



The Columbia Municipal Planning Commission will meet on Wednesday, March 12, 2025 at 4:00 PM in Council Chambers in the basement of City Hall, 700 N. Garden Street. The Planning Commission will consider the following:

I. Organization

1. Call to Order
2. Roll Call
3. Welcome of Visitors/Rules of Conduct
4. Acknowledgement of Official Communications of the Columbia City Council on Annexation and Zoning.
5. Approval of Minutes
6. Review of Bonds and Letters of Credit

II. Consent

1. Request from Allen B. O'Leary for Final Plat approval with surety in the amount of \$190,000 of Williamsport Landing Phase 3 consisting of 28 lots off [Williamsport Pike at Oak Springs Drive, being a 12.66 acre portion of Tax Map 88 Parcel 51.05.](#)

III. Discussion Items

1. Request from Greg Gamble to Rezone property at [Tax Map 90 Parcel 7.12,](#) being a five acre tract at River Road and Taylor Bend, from PUD (Planned Unit Development) to CD-5 (Urban Center Character District) with revocation of the Water's Edge at Taylor Bend PUD.
THIS ITEM WAS DEFERRED FROM A PREVIOUS AGENDA.
2. Request from Olivia DuPuy for Preliminary PUD Master Plan approval with Architectural Design regarding construction of a 45,000 square foot commercial

building in the Honey Farm Crossing PUD Subdivision, being a 7.49 acre portion of [Tax Map 51 Parcel 58 at Nashville Highway and Honey Farm Way](#).
THIS ITEM WAS DEFERRED FROM A PREVIOUS AGENDA.

IV. Other Business

V. Adjourn

The Planning Commission of the City of Columbia welcomes your presence and participation at this meeting. If you wish to address the Commission regarding any item on the Agenda, please sign the sign-up sheet and indicate which agenda item you would like to comment on. You will have the opportunity to comment on an item when it comes up on the Agenda and before the Commission votes on the item. Once recognized, you may then come to the podium and state your name and address.

Anyone requesting accommodation due to disabilities should contact the ADA Coordinator, Wanda McClain, at 931-560-1570 prior to the meeting. For other questions, please contact the Department of Development Services at 931-560-1560.

February 17, 2025

City of Columbia
Development Services
700 North Garden Street
Columbia, TN 38401

RE: Project Name: Williamsport Landing, Phase 3, Final Plat
City of Columbia Staff Review Re-Submittal

On behalf of KCS Property, LLC, the owner of these 28 proposed single-family lots, **WES Engineers & Surveyors** would like to resubmit this Final Plat to the City of Columbia for Planning Commission approval. Comments are addressed below in red.

Planning

1. The lead staff person for this case is Robert Archibald, Planner II. Please contact rarchibald@columbiatn.gov with questions about the development review process or technical comments. The case planner should be copied on all communication with other city staff. **Noted.**
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal. **Noted.**
3. The building lines on Lot #70 does not show enough room to meet the minimum required rear yard setback of 30'. Provide notation that the lot will meet standards for primary, secondary, and rear setback requirements. **Rear setback has been corrected.**
4. Show required 15' Buffer for adjacent Townhome development relating to Lots #70 and #75. **Buffer yard has been added.**

Engineering

5. Stormwater maintenance agreement recorded (R3044/839). **This has been added.**
6. Provide surety in the amount of \$190,000 by resubmittal date. **This is being handled by the developer.**
7. Asphalt binder and curbing shall be installed prior to resubmittal date. **This has been installed.**
8. Grading shall substantially conform to the approved construction plans. **Noted.**
9. Install street signs (stop and street name) by resubmittal date. **This is being handled by the developer.**
10. Label streets as public and local. **This has been updated.**

Fire

11. No comments. **Noted.**

City Attorney

12. No comments provided. **Noted.**

Building

13. No comments. **Noted.**

Columbia Power

14. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development. **Noted.**

Columbia Water

15. Coordinate walk-through, Bacteria pressure testing with CPWS. **This will be handled by the developer.**
16. Provide a detailed list of water infrastructure cost including labor to CPWS Water Department in advance of plat signing for Deed Over form. **This will be handled by the developer.**
17. Water system must be complete and active at time of plat signing. **Noted.**
18. Columbia Power and Water Systems (CPWS) wishes to note that CPWS has submitted to the property owner a good faith offer based on appraised fair market value to acquire easements along the rear of the property for a water transmission main as part of CPWS's Long Term Water Supply Program. The easement will affect residential lots 81 & 82. We are currently in negotiations for the same. **Noted.**

Maury County Schools

19. The development combined with current neighborhoods and additional approved developments in these zones may require either new construction of realignment of school zones to accommodate new students at Baker Elementary School, Whitthorne Middle, Central High School

* Due to numbers, MCPS will be rezoning all Columbia and Spring Hill elementary schools for the 25/26 SY. **Noted.**

Maury County Highway Dept.

20. No comment. **Noted.**

Duck River Electric Membership Corp

21. No comments. **Noted.**

ATT

22. ATT DOES NOT SERVE THIS DEVELOPMENT

Police

23. No comments provided. **Noted.**

Public Works

24. No comments. **Noted.**

Atmos Energy

25. No comments provided. **Noted.**

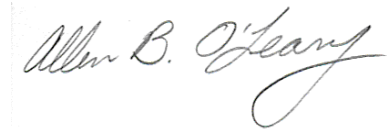
Maury County E911

26. No comments provided. **Noted.**

If you have any questions or comments with this submittal, please do not hesitate to contact me directly.

Sincerely,

WES Engineers & Surveyors

A handwritten signature in cursive script, reading "Allen B. O'Leary". The signature is written in dark ink on a white background.

Allen B. O'Leary, RLS
Principal



DEVELOPMENT REVIEW COMMITTEE MEETING

Tuesday, February 11, 2025

ITEM NO.

25-0027

DESCRIPTION: Williamsport Landing, Phase 3

COMMENTS:

Planning

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2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
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City Attorney

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Building

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- 18. Columbia Power and Water Systems (CPWS) wishes to note that CPWS has submitted to the property owner a good faith offer based on appraised fair market value to acquire easements along the rear of the property for a water transmission main as part of CPWS's Long Term Water Supply Program. The easement will affect residential lots 81 & 82. We are currently in negotiations for the same.

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* Due to numbers, MCPS will be rezoning all Columbia and Spring Hill elementary schools for the 25/26 SY.



Maury County Highway Dept.

20. No comment.

Duck River Electric Membership Corp

21. No comments.

ATT

22. ATT DOES NOT SERVE THIS DEVELOPMENT

Police

23. No comments provided.

Public Works

24. No comments.

Atmos Energy

25. No comments provided.

Maury County E911

26. No comments provided.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

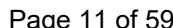
Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact pkeltner@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.



You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.



Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

14th day of January, 2025,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

KCS Property, LLC, the DEVELOPER (hereinafter the
"DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made
a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM and referred
to as Williamport Landing (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal
Planning Commission (hereinafter the "CMPC") on the

_____ day of _____, 20_____,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of
Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS"); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such
development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it
will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and
common areas to be constructed within and to serve the PROJECT including but not be limited to roads,
bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street
lighting, recreation and park facilities, landscaping, and the like (hereinafter the "IMPROVEMENTS");
and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public
infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to
construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances
of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost;
and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements
as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council
approval by resolution, and subject to the applicant's compliance with all requirements in this
agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

Appendix B-1

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELOPER's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

- A. The Preliminary Plat has been approved by the CMPC;
- B. The Construction Plans are approved by the CITY;
- C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
- D. The CITY shall have received an appropriately executed Development Agreement; and
- E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

PROJECT <u>Williamsport Landing</u>	
Completed by the Developer	Completed by the City
DEVELOPER NAME <u>KES Property LLC</u>	
AUTHORIZED AGENT NAME <u>Wade Kincaid</u>	CITY ENGINEER
SIGNATURE <u>[Signature]</u>	SIGNATURE
DATE <u>1/14/2025</u>	DATE
STREET <u>1985 Ridgcrest Dr.</u>	
CITY, STATE, ZIP <u>Columbia, TN 38401</u>	
PHONE <u>931-490-9782</u>	
EMAIL <u>Wade@kesllc.com</u>	
Attest	Attest
ATTEST NAME <u>AL Nickel</u>	ATTEST NAME
ATTEST SIGNATURE <u>[Signature]</u>	ATTEST SIGNATURE
DATE <u>1/14/25</u>	DATE



January 21, 2025

City of Columbia
Development Services
700 North Garden Street
Columbia, TN 38401

RE: Project Name: Williamsport Landing, Phase 3, Final Plat
City of Columbia Staff Review Submittal

On behalf of KCS Property, LLC, the owner of these 28 proposed single family lots, **WES Engineers & Surveyors** would like to submit this Final Plat to the City of Columbia for Planning Commission approval.

If you have any questions or comments with this submittal, please do not hesitate to contact me directly.

Sincerely,

WES Engineers & Surveyors

A handwritten signature in black ink that reads 'Allen B. O'Leary'. The signature is written in a cursive style with a large, looping 'L' at the end.

Allen B. O'Leary, RLS
Principal



PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * 1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)

Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at [City of Columbia | Permitting \(onlana.com\)](http://City of Columbia | Permitting (onlana.com))

ADDRESS/LOCATION	Williamsport Pike, Columbia, TN		
	TAX MAP: 088	GROUP:	PARCEL: 051.05
SUMMARY OF NATURE OF REQUEST AND WORK	To create 28 single family lots and dedicate right-of-way for Williamsport Landing, Phase 3.		

DATE OF PRE-APPLICATION CONFERENCE		<i>Pre-application meetings are scheduled for Wednesdays.</i>
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SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
☐ Comprehensive Plan Amendment ☐ Annexation ☐ Rezoning ☐ Preliminary Plat ☒ Final Plat ☐ PUD Preliminary Master Plan ☐ PUD Final Site Plan ☐ Site Development Plan ☐ Other: <i>*File naming nomenclature examples:</i> <i>Freedom Point Site Plan</i> <i>Freedom Point Master Plan</i> <i>Freedom Point Final Plat</i>	<u>Annexations:</u> ☐ Annexation Permission Form <u>Annexations/Rezoning/Plan Amendments:</u> ☐ Requested Zone Listed ☐ Statement of Compliance with Comprehensive Plan ☐ Concept Plan <u>Preliminary Plats/Site Development Plans:</u> ☐ Plans and/or Plats conforming to City standards with signed and completed check list <u>All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:</u> ☐ Receipt of Payment for Pre-Application Meeting ☐ Written Legal Description copy ☐ Columbia Water System Availability Letter ☐ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs:
	☒ Project Name (include Sections & Phases) Williamsport Landing, Phase 3
	☒ Total Number of Lots/Residential Units 28
	☐ Square Footage of Non-Residential Floor Space
	☒ Total acreage ±12.66

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

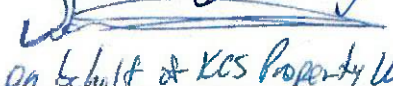
APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Allen B. O'Leary	PHONE	931-388-2329
ADDRESS	2486 Nashville Hwy, Columbia, TN	MAIL	allen@wesengineers.com

PROPERTY OWNER NAME	KCS Property LLC	PHONE	931-490-9782
ADDRESS	1985 Ridgecrest Dr, Columbia, TN	EMAIL	wade@kcsllc.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Allen B. O'leary _____ APPLICANT NAME <i>Wade Kinard on behalf of</i> <i>KCS Property LLC</i> _____ PROPERTY OWNER NAME	 _____ APPLICANT SIGNATURE  <i>on behalf of KCS Property LLC</i> _____ PROPERTY OWNER SIGNATURE	<i>1/14/25</i> _____ DATE <i>1/14/2025</i> _____ DATE
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Water's Edge Property

Project #:	24-0418	Location:	Map 90 Parcels 7.12
Applicant:	Greg Gamble	Case Type(s):	Rezoning
Staff Planner:	Kevin C. McCarthy, AICP	Proposed Use:	Mixed-Use

PROJECT SUMMARY

The applicant requests to rezone a 5.0-acre parcel located at the intersection of Taylor Bend Road and River Road from MU-PUD (Mixed Use Planned Unit Development) to CD-5 (Urban Center Character District). The PUD was approved under a previous ordinance. The attendant Master Plan has expired. The applicant request that the Planning Commission recommend revocation of the Planned Unit Development and rezoning to the CD-5 character district. The requested zoning designation consists of higher density Mixed Use areas.

- The requested zoning is consistent with the City Center Urban Village (CCUV) future land use classification in Connect Columbia.
- The property is located adjacent to a CD-5 property which was subject to a nearly identical request in 2023.
- In support of the requested rezoning, the applicant provided a concept plan which depicts multifamily housing on the site.
- Subsequent development and division of the property will require review and approval by the Planning Commission or the Zoning Administrator.
- The Planning Commission is a **recommending body** for rezoning requests; City Council is the decision-making authority.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

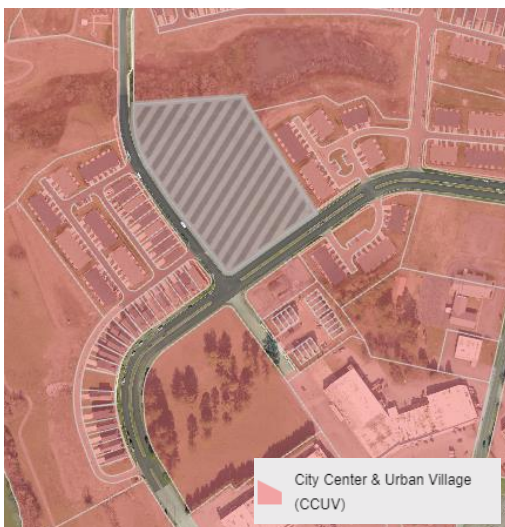


SITE INFORMATION

CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
PUD	Vacant	Vacant	+/- 5.0 acre



FUTURE LAND USE MAP



ZONING MAP





SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	CCUV	PUD	Vacant
North	CCUV	PUD	Open Space
South	CCUV	CD4C/CD5	Office/Vacant
East	CCUV	PUD	Single Family
West	CCUV	PUD	Single Family

CONSISTENCY WITH CONNECT COLUMBIA

City Center Urban Village: The requested rezoning is consistent with the future land use map. The future land use of most of the subject site is CUV. The City Center & Urban Village (CCUV) future land use area comprises Columbia's iconic core and ancillary focal points (Connect Columbia, p. 35). It includes the historic courthouse square and the places residents of Columbia associate with worship, commerce, the arts, community activities and government administration. The CUV also supports the creation of urbanized nodes which provide identifiable commercial hubs for Columbia's emerging neighborhoods. Each development parcel should add to Columbia's existing sense of place and extend its established form and pattern to create a more interconnected community. The future land use classification is implemented by the CD-4 and CD-5 character districts, as well as CV and PUDs. In some cases, the Planning Commission may determine that CD-3 and CD-4C are also appropriate implementing zones.

Character & Intent

The City Center & Urban Village (CCUV) future land use area comprises Columbia's iconic core and ancillary focal points. It includes the historic courthouse square and the places residents of Columbia associate with worship, commerce, the arts, community activities and government administration. The CUV also supports the creation of urbanized nodes which provide identifiable commercial hubs for Columbia's emerging neighborhoods. Each development parcel should add to Columbia's existing sense of place and extend its established form and pattern to create a more interconnected community.

Primary Land Uses are horizontally and vertically mixed in a variety of structure types. The intensity and mix of uses is largely determined by context. New residential development provides a mixture of housing within walking distance of commercial and civic spaces. New non-residential development in established residential areas shall be comprised of low-intensity uses which serve residents' daily needs. Higher intensity uses should complement and extend the traditional pattern of development in Columbia's core, or establish identifiable centers for emerging nodes.

Future development should emphasize connectivity and continuity of the city as a whole. Additionally, new development shall create a pedestrian-friendly environment by filling gaps in sidewalks and enhancing multi-modal infrastructure. All new and infill development shall emphasize linkages to identifiable community anchors such as mixed-use commercial centers, schools, parks, or civic institutions.



Land Use Considerations

Primary uses include government, civic uses, parks, religious facilities, offices, retail, and all forms of medium-density housing. Secondary land uses include utility facilities, institutional uses, low-density housing, and neighborhood retail. New industrial and warehouse uses are inappropriate.

Form & Pattern

The CUV includes established and infill neighborhoods at medium to high densities organized along a well-connected transportation network. Infill development supports and extends the formation of blocks and eliminates gaps in the built environment. The CUV future land use is distinguished from Suburban Neighborhoods (SN) by the unambiguous prominence of public frontages. A high density of streets and thoroughfares with complete public frontages extends the public sphere outward from civic and commercial spaces. Implementing bulk and design standards clearly delineate the public and private realms through the application of layers and front-to-back discipline of lots. Bulk and design standards are occasionally modified to accommodate historic preservation, artistic innovation, redevelopment, and other place-based policies of the City. New development should accompany concurrent extension of complete urban services in places where they do not already exist. Parking is provided on an area-wide basis as a utility supplemented by private land users.

Implementing Districts

Neighborhood CD-3 (Only where compatible with established pattern)
General Urban CD-4
Urban Center CD-5
General Urban-Corridor CD-4C (only along Arterial roadways)
Urban Center - Corridor CD-5C (only along Arterial roadways)*
Mixed Use PUD-MU
Civic CV

Implementing Standards

General Development Pattern: Mixed Uses & Isolated Uses
Density (density units per acre): ≥ 12 du/ac
Building Height: 1-5 stories
Open Space Elements: Civic Spaces, Parks & Greenways



CONFORMITY WITH ZONING ORDINANCE

As required by § 8.5.19 of the Zoning Ordinance, the applicant provided a concept plan (i.e. "Sketch Development Plan"). The current request establishes the applicable standards for future reviews. The concept plan is not a plan of development and approval of the rezoning request does not establish a vested right.

- **The concept demonstrates that it is possible to develop the site in conformity with the bulk and design standard of the Ordinance at Table 4.3.1-F.**
 - The plan depicts development of the property with six Large Multifamily buildings, one small multifamily building, and amenities.
 - All parking is located in the third layer and notes on the concept plan indicate that the design of buildings will conform to the CD-5 standards.
 - The concept plan is very similar to the previously approved PUD Master Plan.
- Development of the property will require a detailed site development plan which will inevitably differ from the concept plan. At the building permit stage, Planning staff will review facades for compliance with the CD-5 design standards. However, the concept plan does demonstrate that it is possible to develop the site in conformity with the standards for the requested character district.
- If the rezoning is successful and the site develops, Planning staff will perform zoning compliance review to determine conformity with the standards of the Ordinance.



Concept Plan Provided for Rezoning (subject to Site Development Plan Review)



2020 PUD Master Plan

REVIEW PROCESS

The Development Review Committee evaluated the proposed rezoning at its August 2024 meeting, as directed by section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package.

Section **8.5.19** of the Zoning Ordinance directs the Planning Commission to review and make a recommendation on all proposed changes to the Official Zoning Map. The Planning Commission is the recommending body for rezonings under **§ 8.3.3.B.3** of the Zoning Ordinance. The City Council is the decision-making authority.

Section **8.5.19.H.4** of the Zoning Ordinance establishes the review criteria for approval of all changes to the Official Zoning Map:

- a. The Rezoning is consistent and not in conflict with the Comprehensive Plan or other applicable approved local plans for the area;*
- b. It has been determined that the legal purposes for which zoning exists, as set forth in Section 1.5 [, are not contravened];*
- c. It has been determined that there will be no adverse effect upon Adjoining property owners unless such effect can be justified by the overwhelming public good or welfare;*
- d. It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public;*
- e. It has been determined that conditions affecting the area have changed to a sufficient to warrant the Zoning Map Amendment or that the existing zoning of the property was the result of a mistake;*
- f. It has been determined that adequate school, road, parks, wastewater treatment, water supply, and stormwater drainage facilities are available*

SUMMARY OF DEVELOPMENT REVIEW COMMITTEE COMMENTS

The DRC reviewed this proposal at its October 2024 meeting. A full list of comments, and the applicant's responses, is provided in the agenda packet. Some key comments are noted below.

- **Planning** directed the applicant to provide a narrative response to criterion at § **8.5.19.H.4(e)** explaining why the applicant believes conditions affecting the area have changed sufficiently to warrant the Zoning Map Amendment.
- Planning asked the applicant to clarify add notes to the concept for future reference.
- **Engineering** advised the applicant that a Traffic Impact Study will be required at the time Site Development Plan.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

The requested CD-5 zoning is consistent with Connect Columbia. As discussed above, the Planning Commission has previously approved a PUD plan for a density and intensity of development similar to that proposed in the concept plan. Last year, the Planning Commission recommended approval of a very similar PUD to CD-5 rezoning request on an adjacent property.

SAMPLE MOTIONS

Recommend to Approve:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in sections **8.5.19.H** of the City of Columbia Zoning Ordinance have been satisfied and recommend approval of the proposed rezoning [*subject to technical comments and other conditions presented by planning staff*].

Recommend to Deny:

Move to recommend denial of the requested rezoning having found, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in section **8.5.19.H** of the City of Columbia Zoning Ordinance are not satisfied [*list specific reasons for denial*].

Defer:

Move to find that there is insufficient information to decide, defer the matter to the next regularly scheduled meeting of the Planning Commission, and request that the [*applicant/staff*] provide: [*list additional information*] for review at a future meeting.



TAYLOR BEND ROAD CONCEPTUAL MASTER PLAN

January 27, 2025





Commitment Letter

February 11, 2025

To: HOA transition team and Taylor Landing residents

From: CPS land, LLC and/or assigns

Concerning Water's Edge Property - Maury County Tax ID 090 007.12, approximately 5 acres located along Taylor Bend and River Road.

As has been discussed at multiple neighborhood meetings. CPS Land, LLC commits to the following items:

- No more than 100 total residential units
- Average parking ratio of 2 parking spaces per unit
- Multi-family buildings not more than 3 stories
- Townhomes no more than two stories along Taylor Bend Road
- Public sidewalks along River Road and Taylor Bend frontage
- Landscape buffer along the eastern boundary line
- Contribution paid quarterly for maintenance of the walking trail and ball fields including dog stations
- Median cut and entrance along River Road and not Taylor Bend (contingent on city approval)

We greatly appreciate the opportunity to work with the neighborhood on these issues and look forward to a successful partnership.

Respectfully,

Cliff Smith, P.E.

Partner CPS Land

Joshua D. Moore
360 Coleman Ct.
Columbia, TN 38401

February 5, 2025

City of Columbia Planning Commission
700 North Garden Street
Columbia, TN 38401

Dear Members of the Planning Commission,

As a neighboring and affected homeowner, I am writing to oppose the **Request from Greg Gamble to rezone property at Tax Map 90, Parcel 7.12, being a five-acre tract at River Road and Taylor Bend, from PUD (Planned Unit Development) to CD-5 (Urban Center Character District) with revocation of the Water's Edge at Taylor Bend PUD.** My opposition is based on the City of Columbia's repeated failure to enforce crucial requirements for existing developments, particularly those related to site construction and stormwater maintenance plans and agreements.

In Taylor Landing, where I serve as President of the Taylor Landing Homeowner Advocacy nonprofit, we have experienced firsthand the detrimental impacts of the City's lax enforcement. Our site construction plan—approved as part of the Planned Unit Development (PUD)—outlined specific requirements, including topsoil depths, erosion control, and stormwater infrastructure. These requirements were not properly enforced by the Development Services Department, resulting in severe erosion, failed vegetation and landscaping, and sediment runoff into the Duck River watershed.

Both Development Services Director Paul Keltner and Assistant City Engineer Douglas Toney have acknowledged that inspections were inadequate and that topsoil requirements were not verified. Builders have been allowed to meet only minimal visual stabilization standards for temporary occupancy approval, with no regard for long-term erosion control, landscaping, or environmental impact. Furthermore, we have found no evidence that the legally binding stormwater maintenance plan for Taylor Landing has been enforced through required annual inspections, despite a public records request.

Given this history, I have significant concerns about what may happen if the rezoning is approved for the five-acre tract at River Road and Taylor Bend. Rezoning to CD-5 would remove the binding commitments of a PUD plan, leaving little oversight or recourse if the developer does not adhere to their commitments.

Based on the City's demonstrated inability to enforce existing regulations and approved plans, it is reasonable to fear that this development could result in similar issues, including inadequate infrastructure, environmental harm, and financial burdens on future and existing residents.

Until the City demonstrates a stronger commitment to enforcing approved site and stormwater maintenance plans, approving additional high-density developments under less stringent zoning like CD-5 is premature and irresponsible. For these reasons, I respectfully urge the Planning Commission to deny this rezoning request. I also request that the City conduct a full review of its enforcement policies and procedures to ensure compliance with development standards in approved construction plans.

Thank you for your attention to this matter. I look forward to your response.

Sincerely,

Joshua D. Moore

Christy Daus
710 Taylor Bend Rd
Columbia TN 38401

February 7, 2025

City of Columbia Planning Commission
700 N. Garden Street
Columbia TN 38401

Dear Members of the Planning Commission and City Council

As a neighboring and directly affected homeowner, I am writing to **OPPOSE** the **Request from Greg Gamble to rezone property at TAX Map 90, Parcel 7.12, being a five (5) acre tract at River Road and Taylor Bend, from PUD (Planned Unit Development) to CD-5 (Urban Center Character District) with revocation of the Waters Edge at Taylor Bend PUD.** My opposition is based on the City of Columbia's repeated failure to enforce critical requirements for existing developments, the potential for an increase in traffic related accidents (our subdivision includes a school bus stop and the heavy presence of unaccompanied children walking to the stop), increase in property and crimes involving persons, increase in noise in the area, transient traffic and persons involved with apartment renters, lowered home values for us homeowners (and taxpayers), increased use and pressures on existing stormwater and other underground utilities where tie-ins are concerned, increase in emergency services to our quiet subdivision, the use of Taylor Landing amenities by non-HOA individuals, overcrowded parking problems and overcrowding in general on an otherwise small piece of property.

Adding another several hundred to thousand individuals smack dab in the middle of a quiet, family subdivision is a bad idea. Our neighborhood is a quiet neighborhood with new families, small children and young teens who enjoy riding their bikes on the walking paths, young families pushing strollers and older couples walking in general. The proposed development would add roughly 1200 more vehicles (not including transient vehicle traffic, and others who do not live in the area) to the neighborhood, putting these lives at risk. I know you all are aware of how many vehicle/pedestrian accidents the City of Columbia has already and now you want to add more to the statistics. In addition to regular homeowner leisure foot traffic, you will be putting the children who walk to the bus stop on River Rd at a greater risk. As a grandparent of twin seven year old boys, I **DO NOT** feel safe having them over with this potential risk added. This does not even include the unknown characters who may be inhabiting the proposed apartments.

There is a potential for an increase in crime as well given now that criminals have even more opportunity to vandalize, commit burglary, robbery or even personal crimes (robbery, rape, etc..) I do not feel safe knowing that even more people will be added that are not vetted to this otherwise safe/quiet neighborhood. Will these residents be screened for criminal activity? Will sexual predators be allowed to live by children (residents and bus stop)? How will the City or property owner vet these individuals and will Columbia Police Department be able to enforce this?

The noise from these 1000+ residents will also increase. Loud parties, vehicle car alarms, family disturbances, fights, etc.. are all a concern for residents and an increase in those types of situations, increase in an apartment type/multi family type development. How will the City or Police Department protect us from that?

Lower home values are also of a concern for us (property) taxpaying homeowners. I purchased my home outright and that is of a huge concern for myself. The economy is already at a standstill and the real estate market is not what it was. There are multiple homes for sale on both Taylor Bend and River Road. Because the market is down, the potential for lost revenue for sellers increases and this has a snowball affect as property taxes will also decrease and thus resulting in a loss of revenue for the City.

Renters also do not have any “skin in the game”, they typically do not take care of the property they are renting and rental properties typically look run down and depressed. This **WILL** decrease the look of the area overall and thus affect Taylor Landing. The increase in people to the subdivision will also put our HOA (paid for by us homeowners) amenities at risk. They will use our walking paths, playground, fire pit and soccer field. Our HOA dues go to pay for these amenities and with an increase in foot traffic by non paying residents, they are more in jeopardy of being damaged and/or the liability of anything nefarious increases and thus incurring more costs to the Taylor Landing homeowners.

Another issue with this development is the tie-in to the existing underground stormwater pipes off River Rd. There has already been a recurring sinkhole off Ashland and the increase of two developments adding pressure on an already fragile system is discerning and frightening at the same time. The City’s lax enforcement with Meritage has the residents concerned for potential permanent damage to their single family residents along River Rd and Taylor Bend. Given the history on the City’s lax enforcement and lack of follow up with the developer, I have significant concerns about what might happen if the rezoning is approved. Based on the City’s inability to enforce existing regulations, it is reasonable for the residents of Taylor Landing to fear that this development could result in similar issues.

I worked in law enforcement for 15 years and in Engineering for a large city for 10 years and have seen the negative impact of what a multi family development can do to a community. For these reasons and those stated above, I respectfully urge the Planning Commission and City Council to deny this rezoning request.

Thank you for your attention to this matter, I look forward to your response.

Best,

Christy Daus

Arnel Tirones and Abegail Tirones
369 Coleman Ct.
Columbia, TN 38401

February 5, 2025

City of Columbia Planning Commission
700 North Garden Street
Columbia, TN 38401

Dear Members of the Planning Commission,

As Taylor Landing homeowners with property directly adjacent to the land parcel in question, we are writing to formally oppose Greg Gamble's request to rezone the property at Tax Map 90, Parcel 7.12, at River Road and Taylor Bend, from PUD (Planned Unit Development) to CD-5 (Urban Center Character District).

We are deeply concerned about the City's ability to enforce site construction and stormwater maintenance requirements. Our neighbors share these concerns.

In Taylor Landing, we have faced significant issues due to the City's failure to enforce approved plans, resulting in severe erosion and sediment runoff into the Duck River.

Given this history, approving the rezoning for the five-acre tract at River Road and Taylor Bend could lead to similar problems. Rezoning to CD-5 would remove the commitments of a PUD plan, with little oversight if the developer does not adhere to their promises.

Until the City demonstrates a stronger commitment to enforcing site and stormwater maintenance plans, approving additional high-density developments like CD-5 is irresponsible. For these reasons, we urge the Planning Commission to deny this rezoning request.

Thank you for your attention to this matter. We look forward to your response.

Regards,

Arnel Tirones / Abegail Tirones
Arnel Tirones and Abegail Tirones

Subject: [External - USE CAUTION] Request to rezone property at Tax Map 90 Parcel 7.12

I am a member of the Taylor Landing Homeowner Advocacy nonprofit and have attended meetings with Greg Gamble and expressed our concerns with added traffic on Taylor Bend Rd with the entry to this property being on Taylor Bend Rd and Foxland Drive.

We were shown a revised version of the concept plan with the entrance being moved to River Rd. My concern is that this is just a concept and getting the approval for the rezoning to CD-5 does not prohibit the plan to be altered in any way.

With this information, I am writing to oppose the Request from Greg Gamble to rezone property at Tax Map 90, Parcel 7.12, being a five-acre tract at River Road and Taylor Bend, from PUD (Planned Unit Development) to CD-5 (Urban Center Character District) with revocation of the Water's Edge at Taylor Bend PUD.

Thanks,
Robert W Migliavacca
767 Foxland Drive
Columbia, TN
(636) 385-0411

To: Paul Keltner <PKeltner@Columbiatn.gov>

Subject: [External - USE CAUTION] Re-zoning meeting 2/14 item: Taylor Landing PUD Lot

Dear Mr Keltner,

I own a single family home in the Taylor Landing community her in Columbia TN where CPS Land is looking to rezone a lot in the middle of out 65-70 acre PUD development. The lot is currently zoned PUD, I would like that zoning to stay in place as PUD and not Change to the CD5 as CPS land has requested.

While this developer has received the CD5 zoning in another lot near us backing a commercial shopping center off Hwy 31, it's quite presumptuous for them to assume they will also get that rezoning for this "Tree Lot". It was mentioned by CPS Land at a recent community meeting that this multi-housing development would mirror the other lot that has received the CD5 zoning; in fact they went on to say the newly proposed lot as CD5 would house the "Office, a community pool and Gym for the mulit unit housing in both Lots. WOW!

This rezoning will negatively impact traffic in our community and put extreme pressure on parking which is already an issue in our neighborhood. We have several walking trails and amenities that we cannot guarantee wont be used by the new residents of the proposed lot - we have a duck river walking trail, soccer fields with nets, and a dog park - as well as waste bag stations for dog droppings - our HOA is at risk of being liable for use, maintenance and repairs plus liability insurance for said areas.

Our community strongly opposes the zoning change. I would like the zoning to remain PUD as noted on the Meritage map of the development in their sales office when we all purchased out homes/townhomes. Additionally, I am wondering why the developer will not just resubmit their proposed plans under the current PUD zoning. With that being said, regardless of what they present to our community as means of "working together" and modifying their original proposed development there are NO guarantees the end result will even look close to or similar to what was originally proposed. Their concept plan is not legally binding. Our Meritage Development knows that all too well as whats on the concept drawing is not always the outcome. Our Meritage development was approved to be brick and hardie board only to have another change filed and we ended up with vinyl siding which has caused numerous issues many of which Meritage is failing to honor the vinyl repairs and replacement.

This point is made only to emphasize we are not guaranteed anything by concept plans on paper.

Overall I do not see a valid reason why CPS land cannot work within the PUD zoning and strongly oppose their request to make the zoning change.

Respectfully submitted,

Marieva Walsh
605 Taylor Bend Rd

Melissa Sanders

From: Paul Keltner
Sent: Wednesday, February 12, 2025 7:52 AM
To: Melissa Sanders
Subject: FW: [External - USE CAUTION] Fwd: Re-zoning meeting 2/14 item: Taylor Landing PUD Lot

From: Pat Mims <pm1950@yahoo.com>
Sent: Tuesday, February 11, 2025 9:01 PM
To: Paul Keltner <PKeltner@Columbiatn.gov>
Subject: [External - USE CAUTION] Fwd: Re-zoning meeting 2/14 item: Taylor Landing PUD Lot

From: PatSawatzki<pm1950@yahoo.com>
Date: February 11, 2025
Subject: Re-zoning meeting 2/14 item: Taylor Landing PUD Lot

Rezoning **meeting 2/14 item: Taylor Landing PUD Lot**

Dear Mr Keltner,

I own a single family home in the Taylor Landing community in Columbia TN where CPS Land is looking to rezone a lot.

The lot is currently zoned PUD, I would like that zoning to stay in place as PUD and not Change to the CD5 as CPS land has requested.

This rezoning will negatively impact traffic in our community and put extreme pressure on parking which is already an issue in our neighborhood. We have several walking trails and amenities that we cannot guarantee will not be used by the new residents of the proposed lot - we have a duck river walking trail, soccer fields with nets, and a dog park - as well as waste bag stations for dog droppings - and a children's play scape. Our HOA is at risk of being liable for use, maintenance and repairs plus liability insurance for said areas.

Our community strongly opposes the zoning change. I would like the zoning to remain PUD as noted on the Meritage map of the development in their sales office when we all purchased out homes/townhomes. Additionally, I am wondering why the developer

will not just resubmit their proposed plans under the current PUD zoning. With that being said, regardless of what they present to our community as means of "working together" and modifying their original proposed development there are NO guarantees the end result will even look close to or similar to what was originally proposed. Their concept plan is not legally binding. Our Meritage Development knows that all too well as what's on the concept drawing is not always the outcome. Our Meritage development was approved to be brick and hardie board only to have another change filed and we ended up with vinyl siding which has caused numerous issues many of which Meritage is failing to honor the vinyl repairs and replacement.

This point is made only to emphasize we are not guaranteed anything by concept plans on paper.

I do not see a valid reason why CPS land cannot work within the PUD zoning and strongly oppose their request to make the zoning

Patricia Sawatzki
601 Taylor Bend Rd
Columbia TN 38401

Melissa Sanders

From: Paul Keltner
Sent: Wednesday, February 12, 2025 7:52 AM
To: Melissa Sanders
Subject: FW: [Caution External Email] - Rezoning in Taylor Bend

Mr. Keltner,

My name is Rose Marie Arnold and I live in a townhome in Taylor Landing, Columbia, TN. I am aware of the proposed rezoning of Parcel 7.12 at the corner of Taylor Bend and River Rd. from PUD to CD5. I am opposed to this change and very concerned about the impact to our community.

I am a member of the HOA transition team and one of the homeowners that has met with the developer of the property. I have seen the newly redone site plans that addressed many of the concerns the homeowners had. We gave them our tentative approval of these new plans. But, they promised to send us a letter confirming that they would abide by the new site plans if the rezoning to CD-5 is approved. They have not done so and have not communicated with homeowners as they indicated they would. I have some real concerns that if the site is rezoned the developers will go back to previous plans which are not what we agreed upon at our last homeowners meeting with them.

Taylor Landing is a small, fairly new community of approximately 300 homes and townhomes with 500 residents. We surround the parcel of land being considered for a zoning change on 3 sides. We have a children's playground, adjacent dog park, walking trails and there is access to the Duck River. These are our green common areas and are maintained through the dues we pay to our HOA. One immediate concern is that there would be no way to keep anyone living on parcel 7.12 from trespassing on Taylor Landing areas. Your rezoning would greatly increase the density of people who would be allowed to live on parcel 7.12. The negative effect on our community would be great.

Other concerns are:

- Taylor Landing currently has a shortage of parking spaces and many residents are parking illegally which has prompted many calls to the police department. The developers addressed this in their new site plans but with a change in zoning, the new site plan could be out the window and they can do whatever they want.
- The old site plan showed the entrance into the new development being on Foxland Dr. They changed this entrance to River Rd. and the city needs to approve this. We need this River Rd. entrance as having 200+ cars exit on to Taylor Bend Rd. would greatly increase traffic in our residential area.

- The negative effect this would have on our property values as we are now a residential community with PUD zoning restrictions. A change to CD5 on parcel 7.12 with higher density, supposedly allowing 125 units on such a small parcel of land, is irresponsible. The developers in the new plans decreased this to 92-95 units but again, with new zoning, they could go back to the higher density number of units.

The planning commission needs to look at the many negative effects of making this zoning change. **Of primary concern is that the developers made a promise to the homeowners of Taylor Landing to address our concerns and they have not followed through by putting it in writing.** This will directly affect the 500 residents currently living in Taylor Landing.

I strongly urge you to deny this rezoning.

Sincerely,

Rose Marie Arnold

RMAWalker@proton.me

Mr. Paul Keltner,

Good Morning, I am a current home owner in the Taylor Landing neighborhood. I would like to share my opposition on the matter of the Greg Gamble Tree Lot rezoning request planned for the middle of our quiet neighborhood. To build an apartment building that will cause traffic down our already narrow streets is ludicrous. Not to mention renters coming into our neighborhood to use our community spaces while we pay the hefty HOA fees. With all of the land available in this county, this builder chooses to build on a tiny piece of land to make people live on top of one another like an inner city. This is not what I imagined for my home and feel this project will now bring my property value way down. I hope that common sense reins in this decision and this project will not proceed.

Respectfully,

Jennifer Fite
724 Prairie View Drive
Columbia, TN 38401

Sent from my iPhone

On Feb 11, 2025, at 8:55 PM, Todd Wilson <todd@multipliers.org> wrote:

Paul,

As I've noted in my previous emails, I continue to be strongly opposed to rezoning Parcel 7.12 from PUD to CD-5. The developer has not demonstrated meeting the criteria that were in your previous staff report (see my previous email below). There is NO reason for the need to rezone from PUD to CD-5. The plans, as communicated to our Taylor Landing Transition team, can be implemented under PUD with no need to change to CD-5. There is NO benefit to the adjacent community and land owners for this to be rezoned. It can only hurt our community, given the relaxed requirements in CD-5 compared with PUD (e.g., parking ratio, buffer setbacks, etc.). Requiring the developer to submit a new PUD is in the community's best interest.

In no event should you approve this without first addressing the reality that at least 2 of the 6 specific requirements for rezoning have not (and can not) be met. To approve the request would be to violate your own standards and will create a significant uproar in the community. We have enough outstanding challenges and issues with the developer of Taylor Landing (Meritage), that neither the city or our community need additional turmoil.

Please register my disagreement as an adjacent homeowner to this rezoning request and include a copy of my disagreement in the official file. I want it on public record that you have not yet addressed the non-compliance with at least 2 of the 6 criteria that have to be met for rezoning approval.

Thanks

Todd Wilson

Melissa Sanders

From: Paul Keltner
Sent: Monday, January 6, 2025 11:41 AM
To: Austin Brass; Robert Archibald; Sandra Richardson; Melissa Sanders
Subject: FW: Taylor's Landing Deferral Request

Fyi..

From: Greg Gamble <greg.gamble@gdc-tn.com>
Sent: Monday, January 6, 2025 11:15 AM
To: Cliff Smith <cliff.smith@cpsland.com>; Paul Keltner <PKeltner@Columbiatn.gov>
Cc: Keli Frymire <keli@gdc-tn.com>
Subject: [Caution External Email] - Taylor's Landing Deferral Request

Paul,

Please accept this email as our request to defer Case Number 24-2418 to rezone Map 90 Parcel 7.12 on River Road and Taylor Bend to the February 12 Planning Commission Meeting. We are continuing to work with the neighborhood on plan revisions and believe that we are making good progress.

We will keep you posted after our next few meetings on our progress. We recognize that resubmittal materials are due on January 21st.

Sincerely



Greg Gamble | RLA
3020 Stansberry Lane, Suite 201
Franklin, TN 37069
Greg.gamble@gdc-tn.com
Mobile: 615.975.5765
www.gdc-tn.com

Melissa Sanders

From: Kevin McCarthy
Sent: Friday, December 6, 2024 1:40 PM
To: Melissa Sanders; Austin Brass; Sandra Richardson; Robert Archibald
Subject: FW: Taylors Bend Rezoning - Deferral Request

Thanks!

Kevin C. McCarthy, AICP
City Planner & Zoning Administrator
[700 N. Garden Street](#)
[Columbia, TN 38401](#)
kmccarthy@columbiatn.gov



From: Keli Frymire <keli@gdc-tn.com>
Sent: Friday, December 6, 2024 1:35 PM
To: Kevin McCarthy <KMccarthy@Columbiatn.gov>; Greg Gamble <greg.gamble@gdc-tn.com>
Cc: Paul Keltner <PKeltner@Columbiatn.gov>
Subject: [Caution External Email] - Taylors Bend Rezoning - Deferral Request

Good afternoon Paul and Kevin,

The Taylors Bend team is still working through the feedback that we've received and would like to request a deferral of the Taylors Bend Rezoning from the December Planning Commission meeting to the January Planning Commission meeting.

Please confirm receipt of this email request and let me know if you need additional information.

Thank you,



Keli Frymire | PLA
Mailing: 3020 Stansberry Lane, Suite 201; Franklin, TN 37069
Physical: Freeport, FL
keli@gdc-tn.com
Mobile: (706) 566-6480
www.gdc-tn.com

From: Kevin McCarthy <KMcCarthy@Columbiatn.gov>
Sent: Friday, November 15, 2024 10:58 AM
To: Keli Frymire <keli@gdc-tn.com>; Greg Gamble <greg.gamble@gdc-tn.com>
Cc: Paul Keltner <PKeltner@Columbiatn.gov>
Subject: RE: Taylors Bend Rd property - deferral follow up

Hi Keli. Thank you for the update. We appreciate the information. There's nothing more that you need to submit to be on the December agenda. However, we would appreciate any summary of the neighborhood conversation that you can provide prior to the CMPC meeting. That will help us update the staff report and answer any questions from CMPC members. Paul will take over as the case planner for this item; please include him in communications.

Thank you!

Please note that our email addresses have changed from a ".com" to ".gov" domain. My email is now kmccarthy@columbiatn.gov

Kevin C. McCarthy, AICP
City Planner
[700 N. Garden Street](#)
[Columbia, TN 38401](#)
kmccarthy@columbiatn.gov



From: Keli Frymire <keli@gdc-tn.com>
Sent: Friday, November 15, 2024 10:32 AM
To: Greg Gamble <greg.gamble@gdc-tn.com>; Kevin McCarthy <KMcCarthy@Columbiatn.gov>
Subject: [Caution External Email] - Taylors Bend Rd property - deferral follow up

Good morning Kevin,
Just wanted to follow up with you on a few items for the Taylor's Bend Rd rezoning request project that was deferred at PC this week.

First, we have scheduled the neighborhood meeting. This will be on November 26, 2024 from 6:30 pm to 8pm. The format will be a drop-in style open house. This will be held at the Northside Baptist Church, in the basement meeting room.

Do you a resubmittal or any other documentation from us in order to proceed to the December 11, 2024 Planning Commission meeting?

Thanks!



Keli Frymire | PLA

Mailing: 3020 Stansberry Lane, Suite 201; Franklin, TN 37069

Physical: Freeport, FL

keli@gdc-tn.com

Mobile: (706) 566-6480

www.gdc-tn.com

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November 10, 2024

Mr. McCarthy,

My name is Todd Wilson. I'm a resident and homeowner at Taylor Landing in Columbia, TN. I recently learned that the Columbia Planning Commission will consider a rezoning application to change Parcel 7.12 (Tax Map 90) at the corner of River Road and Taylor Bend from PUD (Planned Unit Development) to CD—5 (Urban Character District).

I'm writing to voice my questions and concerns about this rezoning and, as importantly, the potential for allowing significantly higher-density housing within the footprint of Taylor Landing. I will be out of state on November 13, 2024, when the Planning Commission meets, and during public hearings on December 12, 2024. I'm asking that you do a phone call with me before the November 13th Planning Commission meeting.

As a steward of the community's best interests, I hope you and your team will take the time to hear my concerns and those of the large number of homeowners in Taylor Landing you will also be hearing from.

Should the Planning Commission recommend that the City Council consider the rezoning, I also ask that you meet with representatives from the Taylor Landing community before the December 5th study session. We have a Taylor Landing Transition Team working to ensure a smooth transition from the developer (Meritage) to a community-led homeowner's association (HOA). We are very sensitive to community issues and are keenly aware of the potential negative impacts of this rezoning and the allowance for significantly higher housing density in our community. It would be best if you heard our concerns as soon as possible.

This is not an issue of some "nearby" zoning action. This is a rezoning directly within our community's footprint and will undoubtedly harm our community. I know your team has a thankless job. We need to know that you will work with us, hear us, and have our best interests as a primary consideration in your work.

I'm confident the other members of our Taylor Landing Transition Team share my concerns. The community will undoubtedly also share our concerns as they begin learning about the significance of this change and the resulting negative impact it would have on us.

Taylor Landing is a new neighborhood situated on approximately 70 acres in Columbia, TN. It is zoned PUD and features a mix of single-family homes, townhomes, and community amenities such as a children's playground area, walking trails, and a dog park. We have nearly 300 housing units representing over 500 residents. Many of us moved to Taylor Landing because of its residential, not urban, context. We love the convenient location and our residential space. Green space along the Duck River is a large part of the attraction of our neighborhood.

For perspective, Parcel 7.12, being considered for rezoning, is approximately 5 acres. We understand this rezoning would allow over 125 additional housing units in just 5 acres. This rezoning activity essentially “squeezes” these 5 acres directly into the 70 acres of Taylor Landing (a 7% increase in land but an over 40% increase in housing units within the footprint of Taylor Landing).

My primary concern is the allowance of this significantly higher housing density that exists within the 70 acres of Taylor Landing.

For additional perspective, throughout Taylor Landing, where there are housing units (not counting fields and green space along the Duck River), there are approximately 20 to 30 housing units, on average, in areas the size of Parcel 7.12 (compared with adding over 125 in CD-5 zoning). Hence, to remain PUD zoning, we would see a 20 to 30 housing unit increase. This 7% to 10% increase in housing units is consistent with the 7% increase in acreage represented by Parcel 7.12 being included within the Taylor Landing footprint.

This prompts these key questions:

First, what is the compelling reason for changing the zoning from PUD to CD-5 and/or allowing significantly higher housing density that would outweigh the negative impacts to homeowners in Taylor Landing? Homeowners purchased their homes with the understanding that Parcel 7.12 would be PUD zoning with housing consistent with Taylor Landing. Are there any positive impacts on the residents of Taylor Landing with the rezoning? (I can only identify negative consequences.)

Second, how is changing the PUD zoning within the footprint of an established PUD-zoned neighborhood consistent with the Master Plan for this area of Columbia? What other examples exist in Columbia where an established PUD-zoned neighborhood had a CD-5-zoned urban center inserted within its footprint? While I understand the city recently allowed the rezoning of another nearby property, and the developer of Parcel 7.12 is now trying to use that as partial justification, two wrongs don't make a right.

Third, what rules and Planning Commission considerations apply to changing the zoning within the footprint of an established neighborhood and allowing significantly higher housing density than what exists all around it, especially when the change would impact the neighborhood's character?

Fourth, what standard does the Planning Commission use to (1) decide to even consider a rezoning, (2) allowable housing density in a specific context, and (3) discern whether a rezoning is appropriate when it's inconsistent with the community directly surrounding it?

Fifth, what negative, unintended consequences should be considered when discerning the wisdom of changing the zoning from PUD to CD-5 and/or allowing a significantly higher housing density?

I want to discuss all five questions and share my concerns on the fifth question with you. My specific concerns include, but are not limited to:

1. **The Burden on Our Existing Taylor Landing Amenities:** We have a small children's playground/park area, hiking trails, a dog park, and open space along the Duck River, all funded by the current members of our community. Parcel 7.12, within the footprint of Taylor Landing, is closer in distance to all these amenities than it is for the average resident of Taylor Landing. These amenities will be a significant attraction to the people living on Parcel 7.12, and there will be no way of keeping them from using them. As such, the value of these amenities to the HOA-paying members of Taylor Landing will be significantly diminished. This would also likely increase our insurance fees and liability exposure.
2. **The Impact on Our Parking:** Our community has a parking shortage. With a mix of single-family and townhomes (most are single-car garages), we already have residents parking illegally relative to designated parking spots and HOA covenants. Putting over 120 new housing units onto 5 acres within the footprint of Taylor Landing will undoubtedly stress our current parking shortage.

How many parking spots will be required on Parcel 7.12 per new housing unit? Functionally, there needs to be at least 2 per housing unit to avoid impact overflow into our Taylor Landing Community. Only a parking garage can achieve that parking density on this lot with the footprint of 135 new housing units. The lack of adequate parking caused by putting high-density housing within a lower-density residential area can only negatively impact the existing Taylor Landing community.

Finally, there are at least 12 Taylor Landing housing units along the east side of Parcel 7.12 that will be directly exposed to the parcel's parking lot. The lights in that lot will likely be overbearing to adjacent homeowners.

3. **The Traffic Impact:** The primary entrance to our area is via Theta Pike and River Road. Theta Pike is a two-lane road that has seen significant increases in traffic in recent years. It is unlikely this two-lane road will be widened; hence, adding 120+ new units along an already busy thoroughfare will undoubtedly increase the congestion.

Even more importantly, the only entrance and exit to the suggested development on Parcel 7.12 is via Taylor Bend. The 135 new housing units, representing over 200 cars, will add significant traffic in and out of Taylor Landing.

4. **Uncertainty of Type of Housing:** With Taylor Landing having nearly 70 acres of existing residential housing units and Parcel 7.12 only having 5 acres, the type of housing allowed on Parcel 7.12 should be entirely consistent with the existing homes in Taylor Landing. Allowing 5 acres of "to be developed" land within the footprint of Taylor Landing to impact the community's character is simply a bad idea. It's impossible to add this high-density housing within the footprint of Taylor Landing without overbearing the existing community. The housing types and density allowed on Parcel 7.12 should be

consistent and in harmony with Taylor Landing.

5. **Negative Impact on Taylor Landing Property Values:** I see no positive impacts for the residents of Taylor Landing with this rezoning. Unfortunately, this would be a rezoning within the footprint of our community, and hence, it would undoubtedly have negative consequences, including lowering our property values. Our community would become less desirable based on issues like those addressed above, which would put downward pressure on home values.

I request that you and the Planning Commission not move forward with the rezoning and allowing higher-density housing on this property. The negative impacts of this potential rezoning and allowing higher-density housing far outweigh any benefits. The location of Parcel 7.12 within the footprint of Taylor Landing should make denial of the rezoning a simple one.

I also request a phone meeting with you as soon as possible to discuss my questions and concerns. We need to understand the process and your perspective to discern how quickly, broadly, and vocally we mobilize the Taylor Landing community against allowing higher-density housing on Parcel 7.12.

Please include this letter in the record of the official feedback you are receiving.

My cell is 703.304.8324, and my email is tlwfamil@gmail.com. Please let me know when we can talk.

Sincerely,

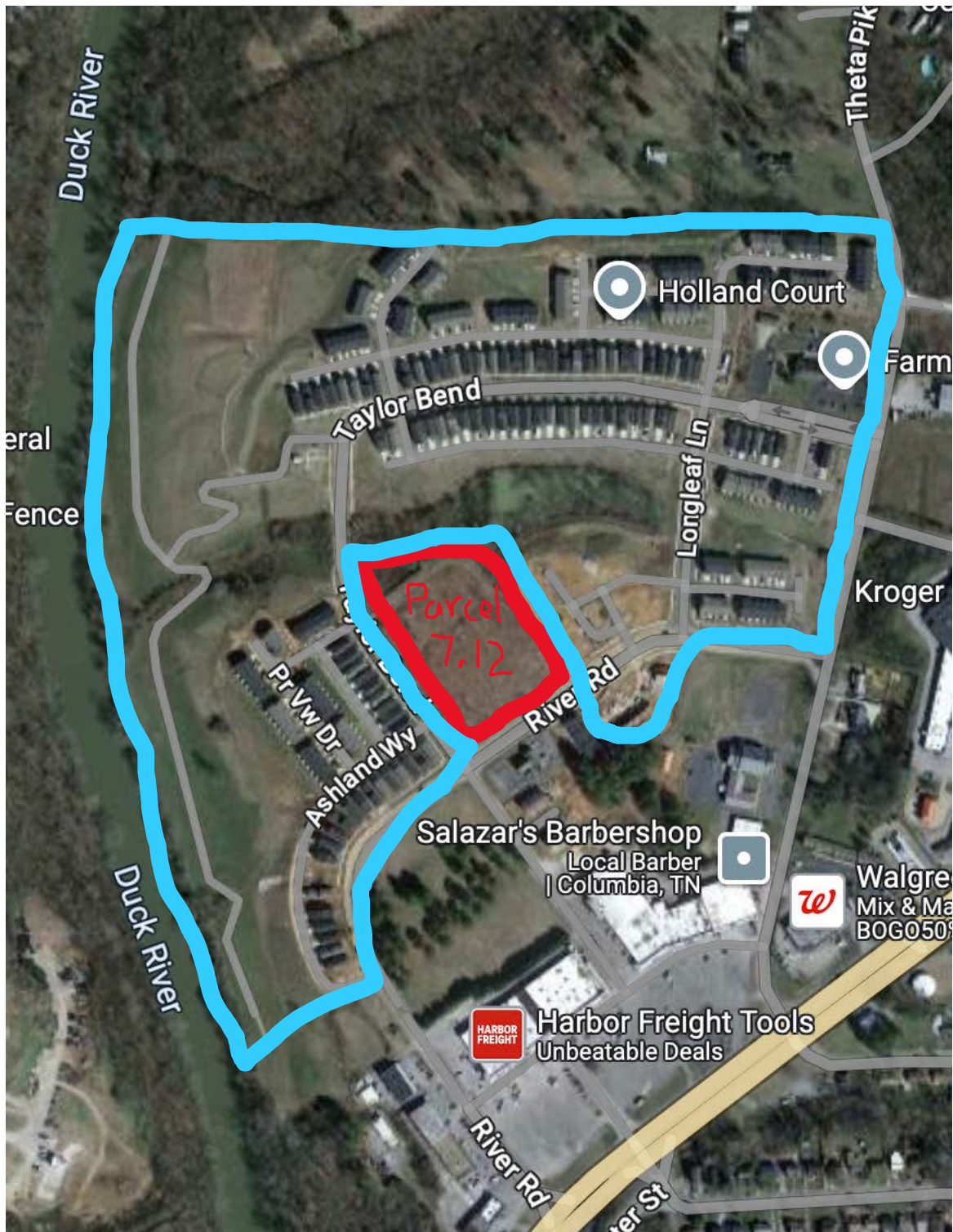
Todd Wilson

Todd Wilson

Parcel 7.12 is essentially within the footprint of the Taylor Landing community.

Blue outline – Taylor Landing

Red outline – Parcel 7.12



November 10, 2024

Mr. McCarthy,

My name is Marieva Walsh. I'm a resident and homeowner at Taylor Landing in Columbia, TN. I recently learned that the Columbia Planning Commission will consider a rezoning application to change Parcel 7.12 (Tax Map 90) at the corner of River Road and Taylor Bend from PUD (Planned Unit Development) to CD—5 (Urban Character District).

I'm writing to voice my questions and concerns about this rezoning. I will not be able to attend on November 13, 2024, due to me working business hours 9-5, I do have several concerns some I will share below. I am not adjacent to the property involved so I was not sent a letter with the pertinent info but do live in the neighborhood of Taylor Landing where this property is located smack in the middle of our neighborhood.

Should the Planning Commission recommend that the City Council consider the rezoning, I ask that you meet with representatives from the Taylor Landing community before the December 5th study session. We have a Taylor Landing Transition Team working to ensure a smooth transition from the developer (Meritage) to a community-led homeowner's association (HOA). We are very sensitive to community issues and are keenly aware of the potential negative impacts of this rezoning on our community. It would be best if you heard our concerns as soon as possible.

The members of our Taylor Landing Transition Team share concerns. The community will undoubtedly also share our concerns as they begin learning about the significance of this change and the resulting negative impact it would have on us.

Taylor Landing is a new neighborhood situated on approximately 70 acres in Columbia, TN. It is zoned PUD and features a mix of single-family homes, townhomes, and community amenities such as a children's playground area, walking trails, and a dog park. We have nearly 300 housing units representing over 500 residents. Many of us moved to Taylor Landing because of its residential, not urban, context. We love the convenient location and our residential space. Green space along the Duck River is a large part of the attraction of our neighborhood.

For perspective, Parcel 7.12, being considered for rezoning, is approximately 5 acres. We understand this rezoning would allow over 125 additional housing units in just 5 acres. **This rezoning activity essentially "squeezes" these 5 acres directly into the 70 acres of Taylor Landing.**

This prompts these key questions:

First, what is the compelling reason for changing the zoning from PUD to CD – 5 that would outweigh the negative impacts to homeowners in Taylor Landing who purchased their homes with the understanding that Parcel 7.12 would be PUD zoning? I do not see any positive impacts on the residents of Taylor Landing with the proposed rezoning? I can only identify negative consequences to all of the Taylor Landing Homeowners.

Second, how is changing the PUD zoning within the footprint of an established PUD-zoned neighborhood consistent with the Master Plan for this area of Columbia? What other examples exist in Columbia where an established PUD-zoned neighborhood had a CD-5-zoned urban center inserted within its footprint? Currently our City Emergency Response teams are overwhelmed with the calls they receive which impacts response times. We are Not in the Downtown area where high density homes/apartments would be necessary, we have a lot of open green space our HOA is responsible for and that includes Insurance Liabilities which would then include coverage for people outside our neighborhood – which I never would have purchased knowing this Liability would be our financial responsibility moving forward.

Third, what rules and Planning Commission considerations apply to changing the zoning within our established neighborhood, especially when the change would impact the neighborhood's character?

Fourth, what standard does the Planning Commission use to (1) decide to even consider a rezoning and (2) to discern whether a rezoning is appropriate when it's inconsistent with the community directly surrounding it?

Fifth, what negative, unintended consequences should be considered when discerning the wisdom of changing the zoning from PUD to CD-5?

This outlines the areas of concern many of us have:

The Burden on Our Existing Taylor Landing Amenities: We have a small children's playground/park area, hiking trails, a dog park, and open space along the Duck River, all funded by the current members of our community. Parcel 7.12, within the footprint of Taylor Landing, is closer in distance to all these amenities than it is for the average resident of Taylor Landing. These amenities will be a significant attraction to the people living on Parcel 7.12, and there will be no way of keeping them from using them. As such, the value of these amenities to the HOA-paying members of Taylor Landing will be significantly diminished. This would also likely increase our insurance fees and liability exposure.

The Impact on Our Parking: Our community has a parking shortage. With a mix of single-family and townhomes (most are single-car garages), we already have residents parking illegally relative to designated parking spots and HOA covenants. Putting over 120 new housing units onto 5 acres within the footprint of Taylor Landing will undoubtedly stress our current parking shortage.

The Traffic Impact: The primary entrance to our area is via Theta Pike and River Road. Theta Pike is a two-lane road that has seen significant increases in traffic in recent years. It is unlikely this two-lane road will be widened; hence, adding 120+ new units along an already busy thoroughfare will undoubtedly increase the congestion.

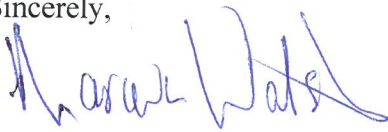
Uncertainty of Type of Housing: Leaving the zoning at PUD almost guarantees that the housing built on Parcel 7.12 will be of consistent value and character as those already in the Taylor Landing community. This is especially important because the Parcel 7.12 is within the footprint of Taylor Landing.

Negative Impact on Taylor Landing Property Values: I see no positive impacts for the residents of Taylor Landing with this rezoning. Unfortunately, this would be a rezoning within the footprint of our community, and hence, it would undoubtedly have negative consequences, including lowering our property values. Our community would become less desirable based on issues like those addressed above, which would put downward pressure on home values.

I request that you and the Planning Commission NOT move forward with the rezoning. The negative impacts of this potential rezoning far outweigh any benefits. The location of Parcel 7.12 within the footprint of Taylor Landing should make denial of the rezoning a simple one.

Please also include this letter in the record of the official feedback you are receiving.

Sincerely,



Marieva Walsh

Joshua D. Moore
360 Coleman Ct.
Columbia, TN 38401
Email: moorej@rose-hulman.edu
Phone: (317) 503-1223

November 10, 2024

Kevin McCarthy, AICP
City Planner
Development Services
City of Columbia
700 N Garden Street
Columbia, TN 38401

Dear Mr. McCarthy,

I am writing as a new homeowner at Taylor Landing to express my strong opposition to the proposed rezoning of Parcel 7.12 (Tax Map 90) at the corner of River Road and Taylor Bend from PUD (Planned Unit Development) to CD-5 (Urban Center). Unfortunately, I cannot attend the upcoming zoning meeting as I am preparing to move from my apartment in Franklin, TN, to the townhome I recently purchased in Taylor Landing. However, I want to ensure my concerns are heard.

Notification Issue

I closed on my townhome on October 3, 2024, and the City of Columbia was notified of my ownership through the filing of my deed with the Columbia Register of Deeds on October 4, 2024. Despite this, the certified letters regarding the rezoning were addressed to the previous homeowners and mailed on October 29, 2024.

Through USPS Informed Delivery, I was notified that a certified letter from the City of Columbia had been sent to my address (see attached USPS scan). Upon checking my mailbox, I found only the notice of the certified letter, which was addressed to the previous homeowners. I promptly returned the notice to the post office to indicate that the certified letter was not for me. Consequently, I have not received my copy of this critical notice, even though I am an adjacent property owner directly affected by the rezoning.

While Tennessee Code Annotated § 13-7-105 requires public notice via newspaper publication at least 15 days before a public hearing, the City of Columbia goes beyond this legal standard by notifying adjacent property owners through certified mail. This additional step is commendable, as it enhances transparency and ensures affected residents are directly informed.

However, in my case, the City's failure to correctly address the certified letter to me raises significant procedural concerns. Unlike other adjacent property owners, I was effectively denied proper notice and, therefore, an opportunity to participate in the zoning process. This inconsistency in notification undermines the fairness and equity of the process.

Legal and Procedural Implications

- **Denial of Due Process:** By not receiving proper notice, I was unable to engage meaningfully in the public hearing process, which could be seen as a denial of due process in this matter.
- **Potential for Legal Challenge:** If the rezoning is approved, the lack of consistent notification to all affected property owners could serve as grounds for an appeal or challenge, potentially delaying or invalidating the decision.
- **Procedural Precedent:** This oversight sets a troubling precedent that could erode public trust in the City's zoning procedures. Ensuring that all property owners are notified equally is critical to maintaining transparency and legitimacy in future zoning actions.

Given the procedural flaws in this case, I respectfully urge the City to deny or delay the rezoning request to ensure that all affected property owners, including myself, receive proper notice and an opportunity to participate in the process. Failing to address this oversight risks undermining the legitimacy of the rezoning and could expose the City to legal challenges.

Financial and Community Impact

Since purchasing my home, I've learned about the serious financial challenges facing our HOA, which is currently under developer control. These include:

- A \$100,000 deficit due to skyrocketing insurance premiums.
- The likelihood of substantial increases in HOA dues and special assessments, placing a financial burden on homeowners.

Introducing a high-density, 4-story apartment complex in the middle of our community will significantly increase liability risks, further raising insurance premiums. This will exacerbate the financial strain on homeowners, who are already facing steep increases in dues and assessments.

Incompatibility with Existing Community

Taylor Landing was developed as a PUD, with a mix of single-family homes, townhomes, and carefully planned community amenities such as a playground, walking trails, and a dog park. Placing a high-density apartment complex in the heart of our neighborhood undermines the residential character that attracted many of us to this community. Specifically:

- Parcel 7.12 represents just a 7% increase in land area but would bring a 40% increase in housing units, resulting in an extreme and disproportionate density increase.
- This will create severe strain on our amenities, which were designed for a lower-density community, and diminish their value to HOA-paying residents.
- Increased traffic and parking overflow will compromise safety and accessibility, particularly near our playground and open spaces.

Impact on Property Values

Over the past two years, property values in Taylor Landing have already decreased by more than \$40,000 for my townhome alone. Allowing a large apartment complex in the middle of our development will likely drive property values even lower.

This apartment complex will:

- Reduce the neighborhood's desirability, making it harder to attract buyers who prefer the community's current residential character.
- Lead to further depreciation of property values, especially as issues like increased traffic, parking shortages, and strained amenities become apparent.

For homeowners like me, this trend represents a significant financial loss. Our homes are not just places to live but major investments, and the rezoning threatens the stability and growth of these investments.

Key Concerns and Questions

1. **What is the compelling reason for this rezoning?**
Homeowners purchased their properties with the understanding that Parcel 7.12 would be developed under PUD zoning. What benefits, if any, does this rezoning offer to our community?
2. **How does this rezoning align with Columbia's Master Plan?**
Rezoning within an established PUD sets a concerning precedent. Are there other examples in Columbia where CD-5 zoning was inserted within a PUD?
3. **What standards are being applied?**
What criteria will the Planning Commission use to evaluate whether this rezoning is appropriate, especially given its inconsistency with the surrounding community?
4. **What are the potential unintended consequences?**
Increased density within our development will negatively impact quality of life, reduce property values, and strain community resources.

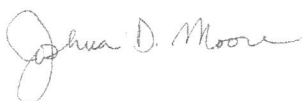
Request for Action

Given the significant negative impacts this rezoning would have on Taylor Landing, and in light of the procedural oversight that denied me proper notification, I urge the Planning Commission to deny or delay the request to rezone Parcel 7.12 to CD-5. This development, as proposed, is incompatible with the character, infrastructure, and financial health of our community.

Please include this letter in the official record of feedback regarding this rezoning. I welcome the opportunity to discuss my concerns further and can be reached via email or phone.

Attachment: USPS Informed Delivery scan of certified letter addressed to previous homeowners, which I did not receive as a result.

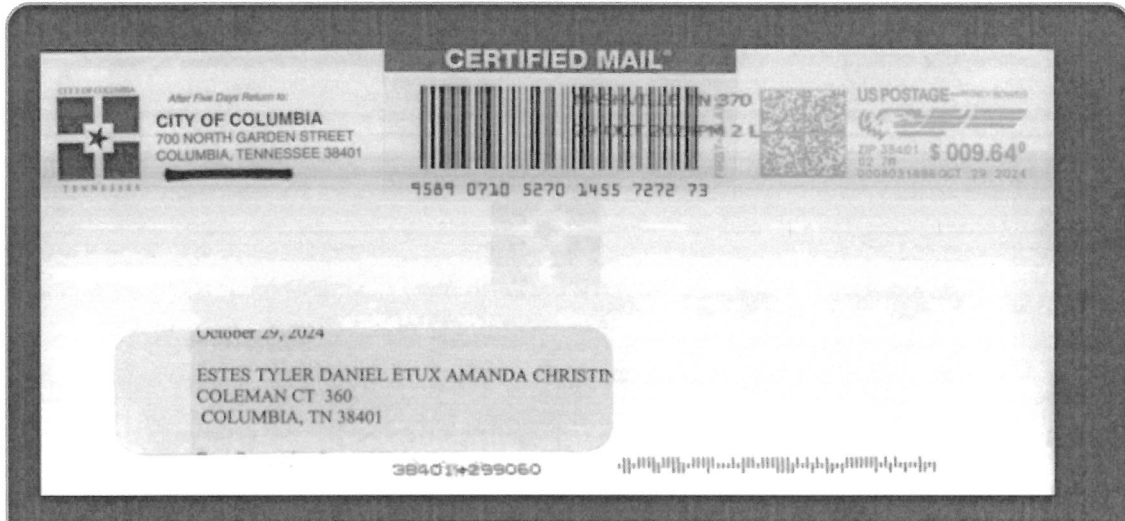
Sincerely,



Joshua D. Moore

Attachment:

USPS Informed Delivery scan of certified letter addressed to previous homeowners, which I did not receive as a result.



November 12, 2024

Mr. McCarthy,

I live on Taylor Bend Road, across the street from Map 90 Parcel 7.12 and oppose the Rezoning to CD-5 Mixed Use.

Taylor Bend Road is a main entry into the community with school busses and UPS on a daily basis. Garbage trucks weekly also need to maneuver through the cars as-is. If cars are parked on both sides of the street, it will be nearly impossible for vehicles to get through. My SIL's parked car was hit on November 6, 2022 due to someone going too fast down Taylor Bend. (Police report can be provided upon request.)



In addition, other than a STOP sign on the corner of Taylor Bend and River, there is no striping on the road on all four sides to indicate a stop. And Parcel 7.12 is overgrown, which also makes it hard to see when making a left turn from TB to River. Imagine a 2-4 story building! I see cars every day drive right through this stop sign. There is also no sidewalk on River, forcing people to walk in the street to get their mail, etc. If cars park on River pedestrians will be walking in the middle of the street. This is a dangerous situation even before Waters Edge is built. Inviting Columbia residents to a Mixed-Use plan encourages more unnecessary traffic.

Please consider the safety of our moms with strollers, kids on bikes, joggers and friends out for a walk in our beautiful community and decline the request for rezoning.

Thank you for your time,

Bonnie Froehlich

Kevin McCarthy
City Planning Commission
700 North Garden St.
Columbia, TN 38401

Mr. McCarthy,

My name is Gerald Haase and live in a townhome in Taylor Landing, Columbia, TN. I have been made aware of the proposed rezoning of Parcel 7.12 at the corner of Taylor Bend and River Rd. from PUD to CD5. I am opposed to this change and very concerned about the impact to our community.

I strongly urge you to deny this rezoning.

Sincerely,

A handwritten signature in black ink, appearing to read "Gerald Haase", written in a cursive style.

Gerald Haase
737 Prairie View Drive
561.291.7006

Kevin McCarthy, City Planning Commission
700 North Garden St.
Columbia, TN 38401

Mr. McCarthy,

My name is Rose Marie Arnold and I live in a townhome in Taylor Landing, Columbia, TN. I have been made aware of the proposed rezoning of Parcel 7.12 at the corner of Taylor Bend and River Rd. from PUD to CD5. I am opposed to this change and very concerned about the impact to our community.

Taylor Landing is a small, fairly new community of approximately 300 homes and townhomes with 500 residents. We surround the parcel of land being considered for a zoning change on 3 sides. We have a children's playground, adjacent dog park, walking trails and there is access to the Duck River. These are our green common areas and are maintained through the dues we pay to our HOA. One immediate concern is that there would be no way to keep anyone living on parcel 7.12 from trespassing on Taylor Landing areas. Your rezoning would greatly increase the density of people who would be allowed to live on parcel 7.12. The negative effect on our community would be great.

Other concerns are:

- Taylor Landing currently has a shortage of parking spaces and many residents are parking illegally which has prompted many calls to the police department. Adding those new units will add stress to this situation.
- The negative effect this would have on our property values as we are now a residential community with PUD zoning restrictions. A change to CD5 on parcel 7.12 with higher density, supposedly allowing 125 units on such a small parcel of land, is irresponsible.

The planning commission needs to look at the many negative effects of making this zoning change and how it would directly affect the 500 residents currently living in Taylor Landing.

I strongly urge you to deny this rezoning.

Sincerely,

A handwritten signature in black ink, appearing to read "Rose Marie Arnold". The signature is fluid and cursive, with the first name "Rose" being particularly prominent.

Rose Marie Arnold

From: [MELCENIA BRADY](#)
To: [Kevin McCarthy](#); cc.srichardson@columbiatn.gov
Subject: [External - USE CAUTION] Taylor landing neighborhood proposed new apartment building and business
Date: Wednesday, November 13, 2024 1:44:24 PM

I'm opposed to the new building plan, I own my townhome right in back of the proposed building project. It would add noise and traffic issues, parking and obstruct my view. It will probably bring down property value, which would be a loss for property owners, please keep this in mind before passing this project.

Thank you, Melcenia Brady
Sent from my iPhone

From: [Steve Baker](#)
To: [Kevin McCarthy](#); [Sandra Richardson](#)
Subject: [External - USE CAUTION] Concerns regarding the proposed re-zoning of the area at the corner of Taylor Bend and River Road in Columbia
Date: Wednesday, November 13, 2024 7:05:04 PM

Kevin & Sandra,

I hope this message finds you both well.

I am writing to formally express my strong concerns regarding the proposed re-zoning of the area at the corner of Taylor Bend and River Road, adjacent to our Taylor Bend neighborhood under CD-5 (Urban Center) zoning and the subsequent possible development of a 4-story apartment complex.

As a resident of the Taylor Bend community, I feel strongly that this zoning change is incompatible with the existing character of our neighborhood and will have significant negative impacts on both our community and the surrounding environment.

My wife and I built our townhome in Taylor Landings four years ago, during the first phase of the buildout of the subdivision. We love the closeness of the neighborhood and the cohesive look and feel of the houses and the townhomes therein. It's very walkable and the playground & dog park are never crowded.

A couple of weeks ago, I was surprised to learn that the corner lot at Taylor Bend and River Road was being considered for re-zoning and that a 4-story apartment complex with possible retail space was being proposed. This prompted this e-mail to you.

I would like to outline several key points of major concern for your consideration:

1. Incompatibility with Existing Community

The proposed development, with its 4-story apartment complex, is fundamentally incompatible with the surrounding two-story single-family homes and townhomes. The stark contrast in height and density will disrupt the cohesive aesthetic and character of our neighborhood, undermining the suburban residential feel that current residents value.

2. CD-5 Zoning Is Inappropriate for This Location

CD-5 zoning is designed for high-density, mixed-use developments in urban centers, not suburban neighborhoods like ours. This zoning change is incompatible with the residential focus of our PUD and could result in future re-zoning requests, permanently altering the character of our community and further straining our infrastructure and finances.

3. Traffic and Parking Concerns

Additionally, the CD-5 zoning would dramatically increase vehicle traffic and parking in the area. This will lead to greater safety issues for the kids and families that walk and ride their bikes & scooters as the traffic on Taylor Bend would definitely increase. Additionally, I'm concerned that any additional street overflow parking would possibly impede emergency and fire crew travel and access in the event of an emergency situation.

4. Liability and Safety Issues

The proximity of the proposed development to our community's playground and open spaces raises significant liability concerns. Non-residents using these facilities increases the risk of accidents, vandalism, and potential damage to these shared spaces. This could lead to higher insurance premiums and legal

exposure for our HOA.

5. **Environmental Impact on Farm Pond**

Farm Pond, a protected waterway, lies directly behind the proposed development site. The construction process and increased density pose risks to the pond through runoff, pollution, and sedimentation. These risks could have long-term detrimental effects on local wildlife and ecosystems, which we must protect.

6. **Decline in Quality of Life**

The higher density allowed under CD-5 will introduce more noise, light pollution, and congestion, significantly diminishing the quality of life for current residents. The construction process itself will bring ongoing disruption for years, including noise, dust, and heavy machinery, further disturbing the peace and serenity of our community.

7. **Negative Impact on Property Values**

The introduction of a large-scale apartment complex is likely to decrease property values in our area, particularly considering the current trends in the real estate market. Potential buyers may be deterred by the proximity to high-density rental housing, high traffic and scarcity of parking, negatively impacting resale opportunities for current homeowners.

8. **Financial and Insurance Strain on HOA**

Our HOA has already been under significant financial strain, with property and liability insurance premiums rising by over 100% in recent years. The proposed development will exacerbate this burden, increasing liability risks and potentially raising insurance costs further. Without major financial contributions from the new development, these costs will be passed on to current residents through higher HOA dues or reduced services.

9. **Unfair Burden on HOA Amenities**

The residents of the new apartment complex are likely to use our HOA-maintained playgrounds and open spaces, increasing wear and tear on these amenities. This will not only lead to overcrowding but also higher maintenance costs, further burdening our community's finances.

10. **Lack of Community Benefits**

The proposed development offers no tangible benefits to our community, such as infrastructure improvements or public services. Instead, it presents significant costs, risks, and burdens that will be placed on current residents without any clear offset or enhancement in return.

Given these concerns, I respectfully request that the Zoning Commission consider the following recommendations:

- **Require Mitigation Measures:** Ask the developer to provide financial contributions or shared maintenance agreements with the HOA to help offset the increased costs.
- **Environmental Review:** Conduct a detailed environmental impact assessment to assess and mitigate any risks to Farm Pond, the Duck River and the surrounding ecosystem.
- **Traffic and Parking Study:** Request a comprehensive traffic impact study to evaluate the feasibility of the proposed density without compromising local infrastructure or safety.
- **Alternative Development Proposals:** Consider lower-density alternatives, such

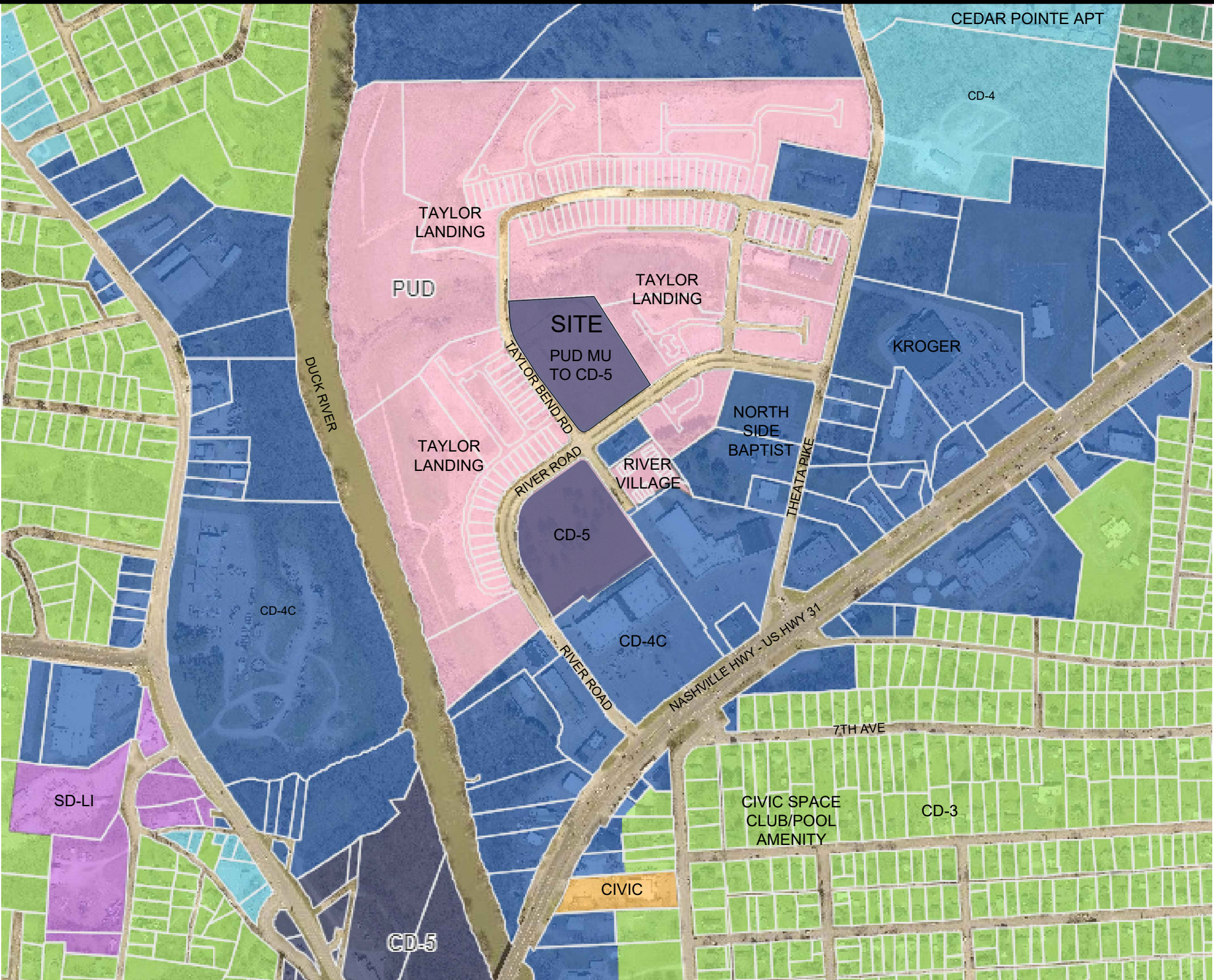
as single family homes, townhomes or smaller multi-family units, which would definitely better align with the character and needs of our community.

I appreciate your attention to these concerns and hope that you and the Zoning Commission will take them into account when reviewing the proposed re-zoning and development plans. I would welcome the opportunity to discuss this matter further, if you would like, at your convenience.

Thank you for your time and consideration.

Sincerely,

Steve Baker
1003 McKee Ct.
Columbia, TN 38401
615-419-0886



LOCATION MAP - ZONING MAP

PROJECT INFORMATION:

PARCEL: MAP 90 PARCEL 7.12
ADDRESS: RIVER ROAD
AREA: +/-5.0 AC

APPLICANT/LANDSCAPE ARCHITECT:
GREG GAMBLE OR KELI FRYMIRE
GAMBLE DESIGN COLLABORATIVE
3020 STANSBERRY LANE, SUITE 201
FRANKLIN, TN 37069
615-975-5785
greg.gamble@gdc-tn.com
keli@gdc-tn.com

DEVELOPER:
CLIFF SMITH
CPS LAND
213 OVERLOOK CIRCLE, SUITE B2
BRENTWOOD, TN 37027
615.477.3186



DEVELOPMENT PLANNING AND
LANDSCAPE ARCHITECTURE

RIVER ROAD PARCEL
REZONING REQUEST & CONCEPTUAL DEVELOPMENT PLAN
Columbia, Tennessee

LEGAL DESCRIPTION OF PROPERTY:
WATERS EDGE AT TAYLOR BEND
PROPERTY MAP 090, PARCEL 007.03
RIVER ROAD
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

Being a certain tract or parcel of land lying and being in the Ninth (9th) Civil District of Maury County, city of Columbia, Tennessee and being more particularly described as follows:

Being Tract 24, a 5.026-acre tract as shown on the final plat entitled "Waters Edge at Taylor Bend" of record in Plat Book P17, page 319, Register's Office for Maury County, Tennessee to which plat reference is hereby made for a more complete description of the subject property.

No field work has been performed by Kimley-Horn Associates to verify the accuracy of the property lines, corners or areas shown on said recorded plats.

NOTE:

THE SUBJECT PARCEL IS LESS THAN 10 ACRES IN SIZE, DOES NOT INCLUDE THE CREATION OF A NEW THOROUGHFARE OR INTERNAL DRIVE, AND THEREFORE IS NOT A DEVELOPMENT PARCEL.

SKETCH PLAN CD-5 DESIGN CRITERIA:

GROSS SITE AREA: +/-5.0 AC
GROSS DENSITY: 27 DUA
TOTAL UNITS: 135 UNITS

PROVIDED CIVIC SPACE: 0.25 AC MIN (5% GROSS AREA)

REZONING REQUEST:

EXISTING ZONING: PUD
FUTURE LAND USE: CCUV - CITY CENTER URBAN VILLAGE
REQUESTED ZONING: CD-5

THE SITE IS CURRENTLY ZONED PUD. HOWEVER, THE PUD PLAN HAS EXPIRED. THE APPLICANT SEEKS TO REZONE THE PROPERTY TO A CHARACTER AREA SUPPORTED BY THE CCUV LAND USE POLICY AND CREATE A RESIDENTIAL INFILL DEVELOPMENT. THE LAND USE POLICY REQUESTS "URBAN NODES", "NEW RESIDENTIAL WITHIN WALKING DISTANCE TO COMMERCIAL AND CIVIC SPACES", "INFILL WITH MEDIUM AND HIGH DENSITY", AND "INFILL THAT SUPPORTS AND EXTENDS THE FORMATION OF BLOCKS AND ELIMINATES GAPS IN THE BUILDING ENVIRONMENT. THE APPLICANTS PROPOSAL WILL SATISFY THESE LAND USE POLICY REQUESTS.

HISTORY: THE APPROVED/EXPIRED PUD WAS APPROVED ON NOV. 14, 2019 AND CALLED WATERS EDGE. THIS PROJECT WAS A MULTI-FAMILY DEVELOPMENT THAT CONSISTED OF 5 BUILDINGS WITH 27 UNITS PER BUILDING, FOR A TOTAL OF 135 DWELLING UNITS.

THE PROPOSED CONCEPT PLAN SEEKS TO USE THE SAME USE AND DENSITY AS THE PREVIOUSLY APPROVED PUD AND DEVELOP IT WITHIN THE GUIDELINES OF THE CD-5 CHARACTER DISTRICT. THE APPLICANT PROPOSES TO USE SIMILAR BUILDINGS TO THE RIVER ROAD DEVELOPMENT ON THE SOUTHWEST CORNER OF THIS SAME INTERSECTION PUSHED UP TO THE STREET FRONTAGES WITH ALL PARKING ON-STREET OR BEHIND THE BUILDINGS. THIS PLAN ARRANGEMENT LEAVES NATURAL AREA/STORMWATER AREA TO THE NORTH OF THE SITE, ADJACENT TO THE TAYLOR LANDING OPEN SPACE. PARKING AND LANDSCAPE AREA ARE PROPOSED TO THE BOUNDARY WITH THE TOWNHOMES TO THE EAST.

THIS PROPERTY IS IN AN AREA OF CHANGE, AS DESIGNATED BY CONNECT COLUMBIA. THIS AREA IS ENCOURAGED TO USE CITY POLICIES TO FOSTER PROACTIVE CHANGE AND CREATE SIGNIFICANT AND BENEFICIAL CHANGE. DEVELOPING WITH THE FUNCTIONAL AND AESTHETIC REQUIREMENTS OF THE CD-5 DISTRICT, THIS PROPERTY WILL COMPLETE THE NEIGHBORHOOD DEVELOPMENT FOR THIS AREA. IT COMPLIMENTS THE RANGE OF HOUSING OPTIONS AVAILABLE FOR THIS AREA AND PLACES RESIDENTIAL DEVELOPMENT WITHIN WALKING DISTANCE OF THE CIVIC SPACE PARK AT THE RIVER ROAD PROPERTY TO THE SOUTHWEST AND THE COMMERCIAL DEVELOPMENT TO THE SOUTH ALONG NASHVILLE HIGHWAY.

ROADWAYS: THE FRONTAGE OF THE PROPERTY IS ON RIVER ROAD (MAJOR LOCAL) AND TAYLOR BEND ROAD (MAJOR LOCAL).

CONCEPT PLAN LOT DIMENSIONS:

MULTI-FAMILY BUILDING
FRONT SETBACK: 0-15'
SIDE SETBACK: 0-24'
REAR SETBACK: NOT REGULATED
MAXIMUM BUILDING WIDTH: 120'
MAXIMUM UNITS PER BUILDING: 24
PARKING PROVIDED IN SURFACE PARKED LOT (THIRD LAYER), OR ON STREET



Date: September 9, 2024
Revision Date
A10-21-2024 Staff Comments

△
△

REZONING
REQUEST

SHEET

L1.0



October 21, 2024

Paul Keltner, Director
Kevin McCarthy, City Planner
Development Services
City of Columbia, TN

RE: Re-Submittal Taylor's Bend Road Rezoning Request – **City of Columbia Project #24-0418**

Dear Mr. Keltner and Mr. McCarthy,

The accompanying documents are for the re-submittal associated with the Taylor's Bend Road Rezoning Request, on the property with a PUD formerly known as Waters Edge at Taylor's Bend. A response to Zoning Ordinance Section 8.5.19.H.4 has been provided below, as requested. The Technical Review Comment responses can be found below.

Resubmittal Items uploaded to the online portal:

1. Sheet LI.0 (24x36 PDF) Rezoning Request and Conceptual Plan
2. Comment Response Letter.

Rezoning Request Justification:

The following criteria from Zoning Ordinance 8.5.19.H.4 have been addressed/met as follows:

- a. *The Rezoning is consistent and not in conflict with the Comprehensive Plan or other applicable approved local plans for the area, provided the Planning Commission is not obligated to recommend approval of requests which would bring existing zoning into conformity with the Comprehensive Plan prior to the time such change is warranted by the findings of 8.5.19.H.4.e and f.* **Response: The applicant seeks to rezone the property to CD-5; which is consistent with the Comprehensive Plan Future Land Use of City Center Urban Village. The property is also within an Area of Change, as designated by Connect Columbia. This area is encouraged to use City policies to foster proactive change and create significant and beneficial change. Developing with the functional and aesthetic requirements of the CD-5 district, this property will complete the neighborhood development for the area. It compliments the range of housing options available for this area and placed residential development within walking distance of the civic space park at the river road property to the southwest and the commercial development to the south along Nashville Highway.**
- b. *It has been determined that the legal purposes for which zoning exists, as set forth in Section 1.5.* **Response: As currently zoned, this property cannot be developed. The existing zoning is PUD, which has expired and the existing PUD plan would not conform to the current requirements of the zoning ordinance. A rezoning is necessary in order to create a development plan that will comply with the City standards and provide the compatible development character that the Comprehensive Plan and Zoning Code require.**



- c. *It has been determined that there will be no adverse effect upon adjoining property owners unless such effect can be justified by the overwhelming public good or welfare. Response: Providing a rezoning to a character district that is consistent with the Comprehensive Plan provides no adverse effect on adjoining property. Additionally, the Conceptual Plan provided in with this request demonstrates the developer's intent to develop the property with the same use and density as was identified in the previously approved PUD development. The applicant can achieve this through a character district consistent with the Comprehensive Plan Future Land Use policy for this property, which provides clear guides for character and aesthetic.*
- d. *It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public. Response: The applicant seeks to rezone to a character district consistent with the Comprehensive Plan and develop within the requirements of the character district. This request would not be a detriment to the general public.*
- e. *It has been determined that conditions affecting the area have changed to a sufficient degree to warrant the Zoning Map Amendment or that the existing Zoning of the property was the result of a mistake. Response: The existing zoning designation of PUD was established on November 14, 2019. At this time, the approved PUD has expired and it cannot be reapproved under the current Zoning criteria. The applicant is seeking to rezone the property to a character district that is consistent with the Comprehensive Plan and development the same use and density as the previous approved PUD; however, with a plan that is consistent with the current Zoning Ordinance requirements.*
- f. *It has been determined that the adequate school, road, parks, wastewater treatment, water supply, and stormwater facilities are available. Response: Water and waste water availability letters have been provided with this submittal. No additional comments were provided from these utility providers or school district during the Technical Review Process. No additional roadways will be created with this future development plan and stormwater facilities will be provided on site with the development plan.*

Technical Review Comments – Dated Oct. 8, 2024

Planning:

1. *The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff. Response: Noted.*
2. *At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal. Response: Noted.*
3. *Please add a note to the concept plan indicating that the subject site is less than 10 acres in size, does not include the creation of a new Thoroughfare or Internal Drive, and therefore is not a development parcel. Response: Please see Sheet L1.0. This note has been added.*



4. *The description of the rezoning request included on the concept plan explains the rationale. In the response to DRC comments, please provide additional information, if any, that will aid the CMPC's evaluation of the criteria at 8.5.19.H of the zoning ordinance. **Response: Please see the above response to this section of the zoning ordinance. Additionally, a narrative concerning the rezoning request is on the L1.0 Sheet.***

Engineering:

5. *No Comments on Rezoning **Response: Noted.***
6. *TIS required at Site Development Plan. **Response: noted.***

Fire:

7. *Need to get a water availability letter from CPWS, if you have one, please upload it. **Response: This letter was received and uploaded on October 8, 2024.***

Columbia Water:

8. *A water availability letter was issued on October 7, 2024, it remains valid for 120 days. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements. **Response: Noted***

Columbia Power:

9. *Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development. **Response: Noted***
10. *CPWS BB Plan to Serve **Response: Noted***

ATT

11. *ATT to Serve. **Response: Noted***

Wastewater:

12. *No Comments provided. **Response: Noted***

Public Works:

13. *No comments on the rezoning. Private sanitation services may be utilized. Please retain the attached City of Columbia Dumpster Guidelines & Accessibility Requirements for your reference. **Response: Noted***



Maury County E911:

14. *No comments provided. Response: Noted*

Maury County Schools:

15. *No Comment. Response: Noted*

Duck River Electric Membership Corp:

16. *No comments. Response: Noted*

Maury County Highway Dept:

17. *No comments. Response: Noted.*

If there are any questions or additional information needed, please feel free to reach out to me, or Keli Frymire (keli@gdc-tn.com) in my office.

Thank you,

A handwritten signature in black ink, appearing to read 'Greg Gamble'.

Gamble Design Collaborative
Greg Gamble

Current Enrollment / Capacity

	Facility Name	Constructed	Sq. Ft.	Acreage	Capacity	Current Enrollment	Capacity Used
Elementary	Baker	1960	43,920	12	340	283	83.2%
	Battle Creek	2019	90,000	30	700	682	97.4%
	Brown	1968	56,720	20	405	336	83.0%
	Highland	1986	47,800	4.5	380	308	81.1%
	Howell	1999	81,600	17.5	700	595	85.0%
	Mt. Pleasant	1978	80,021	22	630	548	87.0%
	Riverside	1984	71,150	14	500	381	76.2%
	Spring Hill	1984	69,000	10	540	458	84.8%
	Woodard	1990	76,200	17	600	583	97.2%
	Wright	2005	97,765	18	740	617	83.4%
					5535	4791	86.6%
Middle	Battle Creek	2019	125,000	45	900	751	83.4%
	Cox	1997	137,200	25	900	628	69.8%
	Mt. Pleasant	2001	113,938	29.2	550	393	71.5%
	Spring Hill	2010	158,106	39.49	950	559	58.8%
	Whitthorne	1979	175,600	17	1050	952	90.7%
					4350	3283	75.5%
High	Battle Creek	2024	305,675	51	2000	403	20.2%
	Central	2016	296,740	55	1700	1406	82.7%
	Mt. Pleasant	1969	110,759	31	600	375	62.5%
	Spring Hill	1993	181,800	57	1200	913	76.1%
					5500	3097	56.3%
Unit	Culleoka	1969	205,800	34	1020	876	85.9%
	Hampshire	1978	83,410	13.12	500	417	83.4%
	Santa Fe	1964	94,225	24	650	553	85.1%
					2170	1846	85.1%
Other	Central Office	1960	15,400	1.5			
	College Hill	1958	42,211	2.26		140	
	Maintenance	1987	9,400	4.7			
	McDowell		46,165	7			
			2,815,605	601.27	17555	13157	



DEVELOPMENT REVIEW COMMITTEE MEETING

Tuesday, October 8, 2024

ITEM NO.

24-0418

DESCRIPTION: Waters Edge at Taylors Bend

COMMENTS:

Planning

1. The lead staff person for this case is City Planner Kevin McCarthy, AICP; he will prepare the staff report for this item. Please contact kmccarthy@columbiatn.com with questions about the development review process or technical comments. The lead planner should be copied on all communication with other city staff.
2. At resubmittal, please provide a response letter addressing each comment along with any revised plans. If the nature of the comment does not warrant a response, or the comment was previously addressed, please simply note that the information has been acknowledged. Any documents or additional information that you want to present to the Planning Commission should be included in your resubmittal.
3. Please add a note to the concept plan indicating that the subject site is less than 10 acres in size, does not include the creation of a new Thoroughfare or Internal Drive, and therefore is not a development parcel.
4. The description of the rezoning request included on the concept plan explains the rationale. In the response to DRC comments, please provide additional information, if any, that will aid the CMPC's evaluation of the criteria at 8.5.19.H of the zoning ordinance.

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5. No Comments on rezoning
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Fire

7. Need to get a water availability letter from CPWS, if you have one, please upload it

Columbia Water



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ATT

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Wastewater

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Public Works

13. No comments on the rezoning. Private sanitation services may be utilized. Please retain the attached City of Columbia Dumpster Guidelines & Accessibility Requirements for your reference.

Maury County E911

14. No comments provided.

Maury County Schools

15. No comment.



Duck River Electric Membership Corp

16. No comments.

Maury County Highway Dept.

17. No comments.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

Please contact kmccarthy@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.



DEVELOPMENT PLANNING AND
LANDSCAPE ARCHITECTURE

RIVER ROAD PARCEL REZONING REQUEST & CONCEPTUAL DEVELOPMENT PLAN

Columbia, Tennessee

Date: September 9, 2024

Revision Date

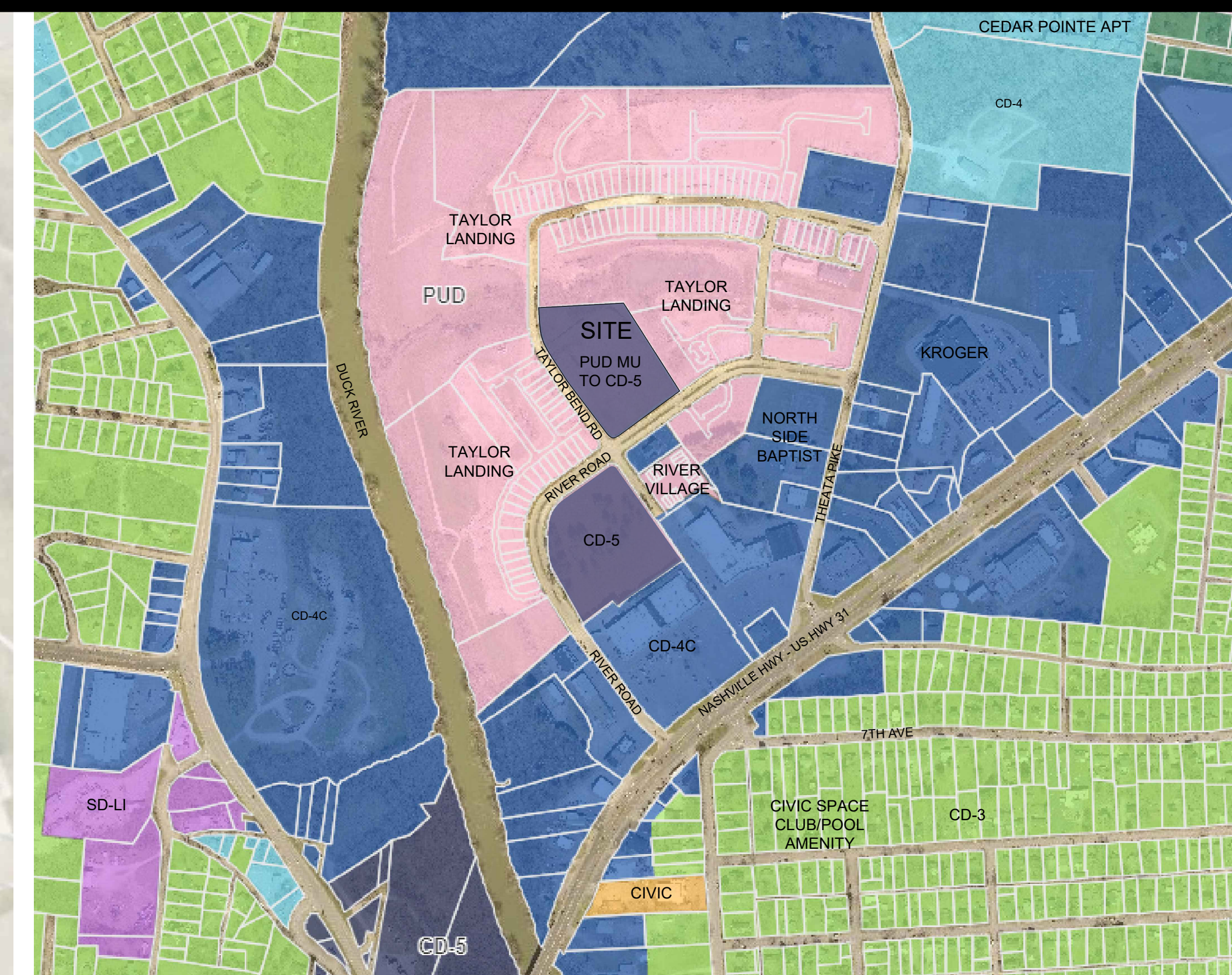






REZONING
REQUEST
SHEET
L1.0

DEVELOPER:
CLIFF SMITH
CPS LAND
213 OVERLOOK CIRCLE, SUITE E
BRENTWOOD, TN 37027
615.477.3186



LOCATION MAP - ZONING MAP



WATERS EDGE AT TAYLOR BEND
PROPERTY MAP 090, PARCEL 007.03
RIVER ROAD
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

Being Tract 24, a 5.026-acre tract as shown on the final plat entitled "Waters Edge at Taylor Bend" of record in Plat Book P17, page 319, Register's Office for Maury County, Tennessee to which plat reference is hereby made for a more complete description of the subject property.

REZONING REQUEST:

THE SITE IS CURRENTLY ZONED PUD. HOWEVER, THE PUD PLAN HAS EXPIRED. THE APPLICANT SEEKS TO REZONE THE PROPERTY TO A CHARACTER AREA SUPPORTED BY THE CCUV LAND USE POLICY AND CREATE A RESIDENTIAL INFILL DEVELOPMENT. THE LAND USE POLICY REQUESTS "URBAN NODES", "NEW RESIDENTIAL WITHIN WALKING DISTANCE TO COMMERCIAL AND CIVIC SPACES", "INFILL WITH MEDIUM AND HIGH DENSITY", AND "INFILL THAT SUPPORTS AND EXTENDS THE FORMATION OF BLOCKS AND ELIMINATES GAPS IN THE BUILDING ENVIRONMENT. THE APPLICANTS PROPOSAL WILL SATISFY THESE LAND USE POLICY REQUESTS.

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THE PROPOSED CONCEPT PLAN SEEKS TO USE THE SAME USE AND DENSITY AS THE PREVIOUSLY APPROVED PUD AND DEVELOP IT WITHIN THE GUIDELINES OF THE CD-5 CHARACTER DISTRICT. THE APPLICANT PROPOSES TO USE SIMILAR BUILDINGS TO THE RIVER ROAD DEVELOPMENT ON THE SOUTHWEST CORNER OF THIS SAME INTERSECTION PUSHED UP TO THE STREET FRONTS WITH ALL PARKING ON-STREET OR BEHIND THE BUILDINGS. THIS PLAN ARRANGEMENT LEAVES NATURAL AREA/STORMWATER AREA TO THE NORTH OF THE SITE, ADJACENT TO THE TAYLOR LANDING OPEN SPACE. PARKING AND LANDSCAPE AREA ARE PROPOSED TO THE BOUNDARY WITH THE TOWNHOMES TO THE EAST.

THIS PROPERTY IS IN AN AREA OF CHANGE, AS DESIGNATED BY CONNECT COLUMBIA. THIS AREA IS ENCOURAGED TO USE CITY POLICIES TO FOSTER PROACTIVE CHANGE AND CREATE SIGNIFICANT AND BENEFICIAL CHANGE, DEVELOPING WITH THE FUNCTIONAL AND AESTHETIC REQUIREMENTS OF THE CD-5 DISTRICT, THIS PROPERTY WILL COMPLETE THE NEIGHBORHOOD DEVELOPMENT FOR THIS AREA. IT COMPLIMENTS THE RANGE OF HOUSING OPTIONS AVAILABLE FOR THIS AREA AND PLACES RESIDENTIAL DEVELOPMENT WITHIN WALKING DISTANCE OF THE CIVIC SPACE PARK AT THE RIVER ROAD PROPERTY TO THE SOUTHWEST AND THE COMMERCIAL DEVELOPMENT TO THE SOUTH ALONG NASHVILLE HIGHWAY.

ROADWAYS: THE FRONTAGE OF THE PROPERTY IS ON RIVER ROAD (MAJOR LOCAL) AND TAYLOR BEND ROAD (MAJOR LOCAL).

CONCEPT PLAN LOT DIMENSIONS:

MULTI-FAMILY BUILDING

FRONT SETBACK: 0-15'

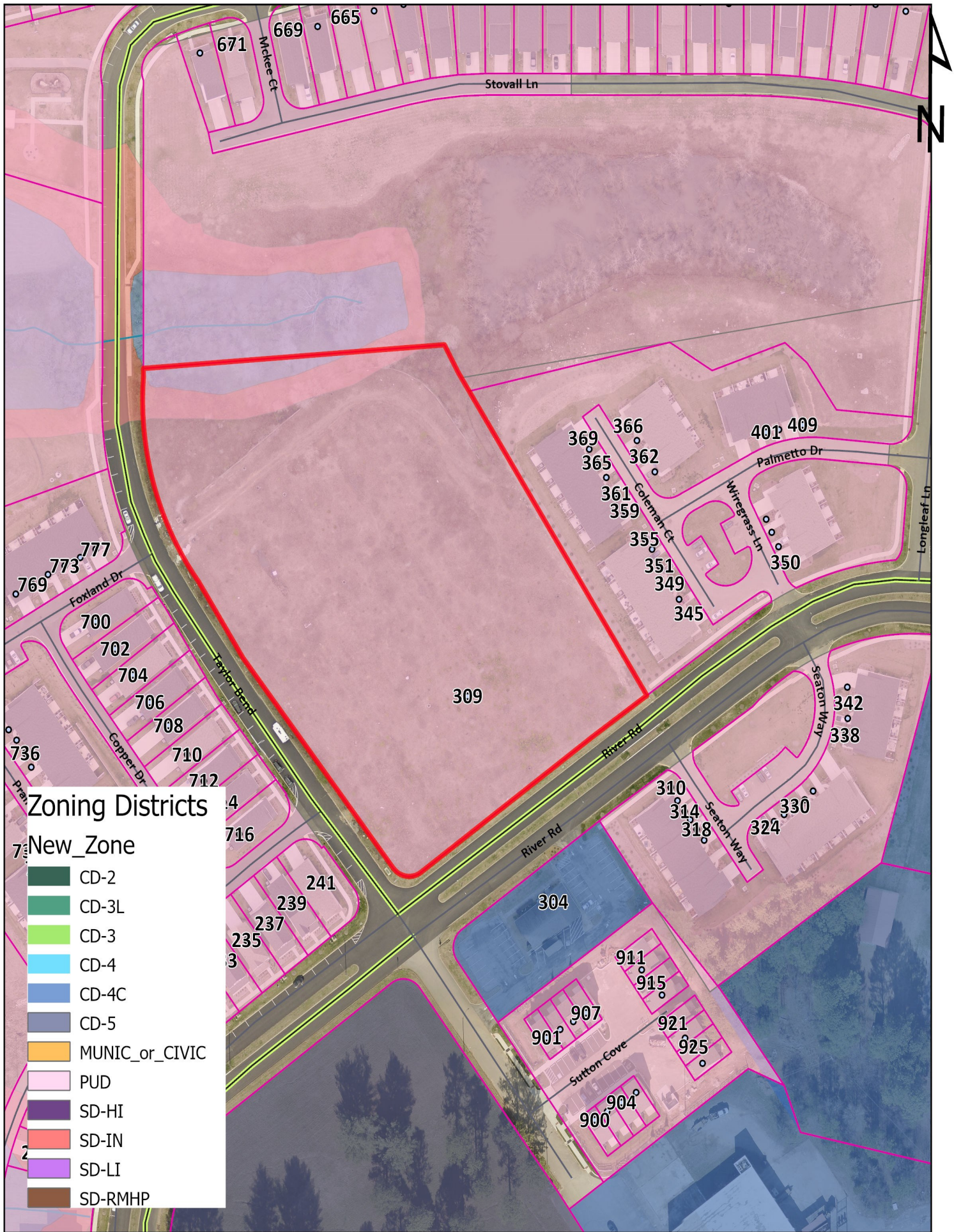
SIDE SETBACK: 0-24'

REAR SETBACK: NOT REGULATED

MAXIMUM BUILDING WIDTH: 120'

MAXIMUM UNITS PER BUILDING: 24

PARKING PROVIDED IN SURFACE PARKED LOT (THIRD LAYER),
OR ON STREET



Case #24-0418
 River Rd. & Taylor Bend
 Tax Map 90 Parcel 7.12

City of Columbia
 Development Services
 700 N. Garden Street
 Columbia, TN 38401
www.columbiatn.gov



**WATERS EDGE AT TAYLOR BEND
PROPERTY MAP 090, PARCEL 007.03
RIVER ROAD
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE**

Being a certain tract or parcel of land lying and being in the Ninth (9th) Civil District of Maury County, city of Columbia, Tennessee and being more particularly described as follows:

Being Tract 24, a 5.026-acre tract as shown on the final plat entitled “Waters Edge at Taylor Bend” of record in Plat Book P17, page 319, Register’s Office for Maury County, Tennessee to which plat reference is hereby made for a more complete description of the subject property.

No field work has been performed by Kimley-Horn Associates to verify the accuracy of the property lines, corners or areas shown on said recorded plats.



October 7, 2024

Mr. Keyshawn Gallon

Kimley-Horn

4031 Aspen Grove Drive Suite 200

Franklin, TN 37067

Sent via email: keyshaw.gallon@kimley-horn.com

RE: Water Availability Letter

Waters Edge

Northeast Intersection at Taylors Bend and River Rd

Tax Map 90, Parcel 7.12

Columbia, Maury County, TN

Dear Mr. Gallon:

Columbia Power and Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation, various Planning Commissions and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies, water service will be made available on a first-come, first-served basis, subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development consists of 135 multi-family units in 7 buildings, with an amenity center. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model and is able to meet a fire-flow capacity of 1,650 gpm at 20 psi while maintaining the existing level of service and pressures in this portion of the distribution system. CPWS can provide water for the proposed development according to the following requirements:

- Domestic waterline connections will be made to the existing 8-inch water mains located on Taylors Bend and/or River Rd.
- Dual domestic and fire master meters will be required.

All of the above requirements are to be constructed and paid for by the Applicant and dedicated to CPWS once complete up to and including the meter. No construction of CPWS infrastructure shall be initiated until final construction plans have been approved by TDEC and all parties have fully executed a water service agreement.



Once you have received this Water Availability Letter, next steps in the process to obtain water service from CPWS are as follows:

- Prior to expiration of this letter in 120 days, remit to CPWS new water service fees:

New Water Service Fee: \$1,500 + \$370 per SFU (135 SFUs)	\$51,450.00
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- Provide for review and comment site utility drawings, including the proposed locations of all meters and backflow devices.
- Upon resolution of all comments, applicant may then schedule a pre-construction meeting with CPWS. Pre-construction meeting will be canceled and re-scheduled unless all meter and impact fees are paid at least 48 hours prior, or surety is provided in lieu of full payment. Final meter and impact fees are subject to change based on final design and the prevailing Board-approved rates at time of payment. If surety is provided in lieu of payment, meters are not ordered until fees are paid and may result in extended lead-times.

Meter Fee: TBD per 3" domestic meter (2 meters)	TBD
Meter Fee: TBD per 6" fire meter (2 meters)	TBD
Impact Fee: \$84,000 per 3" meter (1 meter)	\$84,000.00
Total Meter and Impact Fees Due =	\$84,000.00

- After the pre-construction meeting, CPWS will then issue a formal notice to proceed. No construction of CPWS infrastructure may take place prior to the pre-construction meeting.
- Applicant is then required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.



If you have any questions, please feel free to contact me at 423-774-0349 or eric.king@inflodesign.com. This letter is valid for one-hundred twenty (120) days from the date of this letter.

Sincerely,

A handwritten signature in blue ink that reads "Eric King". The signature is fluid and cursive, with the first name "Eric" and last name "King" clearly distinguishable.

Eric King, P.E.
Inflo Design Group, LLC
on behalf of Columbia Power and Water Systems

cc: Matt Wheeler, CPWS
File 24-062



WASTEWATER DEPARTMENT

30 August 2024

Keyshawn Gallon
4031 Aspen Grove Drive, Suite 200
Franklin, TN 37067

RE: Waters Edge, 090 007.12; Intersection of Taylor Bend Rd and River Road, Columbia, TN 38401

Keyshawn,

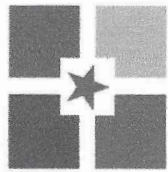
This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. Any Final Plat approval and Dedication are both subject to installation and function, as determined by our Department. No detailed design plan for an extension of the sewer has been proposed at this time.

A handwritten signature in blue ink, reading "Donnie Boshers". The signature is fluid and cursive, with the first name "Donnie" and last name "Boshers" clearly legible.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

Something Good Around Every Corner

1244 Treatment Plant Road Columbia, Tennessee 38401 Phone 931.560.1001



PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * 1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)

Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at [City of Columbia | Permitting \(onlana.com\)](http://City of Columbia | Permitting (onlana.com))

ADDRESS/LOCATION	corner of River Rd & Taylors Bend		
	TAX MAP: 90	GROUP:	PARCEL: 7.12
SUMMARY OF NATURE OF REQUEST AND WORK	The applicant is seeking a rezoning from PUD to CD-5 for a 5 acre vacant parcel located at the NE corner of River Rd and Taylors Bend and identified as parcel 090-00712-000. The PUD plan associated with the existing zoning is expired. The applicant would like to proposed CD-5 zoning to match the parcel at the SW of this same intersection and develop per the existing Zoning Code.		

DATE OF PRE-APPLICATION CONFERENCE	8/21/2024	Pre-application meetings are scheduled for Wednesdays.
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SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
☐ Comprehensive Plan Amendment ☐ Annexation ☒ Rezoning ☐ Preliminary Plat ☐ Final Plat ☐ PUD Preliminary Master Plan ☐ PUD Final Site Plan ☐ Site Development Plan ☐ Other: <i>*File naming nomenclature examples:</i> Freedom Point Site Plan Freedom Point Master Plan Freedom Point Final Plat	<u>Annexations:</u> ☐ Annexation Permission Form <u>Annexations/Rezoning/Plan Amendments:</u> ☒ Requested Zone Listed ☒ Statement of Compliance with Comprehensive Plan ☒ Concept Plan <u>Preliminary Plats/Site Development Plans:</u> ☐ Plans and/or Plats conforming to City standards with signed and completed check list <u>All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:</u> ☒ Receipt of Payment for Pre-Application Meeting ☒ Written Legal Description copy ☒ Columbia Water System Availability Letter ☒ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs:
	☐ Project Name (include Sections & Phases)
	☐ Total Number of Lots/Residential Units
	☐ Square Footage of Non-Residential Floor Space
☐ Total acreage	

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Greg Gamble - Gamble Design Collaborative	PHONE	615-975-5765
ADDRESS	3020 Stansberry Lane, Ste 201, Franklin TN	EMAIL	info@gdc-tn.com

PROPERTY OWNER NAME	Brent Campbell	PHONE	615-476-8000
ADDRESS	211 Grand Park, 37067	EMAIL	br@shibrent@gmail.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Greg Gamble

APPLICANT NAME



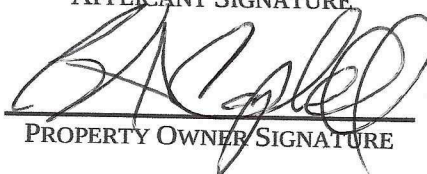
APPLICANT SIGNATURE

9/16/2024

DATE

Brent Campbell

PROPERTY OWNER NAME



PROPERTY OWNER SIGNATURE

9-4-'24

DATE

Melissa Sanders

From: Austin Brass
Sent: Wednesday, February 12, 2025 1:18 PM
To: Olivia DuPuy
Cc: Joseph Parsley; Sandra Richardson; Glenn Harper; Paul Keltner; Melissa Sanders; Robert Archibald
Subject: RE: 3908-1000 Walmart Neighborhood Market - Planning Commission Meeting

Hi Olivia;

I appreciate the update. We will make sure to mark this application as deferred at request of the applicant and proceed forward on the March agenda.

Best,

From: Olivia DuPuy <OliviaDuPuy@carlsonconsulting.net>
Sent: Wednesday, February 12, 2025 12:37 PM
To: Austin Brass <ABrass@Columbiatn.gov>
Cc: Joseph Parsley <JosephParsley@carlsonconsulting.net>
Subject: [Caution External Email] - 3908-1000 Walmart Neighborhood Market - Planning Commission Meeting

Good afternoon Austin,

With the latest feedback we have received, our client would like to defer to next month's meeting for further coordination.

Thank you,

Olivia DuPuy

Get [Outlook for iOS](#)

Honey Farm Wal Mart Preliminary PUD Master Plan

Project #:	24-0535	Location:	2248 Nashville Hwy Map 51 Parcel 058
Applicant:	Olivia DuPuy	Case Type(s):	PUD Master Plan
Staff Planner:	Austin Brass, AICP	Proposed Use:	Walmart Neighborhood Market

PROJECT SUMMARY

The applicant seeks approval of a Preliminary Planned Unit Development Master Plan approval for a 45,002 SF grocery retail market within a PUD-MU District. This proposal is located on a vacant 7.49-acre site at the Northeast corner of Honey Farm Way and Nashville Hwy.

The following bullet points list requested deviations that do not comply with the PUD-MU standards of the Zoning Ordinance. Please see applicant response to deviations list in attachments.

- A PUD-MU district requires all lots/building sites to have a maximum width of 180' at the right-of-way. This request divides the site into 6 individual building sites dedicated to site specific uses of parking while including one building site dedicated to the physical footprint of the Walmart building. Among the six building sites, deviations have been requested for building sites 2 and 3 to exceed 180'. In addition, a deviation request has been noted for other building sites; however, this is the 20% parameters of an administrative adjustment and can be granted by Staff. The applicant's response to this justification has been included in the agenda packet.
- A PUD-MU district requires a 75' buffer per § 4.3.11.H of the Zoning Ordinance where a parcel buffer shall be applied for any new development or structure adjacent to a single-family dwelling. This buffer is required along the northern boundary line of the site. The applicant has requested a deviation for a reduced buffer noting that there is an existing 70' utility easement on the site with overhead electrical lines. The applicant is proposing to provide a 6' wooden fence to provide screening and allow for access to the utility area.
- The applicant is proposing a one story building. As noted, this requirement is subject to adjacent uses within a PUD-MU district subject to Planning Commission approval. The applicant has responded by providing a prototypical building elevation with tall vestibules and building elements to make the building appear to be a second story. In addition, glazing has been added on the upper sections of the building façade that give the appearance of second story windows.
- The Zoning Ordinance requires retaining walls to be screened by a row of evergreen shrubs planted every five feet on center of the base of the wall with a minimum of 30 inches in height. The applicant is proposing not to provide screening of the retaining wall as the wall is located at the rear of the property behind the proposed building.

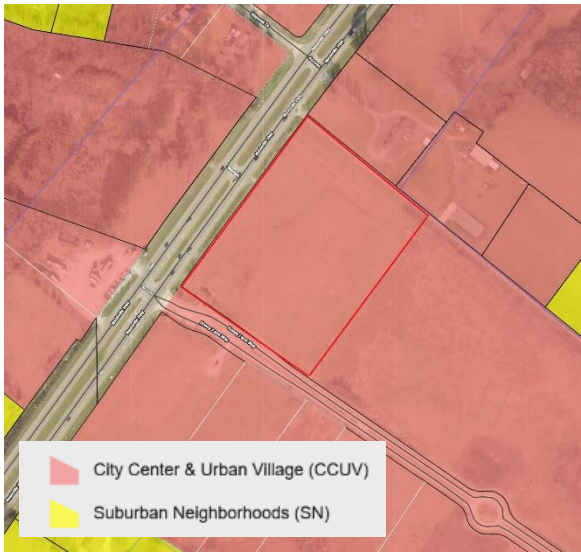
- A PUD-MU district requires all buildings with a retail use to consist of a shopfront façade type. All shopfront façade types require 70% glazing (*glass*) as an element of this façade. The applicant has requested for reduced glazing on the shopfront elevation with 19.5% of clear glass. As noted, clear glass is only permissible to count toward the glazing requirement.
- Food sales with a parking ratio of 1 space per 500 SF for general merchandise sales is required. With an overall building square footage of 45,000 SF. The applicant indicates 195 spaces total including all pickup stalls. The Zoning Ordinance requires a parking ratio to not exceed 30% of the maximum requirement with 166 spaces being the maximum allowed per the Ordinance thus requesting a deviation to exceed the parking count standards.
- Any approval should be conditioned on the timely submittal of "as-approved" plans, which reflect the substance of the plans approved by the Planning Commission, as determined by the Zoning Administrator and the City Engineer.
- This request includes substitutional deviations from signage including a proposal for a freestanding and monument sign option. The monument sign option proposed a 120 SF sign exceeding the allowable area by 40 SF. In addition, this sign exceeds the 10ft maximum height allowance at 14.6 ft. A 28 ft tall freestanding pylon sign option exceeds the ordinance by 40 SF in sign area and 15 ft in height.
- A deviation is requested for wall mounted signage to exceed the base standards of 32 SF with multiple signs faces on the front elevation. In addition, the southwest elevation enfronting Honey Farms Way proposes a 200' wall sign.
- The Planning Commission is the **recommending body** to City Council for a Preliminary PUD Master Plan per section 8.5.21.K of the Zoning Ordinance that lists the criteria for Planning Commission action. The Planning Commission will be the decision-making authority for the Final PUD Master.

SITE INFORMATION

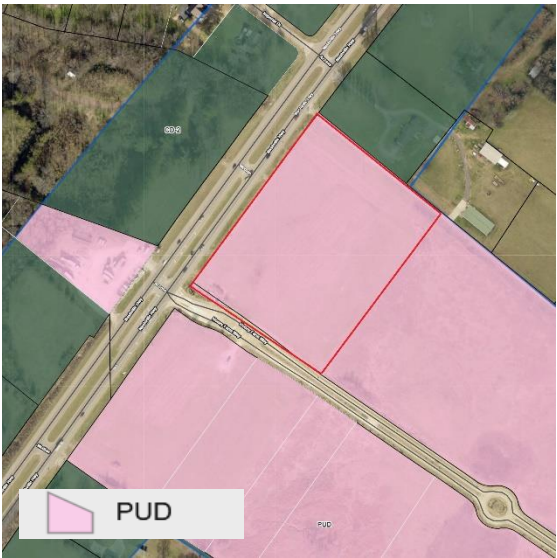
CURRENT ZONING	EXISTING USE	EXISTING IMP.	LAND AREA
PUD-MU	Vacant Land	45,002 SF Wal Mart	+ /- 7.49 acres



FUTURE LAND USE MAP (City Center & Urban Village)



ZONING MAP (PUD-MU)



CONSISTENCY WITH CONNECT COLUMBIA

SITE CONTEXT/ADJACENT PROPERTIES			
	Future Land Use	Zoning	Current Use
Subject Property	City Center & Urban Village	PUD-MU	Vacant
North	City Center & Urban Village	CD-2	Single-Family Residential
South	City Center & Urban Village	PUD-MU	Future McDonalds/ Retail
East	City Center & Urban Village	PUD-R & CD-2	Vacant
West	City Center & Urban Village	PUD-MU	Vacant

City Center & Urban Village:

The City Center & Urban Village (CCUV) future land use area comprises Columbia's iconic core and ancillary focal points. It includes the historic courthouse square and the places residents of Columbia associate with worship, commerce, the arts, community activities and government administration. The CCUV also supports the creation of urbanized nodes which provide identifiable commercial hubs for Columbia's emerging neighborhoods. Each development parcel should add to Columbia's existing sense of place and extend its established form and pattern to create a more interconnected community. Primary Land Uses are horizontally and vertically mixed in a variety of structure types. The intensity and mix of uses are largely determined by context. New residential development provides a mixture of housing within walking distance of commercial and civic spaces. New non-residential development in established residential areas shall be comprised of low-intensity uses which serve residents' daily needs. Higher intensity uses should complement and extend the traditional pattern of development in Columbia's core, or establish identifiable centers for emerging nodes. **Future development should emphasize connectivity and continuity of the city as a whole. Additionally, new development shall create a pedestrian-friendly environment by filling gaps in sidewalks and enhancing multi-modal infrastructure. All new and infill development shall emphasize linkages to identifiable community anchors such as mixed-use commercial centers, schools, parks, or civic institutions.**



CITY OF COLUMBIA TENNESSEE PLANNING COMMISSION STAFF REPORT

FEBRUARY 2025
24-0535 NASHVILLE HWY
PRELIMINARY PUD

Character & Intent

The City Center & Urban Village (CCUV) future land use area comprises Columbia's iconic core and ancillary focal points. It includes the historic courthouse square and the places residents of Columbia associate with worship, commerce, the arts, community activities and government administration. The CCUV also supports the creation of urbanized nodes which provide identifiable commercial hubs for Columbia's emerging neighborhoods. Each development parcel should add to Columbia's existing sense of place and extend its established form and pattern to create a more interconnected community.

Primary Land Uses are horizontally and vertically mixed in a variety of structure types. The intensity and mix of uses is largely determined by context. New residential development provides a mixture of housing within walking distance of commercial and civic spaces. New non-residential development in established residential areas shall be comprised of low-intensity uses which serve residents' daily needs. Higher intensity uses should complement and extend the traditional pattern of development in Columbia's core, or establish identifiable centers for emerging nodes.

Future development should emphasize connectivity and continuity of the city as a whole. Additionally, new development shall create a pedestrian-friendly environment by filling gaps in sidewalks and enhancing multi-modal infrastructure. All new and infill development shall emphasize linkages to identifiable community anchors such as mixed-use commercial centers, schools, parks, or civic institutions.



Land Use Considerations

Primary uses include government, civic uses, parks, religious facilities, offices, retail, and all forms of medium-density housing. Secondary land uses include utility facilities, institutional uses, low-density housing, and neighborhood retail. New industrial and warehouse uses are inappropriate.

Form & Pattern

The CCUV includes established and infill neighborhoods at medium to high densities organized along a well-connected transportation network. Infill development supports and extends the formation of blocks and eliminates gaps in the built environment. The CCUV future land use is distinguished from Suburban Neighborhoods (SN) by the unambiguous prominence of public frontages. A high density of streets and thoroughfares with complete public frontages extends the public sphere outward from civic and commercial spaces. Implementing bulk and design standards clearly delineate the public and private realms through the application of layers and front-to-back discipline of lots. Bulk and design standards are occasionally modified to accommodate historic preservation, artistic innovation, redevelopment, and other place-based policies of the City. New development should accompany concurrent extension of complete urban services in places where they do not already exist. Parking is provided on an area-wide basis as a utility supplemented by private land users.

Implementing Districts

Neighborhood CD-3 (Only where compatible with established pattern)
General Urban CD-4
Urban Center CD-5
General Urban-Corridor CD-4C (only along Arterial roadways)
Urban Center - Corridor CD-5C (only along Arterial roadways)*
Mixed Use PUD-MU
Civic CV

Implementing Standards

General Development Pattern: Mixed Uses & Isolated Uses
Density (density units per acre): ≥ 12 du/ac
Building Height: 1-5 stories
Open Space Elements: Civic Spaces, Parks & Greenways



AREA OF CHANGE

Connect Columbia established the areas of change policy designation for the subject site as *Activate*. The designation includes areas where significant and beneficial change is occurring or is desired. These areas are the focus of proactive City policies to bring the community's values to fruition. Public investment and increased coordination with the private sector will achieve transformational changes envisioned by the community (Connect Columbia p. 32).



■ Activate (City Policies Foster Proactive Change)
■ Protect (City Policies Minimize Change to Established Land Use)
■ Facilitate (City Facilitates Orderly Market-Driven Change)

CONFORMITY WITH ZONING ORDINANCE

Thoroughfare/ Enfrontment:

A thoroughfare has been added throughout the site in the form of a private internal drive street section that consists of a required 37' PUDAE with two 11' travel lanes. In addition, the engineering standards require that an internal drive street section consist of a 5' sidewalk and 5' planter strip. The ESS standards do allow for an exception to utilize 5' wide tree wells in lieu of the planter strip. These tree wells have been added every 50' along the sidewalk frontage adjacent to the physical footprint of the building where a planter strip is not present. The planter strip and sidewalk has continued along the internal drive section that terminates into a right-out, right-in from Nashville Hwy. The purpose of this internal drive street section is to allow for building enfrontment onto a thoroughfare and provide a high standard of pedestrian and vehicular circulation throughout the site.

Landscaping/ Buffering:

This site development plan conforms to all internal landscaping standards for parking lot islands and frontage landscaping. It shall be noted that the applicant has proposed planter boxes in lieu of foundation landscaping at the frontage of the building that is permitted per the Zoning Ordinance. Internal parking lot hedgerows and a 3' aluminum fence has been added that provide for separation and delineation of building sites when utilizing parking lots as the principal use as required Zoning Ordinance. A 3' split rail aluminum fence and hedgerow is indicated around the perimeters of these parking areas. In addition, a PUD-MU district requires a 75' buffer per section 4.3.11.H of the Zoning Ordinance where a parcel buffer shall be applied for any new development or structure adjacent to a single-family dwelling. This buffer is required along the northern boundary line of the site. The applicant has requested a deviation for a reduced buffer noting that there is an existing 70' utility easement on the site with overhead electrical lines. The applicant is proposing to provide a 6' wooden fence to provide screening and allow for access to the utility area along this northern boundary line.

Parking/Loading:

This site development plan provides all adequate parking layout and orientation requirements per section 4.3.12.C of the Zoning Ordinance. As a parking lot of more than 120 spaces, a pedestrian path is indicated that bisects the parking area with a sidewalk width of 8 ft. ADA compliant parking stalls are located closest to the entrance of the building and provide all van-accessible stalls as required. This site development plan utilizes parking lots as a principle use that is subject to the limited use standards of a wall or continuous evergreen hedgerow of at least 24 inches and a fence of no more than 48 inches placed around the perimeter of the parking

area to prevent encroachment of vehicles into surrounding areas. The applicant has provided this required hedgerow and has provided an aluminum split rail fence around all perimeters of parking areas provided. In addition, this hedgerow and aluminum fence is provided at the entire frontage of the site enfronting Nashville Hwy. and Honey Farm Way. All loading for delivery vehicles and access is provided at the rear elevation of the building via a defined access driveway that circulates the rear of the site. A parking ratio of 1 space per 200 SF is required with a parking ratio of 1 space per 500 SF for general merchandise sales. With an overall building square footage of 45,002 SF; 22,628 SF is dedicated to retail food sales with the provided 114 spaces required. General merchandising accounts for 6,936 SF with a requirement of 14 spaces. With 128 parking spaces required, the applicant indicates 195 spaces that includes pickup stalls. The Zoning Ordinance requires a site parking ratio not to exceed 30% of the maximum requirement with 166 spaces being the maximum allowed per the Ordinance.

Lots, Building Sites & Bulk Standards:

- **The proposed Planned Unit Development Preliminary Master Plan conforms to the bulk standards of the Ordinance within a PUD-MU District.**
 - All proposed uses must conform to the uses as outlined in § 4.3.9.A-1 of the Zoning Ordinance. The Zoning Ordinance permits retail sales in a PUD-MU district.
 - This site plan includes deviations from the base standards within a PUD-MU District that outline all required design standards. These deviations include increased building site widths, fence placement in lieu of parcel buffer landscaping on north boundary line, and a proposal for a one-story building with reduced glazing.
 - Staff prepared the tables below to demonstrate how the proposed development conforms to the bulk and design standards of the Zoning Ordinance. Table 1 describes applicable bulk standards per the Zoning Ordinance for a PUD-MU character district in which the subject property is zoned. Table 2 describes the design standards of the Zoning Ordinance per § 4.3.1-M of the Zoning Ordinance within a PUD-MU District.

Table 1 (PUD-MU) Mixed Use Planned Unit Development Bulk Standards		
Bulk Standards:	Required	Proposed
Minimum Lot/ Building Site Width Minimum and Maximum:	18 ft. min/ 180 ft. max	Building Lot 1: 189' Building Lot 2: 223' Building Lot 3: 248' Building Lot 4: 160' Building Lot 5: 158' Building Lot 6: 188'

Lot/Building Enfrontment:	Facades must have main entrance in principle of building frontage	The façade of the building enfronts a dedicated internal drive street section.
Building Height:	2 stories minimum <i>*Subject to adjacent uses in PUD MU per Planning Commission</i>	1 story
Frontage Buildout:	90% minimum	100%
Setbacks:	Principal Buildings Front: – 0-20 ft. Side: – 0' attached, 10 ft-24ft. Rear: NR.	Front: – 5 +/-' Side: - 0' Rear: NR

Architectural Design Standards:

Table-2 (PUD-MU) Mixed Use Planned Unit Development Architectural Standards		
Design Standards:	Required	Proposed
Main Entrance:	Main Entrance must be in Façade of Principal Frontages.	Main entrance enfronts a defined internal drive street section.
Vertical Composition:	Identifiable Base, Middle, & Cap	The faced includes a defined base, middle, and cap.
Façade Position & Façade Articulation:	Main entrance at façade & position parallel to frontage line. A façade greater than 100' shall be differentiated so that it appears to be comprised of two or more adjacent buildings.	The principal frontage is parallel to the frontage line and provides the façade into segments separated by cornice height and wall materials and includes modulation every 100' by separation of vertical and horizontal elements.
Façade Openings:	20 ft. or less spacing for windows/doors	All windows appear to be 20 ft or less with no blank facades.
Façade Glazing:	20-60 % non-shopfront, 70% for shopfront	Façade 1: 23.8% Façade 2: 23% Façade 3: 44% (70% required as a shopfront façade type)
Window Shape:	Square or vertical proportions	All windows are square or vertical proportioned
Window Alignment:	Upper floor windows and other features must be	All upper floor windows are aligned correctly.

	aligned with those of first floor	
Window Types:	Single-hung, double-hung, casement.	All windows adhere to the window type standards as described.
Window Glazing Material:	Clear	All windows proposed to be a combination of clear and spandrel glass .
Window Trim in 1st Layer:	Min 4 in. trim with sill and top plate/ soldier course above lintel and rowlock course below sill	Elevations contain window trim and rowlock and soldier course around window areas where brick is used as a façade material.
Shutters:	Functional to cover half of window width/ shutter dogs	Shutters are not proposed on windows.
Façade Window Sill Height:	5 ft. min above grade (residential only)	N/A (<i>Commercial uses do not have this requirement</i>)
Façade Variety:	No façade may exist more than once on a block face or within view of same façade	This is a single site building with one façade. The request includes an extended canopy in the center façade with five defined brick columns to add modulation to the façade type.
Roof Type & Pitch:	Hip/ Gable/ Flat	Flat
Primary Building Materials:	Brick, Fiber Cement Board, Wood, Authentic stucco over masonry	All elevations indicate a primary façade material of brick and CMU block with a smooth stucco coating.
Foundation Cladding:	Brick or Natural Stone	Brick
Building Colors:	Up to 3 colors, including the natural color of any allowed materials, but excluding trim color.	Does not exceed 3 colors.

REVIEW PROCESS

Section **8.3.3.B.7** of the Zoning Ordinance authorizes the Planning Commission to make “Recommendations to the City Council on a preliminary Master PUD Development Plan.” Sections 8.5.21.B.3 and 8.5.21.K of the Zoning Ordinance establish the criteria for Planning Commission review and action on the proposed Preliminary PUD Master Plan.

8.5.21.B Master PUD Development Plan Approval

3. Approval of a Master PUD Development Plan [is] subject to the Planning Commission’s and the City Council ’s first making formal, written findings regarding each of the items

listed in Section 8.5.21 B.2 and that the proposed Development, such applications, and approvals:

- a. conforms to all applicable standards and requirements of this Ordinance,
- b. would be compatible with other Development permitted under all applicable provisions of this Ordinance;
- c. will not significantly interfere with the use and enjoyment of other land in the vicinity;
- d. adequately conserve woodland and the protect water courses from erosion and siltation;
- e. maximize safety, convenience, and amenities for the residents and visitors of the Development; and
- f. adequately address all such other matters as they may find to have a material bearing upon the stated standards and objectives of this Ordinance.

4. Unless specifically exempted, the standards and requirements contained in this Section 8.5.21 shall be in addition to all other applicable standards and requirements established in this Ordinance.

8.5.21.K.1 Planning Commission Action on Preliminary Master PUD Development Plan

Before making any recommendation on a Preliminary Master PUD Development Plan or an amendment to an existing approved Preliminary Master PUD Development Plan, the Planning Commission shall consider the Certificate of Compliance and all recommendations from the Zoning Administrator, the City Engineer, and other City departments, and shall conduct a public hearing.

Section **8.3.2.B.4** directs the City Council to rend a final decision on the preliminary Master PUD Development Plan of a Planned Unit Development. If the City Council approves the Preliminary PUD Master Plan, the applicant will have two years to submit a Final PUD Master Plan. The Planning Commission shall determine whether the Final PUD Master Plan complies with the Preliminary Master Plan (§ 8.5.21.Q)

SUMMARY OF DEVELOPMENT REVIEW COMMITTEE COMMENTS

The Development Review Committee reviewed the proposed Preliminarily PUD Master Plan at its January 25th meeting, as directed by section **8.3.7** of the Zoning Ordinance. Technical comments are provided in the agenda package and summarized above.

- **Planning** noted the proposal requiring a fence and hedgerow detail that provide delineation of parking lots when being utilized as principle uses. The applicant responded by adding a 3' aluminum picket fence detail and hedgerow.

- **Engineering** noted that this site development plan is subject to approval of the Traffic Impact Study and that Honey Farm Way improvements including signalization shall be constructed prior to any Certificate of Occupancy. The applicant acknowledged with improvements shown on plans.
- **Columbia Water** indicated that the water availability letter was issued on **December 18th, 2024** and remains valid for 120 days. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application.

COMMENTS FROM PLANNING STAFF

This Proposed Planned Unit Development Preliminary Master Plan includes deviations from the base PUD-MU standards but does adhere to most all standards of the PUD-MU zoning district per table 4.3.1-M of the Zoning Ordinance.

SAMPLE MOTIONS

Approve:

Recommend Approval:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in sections **8.5.21.B**, **8.5.21.K**, **8.5.18** and **8.5.19** of the City of Columbia Zoning Ordinance have been satisfied, and recommend approval of the Rezoning to PUD-MU with Preliminary Planned Unit Development Master Plan as presented [*, subject to technical comments and other conditions presented by planning staff*].

Recommend Approval Subject to Conditions:

Move to find, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in sections **8.5.21.B**, **8.5.21.K**, **8.5.18** and **8.5.19** of the City of Columbia Zoning Ordinance have been satisfied, and recommend approval of the Rezoning to PUD-MU with Preliminary Planned Unit Development Master Plan, subject to the following conditions: [*list conditions of approval crafted by Planning Commission*].

Recommend Denial:

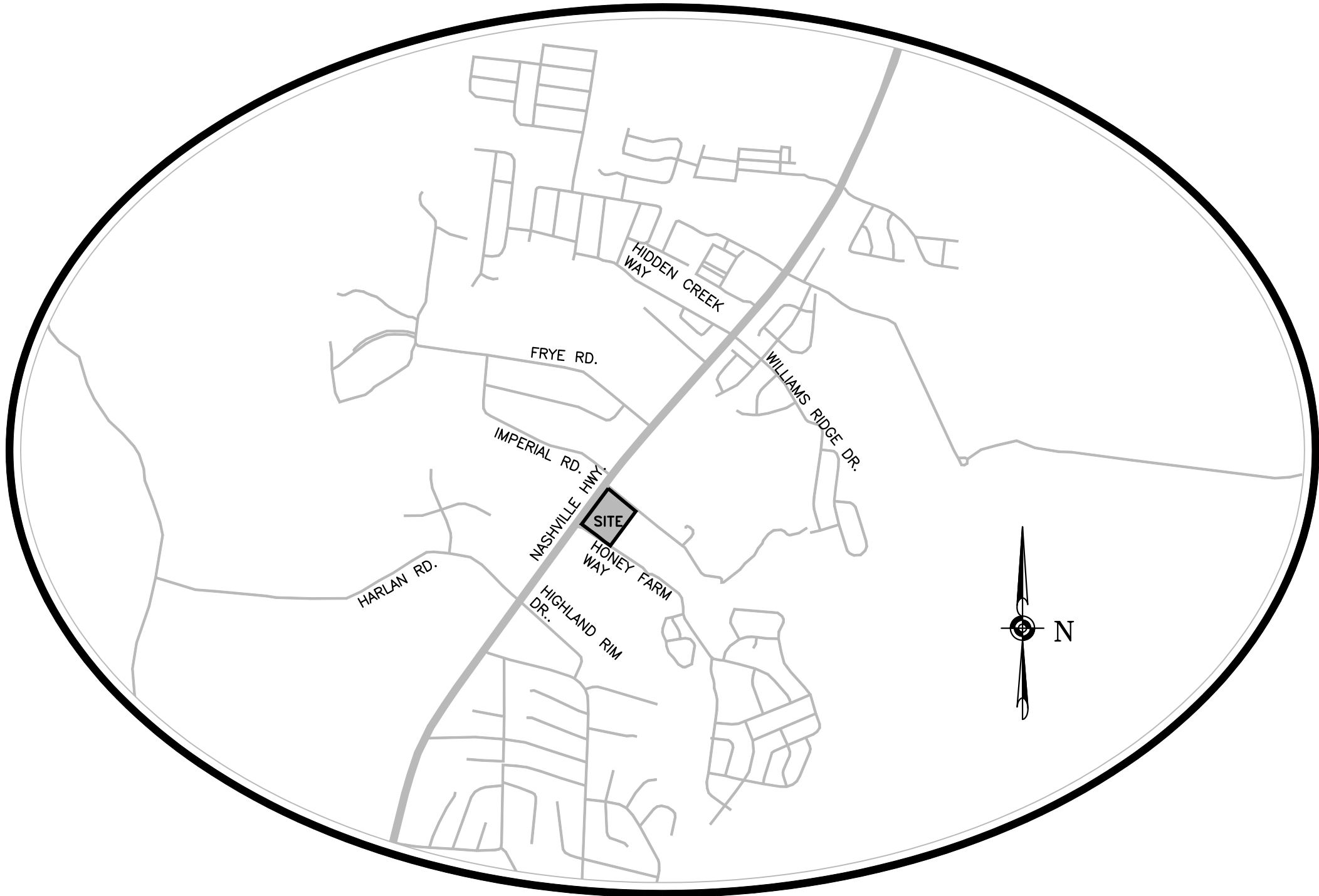
Move to recommend denial of the Rezoning to PUD-MU having found, based on the information presented by the applicant and the analysis provided by city staff, that the criteria listed in sections **8.5.21.B**, **8.5.21.K**, **8.5.18** and **8.5.19** of the City of Columbia Zoning Ordinance, are not satisfied [*list specific reasons for denial*].

Defer:

Move to find that there is insufficient information to make a decision, defer the matter to the next regularly scheduled meeting of the Planning Commission, and request that the [*applicant/staff*] provide: [*list additional information*] for review at a future meeting.

PRELIMINARY PUD WALMART NEIGHBORHOOD MARKET #03908-1000 COLUMBIA, TENNESSEE HONEY FARM WAY & NASHVILLE HWY

ADDRESS INFORMATION:
#03908-1000 WALMART NEIGHBORHOOD MARKET
2248 NASHVILLE HWY
COLUMBIA, TN 38401



VICINITY MAP
NTS

INDEX OF SHEETS

SHEET 1	TITLE SHEET
SHEET 2	SITE PLAN
SHEET 3	INTERNAL DRIVE LAYOUT
SHEET 4	PUD DEVIATION REQUESTS
SHEET 5	GRADING PLAN
SHEET 6	UTILITY PLAN
SHEET 7	PLANTING PLAN
SHEET 8	PHOTOMETRICS PLAN

DEVELOPED BY:

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MAIL STOP 0505

BENTONVILLE, AR 72716-0505

(479) 360-4749

LEAH.TOMLINSON@WALMART.COM

ENGINEER:

CARLSON
CONSULTING
ENGINEERS, INC.

7068 Ledgestone Commons, Bartlett, TN 38133

Phone (901) 384-0404 • Fax (901) 384-0710

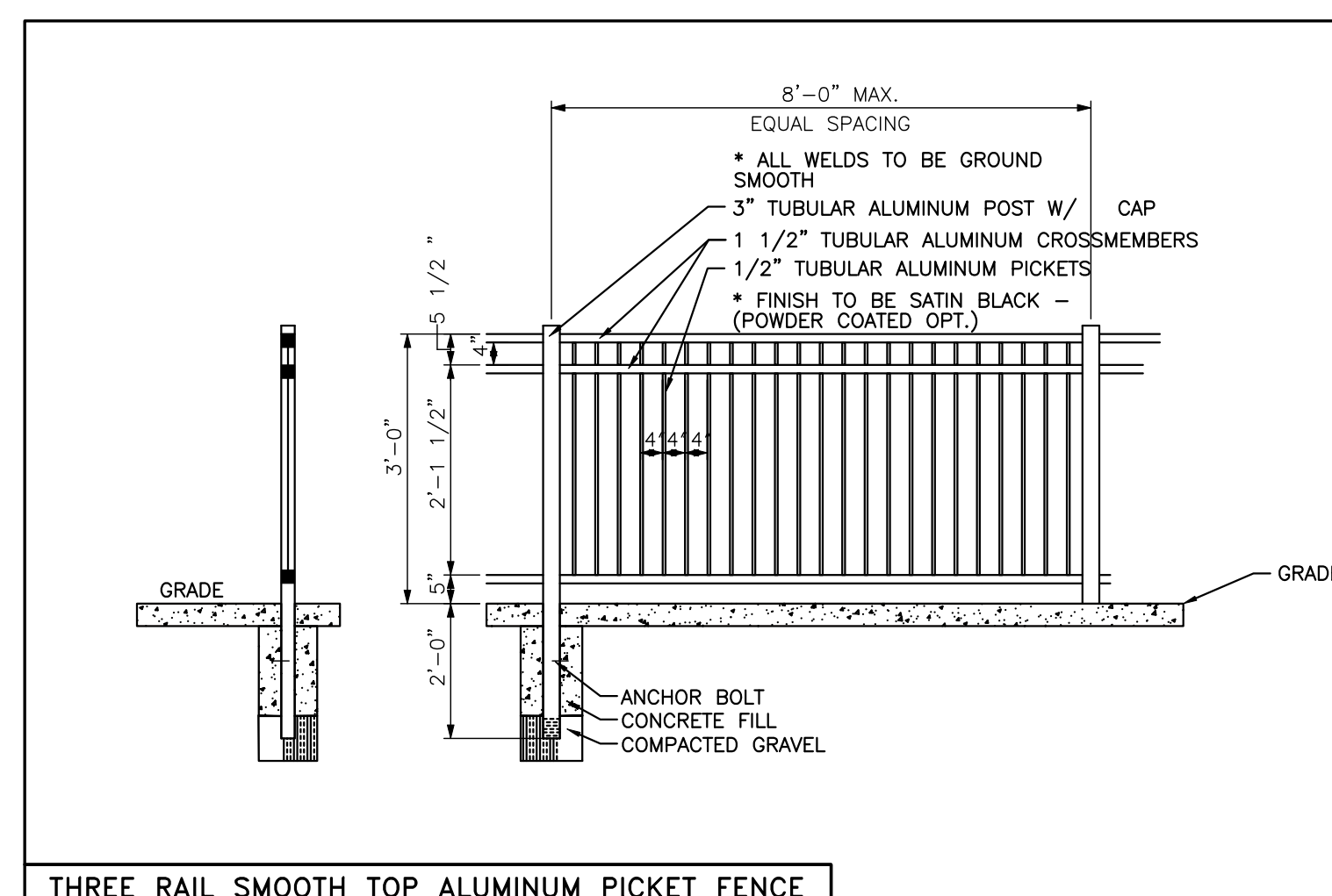
olviadupuy@carlsonconsulting.net

THE SITEWORK FOR THE WALMART'S PORTION OF THIS PROJECT SHALL MEET OR EXCEED THE "SITE SPECIFIC SPECIFICATIONS."

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO CONTRACT COMPLETION AND THE FINAL CONNECTION OF SERVICES.

CONTRACTOR SHALL CONTACT 811 FOR LOCATION OF ALL UTILITIES, AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.





SITE PLAN

[illegible]

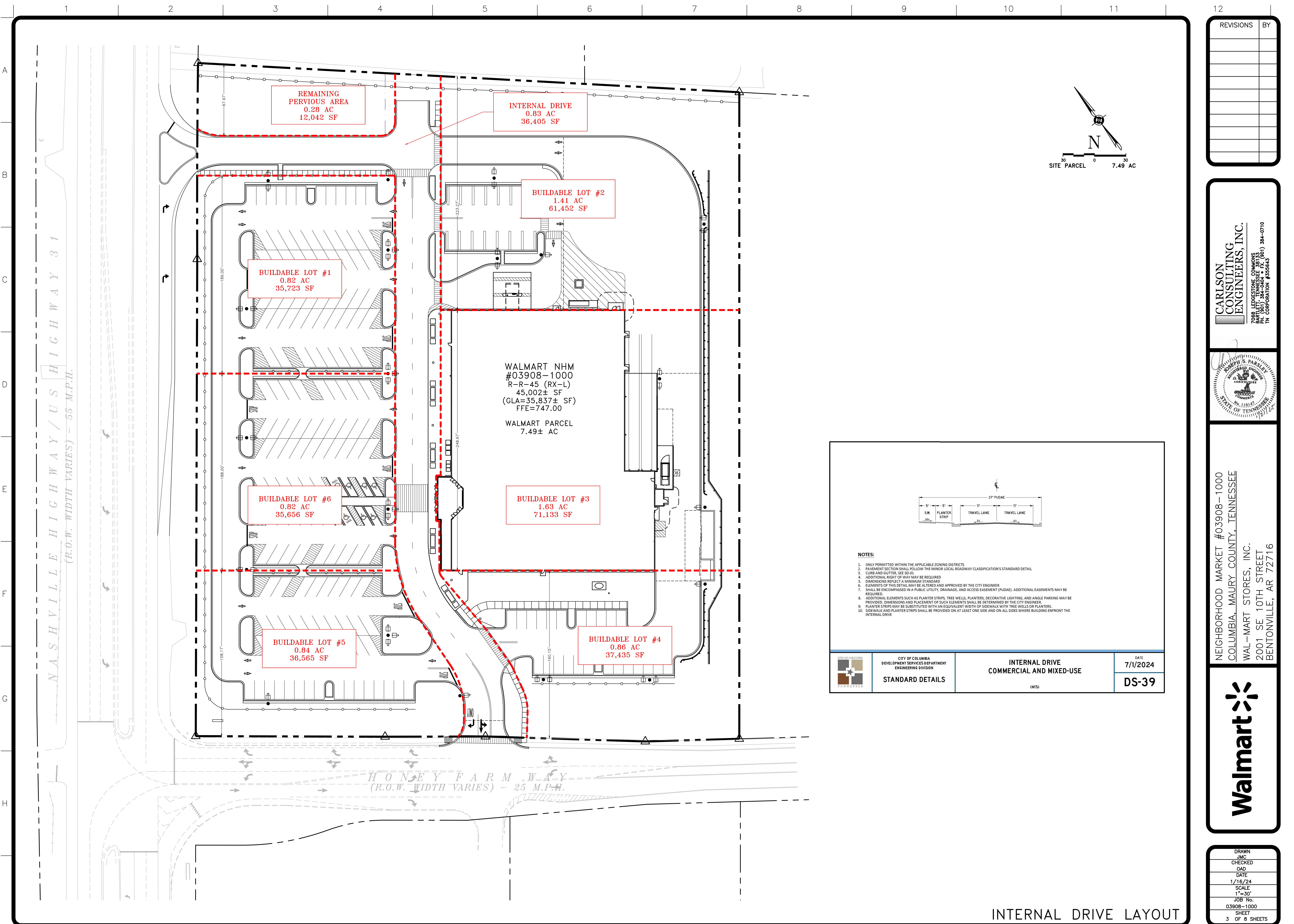
**CARLSON
CONSULTING
ENGINEERS, INC.**



NEIGHBORHOOD MARKET #03908 - 1000
COLUMBIA, MAURY COUNTY, TENNESSEE
WAL-MART STORES, INC.
2001 SE 10TH STREET
BENTONVILLE, AR 72716



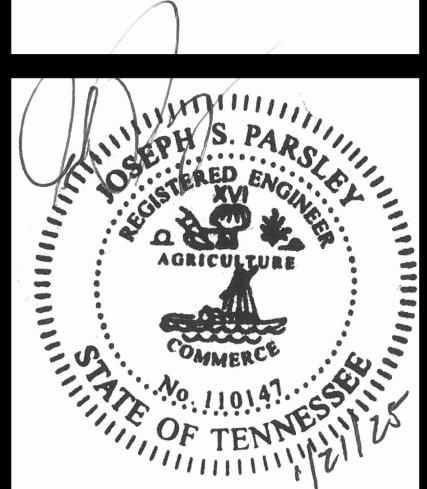
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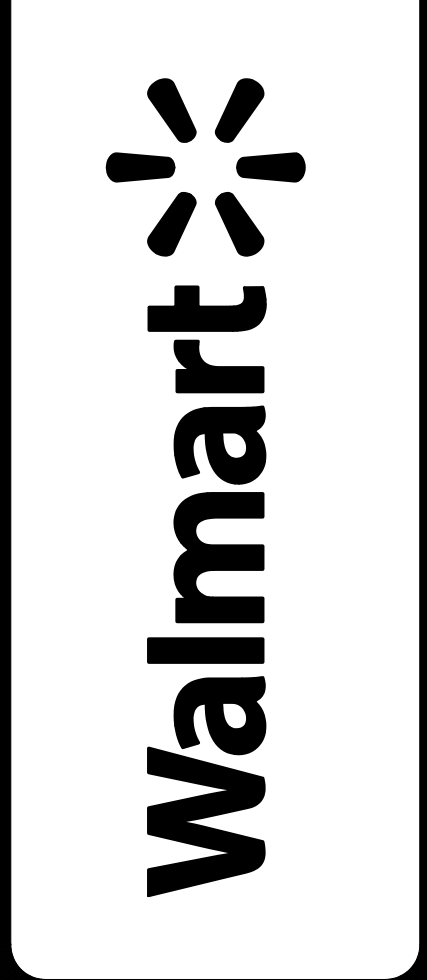
REVISIONS	BY

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TN CORPORATION #355643



NEIGHBORHOOD MARKET #03908-1000
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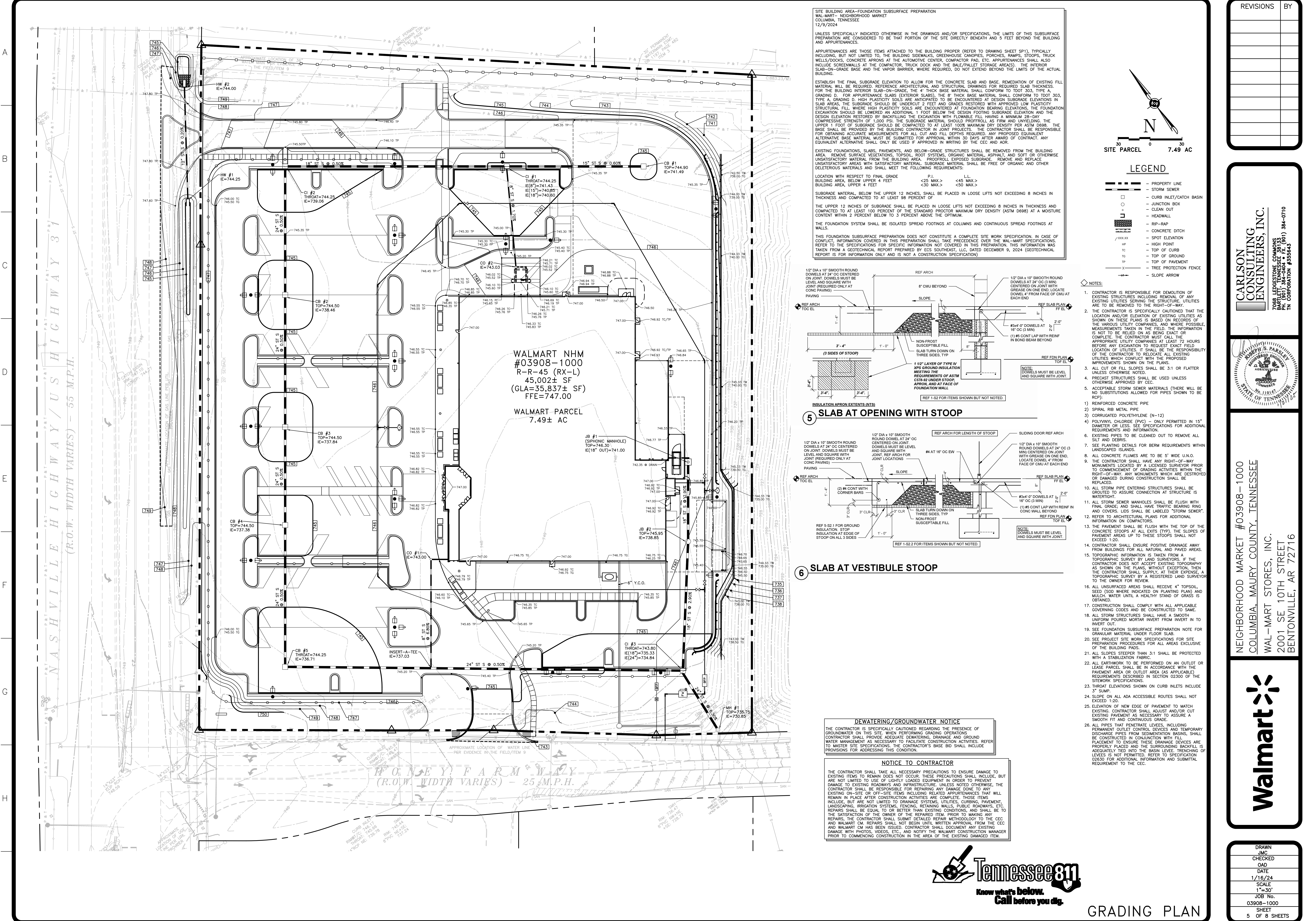


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INTERNAL DRIVE LAYOUT



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03908-1000
SHEET
4 OF 8 SHEETS



SITE BUILDING AREA-FOUNDATION SUBSURFACE PREPARATION
WAL-MART - NEIGHBORHOOD MARKET
COLUMBIA, TENNESSEE
12/9/2024

UNLESS SPECIFICALLY INDICATED OTHERWISE IN THE DRAWINGS AND/OR SPECIFICATIONS, THE LIMITS OF THIS SUBSURFACE PREPARATION ARE CONSIDERED TO BE THAT PORTION OF THE SITE DIRECTLY BENEATH AND 5 FEET BEYOND THE BUILDING AND APPURTENANCES.

APPURTENANCES ARE THOSE ITEMS ATTACHED TO THE BUILDING PROPER (REFER TO DRAWING SHEET SP1), TYPICALLY INCLUDING, BUT NOT LIMITED TO, THE BUILDING SIDEWALKS, GREENHOUSE CANOPIES, PORCHES, RAMPS, STAIRS, TRUCK WELLS/DOCKS, CONCRETE APRONS AT THE AUTOMOTIVE CENTER, CONTRACTOR PAD, ETC. APPURTENANCES SHALL ALSO INCLUDE SCREENWALLS AT THE COMPACTOR, TRUCK DOCK AND THE BALE/PALLET STORAGE AREA(S). THE INTERIOR SLAB-ON-GRADE BASE AND THE VAPOR BARRIER, WHERE REQUIRED, DO NOT EXTEND BEYOND THE LIMITS OF THE ACTUAL BUILDING.

ESTABLISH THE FINAL SUBGRADE ELEVATION TO ALLOW FOR THE CONCRETE SLAB AND BASE. REMEDIATION OF EXISTING FILL MATERIAL WILL BE REQUIRED. REFERENCE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR REQUIRED SLAB THICKNESS. FOR THE BUILDING INTERIOR SLAB-ON-GRADE, THE 4" THICK BASE MATERIAL SHALL CONFORM TO DOT 303, TYPE A, GRADING D. FOR APPURTENANCE SLABS (EXTERIOR SLABS), THE 8" THICK BASE MATERIAL SHALL CONFORM TO DOT 303, TYPE A, GRADING D. HIGH PLASTICITY SOILS ARE ANTICIPATED TO BE ENCOUNTERED AT DESIGN SUBGRADE ELEVATIONS IN SLAB AREAS. THE GRADES SHOULD BE CONFINED TO 2 FEET AND GRADES SHOULD BE APPROXIMATELY LOW PLASTICITY STRUCTURAL FILL. WHERE HIGH PLASTICITY SOILS ARE ENCOUNTERED AT FOUNDATION BEARING ELEVATIONS, THE FOUNDATION EXCAVATION SHOULD BE LOWERED AN ADDITIONAL 1 FOOT BELOW THE DESIGN FOOTING SUBGRADE ELEVATION AND THE DESIGN ELEVATION RESTORED BY BACKFILLING THE EXCAVATION WITH FLOWABLE FILL HAVING A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 1,000 PSI. THE SUBGRADE MATERIAL SHOULD PROFFROLL AS FIRM AND UNYIELDING. THE UPPER 1 FOOT OF SUBGRADE SHOULD BE COMPACTED TO AT LEAST 100% MAXIMUM DRY DENSITY PER ASTM D698. THE BASE SHALL BE PROVIDED BY THE BUILDING CONTRACTOR IN JOINT PROJECTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ACCURATE MEASUREMENTS FOR ALL CUT AND FILL DEPTHS REQUIRED. ANY PROPOSED EQUIVALENT ALTERNATIVE BASE MATERIAL MUST BE SUBMITTED FOR APPROVAL WITHIN 30 DAYS AFTER AWARD OF CONTRACT. ANY EQUIVALENT ALTERNATIVE SHALL ONLY BE USED IF APPROVED IN WRITING BY THE CEC AND ADR.

EXISTING FOUNDATIONS, SLABS, PAVEMENTS, AND BELOW-GRADE STRUCTURES SHALL BE REMOVED FROM THE BUILDING AREA. REMOVE VEGETATIONS, TOPSOIL, ROOT SYSTEMS, ORGANIC MATERIAL, ASPHALT, AND SOFT OR OTHERWISE UNSATISFACTORY MATERIAL FROM THE BUILDING AREA. PROFFROLL EXPOSED SUBGRADE. REMOVE AND REPLACE UNSATISFACTORY AREAS WITH SATISFACTORY MATERIAL. SUBGRADE MATERIAL SHALL BE FREE OF ORGANIC AND OTHER DELTERIOUS MATERIALS AND SHALL MEET THE FOLLOWING REQUIREMENTS:

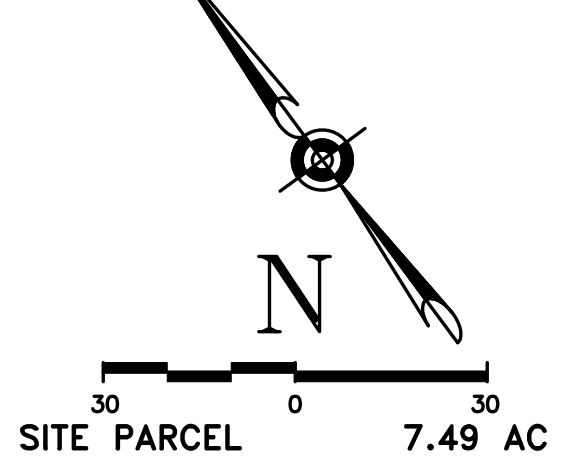
LOCATION WITH RESPECT TO FINAL GRADE
BUILDING AREA, BELOW UPPER 4 FEET
BUILDING AREA, UPPER 4 FEET

SUBGRADE MATERIAL, BELOW THE UPPER 12 INCHES, SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 98 PERCENT OF

THE UPPER 12 INCHES OF SUBGRADE SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 100 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698) AT A MOISTURE CONTENT WITHIN 2 PERCENT BELOW TO 3 PERCENT ABOVE THE OPTIMUM.

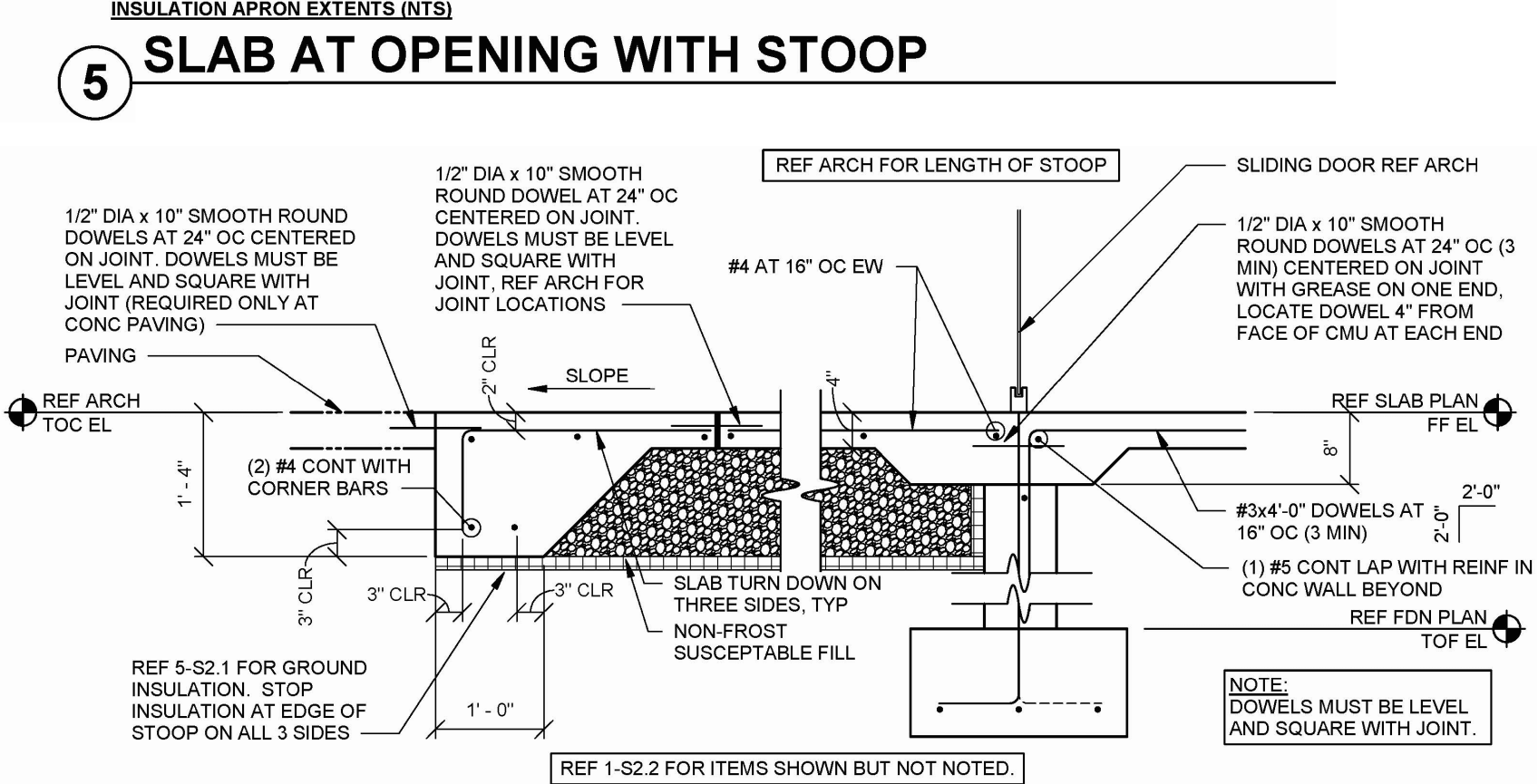
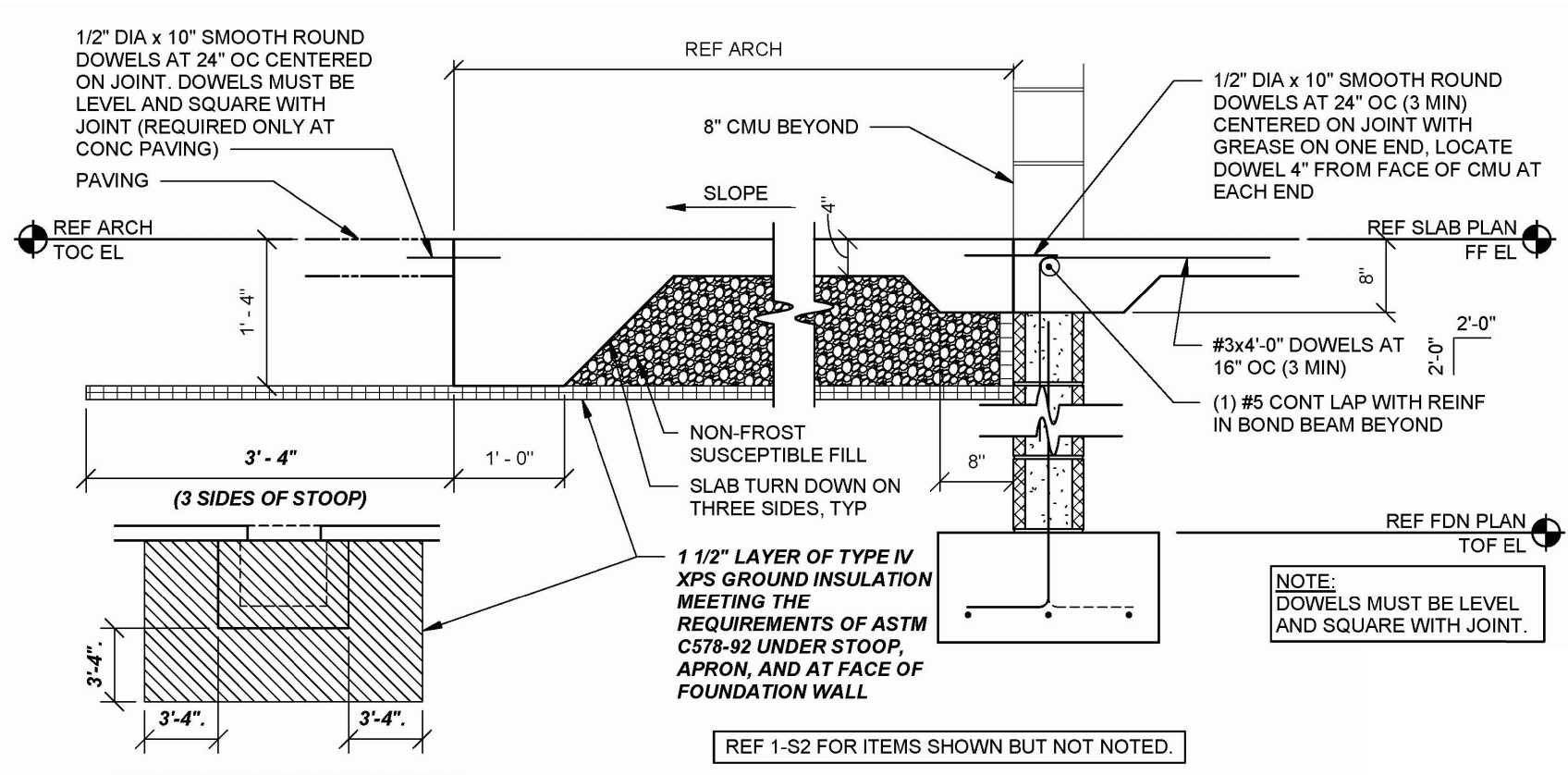
THE FOUNDATION SYSTEM SHALL BE ISOLATED SPREAD FOOTINGS AT COLUMNS AND CONTINUOUS SPREAD FOOTINGS AT WALLS.

THIS FOUNDATION SUBSURFACE PREPARATION DOES NOT CONSTITUTE A COMPLETE SITE WORK SPECIFICATION. IN CASE OF CONFLICT, INFORMATION COVERED IN THIS PREPARATION SHALL TAKE PRECEDENCE OVER THE WAL-MART SPECIFICATIONS. REFER TO THE SPECIFICATIONS FOR SPECIFIC INFORMATION NOT COVERED IN THIS PREPARATION. THIS INFORMATION WAS TAKEN FROM A GEOTECHNICAL REPORT PREPARED BY EGS SOUTHEAST, LLC, DATED DECEMBER 9, 2024 (GEOTECHNICAL REPORT IS FOR INFORMATION ONLY AND IS NOT A CONSTRUCTION SPECIFICATION)



- LEGEND**
- PROPERTY LINE
 - - - STORM SEWER
 - CURB INLET/CATCH BASIN
 - JUNCTION BOX
 - CLEAN OUT
 - HEADWALL
 - RIP-RAP
 - CONCRETE DITCH
 - SPOT ELEVATION
 - HP HIGH POINT
 - TC TOP OF CURB
 - IG TOP OF GROUND
 - TP TOP OF PAVEMENT
 - ✕ TREE PROTECTION FENCE
 - SLOPE ARROW

- NOTES:**
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
 - THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 - ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
 - PRECAST STRUCTURES SHALL BE USED UNLESS OTHERWISE APPROVED BY CEC.
 - ACCEPTABLE STORM SEWER MATERIALS (THERE WILL BE NO SUBSTITUTIONS ALLOWED FOR PIPES SHOWN TO BE ROP):
 - REINFORCED CONCRETE PIPE
 - SPIRAL RIB METAL PIPE
 - CORRUGATED POLYETHYLENE (N-12)
 - POLYVINYL CHLORIDE (PVC) - ONLY PERMITTED IN 15" DIAMETER OR LESS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
 - EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
 - SEE PLANTING DETAILS FOR BERM REQUIREMENTS WITHIN LANDSCAPED ISLANDS.
 - ALL CONCRETE FLUMES ARE TO BE 5' WIDE U.N.O.
 - THE CONTRACTOR SHALL HAVE ANY RIGHT-OF-WAY MONUMENTS LOCATED BY A LICENSED SURVEYOR PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES WITHIN THE RIGHT-OF-WAY. ANY MONUMENTS WHICH ARE DESTROYED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED.
 - ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUDED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.
 - ALL STORM SEWER MANHOLES SHALL BE FLUSH WITH FINAL GRADE, AND SHALL HAVE TRAFFIC BEARING RING. CONCRETE STUOPS AT ALL EXITS (TYP). THE SLOPES OF PAVEMENT AREAS UP TO THESE STUOPS SHALL NOT EXCEED 1:20.
 - CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
 - TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
 - ALL UNSURFACED AREAS SHALL RECEIVE 4" TOPSOIL, SEED (SOD WHERE INDICATED ON PLANTING PLAN) AND MULCH. WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
 - CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
 - ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
 - SEE FOUNDATION SUBSURFACE PREPARATION NOTE FOR GRANULAR MATERIAL UNDER FLOOR SLAB.
 - SEE PROJECT SITE WORK SPECIFICATIONS FOR SITE PREPARATION PROCEDURES FOR ALL AREAS EXCLUSIVE OF THE BUILDING PAD.
 - ALL SLOPES STEEPER THAN 3:1 SHALL BE PROTECTED WITH A STABILIZATION FABRIC.
 - ALL EXISTING TO BE PERFORMED ON AN OUTLOT OR LEASE PARCEL SHALL BE IN ACCORDANCE WITH THE PAVEMENT AREA OR OUTLOT AREA (AS APPLICABLE) REQUIREMENTS DESCRIBED IN SECTION 02300 OF THE SITEMARK SPECIFICATIONS.
 - THROAT ELEVATIONS SHOWN ON CURB INLETS INCLUDE 3" SUMP.
 - SLOPE ON ALL ADA ACCESSIBLE ROUTES SHALL NOT EXCEED 1:20.
 - ELEVATION OF NEW EDGE OF PAVEMENT TO MATCH EXISTING. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
 - ALL PIPES THAT PENETRATE LEVELS, INCLUDING PERMANENT OUTLET CONTROL DEVICES AND TEMPORARY DISCHARGE PIPES FROM SEDIMENTATION BASINS, SHALL BE CONSTRUCTED IN CONJUNCTION WITH FILL PLACEMENT TO ENSURE THESE DRAINAGE DEVICES ARE PROPERLY PLACED AND THE SURROUNDING BACKFILL IS ADEQUATELY TIED INTO THE BASIN LEVEL. TRENCHING OF LEVELS IS NOT PERMITTED. REFER TO SPECIFICATION 02630 FOR ADDITIONAL INFORMATION AND SUBMITTAL REQUIREMENT TO THE CEC.



DEWATERING/GROUNDWATER NOTICE

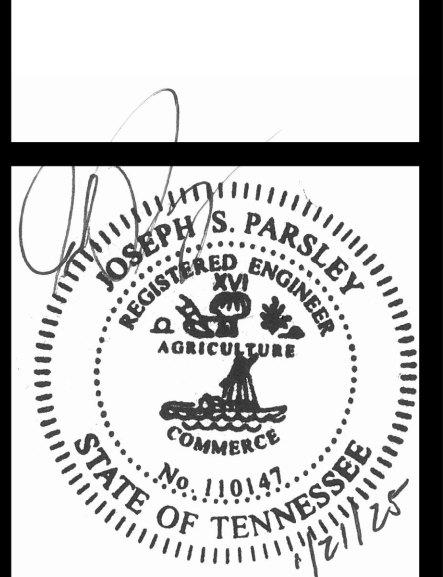
THE CONTRACTOR IS SPECIFICALLY CAUTIONED REGARDING THE PRESENCE OF GROUNDWATER ON THIS SITE. WHEN PERFORMING GRADING OPERATIONS CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE, DRAINAGE AND GROUND WATER MANAGEMENT AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES. REFER TO MASTER SITE SPECIFICATIONS, THE CONTRACTOR'S BASE BID SHALL INCLUDE PROVISIONS FOR ADDRESSING THIS CONDITION.

NOTICE TO CONTRACTOR

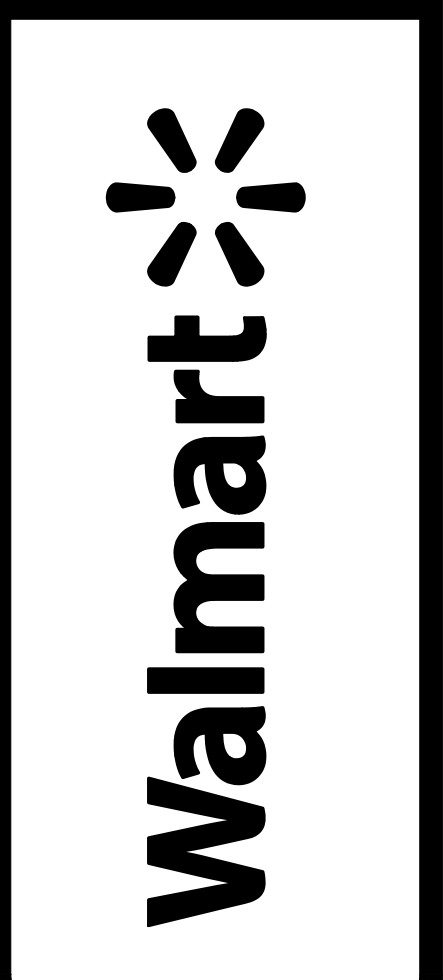
THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE DAMAGE TO EXISTING ITEMS TO REMAIN DOES NOT OCCUR. THESE PRECAUTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE USE OF LIGHTLY LOADED EQUIPMENT IN ORDER TO PREVENT DAMAGE TO EXISTING ROADWAYS AND INFRASTRUCTURE. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY EXISTING ON-SITE OR OFF-SITE ITEMS INCLUDING RELATED APPURTENANCES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THOSE ITEMS INCLUDE, BUT ARE NOT LIMITED TO, DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, PUBLIC ROADWAYS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS, AND SHALL BE TO THE SATISFACTION OF THE OWNER OF THE REPAIRED ITEM. PRIOR TO MAKING ANY REPAIRS, THE CONTRACTOR SHALL SUBMIT DETAILED REPAIR METHODOLOGY TO THE CEC AND WALMART CM. REPAIRS SHALL NOT BEGIN UNTIL WRITTEN APPROVAL FROM THE CEC AND WALMART CM HAS BEEN ISSUED. CONTRACTOR SHALL DOCUMENT ANY EXISTING DAMAGE WITH PHOTOS, VIDEOS, ETC., AND NOTIFY THE WALMART CONSTRUCTION MANAGER PRIOR TO COMMENCING CONSTRUCTION IN THE AREA OF THE EXISTING DAMAGED ITEM.

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
7008 LEDGESTONE COMMONS
PH. (601) 384-1000 • FAX (601) 384-0710
TN CORPORATION #355643



NEIGHBORHOOD MARKET #03908-1000
COLUMBIA, MAURY COUNTY, TENNESSEE
WAL-MART STORES, INC.
2001 SE 10TH STREET
BENTONVILLE, AR 72716



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CHECKED	OAD
DATE	1/16/24
SCALE	1"=30'
JOB NO.	03908-1000
SHEET	5 OF 8 SHEETS



GRADING PLAN



Current Luminaire Schedule									
Symbol	Qty	Label	Arrangement	ULF	Description	Arr. Watts	Arr. Lum. Lumens	BUG Rating	BUS
☐➡	3	D1H4_28	D180	0.837	2-EALSO35H4AF750ND01BLCKF 25ft pole on 3ft base	280	40000	B3-UO-03	43
☐➡	4	D1H5_28	D180	0.837	2-EALSO35H5M750ND01BLCKF 25ft pole on 3ft base	280	40000	B4-UO-02	40
☐➡	3	D2F4_28		0.837	1-EALSO35F4AF750ND01BLCKFS1 & 1-EALSO35F4AF750ND01BLCKFS2 25ft pole on 3ft	232	30000	B2-UO-02	42
●➡	2	SD4_28	SINGLE	0.837	1-EALSO35D4AF750ND01BLCKF 25ft pole on 3ft base	70	10000	B2-UO-02	40
●➡	2	SF4_28	SINGLE	0.837	1-EALSO35F4AF750ND01BLCKF 25ft pole on 3ft base	116	15000	B2-UO-02	40
●➡	2	SH4_28	SINGLE	0.837	1-EALSO35H4AF750ND01BLCKF 25ft pole on 3ft base	140	20000	B3-UO-03	43
●➡	4	TH15-28	3 x 90°	0.837	2-EALSO35H5M750ND01BLCKF 25ft pole on 3ft base	420	60000	B4-UO-02	40
⊗	5	ALM440-Y5-32LED-SK-700	SINGLE	0.837	ALM440-Y5-32LED-SK-700-BLT 12ft pole	74.9	5700	B3-UO-03	43

NOTICE TO CONTRACTOR

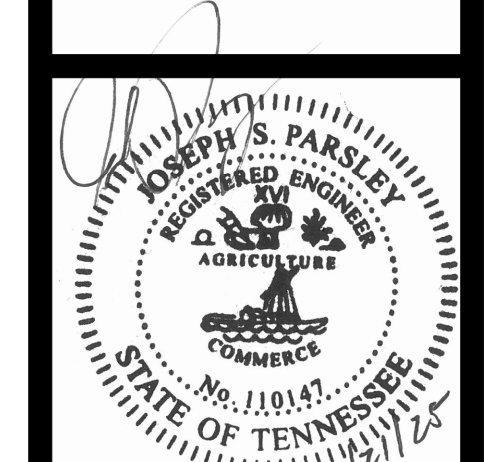
THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE DAMAGE TO EXISTING ITEMS TO REMAIN DOES NOT OCCUR. THESE PRECAUTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO USE OF LIGHTLY LOADED EQUIPMENT IN ORDER TO PREVENT EXCESSIVE VIBRATING AND EXCESSIVE WEIGHTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY EXISTING UTILITY OR EARTHWORK. ITEMS TO REMAIN SHALL BE PROTECTED AND SHALL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THOSE ITEMS INCLUDE, BUT ARE NOT LIMITED TO DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, PUBLIC ROADWAYS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS, AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT DETAILED REPAIR METHODOLOGY TO THE CEO AND WALMART CM. REPAIRS SHALL NOT BEGIN UNTIL WRITTEN APPROVAL FROM THE CEO AND WALMART CM HAS BEEN OBTAINED. THE CONTRACTOR SHALL PROVIDE PHOTOGRAPHS OF DAMAGE WITH PHOTOS, VIDEOS, ETC., AND NOTIFY THE WALMART CONSTRUCTION MANAGEMENT TEAM OF ANY DAMAGE TO EXISTING ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPAIRS TO EXISTING ITEMS.

UTILITY PLAN

[illegible]

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CONSULTING
ENGINEERS, INC.**

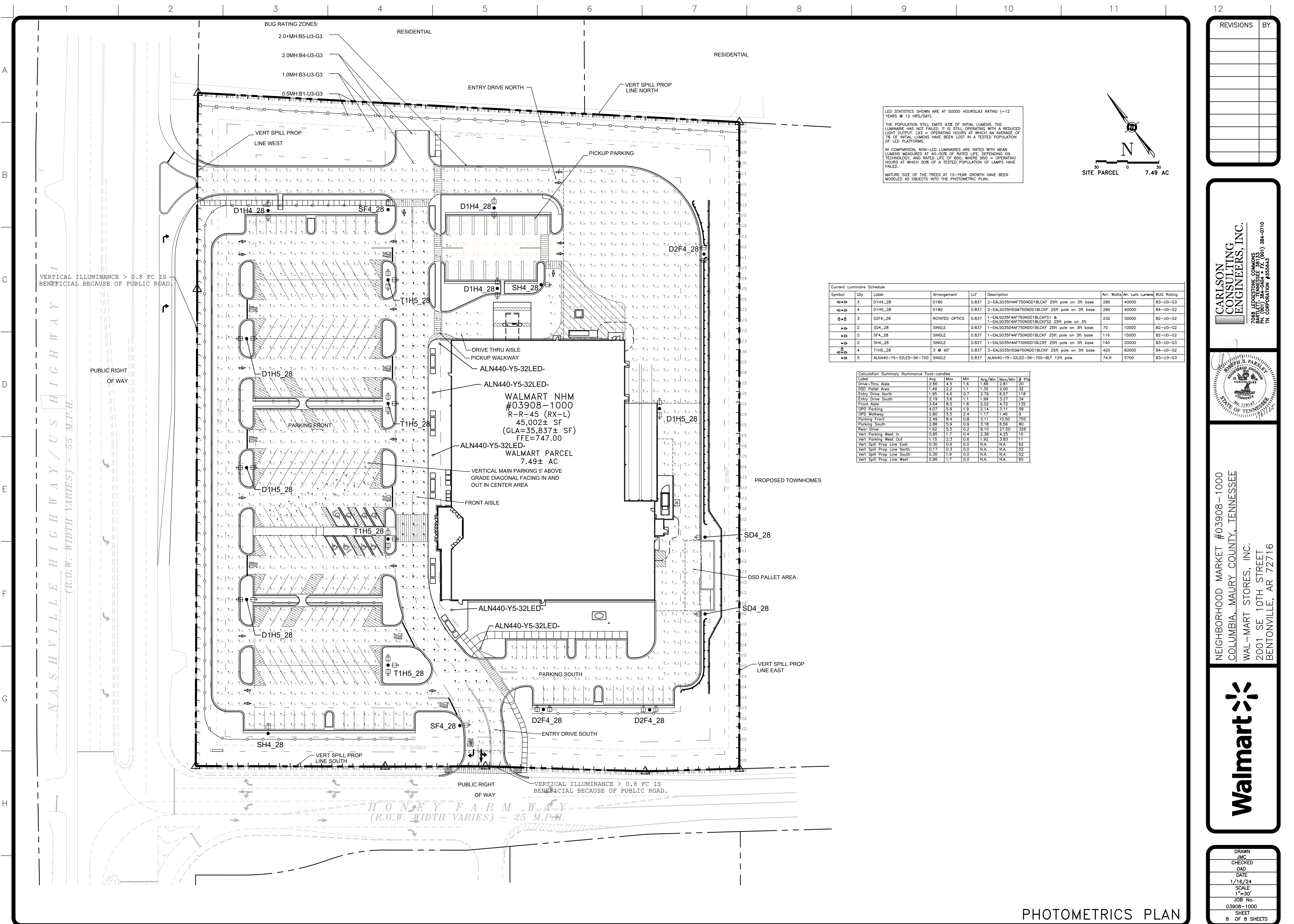
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BARTLETT, TENNESSEE 38133
H. (901) 384-0404 • FX. (901) 384-0710
N CORPORATION #355643



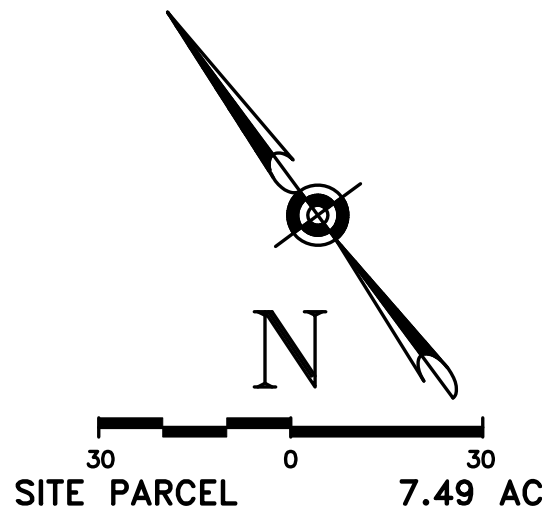
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LED STATISTICS SHOWN ARE AT 50000 HOURS L93 (~12 YEARS @ 12 HRS/DAY).
THE POPULATION STILL EMITS 93% OF INITIAL LUMENS. THE LUMINAIRE HAS NOT FAILED. IT IS STILL OPERATING WITH A REDUCED LIGHT OUTPUT. L93 = OPERATING HOURS AT WHICH AN AVERAGE OF 7% OF INITIAL LUMENS HAVE BEEN LOST IN A TESTED POPULATION OF LED PLATFORMS.
IN COMPARISON, NON-LED LUMINAIRES ARE RATED WITH MEAN LUMENS MEASURED AT 40-50% OF RATED LIFE. DEPENDING ON TECHNOLOGY, AND RATED LIFE OF 850, WHERE 850 = OPERATING HOURS AT WHICH 50% OF A TESTED POPULATION OF LAMPS HAVE FAILED.
MATURE SIZE OF THE TREES AT 10-YEAR GROWTH HAVE BEEN MODELED AS OBJECTS INTO THE PHOTOMETRIC PLAN.



Current Luminaire Schedule									
Symbol	Qty	Label	Arrangement	LLF	Description	Arr. Watts	Arr. Lum. Lumens	BUG Rating	
◀▶	3	D1H4_28	D180	0.837	2-EALS035H4AF750ND01BLCKF 25ft pole on 3ft base	280	40000	B3-U0-G3	
◀▶	4	D1H5_28	D180	0.837	2-EALS035H5SM750ND01BLCKF 25ft pole on 3ft base	280	40000	B4-U0-G2	
⬅➡	3	D2F4_28	ROTATED OPTICS	0.837	1-EALS035F4AF750ND01BLCKFS1 & 1-EALS035F4AF750ND01BLCKFS2 25ft pole on 3ft	232	30000	B2-U0-G2	
➡	2	SD4_28	SINGLE	0.837	1-EALS035D4AF750ND01BLCKF 25ft pole on 3ft base	70	10000	B2-U0-G2	
➡	2	SF4_28	SINGLE	0.837	1-EALS035F4AF750ND01BLCKF 25ft pole on 3ft base	116	15000	B2-U0-G2	
➡	2	SH4_28	SINGLE	0.837	1-EALS035H4AF750ND01BLCKF 25ft pole on 3ft base	140	20000	B3-U0-G3	
⬅	4	T1H5_28	3 @ 90°	0.837	3-EALS035H5SM750ND01BLCKF 25ft pole on 3ft base	420	60000	B4-U0-G2	
➡	5	ALN440-Y5-32LED-SK-700	SINGLE	0.837	ALN440-Y5-32LED-SK-700-BLT 12ft pole	74.9	5700	B3-U3-G3	

Calculation Summary Illuminance Foot-candles						
Label	Avg	Max	Min	Avg/Min	Max/Min	# Pts
Drive-Thru Aisle	2.65	4.5	1.6	1.65	2.81	20
DSD Pallet Area	1.49	2.2	1.1	1.35	2.00	32
Entry Drive North	1.95	4.6	0.7	2.79	6.57	118
Entry Drive South	2.19	3.6	1.1	1.98	3.27	34
Front Aisle	3.64	8.5	1.8	2.02	4.72	135
OPD Parking	4.07	5.9	1.9	2.14	3.11	59
OPD Walkway	2.80	3.5	2.4	1.17	1.46	9
Parking Front	2.49	8.4	0.8	3.11	10.50	755
Parking South	2.86	5.9	0.9	3.18	6.56	80
Rear Drive	1.82	5.5	0.2	8.10	27.50	326
Vert Parking West In	0.95	1.7	0.4	2.38	4.25	10
Vert Parking West Out	1.15	2.3	0.6	1.92	3.83	11
Vert Spill Prop Line East	0.30	0.6	0.0	N.A.	N.A.	82
Vert Spill Prop Line North	0.17	0.3	0.0	N.A.	N.A.	52
Vert Spill Prop Line South	0.30	1.9	0.0	N.A.	N.A.	52
Vert Spill Prop Line West	0.96	1.7	0.0	N.A.	N.A.	65

REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.
7068 LEDGESTONE COMMONS
PH. (601) 384-4400 • FX (800) 384-0710
TN CORPORATION #355643

MAURY COUNTY, TENNESSEE
AGRICULTURE
COUNTY
No. 110187
JAN 1997

NEIGHBORHOOD MARKET #03908-1000
COLUMBIA, MAURY COUNTY, TENNESSEE
WAL-MART STORES, INC.
2001 SE 10TH STREET
BENTONVILLE, AR 72716

Walmart

Walmart logo symbol

DRAWN	JMC
CHECKED	OAD
DATE	1/16/24
SCALE	1"=30'
JOB No.	03908-1000
SHEET	8 OF 8 SHEETS

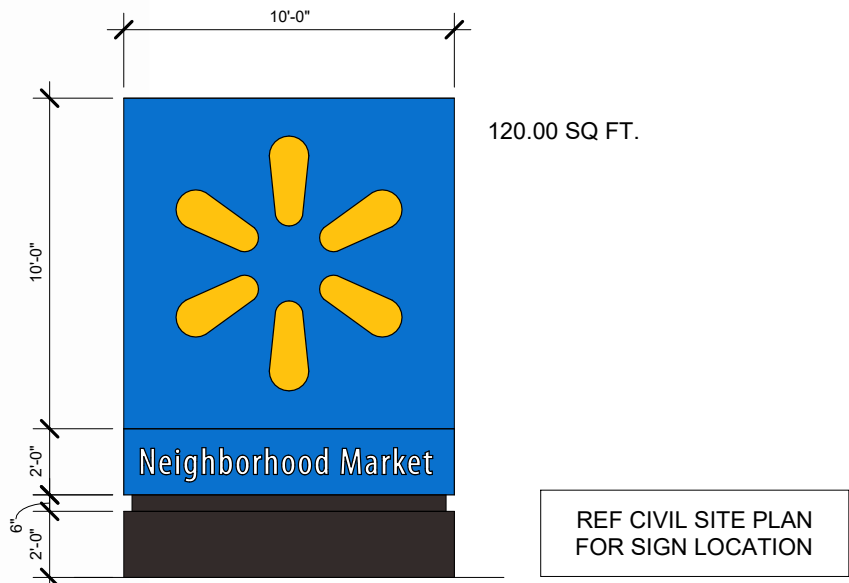
PHOTOMETRICS PLAN

MONUMENT SIGN OPTION



SITE SIGNAGE SCHEDULE							
SIGNAGE	QTY	ILLUMINATED	COLOR	INDIVIDUAL AREA		TOTAL AREA	
Walmart Monument	1	YES	WHITE LETTERING, YELLOW SPARK	120.00	SF	120.00	SF
TOTAL SITE SIGNAGE						120.00	SF

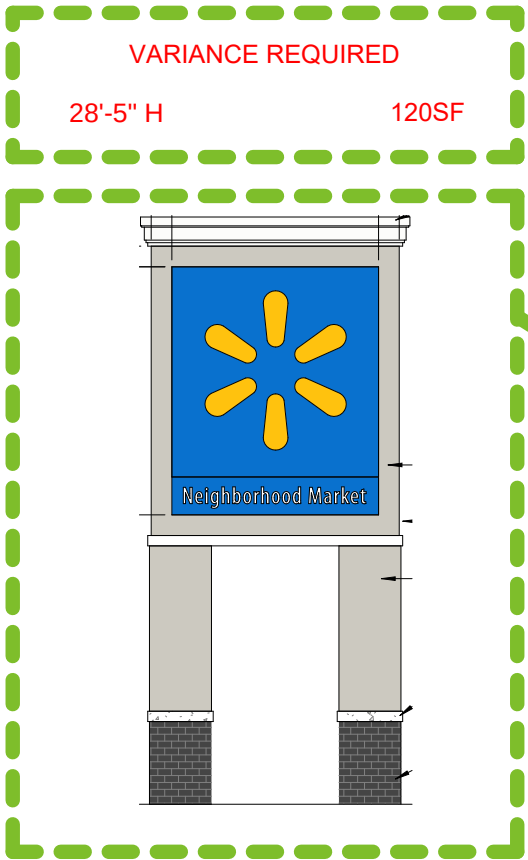
EXCEEDS ALLOWABLE AREA OF 40 SF



MONUMENT SIGN

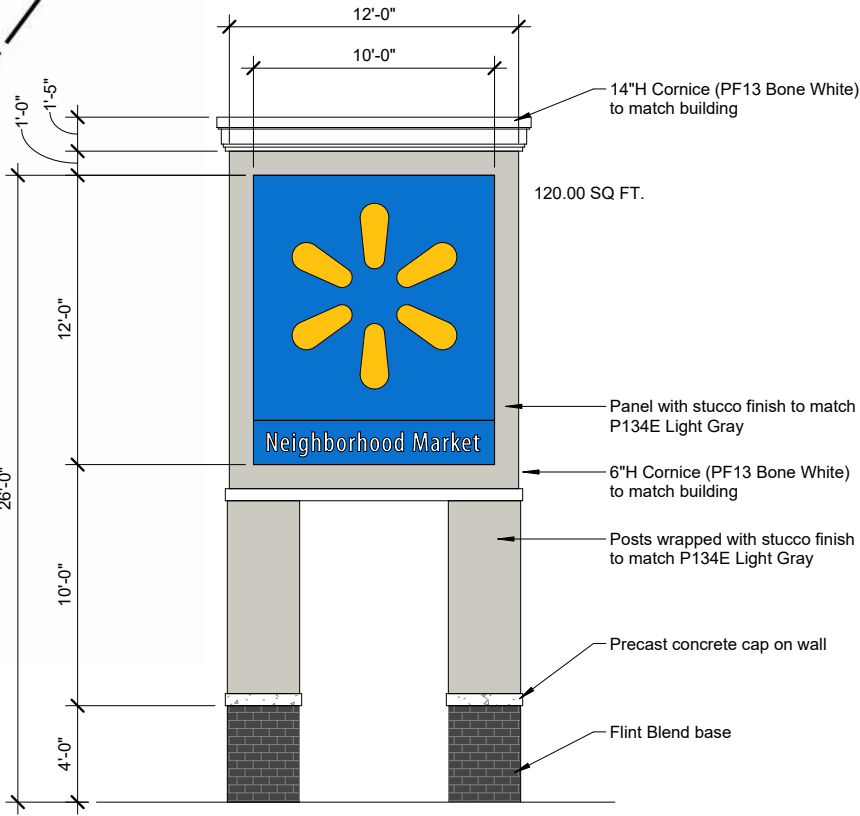
SITE SIGNAGE - MONUMENT

PYLON SIGN OPTION



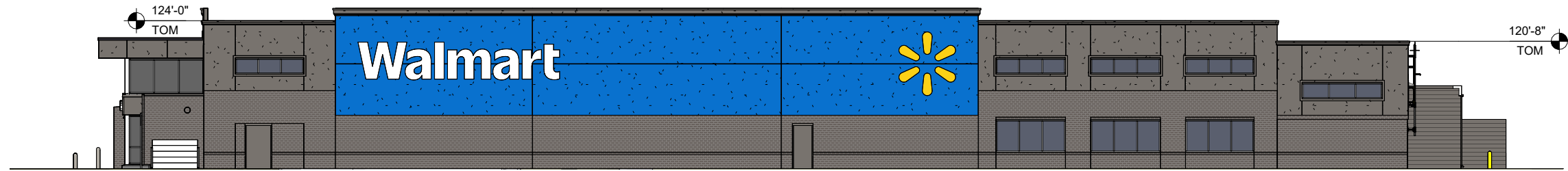
SITE SIGNAGE SCHEDULE							
SIGNAGE	QTY	ILLUMINATED	COLOR	INDIVIDUAL AREA		TOTAL AREA	
Walmart Monument	1	YES	WHITE LETTERING, YELLOW SPARK	120.00	SF	120.00	SF
TOTAL SITE SIGNAGE						120.00	SF

EXCEEDS ALLOWABLE AREA OF 40 SF & ALLOWABLE HEIGHT OF 15 FT

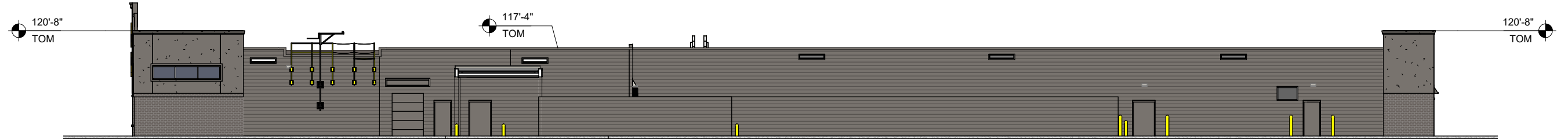


SITE SIGNAGE - PYLON (PREFERRED DUE TO VISIBILITY)

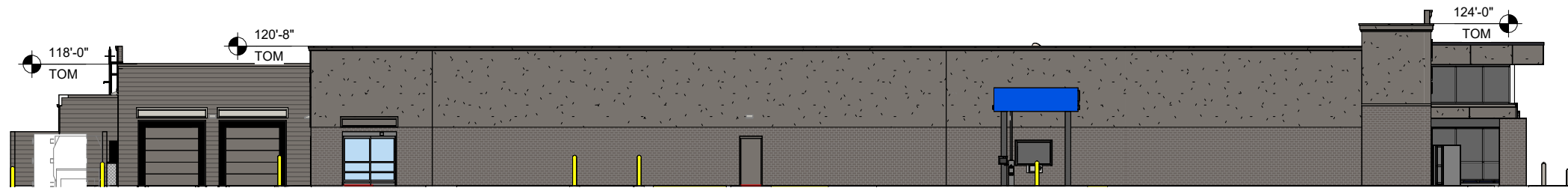
PYLON SIGN ILLUSTRATION - ALT



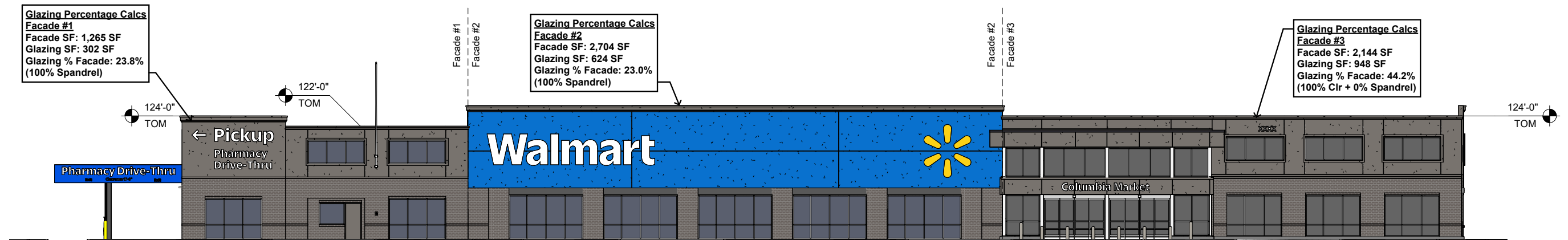
SIDE ELEVATION (SOUTHWEST)



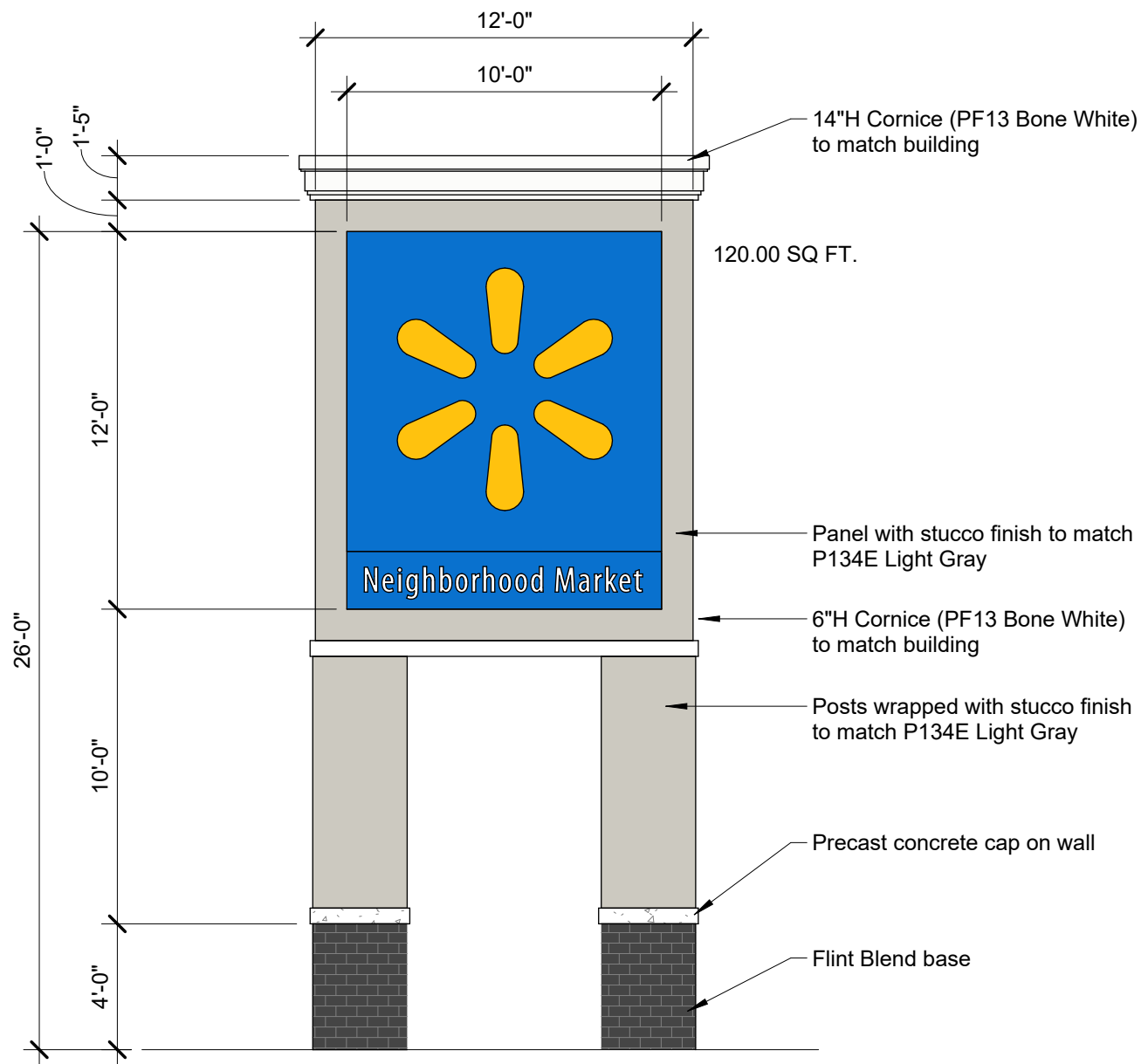
REAR ELEVATION (SOUTHEAST)



SIDE ELEVATION (NORTHEAST)

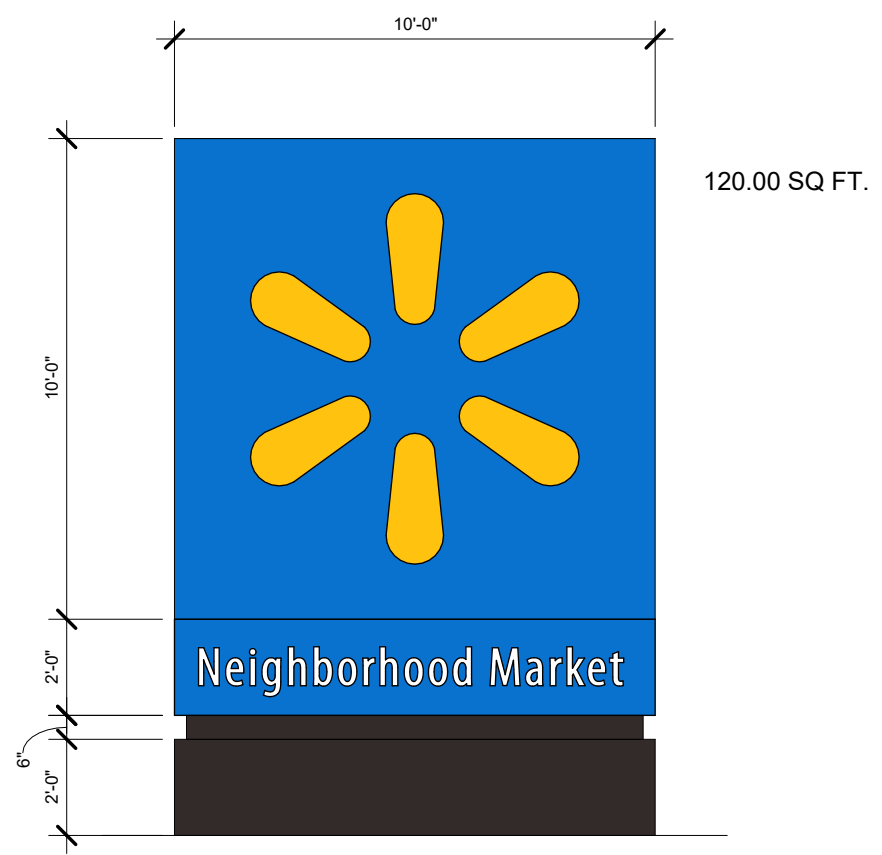


FRONT ELEVATION (NORTHWEST)

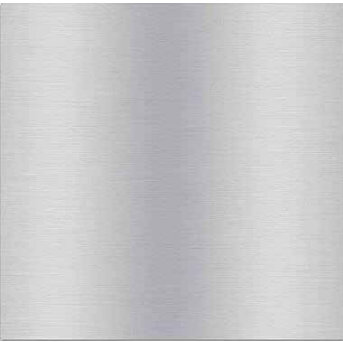


PYLON SIGN ILLUSTRATION - ALT

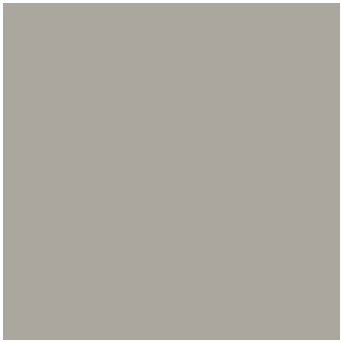
SITE SIGNAGE SCHEDULE							
SIGNAGE	QTY	ILLUMINATED	COLOR	INDIVIDUAL AREA		TOTAL AREA	
Walmart Monument	1	YES	WHITE LETTERING, YELLOW SPARK	120.00	SF	120.00	SF
TOTAL SITE SIGNAGE						120.00	SF



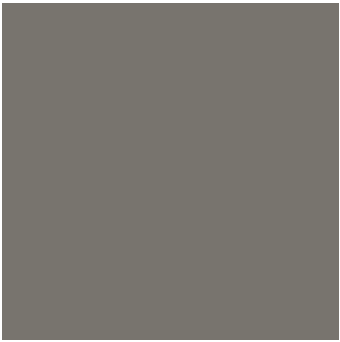
MONUMENT SIGN ILLUSTRATION



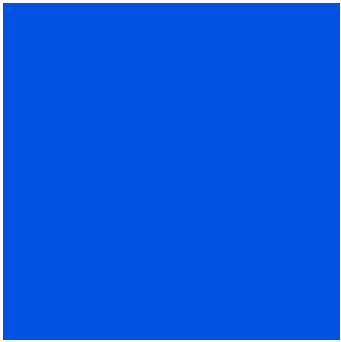
Aluminum Brake Cladding
and Automatic Doors
Clear Anodized finish



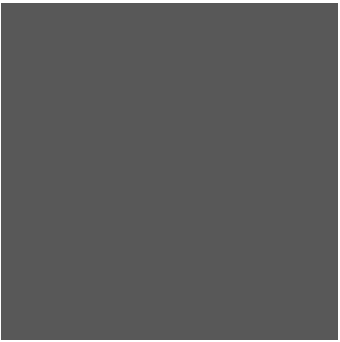
Paint
P135E Medium Gray



Paint
P49E Dark Gray



Paint
P218 True Blue



Paint
P162E Black Gray



Perspective - Parking Front RX Corner



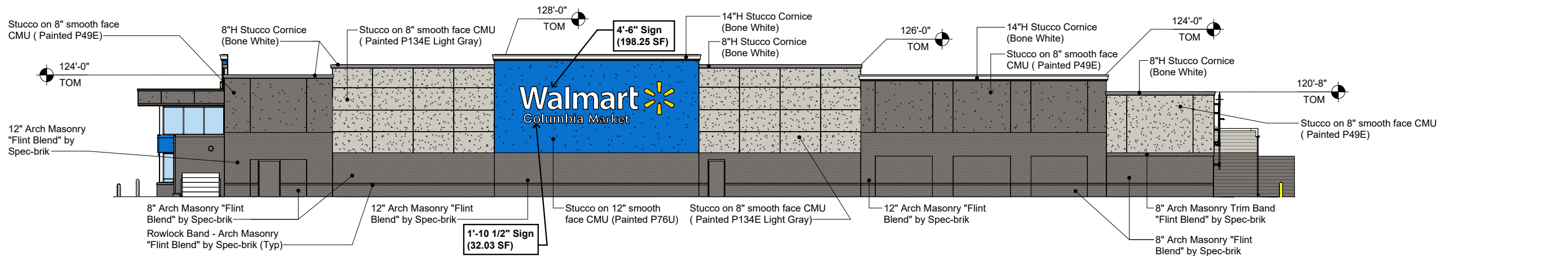
Perspective - Honey Farm Way - South



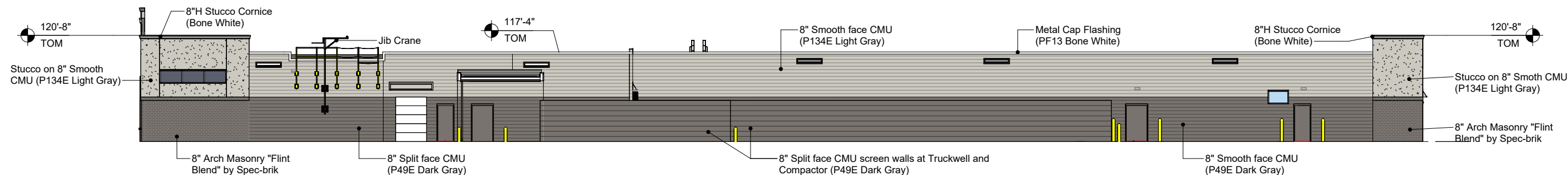
Perspective - Monument Sign Visibility



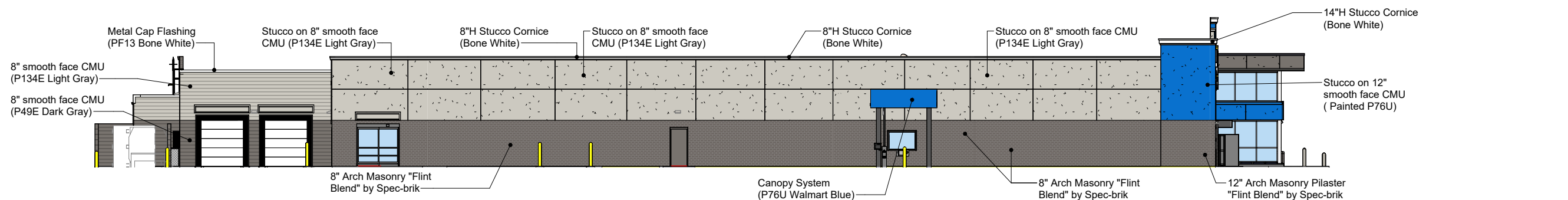
Perspective - Pylon Sign Visibility



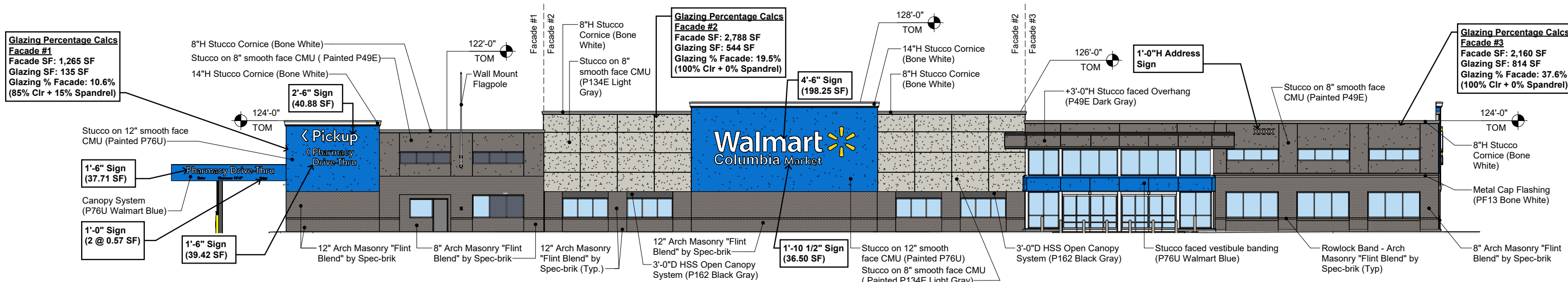
SIDE ELEVATION (SOUTHWEST)



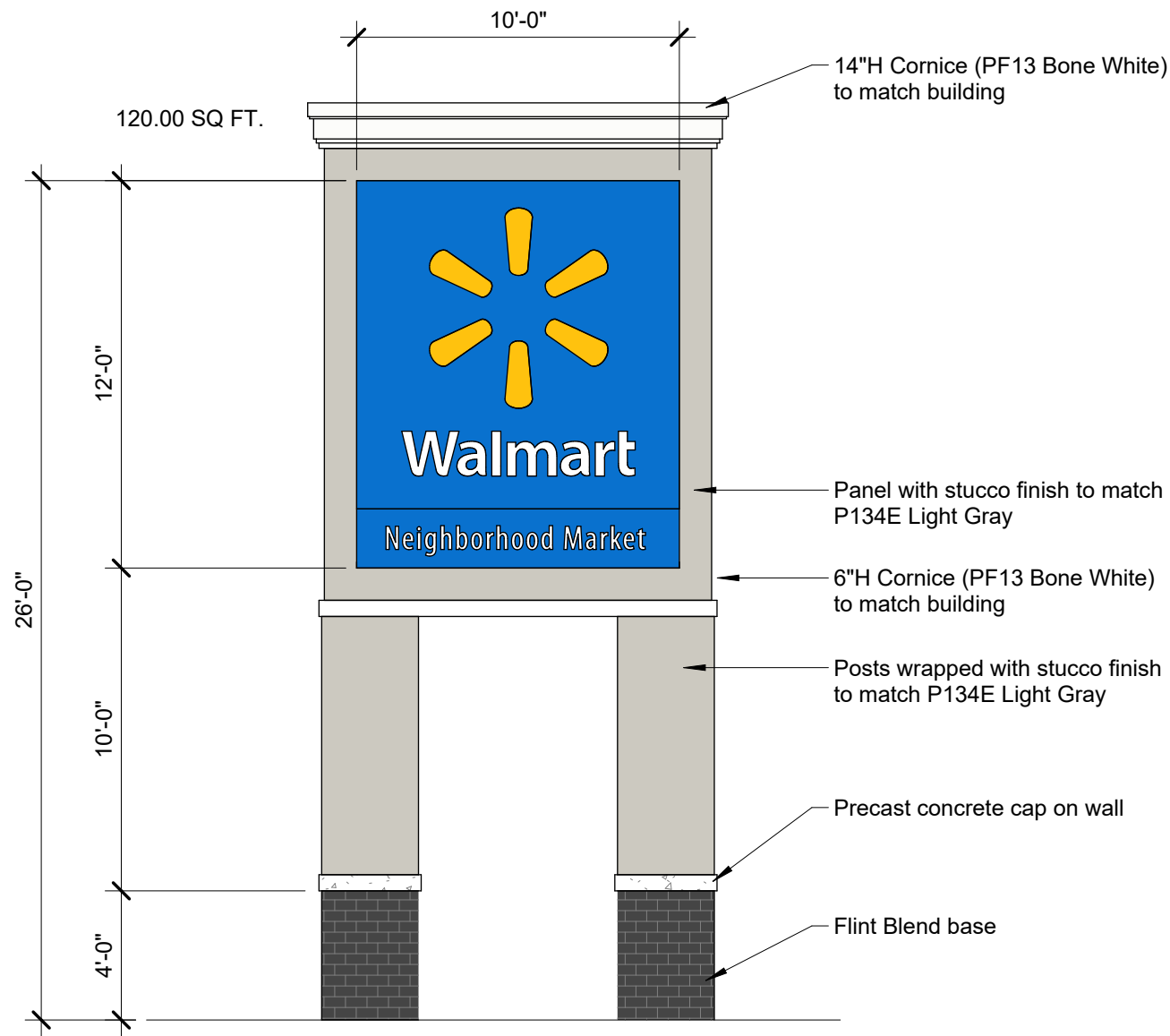
REAR ELEVATION (SOUTHEAST)



SIDE ELEVATION (NORTHEAST)



FRONT ELEVATION (NORTHWEST)



MONUMENT SIGN ELEVATION

SITE SIGNAGE SCHEDULE							
SIGNAGE	QTY	ILLUMINATED	COLOR	INDIVIDUAL AREA		TOTAL AREA	
Walmart Monument	1	YES	WHITE LETTERING, YELLOW SPARK	120.00	SF	120.00	SF
TOTAL SITE SIGNAGE						120.00	SF



Paint
P134E Light Gray



Paint
P135E Medium Gray



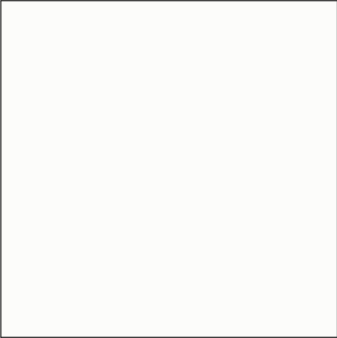
Paint
P49E Dark Gray



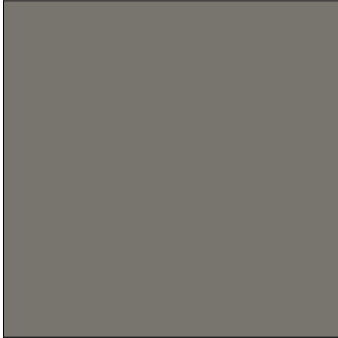
Paint
P76U Walmart Blue



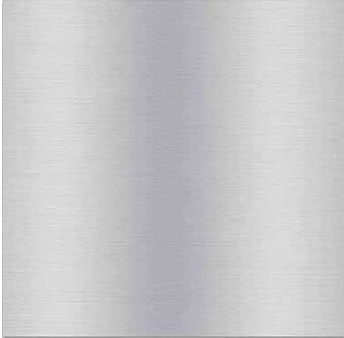
Paint
P162E Black Gray



Pre-finished Metal
PF13 Bone White



Pre-finished Metal
PF21 Dark Gray



Aluminum Brake Cladding
and Automatic Doors
Clear Anodized finish



RG Phillips Consulting, LLC
106 Mission Court, Suite 301
Franklin, Tennessee 37067
Office: (615) 719-7826
Direct: (615) 268-5879
Email: richphillips@rgphillips.net

MEMORANDUM

TO: Olivia DuPuy, EI, Carlson Consulting Engineers, Inc.

FROM: Richard G. Phillips, P.E. *RGP*

RE: **Honey Farm Walmart Neighborhood Market – TIS Review Comments**

Date: January 21, 2025

File: 2024-0908

As requested, we have reviewed the comments received and have revised our traffic study accordingly. In addition, we have the following responses regarding the review comments and the updated traffic study:

- The analyses in the revised traffic study were updated based on the 7th edition of the Highway Capacity Manual.
- The revised traffic study includes recommended storage lengths for westbound approach of Honey Farm Way at Nashville Highway.
- The proposed driveway for the Townhomes on Honey Farm Way was not identified as a study intersection during scoping for the traffic study and therefore was not included in the study.
- Based on a review of projected levels of service for the northbound traffic exiting the Walmart Neighborhood Market site, the trip distribution was reallocated to favor the westbound right turn exiting movement at the proposed right-only access. In the November 2024 traffic study, the exiting Walmart Neighborhood traffic heading north was split evenly, with 25% exiting westbound right at Honey Farm Way and 25% exiting westbound right at the right-only access. This distribution was revised to show 10% exiting westbound right at Honey Farm Way and 40% exiting westbound right at the right-only access. Even with this redistribution, exiting traffic from the Walmart right-only access is projected to have approximately 30 fewer seconds of delay compared to exiting traffic at Honey Farm Way during the AM peak hour and approximately 15 fewer seconds of delay during the PM peak hour.

- Based on analyses with HCM 7 and the revised trip distribution, the projected queue lengths for westbound exiting traffic at Honey Farm Way are less than 275' during both the AM and PM peak hours. If the City remains concerned regarding potential queue lengths, an R10-7 sign, "DO NOT BLOCK INTERSECTION", could be installed for the westbound approach on Honey Farm Way in advance of the proposed Walmart access.
- As noted in the review comments, updated traffic signal warrant analyses were not required as part of the traffic study for the Walmart Neighborhood Market. Without updated signal warrants based on the current proposed development, it is not possible to speculate the on the specific timing of the need for traffic signal installation. However, from a review of the traffic signal warrants contained in the 2023 KCI traffic study, it is clear that a traffic signal will be warranted prior to full buildout of the overall Honey Farm development.

Please let us know if you have any questions or if you need any additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Richard G. Phillips", with a stylized flourish at the end.

Richard G. Phillips, P.E.

TRAFFIC IMPACT STUDY

HONEY FARM
WALMART NEIGHBORHOOD MARKET
COLUMBIA, TENNESSEE

PREPARED ON BEHALF OF:



PREPARED BY:



REVISED
JANUARY 2025

TRAFFIC IMPACT STUDY

PROPOSED HONEY FARM WALMART NEIGHBORHOOD MARKET COLUMBIA, TENNESSEE



PREPARED BY:
RG Phillips Consulting, LLC
Richard G. Phillips, P.E.
106 Mission Court, Suite 301
Franklin, TN 37067



Traffic Impact Study

Honey Farm Walmart Neighborhood Market Columbia, Tennessee

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Introduction and Scope

The purpose of this traffic study is to assess the traffic impacts associated with the proposed Honey Farm Walmart Neighborhood Market development in Columbia, Tennessee. The development is proposed to include a 45,000-S.F. Walmart Neighborhood Market (LUC 850), as well as a 6,600-S.F. fast-food restaurant with a drive-through (LUC 934), a 5,500-S.F. fast casual restaurant (LUC 930), 6,000 S.F. of future retail (LUC 822), 174 apartment units (LUC 220), 180 townhomes (LUC 215), a 98,275-S.F. storage facility (LUC 151), and a 17,000-S.F. health department (LUC 720). Notably, a previous traffic study was prepared for this site by KCI Technologies, Inc. in June 2023. This November 2024 traffic study serves as an update to the prior analyses to reflect changes in proposed land uses, expected trip generation, and project access. Specifically, this updated study addresses the addition of the proposed Walmart Neighborhood Market to the Honey Farm development.

Based on the scope set by City of Columbia staff, this study includes the following intersections:

- #1 – Nashville Highway (US 31 / SR 6) & Honey Farm Way
- #2 – Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access
- #3 – Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access
- #4 – Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive

This report identifies potential traffic impacts to the surrounding roadway network based on the proposed development. Three scenarios were considered for analysis, as follows:

- Existing Traffic Conditions (2024)
- Background Traffic Conditions (2026)
- Projected Traffic Conditions at Horizon Year (2026)

2024 Existing Traffic Conditions

Traffic counts were conducted at locations #1 and #4 from 7:00 AM to 9:00 AM and from 2:00 PM to 6:00 PM. A traffic incident occurred on Nashville Highway during initial traffic collection that affected the AM peak hour traffic; AM traffic data were recollected on a different day as a result.

2026 Background Traffic Conditions

The 2024 existing traffic volumes were increased by 2.5% per year for the two-year buildout period, and one offsite development was identified and included.

2026 Projected Traffic Conditions

Trips expected to be generated by the proposed development were determined from ITE's *Trip Generation, 11th Edition*. These generated volumes were added to the background traffic volumes to determine the 2026 projected traffic conditions. Internal and pass-by reduction factors were included in the trip generation calculations.

Consideration of Offsite Improvements

Right turn lane evaluations were performed for the intersection of Nashville Highway and the proposed Walmart right-only access based on the 2026 projected traffic conditions. The projected conditions at this intersection were found to meet the thresholds for the installation of a northbound right turn lane on Nashville Highway.

Conclusions and Recommendations

Based on the analyses presented in this study, the traffic generated by the proposed Walmart Neighborhood Market can be accommodated by the surrounding roadway infrastructure with the following offsite improvements:

Nashville Highway and Proposed Walmart Right-Only Access

To provide adequate access for the Walmart Neighborhood Market, a right-only driveway on Nashville Highway is shown on the north end of the development. With the inclusion of this driveway, it is recommended that a northbound right turn lane with 150' of storage length be constructed on Nashville Highway.

In addition, recommendations provided in KCI's previous traffic study are now included in the updated Honey Farm site development plan and are summarized as follows:

Nashville Highway and Honey Farm Way

- When warranted, provide traffic signal control. Provide optimized signal timings and evaluate need for coordinated operation.
- Extend the southbound left-turn storage on Nashville Highway to 300'.
- Realign the existing westbound approach of Honey Farm Way to remove the existing curvature of the roadway.
- Provide one entering lane and three exiting lanes for the westbound approach of Honey Farm Way. The exiting approach should include one exclusive left turn lane with 100' of storage, one shared through/left turn lane with 275' of storage, and one right turn lane with 275' of storage.

Honey Farm Way and Proposed Walmart Access / Proposed Commercial Access

- Provide an eastbound left turn lane on Honey Farm Way with 75' of storage.
- Provide an eastbound right turn lane on Honey Farm Way with 75' of storage.
- Provide a westbound left turn lane on Honey Farm Way with 50' of storage.

1. INTRODUCTION

The purpose of this traffic impact study is to assess the traffic impacts associated with the proposed Honey Farm Walmart Neighborhood Market in Columbia, Tennessee and to identify if any offsite access or traffic control improvements will be required to address those impacts.

As mentioned above, the project site is located in Columbia, Tennessee, east of Nashville Highway (US 31 / SR 6) and north of Honey Farm Way. Figure 1 shows the proposed project site, along with the intersections that will be included as part of this study.

A traffic impact study was completed previously for this development, by KCI Technologies, Inc. in June 2023. This traffic study, originally prepared by RG Phillips Consulting, LLC, in November 2024, served as an update to the prior report in order to reflect changes in the proposed land uses, expected trip generation, and project access, specifically as they related to the addition of the proposed Walmart Neighborhood Market to the overall Honey Farm development.

The November 2024 study was revised in January 2025 to address review comments provided by the City of Columbia.

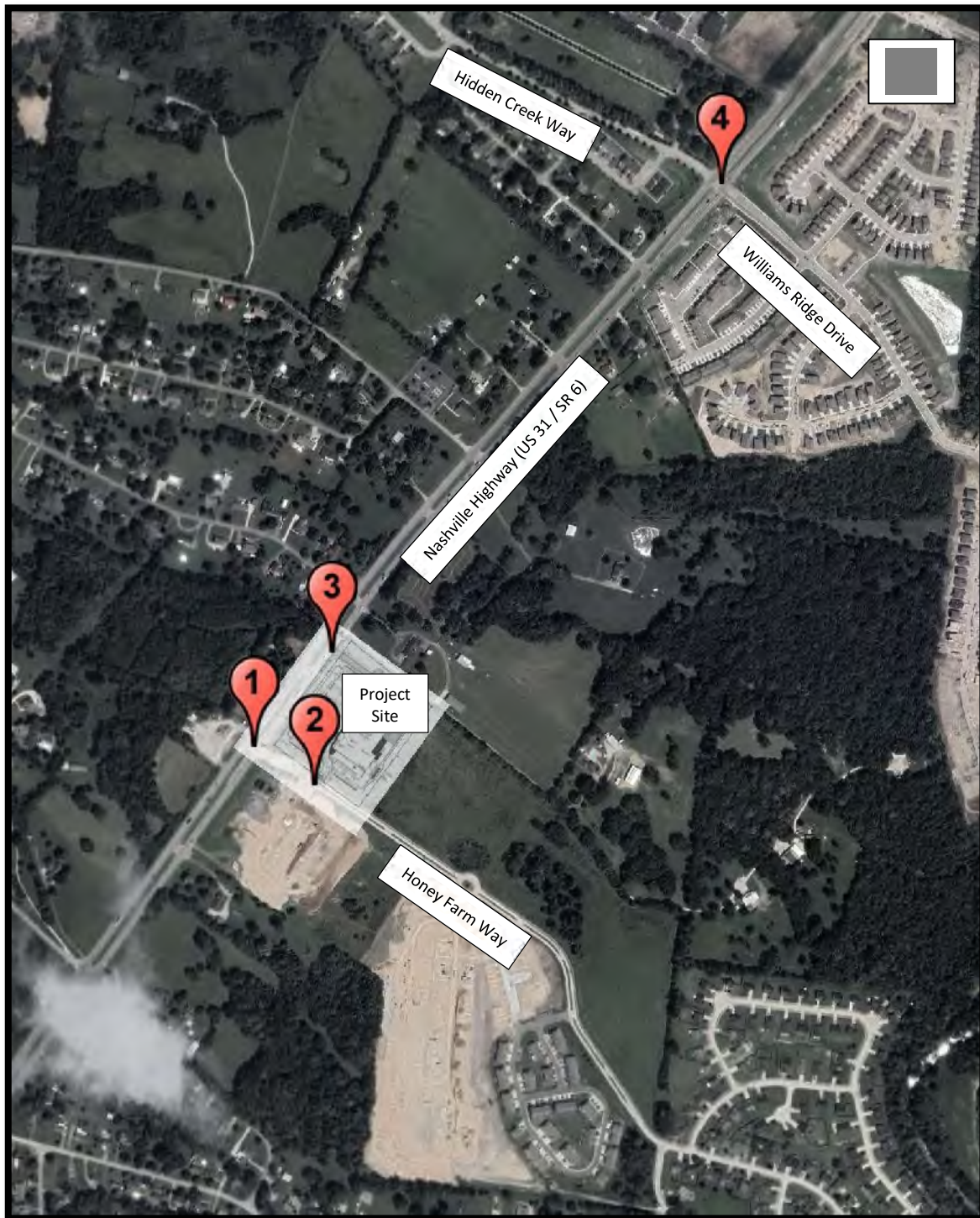


Figure 1.
Project Location and
Study Intersections

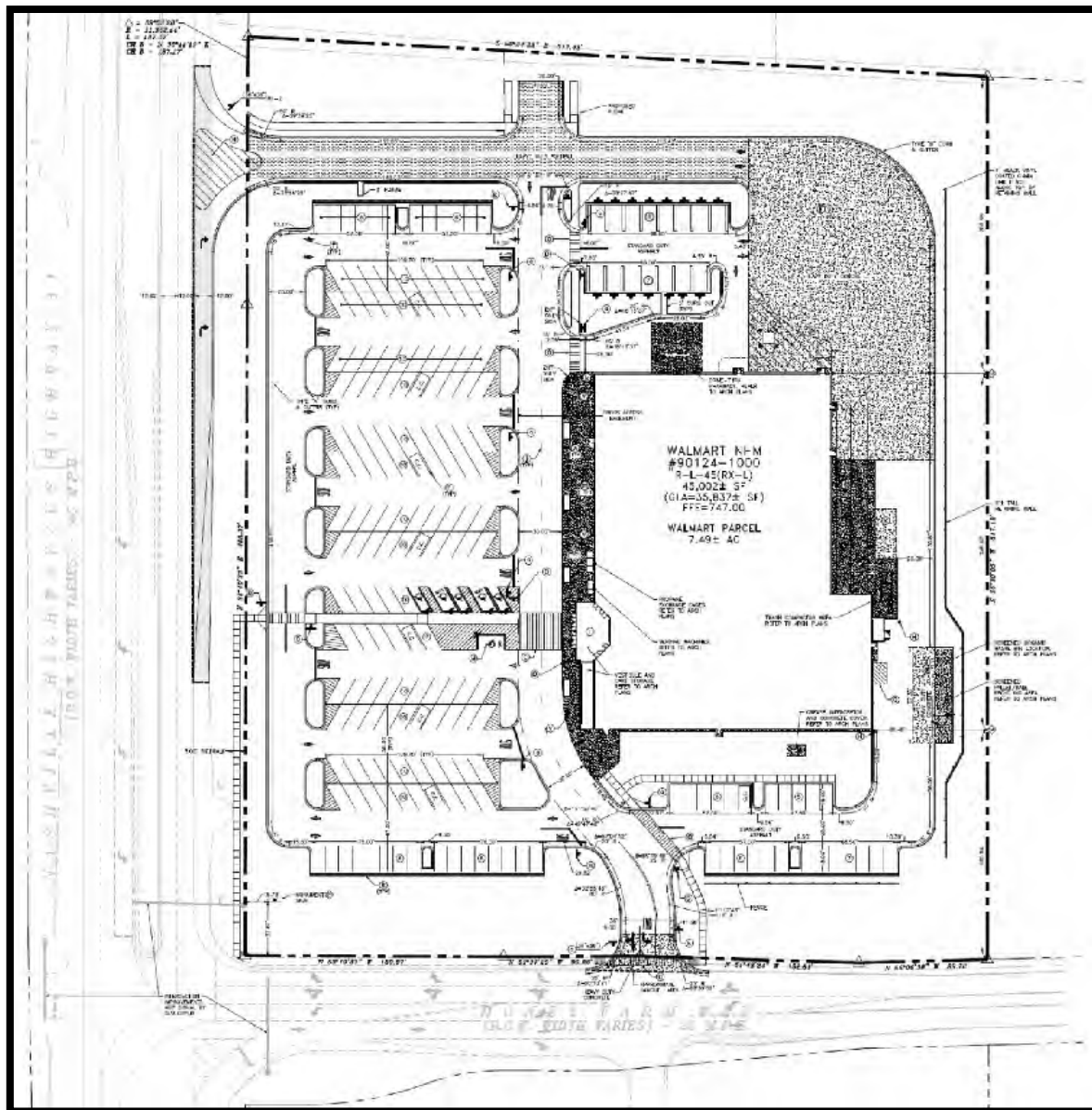
2. PROJECT DESCRIPTION

The current site development plan, provided by Carlson Consulting Engineers, Inc., is illustrated in Figure 2. As detailed in Figure 2, the site plan currently proposes the development of a Walmart Neighborhood Market alongside multiple other land uses. The planned Walmart Neighborhood Market will measure approximately 45,000 S.F. and have a proposed access on Honey Farm Way, as well as a proposed right-only access on Nashville Highway.

In addition to the Walmart Neighborhood Market, the overall Honey Farm development is proposed to include the following:

- Fast-Food Restaurant with Drive-Through (6,600 S.F.)
- Fast Casual Restaurant (5,500 S.F.)
- Future Retail (6,000 S.F.)
- Multifamily Apartment Housing (174 Dwelling Units)
- Townhomes (180 Dwelling Units)
- Mini-Warehouse (98,275 S.F.)
- Health Department (17,000 S.F.)

Based on scoping discussions with City of Columbia staff, it was assumed that the development would be completed by 2026.



CARLSON
CONSULTING
ENGINEERS, INC.

Figure 2.
Walmart Neighborhood Market
Site Development Plan

Project Scope

This report identifies potential traffic impacts to the surrounding roadway network based on the proposed development. Three scenarios were considered for analysis, as follows:

- Existing Traffic Conditions (2024)
- Background Traffic Conditions (2026)
- Future Traffic Conditions at Project Buildout (2026)

Based on scoping discussions with City of Columbia staff, the following intersections were included for analysis in this traffic study:

- #1 – Nashville Highway (US 31 / SR 6) & Honey Farm Way
- #2 – Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access
- #3 – Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access
- #4 – Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive

To simplify review of the traffic study, each intersection was assigned a reference number, as shown above. The traffic assignment and capacity analyses worksheets contained in this report refer to each intersection by both name and assigned intersection number.

It should be noted that at intersection #1, Nashville Highway and Honey Farm Way, there is a business driveway that comprises the west and fourth leg of the intersection. However, based on traffic data collection for both KCI's previous traffic study and this study, there were zero entering and exiting traffic volumes during each peak hour at this driveway. Therefore, for the purposes of this study, this intersection was analyzed as a T-intersection, excluding the business driveway from analysis and future traffic signal phasing.

3. 2024 EXISTING TRAFFIC CONDITIONS

Methodology

The traffic analyses performed in this report were conducted using *Synchro* software, which emulates the methodologies set forth in the *Highway Capacity Manual, 7th Edition*, for evaluation of signalized and unsignalized intersections.

The intersections considered in this study were evaluated in terms of level of service (LOS), which is a rating of traffic conditions for a given roadway or intersection. The descriptions for the various levels of service at both signalized and unsignalized intersections are shown in Table 1 and Table 2, respectively.

Table 1
Level of Service Criteria for Signalized Intersections

Level of Service	Description	Control Delay (Seconds)
A	Very low delay with minimal stops.	<10
B	Stable traffic flow, low delay, few traffic stops.	>10 to ≤20
C	Operations with stable flow, moderate delay.	>20 to ≤ 35
D	Noticeable delays, many stopped vehicles.	>35 and ≤ 55
E	Unstable flow, high delays and congestion.	>55 and ≤ 80
F	Unacceptable delay, excessive congestion.	>80

Table 2
Level of Service Criteria for Unsignalized Intersections

Level of Service	Description	Control Delay (Seconds)
A	Minimal or no delay	≤ 10
B	Minor traffic delay	>10 and ≤ 15
C	Average traffic delay	>15 and ≤ 25
D	Long traffic delay	>25 and ≤ 35
E	Very long traffic delay	>35 and ≤ 50
F	Extreme traffic delay	> 50

Roadway Network

The roadways in the vicinity of the site that will provide access to the Walmart Neighborhood Market development are described as follows:

- *Nashville Highway (US 31 / SR 6)* is a four-lane, median-divided highway that is designated in TDOT's functional classification system as a principal arterial roadway. For the purposes of this study, Nashville Highway was designated as running north-south. At its intersection with Honey Farm Way, Nashville Highway has a southbound left-turn lane and a northbound right-turn lane into the Honey Farms development. The speed limit on Nashville Highway is posted at 55 mph.
- *Honey Farm Way* is a two-lane local roadway with a posted speed limit of 25 mph. At its intersection with Nashville Highway, Honey Farm Way has two exiting westbound lanes.
- *Hidden Creek Way* is a two-lane local roadway that provides access to the Homestead at Carter's Station residential development. Hidden Creek Way has a posted speed limit of 25 mph.
- *Williams Ridge Drive* is a two-lane local roadway that provides access to the Drumwright residential development. The speed limit is not posted on Williams Ridge Drive.

Existing Traffic Operations

To provide data for the analysis, manual turning movement traffic counts were performed at the following locations:

- #1 – Nashville Highway (US 31 / SR 6) & Honey Farm Way
- #4 – Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive

The traffic counts were conducted on a weekday from 7:00 AM to 9:00 AM and from 2:00 PM to 6:00 PM. It should be noted that traffic video data were recorded initially on October 22nd, 2024, but there was a traffic incident on Nashville Highway during this collection that affected the AM peak hour traffic. AM video was therefore recollected on November 7th, 2024.

From the traffic counts collected, it was determined that the AM peak hours of traffic differed by intersection. At intersection #1, Nashville Highway and Honey Farm Way, the AM peak hour occurred from 7:00 AM to 8:00 AM, while at intersection #4, Nashville Highway and Hidden Creek Way / Williams Ridge Drive, the AM peak hour occurred from 7:15 AM to 8:15 AM. At each of the two intersections, the PM peak hour occurred between 2:30 PM and 3:30 PM.

The existing 2024 peak hour traffic volumes for the intersections studied are illustrated in Figure 3. The traffic count data utilized for this study are included in summary form in Appendix A.

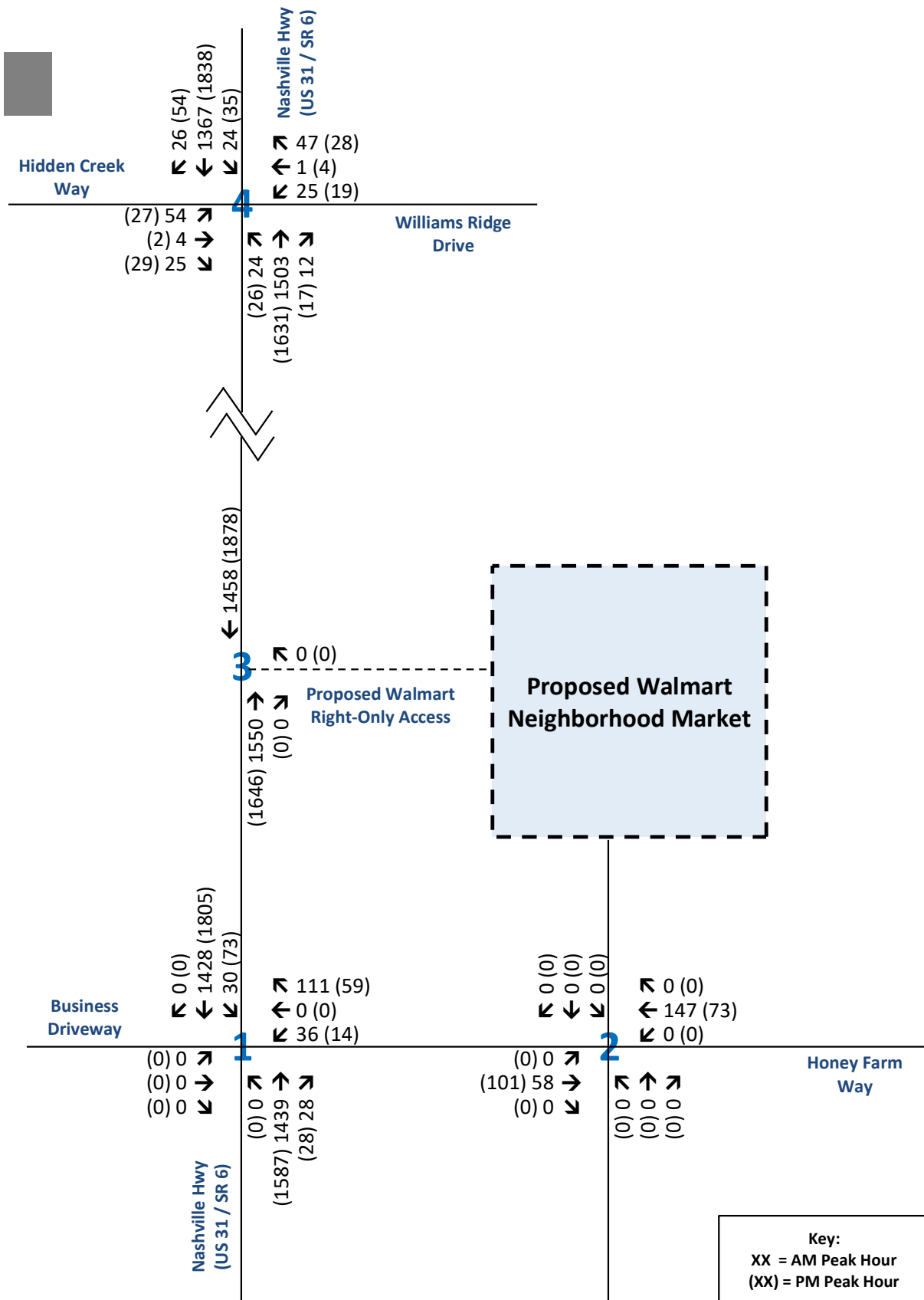


Figure 3.
Existing Traffic Volumes (2024)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



2024 Existing Capacity Analyses

As previously described, the capacity analyses result in the determination of a Level of Service (LOS) for an intersection. The LOS is a concept used to describe how well an intersection or roadway operates. LOS A is the best, while LOS F is the worst.

The results of the capacity analyses for the 2024 existing conditions at the intersections studied are presented in Table 3. As shown, the intersections contained in the study area presently operate at acceptable levels of service (LOS D or better) during both the AM and PM peak traffic hours.

Appendix B contains the capacity analysis worksheets for the 2024 existing traffic conditions.

Table 3
2024 Existing Traffic Conditions Analyses
Peak Hour Levels of Service

Intersection			Level of Service / Delay (Seconds)	
#	Description	Movement ⁽¹⁾	AM Peak Hour	PM Peak Hour
1	Nashville Highway (US 31 / SR 6) & Honey Farm Way	Southbound Left	B (14.4)	C (17.8)
		Westbound	D (29.0)	D (27.9)
2	Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access	Northbound	---	---
		Southbound	---	---
		Eastbound Left	---	---
		Westbound Left	---	---
3	Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access	Westbound Right	---	---
4	Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive	Overall (Signalized)	B (16.3)	B (19.8)

⁽¹⁾ For signalized locations and all-way stop control, the overall LOS and delay are listed for the intersection. For intersections with stop control on the minor approaches only, the LOS and delay are listed for movements that are required to stop or yield the right-of-way.

4. 2026 BACKGROUND TRAFFIC CONDITIONS

The 2026 background conditions analyses are presented to evaluate the traffic levels expected at the project buildout year due to growth. To determine the background traffic volumes, data from a nearby count station, #91, were obtained from TDOT. Based on historical ADT traffic counts at this count station, an average annual rate of 1.3% traffic growth was indicated in the vicinity of the project site over the last five-year period. To be conservative, the 2024 existing traffic volumes were increased by 2.5% per year for the two-year buildout to obtain the 2026 background traffic volumes. The historical TDOT data from this count station are included in Appendix A.

In addition to historical traffic growth, one offsite development was identified for inclusion in the 2026 background traffic conditions. This project is a proposed multifamily and self-storage development located at 2558 Nashville Highway, north of the Honey Farm development.

The 2026 background traffic volumes, which represent the traffic that could be expected to travel through the study area even if the proposed Walmart Neighborhood Market is not completed, are illustrated in Figure 4.

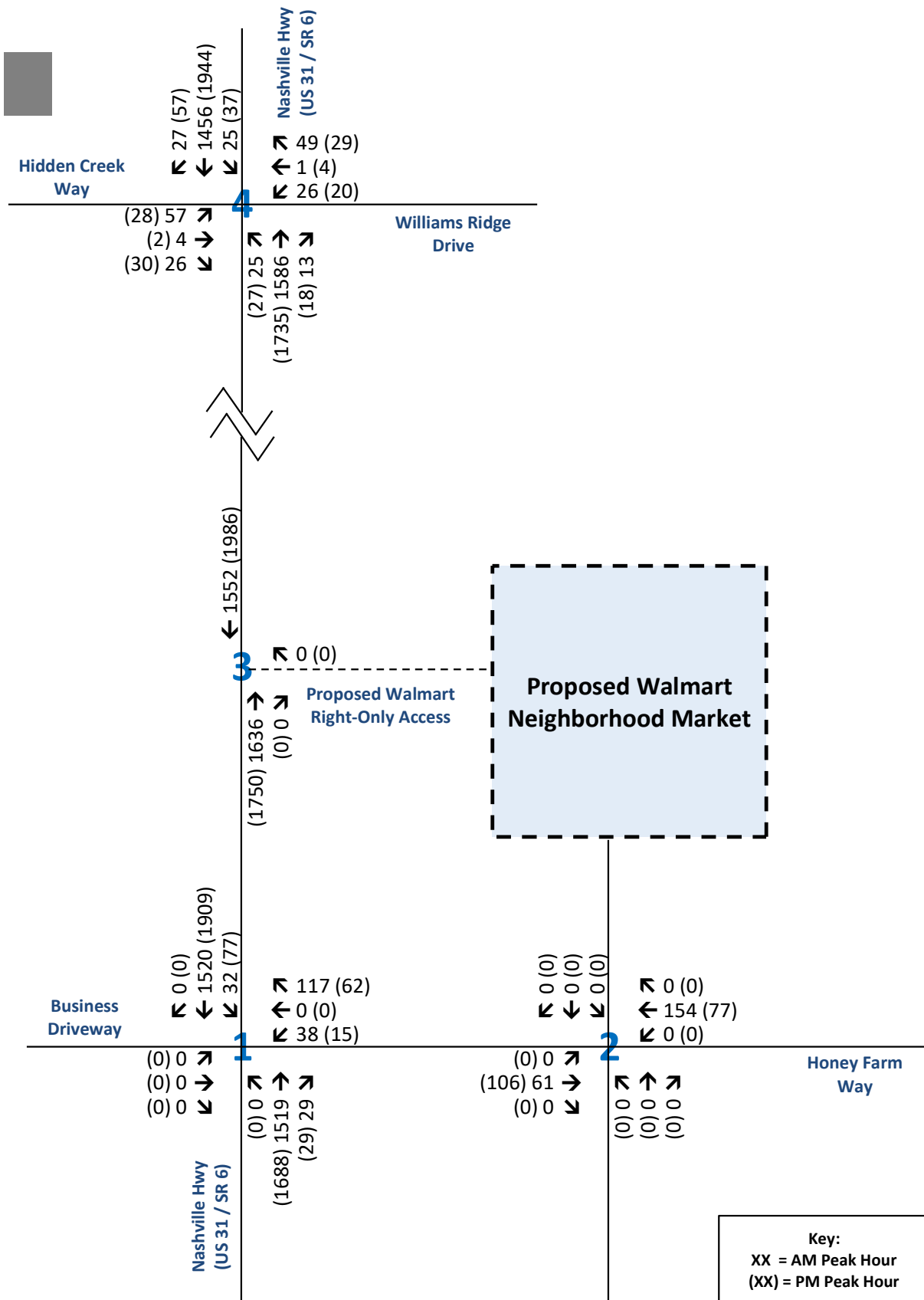


Figure 4.
Background Traffic Volumes (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



2026 Background Intersection Capacity Analyses

To determine the LOS of the intersections studied, capacity analyses were performed for the AM and PM peak hours of traffic for the 2026 background traffic conditions. The capacity calculations were performed in accordance with the methods outlined in the *Highway Capacity Manual*. As previously described, the capacity analyses result in the determination of a Level of Service (LOS) for an intersection. The LOS is a concept used to describe how well an intersection or roadway operates. LOS A is the best, while LOS F is the worst.

As shown in Table 4, the intersections contained in the study area are expected to operate at acceptable levels of service (LOS D or better) during both the AM and PM peak traffic hours.

Appendix B contains the capacity analysis worksheets for the 2026 background traffic conditions.

Table 4
2026 Background Traffic Conditions Analyses
Peak Hour Levels of Service

Intersection			Level of Service / Delay (Seconds)	
#	Description	Movement ⁽¹⁾	AM Peak Hour	PM Peak Hour
1	Nashville Highway (US 31 / SR 6) & Honey Farm Way	Southbound Left	C (15.3)	C (19.8)
		Westbound	D (33.3)	D (32.1)
2	Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access	Northbound	---	---
		Southbound	---	---
		Eastbound Left	---	---
		Westbound Left	---	---
3	Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access	Westbound Right	---	---
4	Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive	Overall (Signalized)	B (17.3)	C (22.7)

⁽¹⁾ For signalized locations and all-way stop control, the overall LOS and delay are listed for the intersection. For intersections with stop control on the minor approaches only, the LOS and delay are listed for movements that are required to stop or yield the right-of-way.

5. 2026 PROJECTED TRAFFIC CONDITIONS

To develop the 2026 projected traffic conditions, the trips expected to be generated by the proposed development were determined. These trips were then assigned to the roadway network using directional traffic distributions.

Trip Generation

As mentioned in the project description, the proposed project will include a Walmart Neighborhood Market measuring approximately 45,000 S.F., as well as a 6,600-S.F. fast-food restaurant with a drive-through window; a 5,500-S.F. fast casual restaurant; 6,000 S.F. of future retail space; 174 apartment units; 180 townhomes; 98,275 S.F. of mini-warehouse space, and a 17,000-S.F. health department. Trips expected to be generated by the proposed development were calculated using data from *Trip Generation, 11th Edition*, which is a publication of the Institute of Transportation Engineers (ITE). The results of the trip generation calculations are presented in Table 5. This table also includes the number of internal and pass-by trips assumed for the development.

- Internal Trip Reduction – Information contained in the *Trip Generation Handbook* indicates that multi-use sites with retail-to-retail attraction can result in as much as a 30% reduction in external trips. However, based on scoping discussions with City of Columbia staff, a 20% internal reduction rate was applied for the grocery store, fast-food restaurant with a drive-through, fast casual restaurant, and future retail portions of the development.
- Pass-By Trips – Information contained in the *Trip Generation Handbook* indicates the pass-by capture rates are significant for retail land uses. The specific pass-by rates utilized for each land use are detailed in the footnotes of Table 5.

Additional information regarding the trip generation calculations for the site development included in this study is contained in Appendix C.

Table 5
Trip Generation for the Proposed
Honey Farm Walmart Neighborhood Market

Description	ITE Land Use Code (LUC)	SIZE	Daily Trips	AM Peak Hour Trips		PM Peak Hour Trips	
				Enter	Exit	Enter	Exit
Grocery Store	850	45,000 S.F.	4,292	76	53	202	202
Fast-Food Restaurant with Drive-Through	934	6,600 S.F.	3,086	150	144	113	105
Fast Casual Restaurant	930	5,500 S.F.	534	4	4	46	37
Future Retail	822	6,000 S.F.	326	12	8	27	27
Multifamily Housing (Low-Rise)	220	174 Units	1,190	18	58	60	35
Townhomes	215	180 Units	1,322	22	66	61	43
Mini-Warehouse	151	98,275 S.F.	142	5	4	7	8
Health Department	720	17,000 S.F.	622	39	10	20	46
Total Generated Trips			11,514	326	347	536	503
Internal Trip Reduction ⁽¹⁾			(2,301)	(65)	(71)	(106)	(100)
Total Primary Trips			9,213	261	276	430	403
Pass-By Trip Reduction ⁽²⁾			(2,093)	(71)	(64)	(114)	(109)
Net New Trips Generated			7,120	190	212	316	294

⁽¹⁾ For LUCs 850, 934, 930, and 822, an internal trip reduction of 20% was taken for the weekday, AM, and PM trip generations.

⁽²⁾ For LUC 850, the weekday, AM, and PM pass-by reduction rates used were 20%, 20%, and 33%, respectively. For LUC 934, the weekday, AM, and PM pass-by reduction rates used were 50%, 49%, and 50%. For LUC 930, the weekday, AM, and PM pass-by reduction rates used were 25%, 0%, and 25%. For LUC 822, the weekday, AM, and PM pass-by reduction rates used were 25%, 0%, and 34%.

Trip Distribution

The trips that will be generated by the proposed project were assigned to the roadway network using trip distributions that are detailed in Appendix D. These directional distributions were based on the existing directional split of traffic, the access proposed for the site, and the population and employment centers in the area. Given the multiple land uses proposed for the Honey Farm development, various trip distributions were determined. As an example, Figure 5 illustrates the primary trip distribution for the Walmart Neighborhood Market, which is described as follows:

- 50% to / from the south on Nashville Highway
- 50% to / from the north on Nashville Highway
 - 45% via Nashville Highway
 - 3% via Williams Ridge Drive
 - 2% via Hidden Creek Way

Appendix D contains the following trip distribution sheets:

- Primary Trip Distributions
 - Grocery Store (Walmart Neighborhood Market)
 - Fast-Food Restaurant with Drive-Through
 - Fast Casual Restaurant
 - Future Retail
 - Multifamily Housing (Low-Rise)
 - Townhomes
 - Mini-Warehouse
 - Health Department
- Pass-By Trip Distributions
 - Grocery Store (Walmart Neighborhood Market)
 - Fast-Food Restaurant with Drive-Through
 - Fast Casual Restaurant
 - Future Retail
- Offsite Trip Distribution
 - 2558 Nashville Highway

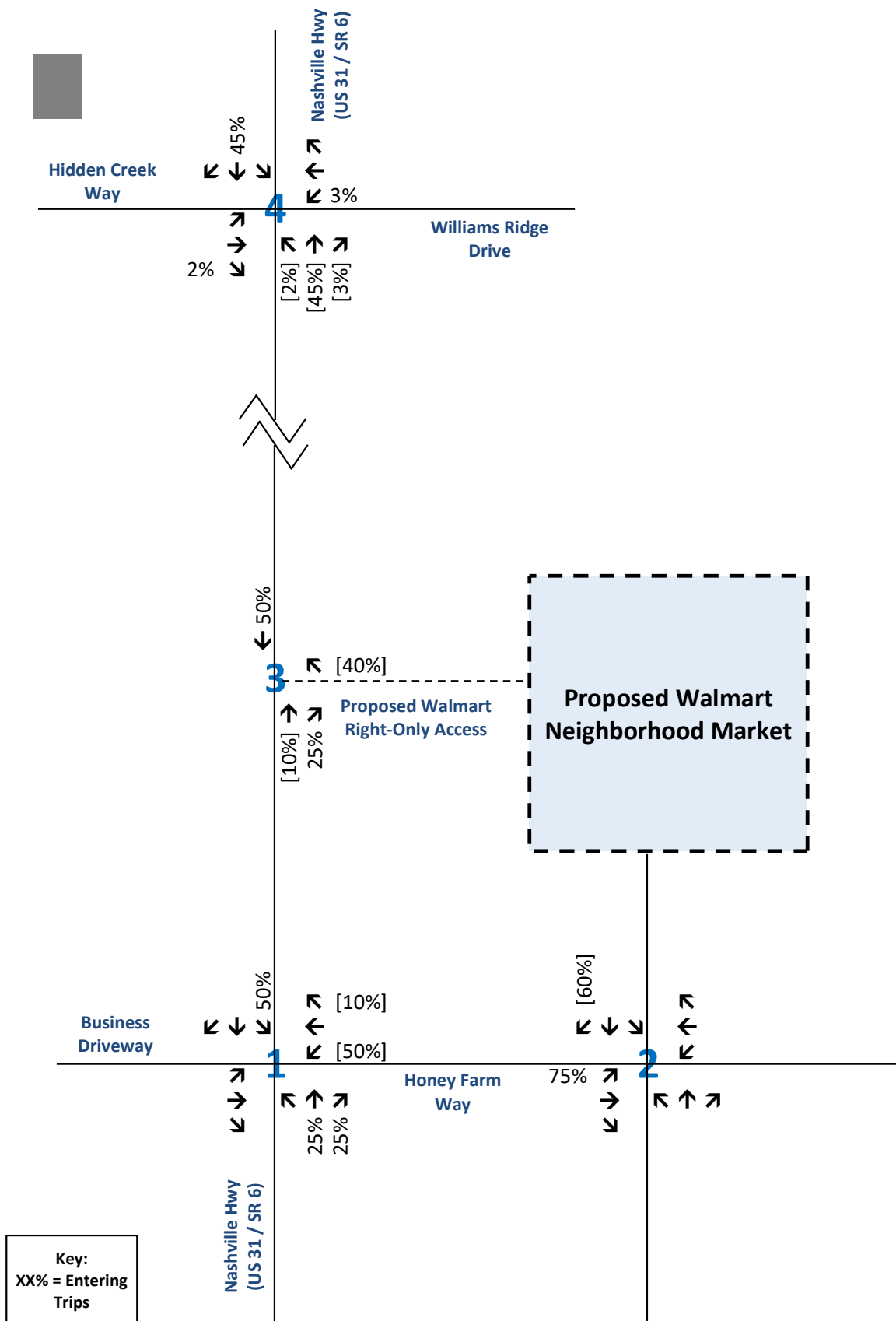


Figure 5.
Primary Trip Distribution - Grocery Store (Walmart Neighborhood Market)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



Traffic Assignment

The assignments of the total trips that will be generated by the proposed development are presented in Figure 6. Appendix E contains the traffic assignment figures utilized in developing the projected traffic volumes at buildout conditions. Traffic assignment information included in Appendix E is listed as follows:

- Existing Traffic Volumes (2024)
- Background Traffic Volumes (2026)
 - Historical Growth (2.5% per year for 2 years)
 - Offsite Traffic – 2558 Nashville Highway
 - Total Background Traffic (Historical Growth + Offsite)
- Site-Generated Traffic
 - Primary Traffic Volumes
 - Grocery Store (Walmart Neighborhood Market)
 - Fast-Food Restaurant with Drive-Through
 - Fast Casual Restaurant
 - Future Retail
 - Multifamily Housing (Low-Rise)
 - Townhomes
 - Mini-Warehouse
 - Health Department
 - Total Primary Traffic Volumes
 - Pass-By Traffic Volumes
 - Grocery Store (Walmart Neighborhood Market)
 - Fast-Food Restaurant with Drive-Through
 - Fast Casual Restaurant
 - Future Retail
 - Total Pass-By Traffic Volumes
- Total Site-Generated Traffic Volumes
- Total Projected Traffic Volumes at Project Buildout (2026)

The site-generated traffic volumes, shown in Figure 6, were added to the total background peak hour traffic volumes in order to obtain the total projected traffic volumes for the intersections within the study area. Figure 7 presents the total projected AM and PM peak hour traffic volumes expected at project buildout in 2026.

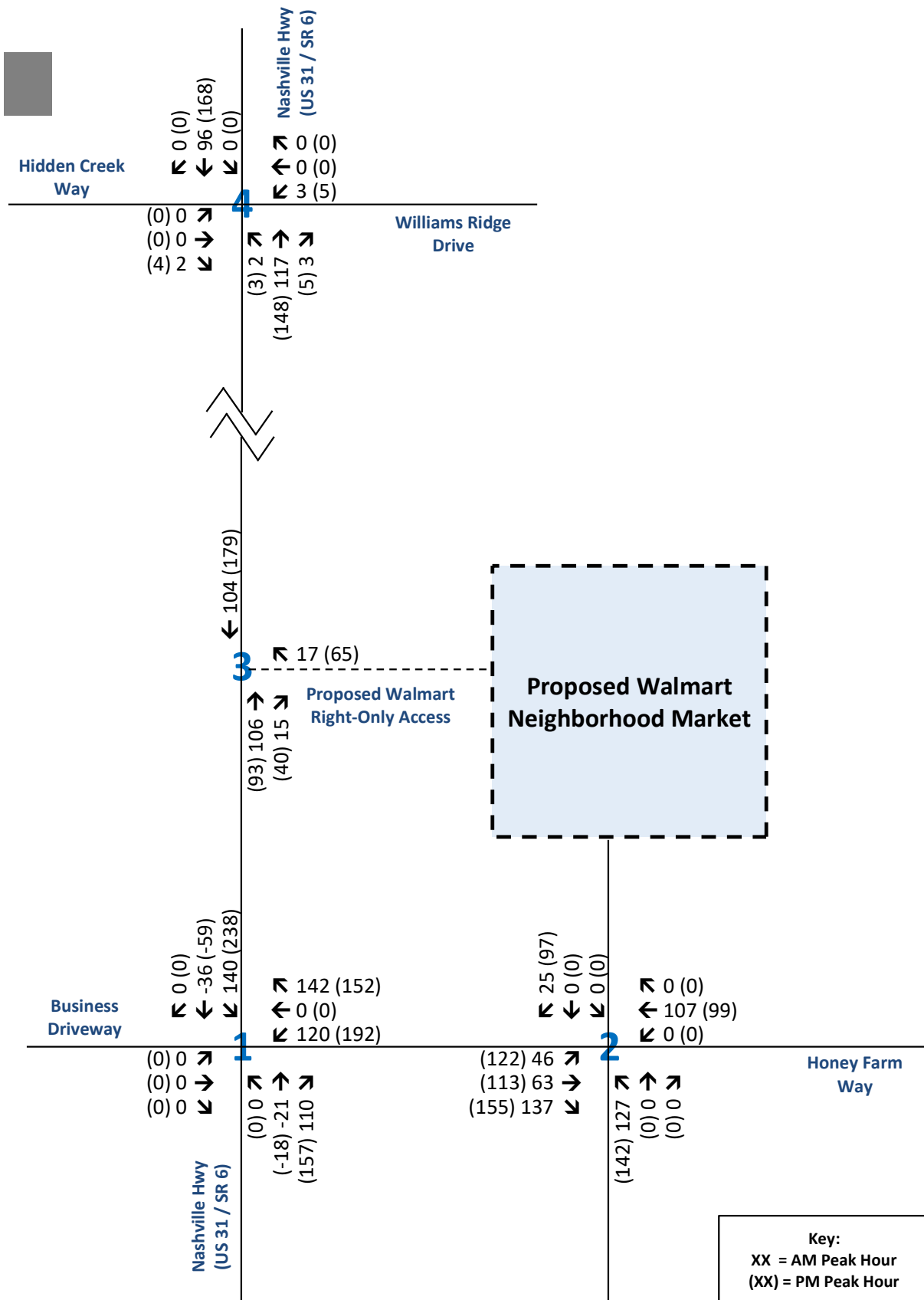


Figure 6.
Site Generated Traffic
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



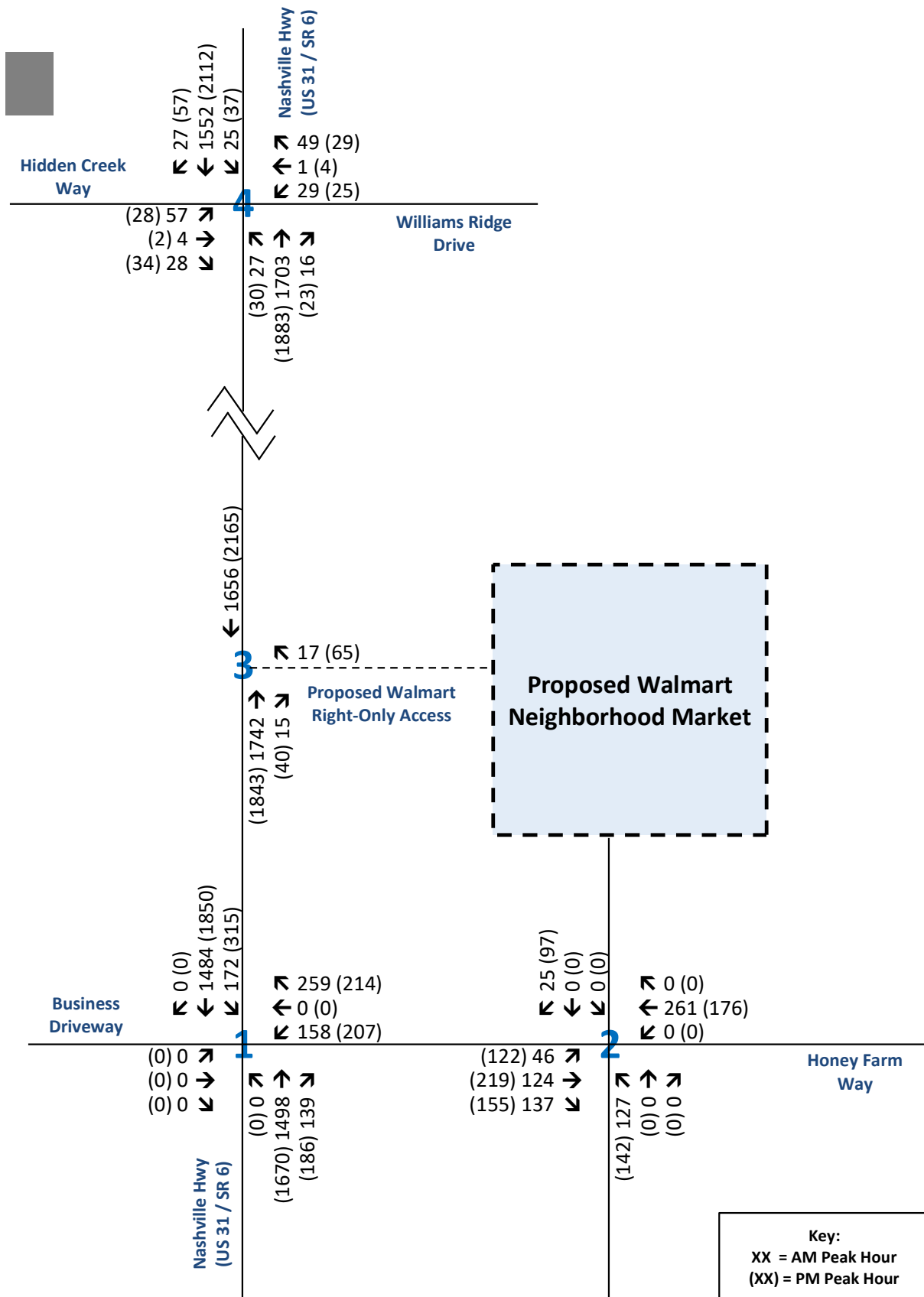


Figure 7.
Total Projected Traffic at Buildout (2026)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



2026 Projected Intersection Capacity Analyses

Capacity analyses were performed in order to determine the impact of the project on the intersections included in the scope of the study. These capacity analyses were used to evaluate the need for roadway and traffic control improvements at the intersections studied.

The results of the capacity analyses for the 2026 projected traffic conditions at the intersections studied are presented in Table 6. As shown, the intersections included in this study are expected to operate at acceptable levels of service (LOS D or better) during the AM and PM peak hours of traffic. Of note, intersection #1, Nashville Highway (US 31 / SR 6) and Honey Farm Way, was analyzed in the 2026 projected traffic conditions as a signalized location. In KCI's previous traffic study for the Honey Farm development, traffic signal warrants were conducted, and the thresholds for a signal were met, at this intersection. Based on KCI's traffic signal warrant analyses and discussions with the City of Columbia, the intersection of Nashville Highway and Honey Farm Way is planned to be signalized as part of the overall Honey Farm buildout.

Appendix B contains the capacity analysis worksheets for the 2026 projected traffic conditions.

Table 6
2026 Projected Traffic Conditions Analyses
Peak Hour Levels of Service

Intersection			Level of Service / Delay (Seconds)	
#	Description	Movement ⁽¹⁾	AM Peak Hour	PM Peak Hour
1	Nashville Highway (US 31 / SR 6) & Honey Farm Way	Overall (Signalized)	B (19.9)	C (28.2)
2	Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access	Northbound	C (15.1)	C (22.3)
		Southbound	B (10.8)	B (10.5)
		Eastbound Left	A (7.9)	A (7.9)
		Westbound Left	A (7.8)	A (8.1)
3	Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access	Westbound Right	C (19.8)	D (26.0)
4	Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive	Overall (Signalized)	B (18.5)	C (31.2)

⁽¹⁾ For signalized locations and all-way stop control, the overall LOS and delay are listed for the intersection. For intersections with stop control on the minor approaches only, the LOS and delay are listed for movements that are required to stop or yield the right-of-way.

2026 Projected Traffic Conditions – Queueing Analyses

As part of the analyses for the 2026 projected traffic conditions in the vicinity of the project site, 95th percentile queues were evaluated for the intersections included in this study. The queue lengths are summarized below in Table 7.

Table 7
95th Percentile Queues for 2026 Projected Traffic Conditions

Intersection			AM Peak Hour	PM Peak Hour
#	Description	Approach / Movement ⁽¹⁾	95 th % Queue ^{(1) (2)}	95 th % Queue ^{(1) (2)}
1	Nashville Highway (US 31 / SR 6) & Honey Farm Way	Northbound Through	670'	#1006'
		Northbound Right	18'	49'
		Southbound Left	96'	m259'
		Southbound Through	720'	1075'
		Westbound Left	107'	141'
		Westbound Right	269'	219'
2	Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access	Northbound	50'	75'
		Southbound Left	<25'	<25'
		Southbound Through-Right	<25'	<25'
		Eastbound Left	<25'	<25'
		Eastbound Through	---	---
		Eastbound Right	---	---
		Westbound Left	0'	0'
		Westbound Through-Right	---	---
3	Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access	Northbound Through	---	---
		Southbound Through	---	---
		Westbound Right	<25'	50'
4	Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive	Northbound Left	m4'	m4'
		Northbound Through	140'	1119'
		Northbound Right	m0'	m0'
		Southbound Left	15'	26'
		Southbound Through	603'	#1331'
		Southbound Right	0'	7'
		Eastbound Left	86'	55'
		Eastbound Through-Right	38'	39'
		Westbound Left	51'	51'
		Westbound Through	7'	19'
		Westbound Right	14'	0'

(1) #: 95th percentile volume exceeds capacity; queue may be longer.

(2) m: Volume for 95th percentile queue is metered by upstream signal.

Consideration of Offsite Improvements

Based on the results of the 2026 projected intersection capacity analyses, the need for offsite improvements was evaluated.

Left Turn Lane Warrants

For left turn lane warrants, traffic volumes are compared to the standards set forth in *NCHRP 457*. However, these analyses are typically performed only for unsignalized intersections; therefore, intersections #1, Nashville Highway and Honey Farm Way, and #4, Nashville Highway and Hidden Creek Way / Williams Ridge Drive, were not considered for analysis because #4 is already signalized and #1 is planned to be signalized in the 2026 projected conditions. Additionally, intersection #3, Nashville Highway and the proposed Walmart right-only access, was not considered for analysis because this access is proposed at a location on Nashville Highway that is median-divided and cannot allow left-turning movements into the site. Finally, an eastbound left turn lane into the site at intersection #2, Honey Farm Way and the proposed Walmart access, is already included on the revised site development plan for future construction.

Right Turn Lane Evaluations

To evaluate the need for right turn lane improvements, the criteria contained in *NCHRP 457* were compared to the 2026 projected traffic volumes at the following locations:

- #2 – Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access
- #3 – Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access

Right turn lane analyses were not conducted at intersection #1, Nashville Highway and Honey Farm Way, as there is an existing northbound right turn lane on Nashville Highway, or at intersection #4, Nashville Highway and Hidden Creek Way / Williams Ridge Drive, as there are existing northbound and southbound right turn lanes at this signalized location.

For location #2, the AM and PM peak hour volumes were compared to the data for a two-lane, 30-mph roadway; for location #3, the volumes were compared to the data for a four-lane, 55-mph roadway.

#2 – Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access

The results of the analyses show that the projected volumes do not meet the thresholds indicated for the installation of a westbound right turn lane at this location during either the AM or PM peak hours.

#3 – Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access

The results of the analyses show that the projected volumes meet the thresholds indicated for the installation of a northbound right turn lane at this location.

Copies of the right turn analyses sheets for the 2026 projected traffic conditions are included in Appendix F.

6. CONCLUSIONS AND RECOMMENDATIONS

Based on the analyses presented in this study, the traffic generated by the proposed Walmart Neighborhood Market can be accommodated by the surrounding roadway infrastructure with the following offsite improvements, which are detailed in Figure 8:

Nashville Highway and Proposed Walmart Right-Only Access

To provide adequate access for the Walmart Neighborhood Market, a right-only driveway on Nashville Highway is shown on the north end of the development. With the inclusion of this driveway, it is recommended that a northbound right turn lane with 150' of storage length be constructed on Nashville Highway.

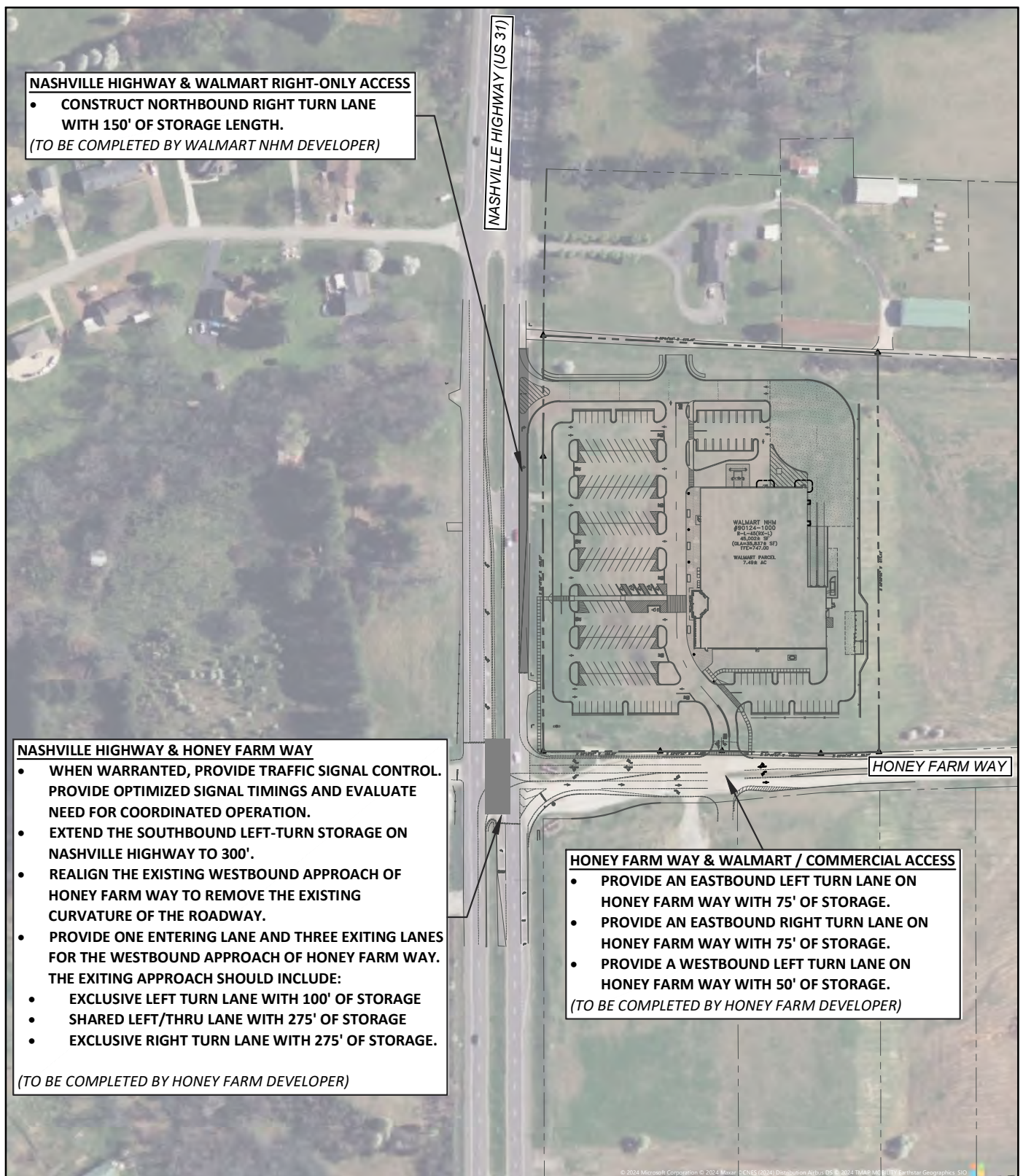
In addition, recommendations provided in KCI's previous traffic study are now included in the updated Honey Farm site development plan and are summarized as follows:

Nashville Highway and Honey Farm Way

- When warranted, provide traffic signal control. Provide optimized signal timings and evaluate need for coordinated operation.
- Extend the southbound left-turn storage on Nashville Highway to 300'.
- Realign the existing westbound approach of Honey Farm Way to remove the existing curvature of the roadway.
- Provide one entering lane and three exiting lanes for the westbound approach of Honey Farm Way. The exiting approach should include one exclusive left turn lane with 100' of storage, one shared through/left turn lane with 275' of storage, and one right turn lane with 275' of storage.

Honey Farm Way and Proposed Walmart Access / Proposed Commercial Access

- Provide an eastbound left turn lane on Honey Farm Way with 75' of storage.
- Provide an eastbound right turn lane on Honey Farm Way with 75' of storage.
- Provide a westbound left turn lane on Honey Farm Way with 50' of storage.



Honey Farm Walmart Neighborhood Market - Traffic Impact Study (Columbia, TN)



Figure 8.
Recommended Improvements

APPENDIX A
TRAFFIC COUNT DATA

INTERSECTION TURNING

MOVEMENT COUNTS

INTERSECTION VEHICULAR TURNING MOVEMENT COUNTS

LOCATION: #1 - Nashville Highway (US Highway 31 / State Route 6) & Honey Farm Way / Business Driveway

PROJECT: Proposed Honey Farm Walmart Neighborhood Market

DATE: Tuesday, October 22, 2024

NOTES: Due to a traffic incident, AM peak data was recollected on 11/7/2024

LOCATION	Northbound			Southbound			Eastbound			Westbound		
	Nashville Highway (US Highway 31 / State Route 6)			Nashville Highway (US Highway 31 / State Route 6)			Business Driveway			Honey Farm Way		
TIME	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM - 7:15 AM	0	334	9	8	289	0	0	0	0	11	0	26
7:15 AM - 7:30 AM	0	345	6	6	362	0	0	0	0	13	0	33
7:30 AM - 7:45 AM	0	364	6	6	419	0	0	0	0	6	0	25
7:45 AM - 8:00 AM	0	396	7	10	358	0	0	0	0	6	0	27
8:00 AM - 8:15 AM	0	318	8	15	281	0	0	0	0	7	0	18
8:15 AM - 8:30 AM	0	302	4	14	274	0	0	0	0	7	0	17
8:30 AM - 8:45 AM	0	327	2	10	278	0	0	0	0	7	0	14
8:45 AM - 9:00 AM	0	340	8	7	308	0	0	0	0	10	0	12
2:00 PM - 2:15 PM	0	346	2	13	404	0	0	0	0	4	0	20
2:15 PM - 2:30 PM	0	320	6	10	422	0	0	0	0	9	0	12
2:30 PM - 2:45 PM	0	375	4	10	552	0	0	0	0	4	0	14
2:45 PM - 3:00 PM	0	396	10	25	449	0	0	0	0	0	0	20
3:00 PM - 3:15 PM	0	383	5	20	395	0	0	0	0	6	0	11
3:15 PM - 3:30 PM	0	433	9	18	409	0	0	0	0	4	0	14
3:30 PM - 3:45 PM	0	432	9	21	370	0	0	0	0	3	0	23
3:45 PM - 4:00 PM	0	374	10	23	360	0	0	0	0	4	0	6
4:00 PM - 4:15 PM	0	353	5	24	366	0	0	0	0	8	0	13
4:15 PM - 4:30 PM	0	399	10	16	363	0	0	0	0	5	0	11
4:30 PM - 4:45 PM	0	388	11	23	368	0	0	0	0	6	0	13
4:45 PM - 5:00 PM	0	290	4	18	393	0	0	0	0	5	0	20
5:00 PM - 5:15 PM	0	338	7	18	382	0	0	0	0	4	0	16
5:15 PM - 5:30 PM	0	424	6	25	346	0	0	0	0	5	0	14
5:30 PM - 5:45 PM	0	382	9	18	350	0	0	0	0	3	0	16
5:45 PM - 6:00 PM	0	323	7	18	345	0	0	0	0	5	0	9
AM Peak Hour (7:00 AM - 8:00 AM)	0	1,439	28	30	1,428	0	0	0	0	36	0	111
PM Peak Hour (2:30 PM - 3:30 PM)	0	1,587	28	73	1,805	0	0	0	0	14	0	59

PHF
0.93
0.93

INTERSECTION VEHICULAR TURNING MOVEMENT COUNTS

LOCATION: #2 - Honey Farm Way & Commercial Access / Proposed Walmart Access

PROJECT: Proposed Honey Farm Walmart Neighborhood Market

DATE: Tuesday, October 22, 2024

NOTES: Due to a traffic incident, AM peak data was recollected on 11/7/2024

LOCATION	Northbound			Southbound			Eastbound			Westbound		
	Commercial Access			Proposed Walmart Access			Honey Farm Way			Honey Farm Way		
TIME	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM - 7:15 AM								17			37	
7:15 AM - 7:30 AM								12			46	
7:30 AM - 7:45 AM								12			31	
7:45 AM - 8:00 AM								17			33	
8:00 AM - 8:15 AM								23			25	
8:15 AM - 8:30 AM								18			24	
8:30 AM - 8:45 AM								12			21	
8:45 AM - 9:00 AM								15			22	
2:00 PM - 2:15 PM								15			24	
2:15 PM - 2:30 PM								16			21	
2:30 PM - 2:45 PM								14			18	
2:45 PM - 3:00 PM								35			20	
3:00 PM - 3:15 PM								25			17	
3:15 PM - 3:30 PM								27			18	
3:30 PM - 3:45 PM								30			26	
3:45 PM - 4:00 PM								33			10	
4:00 PM - 4:15 PM								29			21	
4:15 PM - 4:30 PM								26			16	
4:30 PM - 4:45 PM								34			19	
4:45 PM - 5:00 PM								22			25	
5:00 PM - 5:15 PM								25			20	
5:15 PM - 5:30 PM								31			19	
5:30 PM - 5:45 PM								27			19	
5:45 PM - 6:00 PM								25			14	
AM Peak Hour (7:00 AM - 8:00 AM)	0	0	0	0	0	0	0	58	0	0	147	0
PM Peak Hour (2:30 PM - 3:30 PM)	0	0	0	0	0	0	0	101	0	0	73	0

INTERSECTION VEHICULAR TURNING MOVEMENT COUNTS

LOCATION: #2 - Nashville Highway (US Highway 31 / State Route 6) & Proposed Walmart Right-Only Access

PROJECT: Proposed Honey Farm Walmart Neighborhood Market

DATE: Tuesday, October 22, 2024

NOTES: Due to a traffic incident, AM peak data was recollected on 11/7/2024

LOCATION	Northbound			Southbound			Eastbound			Westbound		
	Nashville Highway (US Highway 31 / State Route 6)			Nashville Highway (US Highway 31 / State Route 6)						Proposed Walmart Right-Only Access		
TIME	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM - 7:15 AM		360			297							
7:15 AM - 7:30 AM		378			368							
7:30 AM - 7:45 AM		389			425							
7:45 AM - 8:00 AM		423			368							
8:00 AM - 8:15 AM		336			296							
8:15 AM - 8:30 AM		319			288							
8:30 AM - 8:45 AM		341			288							
8:45 AM - 9:00 AM		352			315							
2:00 PM - 2:15 PM		366			417							
2:15 PM - 2:30 PM		332			432							
2:30 PM - 2:45 PM		389			562							
2:45 PM - 3:00 PM		416			474							
3:00 PM - 3:15 PM		394			415							
3:15 PM - 3:30 PM		447			427							
3:30 PM - 3:45 PM		455			391							
3:45 PM - 4:00 PM		380			383							
4:00 PM - 4:15 PM		366			390							
4:15 PM - 4:30 PM		410			379							
4:30 PM - 4:45 PM		401			391							
4:45 PM - 5:00 PM		310			411							
5:00 PM - 5:15 PM		354			400							
5:15 PM - 5:30 PM		438			371							
5:30 PM - 5:45 PM		398			368							
5:45 PM - 6:00 PM		332			363							
AM Peak Hour (7:00 AM - 8:00 AM)	0	1,550	0	0	1,458	0	0	0	0	0	0	0
PM Peak Hour (2:30 PM - 3:30 PM)	0	1,646	0	0	1,878	0	0	0	0	0	0	0

INTERSECTION VEHICULAR TURNING MOVEMENT COUNTS

LOCATION: #4 - Nashville Highway (US Highway 31 / State Route 6) & Williams Ridge Drive / Hidden Creek Way

PROJECT: Proposed Honey Farm Walmart Neighborhood Market

DATE: Tuesday, October 22, 2024

NOTES: Due to a traffic incident, AM peak data was recollected on 11/7/2024

LOCATION	Northbound			Southbound			Eastbound			Westbound		
	Nashville Highway (US Highway 31 / State Route 6)			Nashville Highway (US Highway 31 / State Route 6)			Hidden Creek Way			Williams Ridge Drive		
TIME	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM - 7:15 AM	1	349	3	1	266	2	12	0	19	7	0	7
7:15 AM - 7:30 AM	4	379	5	3	353	5	16	1	9	5	0	16
7:30 AM - 7:45 AM	4	392	2	5	394	2	9	0	11	6	0	5
7:45 AM - 8:00 AM	5	394	3	10	342	7	15	3	3	8	0	8
8:00 AM - 8:15 AM	11	338	2	6	278	12	14	0	2	6	1	18
8:15 AM - 8:30 AM	5	324	6	12	288	10	8	0	6	3	0	10
8:30 AM - 8:45 AM	5	338	5	7	272	7	9	0	11	6	2	8
8:45 AM - 9:00 AM	0	360	4	2	302	5	11	0	8	5	0	15
2:00 PM - 2:15 PM	2	339	6	0	409	6	6	1	7	2	0	8
2:15 PM - 2:30 PM	25	248	3	11	391	11	2	0	6	2	0	13
2:30 PM - 2:45 PM	5	427	7	9	577	11	5	0	8	6	0	8
2:45 PM - 3:00 PM	7	409	4	9	447	13	5	1	5	2	2	6
3:00 PM - 3:15 PM	9	384	4	10	397	16	12	0	11	7	2	5
3:15 PM - 3:30 PM	5	411	2	7	417	14	5	1	5	4	0	9
3:30 PM - 3:45 PM	3	449	5	5	378	16	5	1	5	10	0	10
3:45 PM - 4:00 PM	6	365	4	10	385	15	3	0	3	6	2	5
4:00 PM - 4:15 PM	9	347	3	10	342	9	7	0	9	2	1	5
4:15 PM - 4:30 PM	12	373	8	9	372	9	13	0	1	3	0	8
4:30 PM - 4:45 PM	9	360	5	10	359	10	7	0	6	2	0	5
4:45 PM - 5:00 PM	9	314	4	14	387	14	6	0	2	0	0	6
5:00 PM - 5:15 PM	13	315	5	8	326	12	10	0	9	2	0	7
5:15 PM - 5:30 PM	14	427	7	16	319	13	8	0	2	3	0	14
5:30 PM - 5:45 PM	13	382	4	8	370	14	5	0	3	2	0	10
5:45 PM - 6:00 PM	5	325	10	15	359	14	7	1	3	1	0	9
AM Peak Hour (7:15 AM - 8:15 AM)	24	1,503	12	24	1,367	26	54	4	25	25	1	47
PM Peak Hour (2:30 PM - 3:30 PM)	26	1,631	17	35	1,838	54	27	2	29	19	4	28

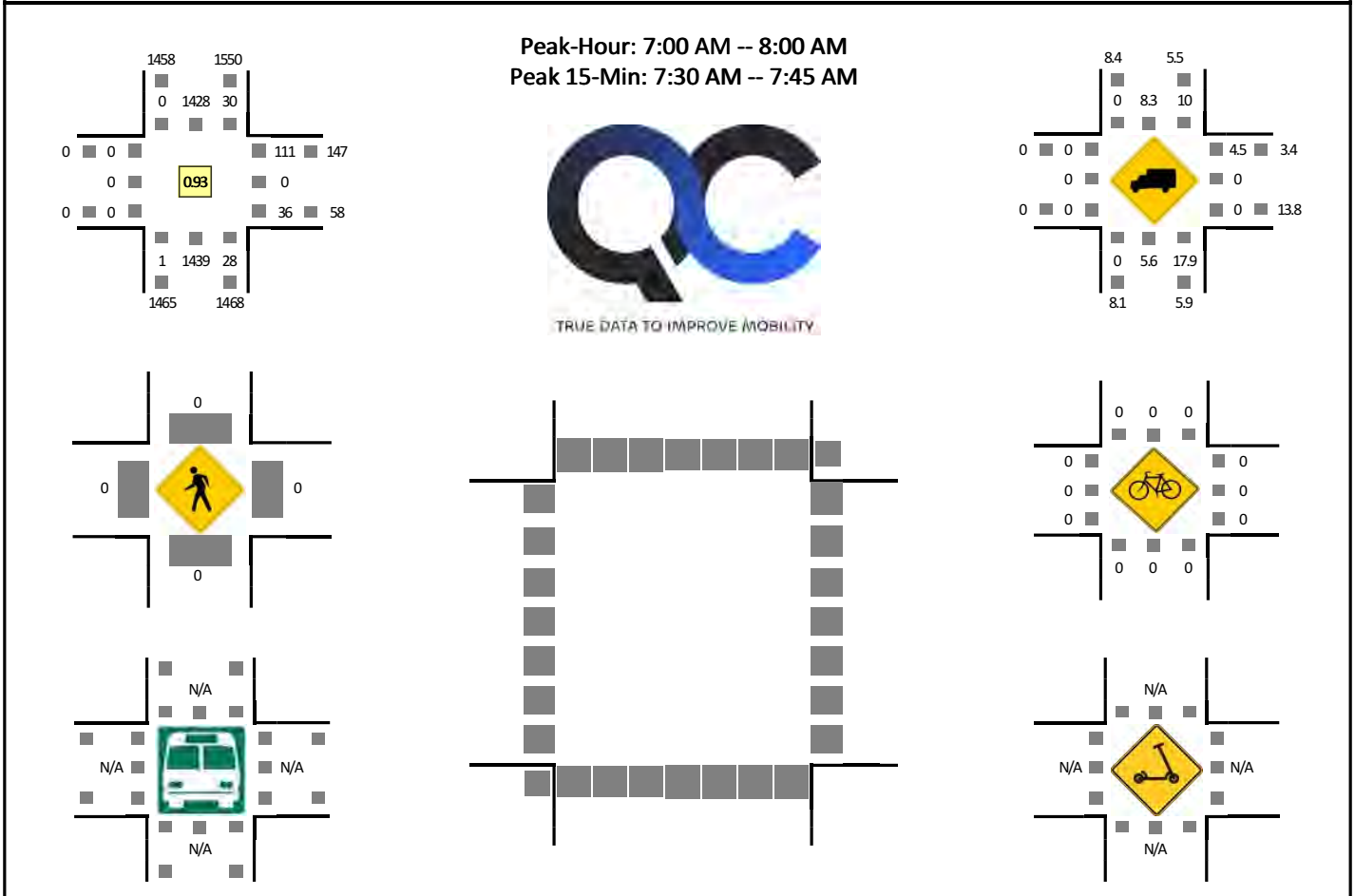
PHF
0.94
0.87

QUALITY COUNTS

TMC REPORTS

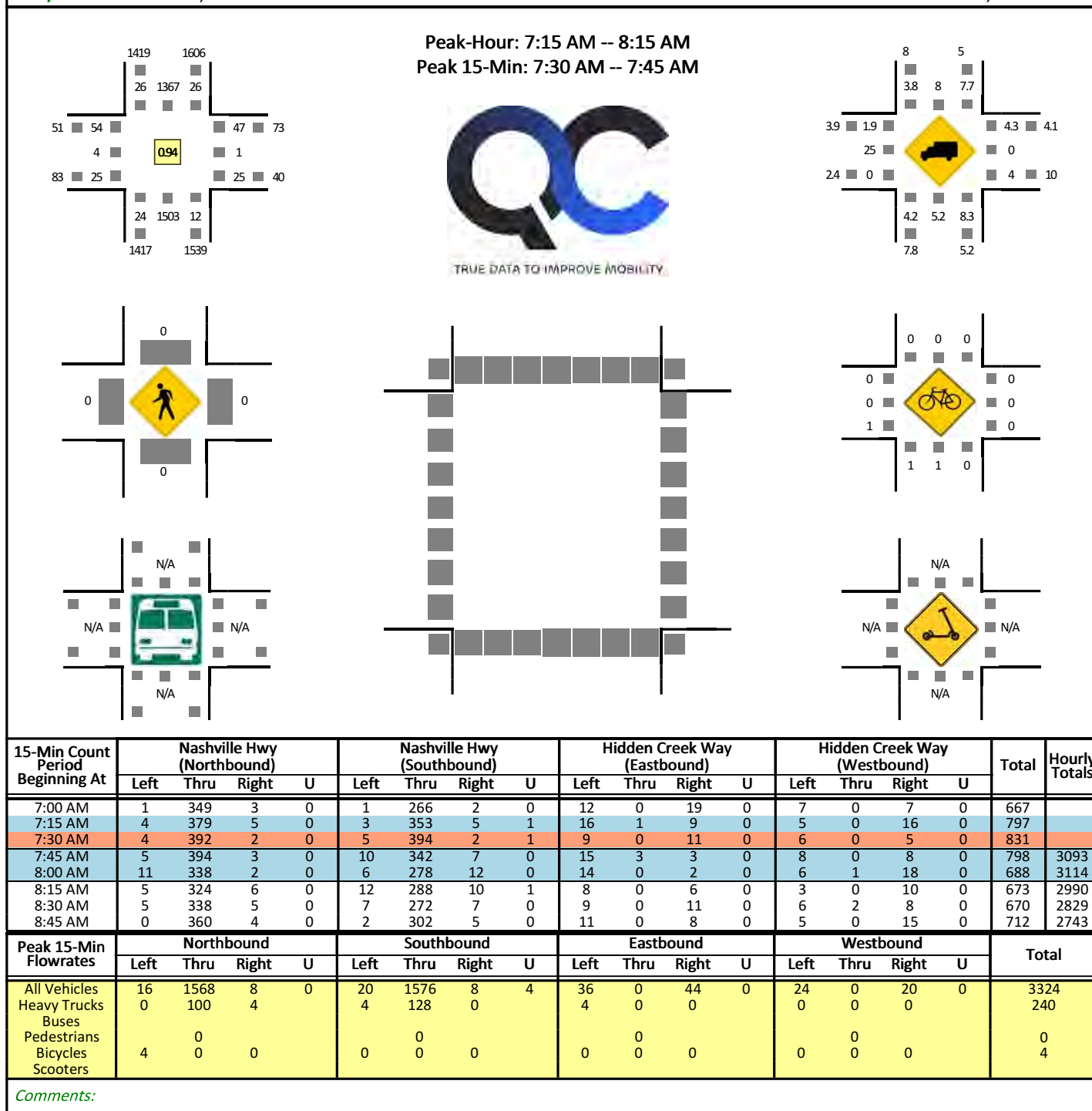
LOCATION: Nashville Hwy -- Honey Farm Way
CITY/STATE: Columbia, TN

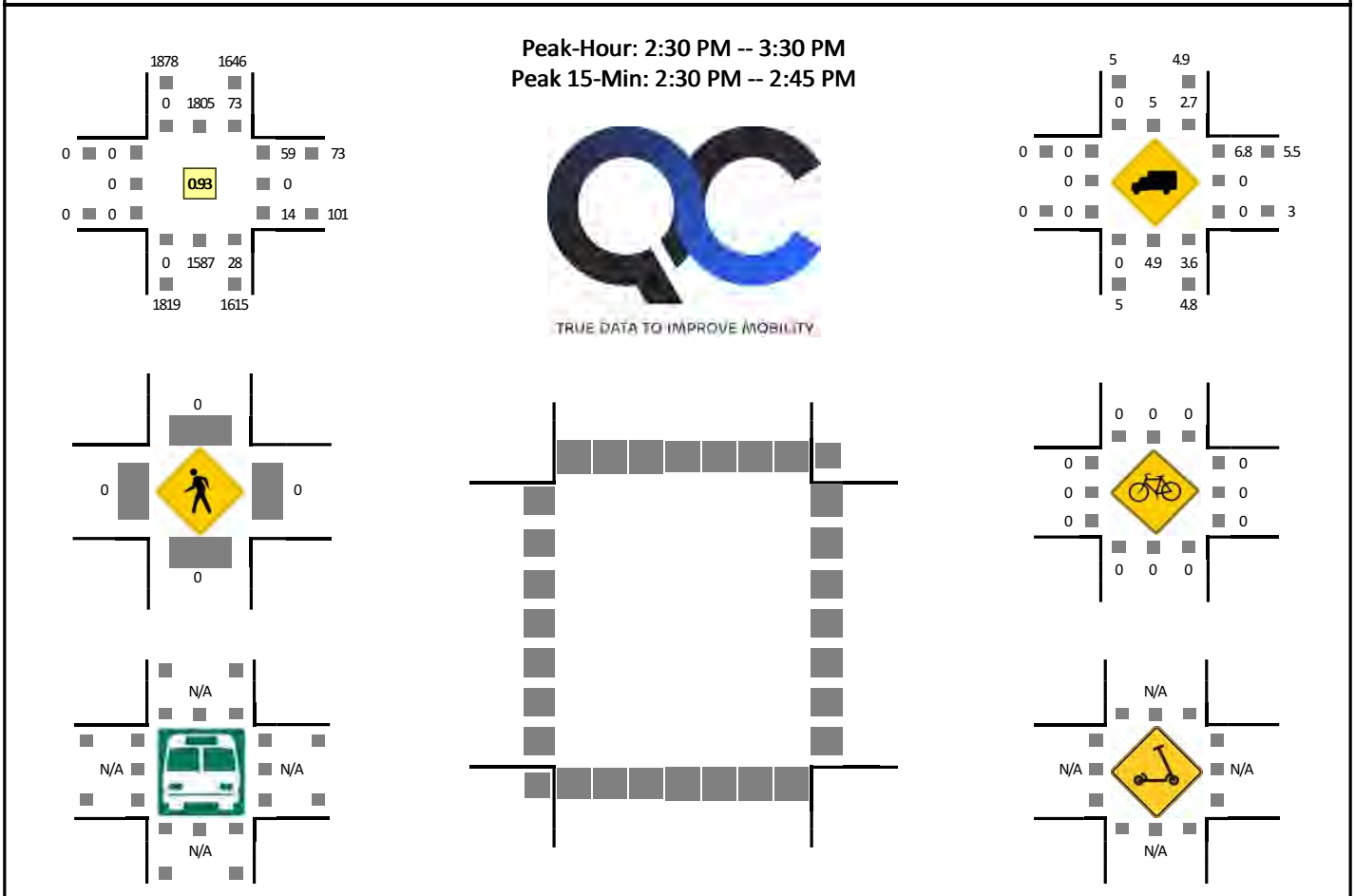
QC JOB #: 16795307
DATE: Thu, Nov 7 2024



15-Min Count Period Beginning At	Nashville Hwy (Northbound)				Nashville Hwy (Southbound)				Honey Farm Way (Eastbound)				Honey Farm Way (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	334	9	1	8	289	0	0	0	0	0	0	11	0	26	0	678	
7:15 AM	0	345	6	0	6	362	0	0	0	0	0	0	13	0	33	0	765	
7:30 AM	0	364	6	0	6	419	0	0	0	0	0	0	6	0	25	0	826	
7:45 AM	0	396	7	0	10	358	0	0	0	0	0	0	6	0	27	0	804	3073
8:00 AM	0	318	8	0	15	281	0	1	0	0	0	0	7	0	18	0	648	3043
8:15 AM	0	302	4	0	14	274	0	0	0	0	0	0	7	0	17	0	618	2896
8:30 AM	0	327	2	0	10	278	0	0	0	0	0	0	7	0	14	0	638	2708
8:45 AM	0	340	8	0	7	308	0	0	0	0	0	0	10	0	12	0	685	2589
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	1456	24	0	24	1676	0	0	0	0	0	0	24	0	100	0	3304	
Heavy Trucks	0	96	0		0	144	0		0	0	0		0	0	8		248	
Buses																		
Pedestrians	0	0			0	0			0	0			0	0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

LOCATION: Nashville Hwy -- Hidden Creek Way**CITY/STATE:** Columbia, TN**QC JOB #:** 16795309**DATE:** Thu, Nov 7 2024

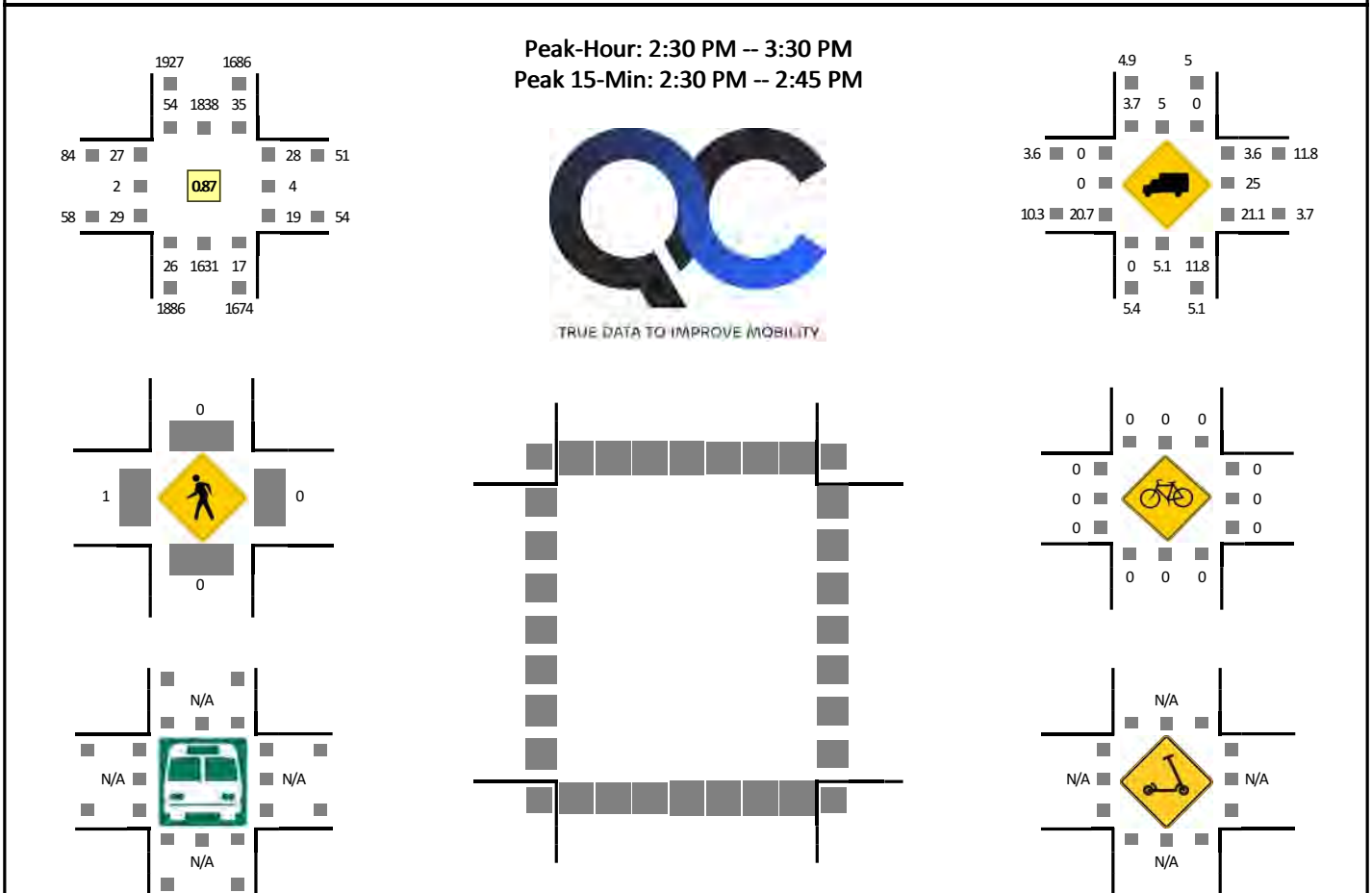
LOCATION: Nashville Highway -- Honey Farm Way**QC JOB #:** 16795302**CITY/STATE:** Columbia, TN**DATE:** Tue, Oct 22 2024

15-Min Count Period Beginning At	Nashville Highway (Northbound)				Nashville Highway (Southbound)				Honey Farm Way (Eastbound)				Honey Farm Way (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	346	2	0	13	404	0	0	0	0	0	0	4	0	20	0	789	
2:15 PM	0	320	6	0	10	422	0	1	0	0	0	0	9	0	12	0	780	
2:30 PM	0	375	4	0	10	552	0	0	0	0	0	0	4	0	14	0	959	
2:45 PM	0	396	10	0	25	449	0	0	0	0	0	0	0	0	20	0	900	3428
3:00 PM	0	383	5	0	20	395	0	0	0	0	0	0	6	0	11	0	820	3459
3:15 PM	0	433	9	0	18	409	0	0	0	0	0	0	4	0	14	0	887	3566
3:30 PM	0	432	9	0	21	370	0	1	0	0	0	0	3	0	23	0	859	3466
3:45 PM	0	374	10	0	23	360	0	0	0	0	0	0	4	0	6	0	777	3343
4:00 PM	0	353	5	0	24	366	0	0	0	0	0	0	8	0	13	0	769	3292
4:15 PM	0	399	10	0	16	363	0	0	0	0	0	0	5	0	11	0	804	3209
4:30 PM	0	388	11	0	23	368	0	0	0	0	0	0	6	0	13	0	809	3159
4:45 PM	0	290	4	0	18	393	0	0	0	0	0	0	5	0	20	0	730	3112
5:00 PM	0	338	7	0	18	382	0	0	0	0	0	0	4	0	16	0	765	3108
5:15 PM	0	424	6	0	25	346	0	0	0	0	0	0	5	0	14	0	820	3124
5:30 PM	0	382	9	0	18	350	0	0	0	0	0	0	3	0	16	0	778	3093
5:45 PM	0	323	7	0	18	345	0	0	0	0	0	0	5	0	9	0	707	3070
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	1500	16	0	40	2208	0	0	0	0	0	0	16	0	56	0	3836	
Heavy Trucks	0	112	0	0	0	100	0	0	0	0	0	0	0	0	0	0	212	
Buses																		
Pedestrians	0				0				0				0				0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

LOCATION: Nashville Hwy -- Hidden Creek Way
CITY/STATE: Columbia, TN

QC JOB #: 16795304
DATE: Tue, Oct 22 2024



15-Min Count Period Beginning At	Nashville Hwy (Northbound)				Nashville Hwy (Southbound)				Hidden Creek Way (Eastbound)				Hidden Creek Way (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	2	339	6	0	0	409	6	0	6	1	7	0	2	0	8	0	786	
2:15 PM	25	248	3	0	11	391	11	0	2	0	6	0	2	0	13	0	712	
2:30 PM	5	427	7	0	9	577	11	0	5	0	8	0	6	0	8	0	1063	
2:45 PM	7	409	4	0	9	447	13	0	5	1	5	0	2	2	6	0	910	3471
3:00 PM	9	384	4	0	10	397	16	0	12	0	11	0	7	2	5	0	857	3542
3:15 PM	5	411	2	0	7	417	14	0	5	1	5	0	4	0	9	0	880	3710
3:30 PM	3	449	5	0	5	378	16	0	5	1	5	0	10	0	10	0	887	3534
3:45 PM	6	365	4	0	10	385	15	0	3	0	3	0	6	2	5	0	804	3428
4:00 PM	9	347	3	0	10	342	9	0	7	0	9	0	2	1	5	0	744	3315
4:15 PM	12	373	8	0	9	372	9	0	13	0	1	0	3	0	8	0	808	3243
4:30 PM	9	360	5	0	10	359	10	0	7	0	6	0	2	0	5	0	773	3129
4:45 PM	9	314	4	0	14	387	14	0	6	0	2	0	0	0	6	0	756	3081
5:00 PM	13	315	5	0	8	326	12	0	10	0	9	0	2	0	7	0	707	3044
5:15 PM	14	427	7	0	16	319	13	0	8	0	2	0	3	0	14	0	823	3059
5:30 PM	13	382	4	0	8	370	14	0	5	0	3	0	2	0	10	0	811	3097
5:45 PM	5	325	10	0	15	359	14	0	7	1	3	0	1	0	9	0	749	3090
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	20	1708	28	0	36	2308	44	0	20	0	32	0	24	0	32	0	4252	
Heavy Trucks	0	112	4	0	0	104	0	0	0	0	4	0	4	0	0	0	228	
Buses																		
Pedestrians	0				0				0				0				0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

TDOT TRAFFIC DATA

TDOT Traffic Count Historical Data

Maury County Station #91 (Nashville Highway, South of Neapolis)

Average Annual Growth, 2018-2023: 1.3% Per Year

	ADT	Average Per Year
2023	39,227	
		8.3%
2022	36,227	
		0.9%
2021	35,920	
		2.5%
2020	35,050	
		-16.5%
2019	41,975	
		14.0%
2018	36,823	



APPENDIX B
TRAFFIC ANALYSES

EXISTING TRAFFIC CONDITIONS (2024)

AM PEAK

HCM 6th TWSC
1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

Intersection

Int Delay, s/veh 1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	111	1439	28	30	1428
Future Vol, veh/h	36	111	1439	28	30	1428
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	250	300	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	119	1547	30	32	1535

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2379	774	0 1577 0
Stage 1	1547	-	- - -
Stage 2	832	-	- - -
Critical Hdwy	6.84	6.94	- - 4.14 -
Critical Hdwy Stg 1	5.84	-	- - -
Critical Hdwy Stg 2	5.84	-	- - -
Follow-up Hdwy	3.52	3.32	- - 2.22 -
Pot Cap-1 Maneuver	~ 29	341	- - 414 -
Stage 1	161	-	- - -
Stage 2	388	-	- - -
Platoon blocked, %		-	- - -
Mov Cap-1 Maneuver	~ 27	341	- - 414 -
Mov Cap-2 Maneuver	112	-	- - -
Stage 1	161	-	- - -
Stage 2	358	-	- - -

Approach	WB	NB	SB
HCM Control Delay, s	29	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	112	341	414	-
HCM Lane V/C Ratio	-	-	0.346	0.35	0.078	-
HCM Control Delay (s)	-	-	53.2	21.1	14.4	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	1.4	1.5	0.3	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	4	25	25	1	47	24	1503	12	24	1367	26
Future Volume (vph)	54	4	25	25	1	47	24	1503	12	24	1367	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.869				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1619	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.482						0.128			0.092		
Satd. Flow (perm)	898	1619	0	1863	1863	1583	238	3539	1583	171	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				84			88			88
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3600			2010	
Travel Time (s)		38.4			39.1			44.6			24.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	57	4	27	27	1	50	26	1599	13	26	1454	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	31	0	27	1	50	26	1599	13	26	1454	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (%)	11.5%	15.4%		11.5%	15.4%	11.5%	11.5%	61.5%	11.5%	11.5%	61.5%	11.5%
Maximum Green (s)	8.5	13.5		8.5	13.5	8.0	8.0	73.5	8.5	8.0	73.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2024 Existing Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	15.0	7.6		9.4	7.4	10.1	97.3	93.5	104.9	98.7	96.3	114.6
Actuated g/C Ratio	0.12	0.06		0.07	0.06	0.08	0.75	0.72	0.81	0.76	0.74	0.88
v/c Ratio	0.30	0.26		0.21	0.01	0.25	0.10	0.63	0.01	0.12	0.55	0.02
Control Delay	52.4	28.7		56.3	57.0	5.5	5.9	14.6	0.0	6.2	12.4	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.4	28.7		56.3	57.0	5.5	5.9	14.6	0.0	6.2	12.4	0.0
LOS	D	C		E	E	A	A	B	A	A	B	A
Approach Delay		44.0			23.7			14.4			12.1	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 14.3

Intersection LOS: B

Intersection Capacity Utilization 69.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

Ø1 15 s	Ø2 (R) 80 s	Ø3 15 s	Ø4 20 s
Ø5 15 s	Ø6 (R) 80 s	Ø7 15 s	Ø8 20 s

Synchro 11 Report

RG Phillips Consulting, LLC

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	4	25	25	1	47	24	1503	12	24	1367	26
Future Volume (veh/h)	54	4	25	25	1	47	24	1503	12	24	1367	26
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	4	27	27	1	50	26	1599	13	26	1454	28
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	14	93	181	99	136	267	2358	1105	236	2358	1126
Arrive On Green	0.05	0.07	0.07	0.03	0.05	0.05	0.03	0.66	0.66	0.03	0.66	0.66
Sat Flow, veh/h	1781	209	1408	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	57	0	31	27	1	50	26	1599	13	26	1454	28
Grp Sat Flow(s),veh/h/ln	1781	0	1617	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.9	0.0	2.4	1.8	0.1	3.9	0.6	35.8	0.3	0.6	30.3	0.7
Cycle Q Clear(g_c), s	3.9	0.0	2.4	1.8	0.1	3.9	0.6	35.8	0.3	0.6	30.3	0.7
Prop In Lane	1.00		0.87	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	0	107	181	99	136	267	2358	1105	236	2358	1126
V/C Ratio(X)	0.27	0.00	0.29	0.15	0.01	0.37	0.10	0.68	0.01	0.11	0.62	0.02
Avail Cap(c_a), veh/h	243	0	168	238	194	217	318	2358	1105	287	2358	1126
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	57.8	55.1	58.3	56.1	9.9	13.4	6.0	11.4	12.4	5.5
Incr Delay (d2), s/veh	0.7	0.0	1.5	0.4	0.0	1.7	0.2	1.6	0.0	0.2	1.2	0.0
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	1.8	0.0	1.0	0.8	0.0	1.6	0.2	12.4	0.1	0.2	10.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	0.0	59.3	55.5	58.4	57.8	10.0	15.0	6.0	11.7	13.7	5.6
LnGrp LOS	E	A	E	E	E	E	B	B	A	B	B	A
Approach Vol, veh/h	88		78				1638			1508		
Approach Delay, s/veh	56.6		57.0				14.8			13.5		
Approach LOS	E		E				B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	92.8	10.9	15.1	11.3	92.8	12.6	13.4				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	73.5	8.5	13.5	8.0	73.5	8.5	13.5				
Max Q Clear Time (g_c+I1), s	2.6	32.3	3.8	4.4	2.6	37.8	5.9	5.9				
Green Ext Time (p_c), s	0.0	8.9	0.0	0.0	0.0	10.1	0.0	0.1				

HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

EXISTING TRAFFIC CONDITIONS (2024)

PM PEAK

HCM 6th TWSC
1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

Intersection

Int Delay, s/veh 0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	59	1587	28	73	1805
Future Vol, veh/h	14	59	1587	28	73	1805
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	250	300	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	63	1706	30	78	1941

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2833	853	0
Stage 1	1706	-	-
Stage 2	1127	-	-
Critical Hdwy	6.84	6.94	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	-
Pot Cap-1 Maneuver	~ 14	302	-
Stage 1	132	-	-
Stage 2	271	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 11	302	-
Mov Cap-2 Maneuver	79	-	-
Stage 1	132	-	-
Stage 2	212	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.9	0	0.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	79	302	359	-
HCM Lane V/C Ratio	-	-	0.191	0.21	0.219	-
HCM Control Delay (s)	-	-	61	20.1	17.8	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	0.7	0.8	0.8	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	2	29	19	4	28	26	1631	17	35	1838	54
Future Volume (vph)	27	2	29	19	4	28	26	1631	17	35	1838	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.859				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1600	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.488						0.042			0.056		
Satd. Flow (perm)	909	1600	0	1863	1863	1583	78	3539	1583	104	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33				78			82			82
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3600			2010	
Travel Time (s)		38.4			39.1			44.6			24.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	31	2	33	22	5	32	30	1875	20	40	2113	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	31	35	0	22	5	32	30	1875	20	40	2113	62
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (%)	10.7%	10.7%		10.7%	10.7%	10.7%	10.7%	67.9%	10.7%	10.7%	67.9%	10.7%
Maximum Green (s)	8.5	8.5		8.5	8.5	8.0	8.0	88.5	8.5	8.0	88.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2024 Existing Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	14.7	7.3		9.3	7.3	10.1	107.5	103.7	115.1	109.1	106.6	124.7
Actuated g/C Ratio	0.10	0.05		0.07	0.05	0.07	0.77	0.74	0.82	0.78	0.76	0.89
v/c Ratio	0.18	0.31		0.19	0.05	0.17	0.21	0.72	0.02	0.24	0.78	0.04
Control Delay	54.5	28.2		61.1	64.0	2.0	8.4	16.3	0.0	8.3	18.1	0.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.5	28.2		61.1	64.0	2.0	8.4	16.3	0.0	8.3	18.1	0.5
LOS	D	C		E	E	A	A	B	A	A	B	A
Approach Delay		40.6			29.3			16.0			17.4	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 49 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 17.3

Intersection LOS: B

Intersection Capacity Utilization 73.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

Ø1	Ø2 (R)	Ø3	Ø4
15 s	95 s	15 s	19 s
Ø5	Ø6 (R)	Ø7	Ø8
15 s	95 s	15 s	15 s

HCM 6th Signalized Intersection Summary

Synchro 11 Report

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

RG Phillips Consulting, LLC

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	2	29	19	4	28	26	1631	17	35	1838	54
Future Volume (veh/h)	27	2	29	19	4	28	26	1631	17	35	1838	54
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	2	33	22	5	32	30	1875	20	40	2113	62
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	5	83	149	91	140	157	2443	1135	202	2461	1153
Arrive On Green	0.04	0.05	0.05	0.03	0.05	0.05	0.03	0.69	0.69	0.04	0.69	0.69
Sat Flow, veh/h	1781	91	1508	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	31	0	35	22	5	32	30	1875	20	40	2113	62
Grp Sat Flow(s),veh/h/ln	1781	0	1599	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	0.0	3.0	1.6	0.4	2.6	0.7	48.9	0.5	0.9	63.1	1.6
Cycle Q Clear(g_c), s	2.3	0.0	3.0	1.6	0.4	2.6	0.7	48.9	0.5	0.9	63.1	1.6
Prop In Lane	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	0	88	149	91	140	157	2443	1135	202	2461	1153
V/C Ratio(X)	0.18	0.00	0.40	0.15	0.05	0.23	0.19	0.77	0.02	0.20	0.86	0.05
Avail Cap(c_a), veh/h	223	0	97	206	114	159	197	2443	1135	234	2461	1153
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.8	0.0	63.9	60.3	63.5	59.4	22.2	14.5	5.7	15.6	16.3	5.4
Incr Delay (d2), s/veh	0.5	0.0	2.9	0.5	0.2	0.8	0.6	2.4	0.0	0.5	4.2	0.1
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	1.1	0.0	1.3	0.8	0.2	1.1	0.5	17.0	0.2	0.5	22.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.3	0.0	66.8	60.8	63.8	60.2	22.8	16.8	5.7	16.1	20.5	5.5
LnGrp LOS	E	A	E	E	E	E	C	B	A	B	C	A
Approach Vol, veh/h	66				59		1925				2215	
Approach Delay, s/veh	63.7				60.7		16.8				20.0	
Approach LOS	E				E		B				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.8	103.5	10.5	14.2	12.5	102.8	11.4	13.3				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	88.5	8.5	8.5	8.0	88.5	8.5	8.5				
Max Q Clear Time (g_c+I1), s	2.7	65.1	3.6	5.0	2.9	50.9	4.3	4.6				
Green Ext Time (p_c), s	0.0	13.5	0.0	0.0	0.0	13.6	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

BACKGROUND TRAFFIC CONDITIONS (2026)

AM PEAK

HCM 6th TWSC
1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

Intersection

Int Delay, s/veh 1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	117	1519	29	32	1520
Future Vol, veh/h	38	117	1519	29	32	1520
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	250	300	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	126	1633	31	34	1634

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2518	817	0
Stage 1	1633	-	-
Stage 2	885	-	-
Critical Hdwy	6.84	6.94	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	-
Pot Cap-1 Maneuver	~ 23	320	-
Stage 1	145	-	-
Stage 2	364	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 21	320	-
Mov Cap-2 Maneuver	100	-	-
Stage 1	145	-	-
Stage 2	332	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.3	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	100	320	383	-
HCM Lane V/C Ratio	-	-	0.409	0.393	0.09	-
HCM Control Delay (s)	-	-	63.9	23.4	15.3	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	1.7	1.8	0.3	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	4	26	26	1	49	25	1586	13	25	1456	27
Future Volume (vph)	57	4	26	26	1	49	25	1586	13	25	1456	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.869				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1619	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.482						0.108			0.077		
Satd. Flow (perm)	898	1619	0	1863	1863	1583	201	3539	1583	143	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28				84			88			88
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3600			2010	
Travel Time (s)		38.4			39.1			44.6			24.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	61	4	28	28	1	52	27	1687	14	27	1549	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	32	0	28	1	52	27	1687	14	27	1549	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (%)	11.5%	15.4%		11.5%	15.4%	11.5%	11.5%	61.5%	11.5%	11.5%	61.5%	11.5%
Maximum Green (s)	8.5	13.5		8.5	13.5	8.0	8.0	73.5	8.5	8.0	73.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2026 Background Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	15.1	7.6		9.5	7.4	10.1	97.2	93.4	104.9	98.6	96.2	114.6
Actuated g/C Ratio	0.12	0.06		0.07	0.06	0.08	0.75	0.72	0.81	0.76	0.74	0.88
v/c Ratio	0.31	0.26		0.22	0.01	0.26	0.12	0.66	0.01	0.14	0.59	0.02
Control Delay	52.9	28.5		56.5	57.0	6.1	6.1	15.6	0.0	6.6	13.2	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	28.5		56.5	57.0	6.1	6.1	15.6	0.0	6.6	13.2	0.0
LOS	D	C		E	E	A	A	B	A	A	B	A
Approach Delay		44.5			24.1			15.3			12.8	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 15.1

Intersection LOS: B

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive



HCM 6th Signalized Intersection Summary

Synchro 11 Report

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

RG Phillips Consulting, LLC

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	4	26	26	1	49	25	1586	13	25	1456	27
Future Volume (veh/h)	57	4	26	26	1	49	25	1586	13	25	1456	27
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	4	28	28	1	52	27	1687	14	27	1549	29
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	13	94	182	99	137	245	2352	1103	218	2352	1125
Arrive On Green	0.05	0.07	0.07	0.03	0.05	0.05	0.03	0.66	0.66	0.03	0.66	0.66
Sat Flow, veh/h	1781	202	1414	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	61	0	32	28	1	52	27	1687	14	27	1549	29
Grp Sat Flow(s),veh/h/ln	1781	0	1616	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.1	0.0	2.5	1.9	0.1	4.0	0.6	39.7	0.4	0.6	34.0	0.7
Cycle Q Clear(g_c), s	4.1	0.0	2.5	1.9	0.1	4.0	0.6	39.7	0.4	0.6	34.0	0.7
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	108	182	99	137	245	2352	1103	218	2352	1125
V/C Ratio(X)	0.29	0.00	0.30	0.15	0.01	0.38	0.11	0.72	0.01	0.12	0.66	0.03
Avail Cap(c_a), veh/h	243	0	168	238	194	218	295	2352	1103	268	2352	1125
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	57.8	55.0	58.3	56.1	11.0	14.2	6.1	12.8	13.2	5.6
Incr Delay (d2), s/veh	0.7	0.0	1.5	0.4	0.0	1.7	0.2	1.9	0.0	0.3	1.5	0.0
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	1.9	0.0	1.1	0.9	0.0	1.7	0.2	13.8	0.1	0.2	11.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.2	0.0	59.3	55.4	58.4	57.8	11.2	16.1	6.1	13.1	14.6	5.6
LnGrp LOS	E	A	E	E	E	E	B	B	A	B	B	A
Approach Vol, veh/h	93		81				1728				1605	
Approach Delay, s/veh	56.6		57.0				15.9				14.5	
Approach LOS	E		E				B				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	92.5	11.0	15.2	11.4	92.5	12.7	13.4				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	73.5	8.5	13.5	8.0	73.5	8.5	13.5				
Max Q Clear Time (g_c+I1), s	2.6	36.0	3.9	4.5	2.6	41.7	6.1	6.0				
Green Ext Time (p_c), s	0.0	9.8	0.0	0.0	0.0	10.7	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

BACKGROUND TRAFFIC CONDITIONS (2026)

PM PEAK

Intersection

Int Delay, s/veh 1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	62	1688	29	77	1909
Future Vol, veh/h	15	62	1688	29	77	1909
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	250	300	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	67	1815	31	83	2053

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	3008	908	0
Stage 1	1815	-	-
Stage 2	1193	-	-
Critical Hdwy	6.84	6.94	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	-
Pot Cap-1 Maneuver	~ 10	278	-
Stage 1	115	-	-
Stage 2	250	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 7	278	-
Mov Cap-2 Maneuver	68	-	-
Stage 1	115	-	-
Stage 2	186	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.1	0	0.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 68	278	325
HCM Lane V/C Ratio	-	- 0.237	0.24	0.255
HCM Control Delay (s)	-	- 73.7	22	19.8
HCM Lane LOS	-	- F	C	C
HCM 95th %tile Q(veh)	-	- 0.8	0.9	1

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	2	30	20	4	29	27	1735	18	37	1944	57
Future Volume (vph)	28	2	30	20	4	29	27	1735	18	37	1944	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.858				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1598	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.488						0.044			0.043		
Satd. Flow (perm)	909	1598	0	1863	1863	1583	82	3539	1583	80	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34				78			82			82
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3600			2010	
Travel Time (s)		38.4			39.1			44.6			24.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	32	2	34	23	5	33	31	1994	21	43	2234	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	36	0	23	5	33	31	1994	21	43	2234	66
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (%)	10.7%	10.7%		10.7%	10.7%	10.7%	10.7%	67.9%	10.7%	10.7%	67.9%	10.7%
Maximum Green (s)	8.5	8.5		8.5	8.5	8.0	8.0	88.5	8.5	8.0	88.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2026 Background Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	17.4	7.3		9.3	7.3	10.2	104.7	100.9	112.3	106.5	103.9	124.7
Actuated g/C Ratio	0.12	0.05		0.07	0.05	0.07	0.75	0.72	0.80	0.76	0.74	0.89
v/c Ratio	0.15	0.31		0.19	0.05	0.18	0.21	0.78	0.02	0.29	0.85	0.05
Control Delay	52.7	28.1		61.3	64.0	2.0	8.7	19.9	0.0	13.7	21.9	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	28.1		61.3	64.0	2.0	8.7	19.9	0.0	13.7	21.9	0.6
LOS	D	C		E	E	A	A	B	A	B	C	A
Approach Delay		39.7			29.5			19.5			21.1	
Approach LOS		D			C			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 49 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 20.8

Intersection LOS: C

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	95 s	15 s	19 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
15 s	95 s	15 s	15 s

HCM 6th Signalized Intersection Summary

Synchro 11 Report

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

RG Phillips Consulting, LLC

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	2	30	20	4	29	27	1735	18	37	1944	57
Future Volume (veh/h)	28	2	30	20	4	29	27	1735	18	37	1944	57
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	2	34	23	5	33	31	1994	21	43	2234	66
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	5	83	150	91	142	141	2437	1134	184	2456	1152
Arrive On Green	0.04	0.05	0.05	0.03	0.05	0.05	0.04	0.69	0.69	0.04	0.69	0.69
Sat Flow, veh/h	1781	89	1510	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	32	0	36	23	5	33	31	1994	21	43	2234	66
Grp Sat Flow(s),veh/h/ln	1781	0	1599	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	0.0	3.0	1.7	0.4	2.7	0.7	56.3	0.5	0.9	73.2	1.7
Cycle Q Clear(g_c), s	2.3	0.0	3.0	1.7	0.4	2.7	0.7	56.3	0.5	0.9	73.2	1.7
Prop In Lane	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	88	150	91	142	141	2437	1134	184	2456	1152
V/C Ratio(X)	0.18	0.00	0.41	0.15	0.05	0.23	0.22	0.82	0.02	0.23	0.91	0.06
Avail Cap(c_a), veh/h	223	0	97	205	114	161	180	2437	1134	213	2456	1152
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.8	0.0	64.0	60.2	63.5	59.3	28.8	15.8	5.8	19.6	18.0	5.5
Incr Delay (d2), s/veh	0.5	0.0	3.0	0.5	0.2	0.8	0.8	3.2	0.0	0.6	6.4	0.1
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	1.1	0.0	1.3	0.8	0.2	1.1	0.6	19.8	0.2	0.7	26.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	67.0	60.7	63.7	60.1	29.5	19.0	5.8	20.2	24.3	5.5
LnGrp LOS	E	A	E	E	E	E	C	B	A	C	C	A
Approach Vol, veh/h	68					61		2046		2343		
Approach Delay, s/veh	63.8					60.6		19.0		23.7		
Approach LOS	E					E		B		C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.9	103.3	10.6	14.2	12.7	102.5	11.5	13.3				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	88.5	8.5	8.5	8.0	88.5	8.5	8.5				
Max Q Clear Time (g_c+I1), s	2.7	75.2	3.7	5.0	2.9	58.3	4.3	4.7				
Green Ext Time (p_c), s	0.0	9.8	0.0	0.0	0.0	13.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

PROJECTED TRAFFIC CONDITIONS (2026)

AM PEAK

Lanes, Volumes, Timings
1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 12 Report
RG Phillips Consulting, LLC

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	158	259	1498	139	172	1484
Future Volume (vph)	158	259	1498	139	172	1484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150	0		250	300	
Storage Lanes	2	1		1	1	
Taper Length (ft)	50				50	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.079	
Satd. Flow (perm)	3433	1583	3539	1583	147	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		11		149		
Link Speed (mph)	30		55			55
Link Distance (ft)	450		2000			600
Travel Time (s)	10.2		24.8			7.4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	170	278	1611	149	185	1596
Shared Lane Traffic (%)						
Lane Group Flow (vph)	170	278	1611	149	185	1596
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	24		20			20
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	1	1	1	1
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pm+ov	NA	pm+ov	pm+pt	NA
Protected Phases	7	1	2	7	1	6
Permitted Phases		7		2	6	
Detector Phase	7	1	2	7	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0
Total Split (s)	35.0	25.0	70.0	35.0	25.0	95.0
Total Split (%)	26.9%	19.2%	53.8%	26.9%	19.2%	73.1%
Maximum Green (s)	29.0	18.0	63.0	29.0	18.0	88.0
Yellow Time (s)	3.5	4.5	5.0	3.5	4.5	5.0
All-Red Time (s)	2.5	2.5	2.0	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0

2026 Projected Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Lanes, Volumes, Timings
1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 12 Report
RG Phillips Consulting, LLC

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Total Lost Time (s)	6.0	7.0	7.0	6.0	7.0	7.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	None	None	C-Max
Act Effct Green (s)	11.8	34.7	81.3	100.1	105.2	105.2
Actuated g/C Ratio	0.09	0.27	0.63	0.77	0.81	0.81
v/c Ratio	0.55	0.65	0.73	0.12	0.56	0.56
Control Delay (s/veh)	62.9	46.8	20.5	1.0	18.7	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.9	46.8	20.5	1.0	18.7	10.0
LOS	E	D	C	A	B	A
Approach Delay (s/veh)	52.9		18.8			10.9
Approach LOS	D		B			B
Queue Length 50th (ft)	71	200	461	0	37	581
Queue Length 95th (ft)	107	269	670	18	96	720
Internal Link Dist (ft)	370		1920			520
Turn Bay Length (ft)	150			250	300	
Base Capacity (vph)	765	459	2212	1442	359	2864
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.61	0.73	0.10	0.52	0.56

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 85 (65%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay (s/veh): 19.1 Intersection LOS: B
Intersection Capacity Utilization 72.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way



Queues
1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 12 Report
RG Phillips Consulting, LLC

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	170	278	1611	149	185	1596
v/c Ratio	0.55	0.65	0.73	0.12	0.56	0.56
Control Delay (s/veh)	62.9	46.8	20.5	1.0	18.7	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.9	46.8	20.5	1.0	18.7	10.0
Queue Length 50th (ft)	71	200	461	0	37	581
Queue Length 95th (ft)	107	269	670	18	96	720
Internal Link Dist (ft)	370		1920			520
Turn Bay Length (ft)	150			250	300	
Base Capacity (vph)	765	459	2212	1442	359	2864
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.61	0.73	0.10	0.52	0.56
Intersection Summary						

HCM 7th Signalized Intersection Summary
1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 12 Report
RG Phillips Consulting, LLC

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	158	259	1498	139	172	1484
Future Volume (veh/h)	158	259	1498	139	172	1484
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	278	1611	149	185	1596
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	640	382	2150	1252	231	2540
Arrive On Green	0.19	0.19	0.60	0.60	0.06	0.71
Sat Flow, veh/h	3456	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	170	278	1611	149	185	1596
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1781	1777
Q Serve(g_s), s	5.5	21.0	42.6	2.8	4.9	30.2
Cycle Q Clear(g_c), s	5.5	21.0	42.6	2.8	4.9	30.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	640	382	2150	1252	231	2540
V/C Ratio(X)	0.27	0.73	0.75	0.12	0.80	0.63
Avail Cap(c_a), veh/h	771	442	2150	1252	377	2540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	45.4	18.6	3.2	25.3	9.6
Incr Delay (d2), s/veh	0.2	5.0	2.5	0.2	6.4	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	18.2	15.9	6.6	3.8	9.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	45.6	50.4	21.0	3.4	31.6	10.8
LnGrp LOS	D	D	C	A	C	B
Approach Vol, veh/h	448		1760			1781
Approach Delay, s/veh	48.6		19.5			13.0
Approach LOS	D		B			B
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.3	85.6		30.1		99.9
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0
Max Green Setting (Gmax), s	18.0	63.0		29.0		88.0
Max Q Clear Time (g_c+I1), s	6.9	44.6		23.0		32.2
Green Ext Time (p_c), s	0.4	8.7		1.1		10.6
Intersection Summary						
HCM 7th Control Delay, s/veh			19.9			
HCM 7th LOS			B			

2026 Projected Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	124	137	5	261	5	127	5	5	5	5	25
Future Vol, veh/h	46	124	137	5	261	5	127	5	5	5	5	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	50	50	-	-	-	-	-	25	-	-
Veh in Median Storage, #	0	-	-	0	-	-	1	-	-	1	-	-
Grade, %	-	0	-	0	-	-	0	-	-	0	-	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	135	149	5	284	5	138	5	5	5	5	27

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	289	0	0	284	0	0	532	535	135	535	681	286
Stage 1	-	-	-	-	-	-	235	235	-	297	297	-
Stage 2	-	-	-	-	-	-	297	300	-	237	384	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1273	-	-	1279	-	-	458	452	914	456	373	753
Stage 1	-	-	-	-	-	-	768	711	-	711	667	-
Stage 2	-	-	-	-	-	-	711	666	-	766	612	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1273	-	-	1279	-	-	418	432	914	429	356	753
Mov Cap-2 Maneuver	-	-	-	-	-	-	497	490	-	522	444	-
Stage 1	-	-	-	-	-	-	738	683	-	708	665	-
Stage 2	-	-	-	-	-	-	677	663	-	725	588	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.19	0.14	15.08	10.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	505	1273	-	-	1279	-	-	522	675
HCM Lane V/C Ratio	0.295	0.039	-	-	0.004	-	-	0.01	0.048
HCM Ctrl Dly (s/v)	15.1	7.9	-	-	7.8	-	-	12	10.6
HCM Lane LOS	C	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	1.2	0.1	-	-	0	-	-	0	0.2

Intersection

Int Delay, s/veh 0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	1742	15	0	1656
Future Vol, veh/h	0	17	1742	15	0	1656
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	-	100	-	-
Veh in Median Storage, #	-	-	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	0	18	1893	16	0	1800

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	-	947	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	262	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	262	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach WB NB SB

HCM Ctrl Dly, s/v	19.78	0	0
HCM LOS	C		

Minor Lane/Major Mvmt NBT NBRWBLn1 SBT

Capacity (veh/h)	-	-	262	-
HCM Lane V/C Ratio	-	-	0.071	-
HCM Ctrl Dly (s/v)	-	-	19.8	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	4	28	29	1	49	27	1703	16	25	1552	27
Future Volume (vph)	57	4	28	29	1	49	27	1703	16	25	1552	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.868				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1617	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.556						0.089			0.057		
Satd. Flow (perm)	1036	1617	0	1863	1863	1583	166	3539	1583	106	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30				84			88			88
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3000			2010	
Travel Time (s)		38.4			39.1			37.2			24.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	61	4	30	31	1	52	29	1812	17	27	1651	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	34	0	31	1	52	29	1812	17	27	1651	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (%)	11.5%	15.4%		11.5%	15.4%	11.5%	11.5%	61.5%	11.5%	11.5%	61.5%	11.5%
Maximum Green (s)	8.5	13.5		8.5	13.5	8.0	8.0	73.5	8.5	8.0	73.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2026 Projected Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

4: Nashville Hwy (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Dr RG Phillips Consulting, LLC

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effect Green (s)	15.2	7.4		9.8	7.4	10.1	97.1	93.3	105.1	98.5	96.1	114.6
Actuated g/C Ratio	0.12	0.06		0.08	0.06	0.08	0.75	0.72	0.81	0.76	0.74	0.88
v/c Ratio	0.31	0.28		0.23	0.01	0.26	0.14	0.71	0.01	0.16	0.63	0.02
Control Delay (s/veh)	52.6	28.1		56.7	57.0	6.1	3.2	7.7	0.0	7.2	14.1	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.6	28.1		56.7	57.0	6.1	3.2	7.7	0.0	7.2	14.1	0.0
LOS	D	C		E	E	A	A	A	A	A	B	A
Approach Delay (s/veh)		43.9			25.4			7.6			13.8	
Approach LOS		D			C			A			B	
Queue Length 50th (ft)	45	3		26	1	0	4	648	0	5	477	0
Queue Length 95th (ft)	86	38		51	7	14	m4	140	m0	15	603	0
Internal Link Dist (ft)		1609			1642			2920			1930	
Turn Bay Length (ft)	150			125		250	400		350	400		375
Base Capacity (vph)	201	194		141	193	211	223	2540	1299	183	2616	1391
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.18		0.22	0.01	0.25	0.13	0.71	0.01	0.15	0.63	0.02

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 11.7

Intersection LOS: B

Intersection Capacity Utilization 75.4%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Nashville Hwy (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Dr

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	80 s	15 s	20 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
15 s	80 s	15 s	20 s

Queues

Synchro 12 Report

4: Nashville Hwy (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Dr RG Phillips Consulting, LLC

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	61	34	31	1	52	29	1812	17	27	1651	29
v/c Ratio	0.31	0.28	0.23	0.01	0.26	0.14	0.71	0.01	0.16	0.63	0.02
Control Delay (s/veh)	52.6	28.1	56.7	57.0	6.1	3.2	7.7	0.0	7.2	14.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.6	28.1	56.7	57.0	6.1	3.2	7.7	0.0	7.2	14.1	0.0
Queue Length 50th (ft)	45	3	26	1	0	4	648	0	5	477	0
Queue Length 95th (ft)	86	38	51	7	14	m4	140	m0	15	603	0
Internal Link Dist (ft)		1609		1642			2920			1930	
Turn Bay Length (ft)	150		125		250	400		350	400		375
Base Capacity (vph)	201	194	141	193	211	223	2540	1299	183	2616	1391
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.18	0.22	0.01	0.25	0.13	0.71	0.01	0.15	0.63	0.02

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

Synchro 12 Report

4: Nashville Hwy (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Dr RG Phillips Consulting, LLC

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	4	28	29	1	49	27	1703	16	25	1552	27
Future Volume (veh/h)	57	4	28	29	1	49	27	1703	16	25	1552	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	4	30	31	1	52	29	1812	17	27	1651	29
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	12	92	181	99	137	225	2351	1106	194	2346	1122
Arrive On Green	0.05	0.06	0.06	0.04	0.05	0.05	0.03	0.66	0.66	0.03	0.66	0.66
Sat Flow, veh/h	1781	190	1424	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	61	0	34	31	1	52	29	1812	17	27	1651	29
Grp Sat Flow(s),veh/h/ln	1781	0	1614	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.1	0.0	2.6	2.1	0.1	4.0	0.7	45.8	0.4	0.6	38.3	0.7
Cycle Q Clear(g_c), s	4.1	0.0	2.6	2.1	0.1	4.0	0.7	45.8	0.4	0.6	38.3	0.7
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	104	181	99	137	225	2351	1106	194	2346	1122
V/C Ratio(X)	0.29	0.00	0.33	0.17	0.01	0.38	0.13	0.77	0.02	0.14	0.70	0.03
Avail Cap(c_a), veh/h	243	0	168	233	194	218	272	2351	1106	244	2346	1122
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	58.1	54.9	58.3	56.1	12.4	15.2	6.0	15.1	14.0	5.6
Incr Delay (d2), s/veh	0.7	0.0	1.8	0.4	0.0	1.7	0.3	2.5	0.0	0.3	1.8	0.0
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	1.9	0.0	1.1	1.0	0.0	1.7	0.2	16.0	0.1	0.3	13.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	0.0	59.9	55.3	58.4	57.8	12.7	17.7	6.0	15.5	15.8	5.7
LnGrp LOS	E		E	E	E	E	B	B	A	B	B	A
Approach Vol, veh/h	95				84		1858				1707	
Approach Delay, s/veh	56.8				56.9		17.5				15.6	
Approach LOS	E				E		B				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	92.3	11.2	14.9	11.4	92.5	12.7	13.4				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	73.5	8.5	13.5	8.0	73.5	8.5	13.5				
Max Q Clear Time (g_c+I1), s	2.7	40.3	4.1	4.6	2.6	47.8	6.1	6.0				
Green Ext Time (p_c), s	0.0	10.6	0.0	0.0	0.0	11.2	0.0	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			18.5									
HCM 7th LOS			B									

2026 Projected Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

PROJECTED TRAFFIC CONDITIONS (2026)

PM PEAK

Lanes, Volumes, Timings
1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 12 Report
RG Phillips Consulting, LLC

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	207	214	1670	186	315	1850
Future Volume (vph)	207	214	1670	186	315	1850
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150	0		250	300	
Storage Lanes	2	1		1	1	
Taper Length (ft)	50				50	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.048	
Satd. Flow (perm)	3433	1583	3539	1583	89	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		10		106		
Link Speed (mph)	30		55			55
Link Distance (ft)	450		2000			600
Travel Time (s)	10.2		24.8			7.4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	223	230	1796	200	339	1989
Shared Lane Traffic (%)						
Lane Group Flow (vph)	223	230	1796	200	339	1989
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	24		20			20
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	1	1	1	1
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pm+ov	NA	pm+ov	pm+pt	NA
Protected Phases	7	1	2	7	1	6
Permitted Phases		7		2	6	
Detector Phase	7	1	2	7	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0
Total Split (s)	30.0	30.0	80.0	30.0	30.0	110.0
Total Split (%)	21.4%	21.4%	57.1%	21.4%	21.4%	78.6%
Maximum Green (s)	24.0	23.0	73.0	24.0	23.0	103.0
Yellow Time (s)	3.5	4.5	5.0	3.5	4.5	5.0
All-Red Time (s)	2.5	2.5	2.0	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0

2026 Projected Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Lanes, Volumes, Timings
1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 12 Report
RG Phillips Consulting, LLC

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Total Lost Time (s)	6.0	7.0	7.0	6.0	7.0	7.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	None	None	C-Max
Act Effct Green (s)	14.6	49.6	76.4	98.0	112.4	112.4
Actuated g/C Ratio	0.10	0.35	0.55	0.70	0.80	0.80
v/c Ratio	0.62	0.41	0.93	0.18	0.81	0.70
Control Delay (s/veh)	67.6	34.3	39.8	3.7	43.1	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.6	34.3	39.8	3.7	43.1	15.0
LOS	E	C	D	A	D	B
Approach Delay (s/veh)	50.7		36.2			19.1
Approach LOS	D		D			B
Queue Length 50th (ft)	102	147	795	27	207	1001
Queue Length 95th (ft)	141	219	#1006	49	m259	1075
Internal Link Dist (ft)	370		1920			520
Turn Bay Length (ft)	150			250	300	
Base Capacity (vph)	588	567	1930	1238	420	2841
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.41	0.93	0.16	0.81	0.70

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 135 (96%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay (s/veh): 29.2 Intersection LOS: C
Intersection Capacity Utilization 86.2% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way



Queues

1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 12 Report
RG Phillips Consulting, LLC

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	223	230	1796	200	339	1989
v/c Ratio	0.62	0.41	0.93	0.18	0.81	0.70
Control Delay (s/veh)	67.6	34.3	39.8	3.7	43.1	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.6	34.3	39.8	3.7	43.1	15.0
Queue Length 50th (ft)	102	147	795	27	207	1001
Queue Length 95th (ft)	141	219	#1006	49	m259	1075
Internal Link Dist (ft)	370		1920			520
Turn Bay Length (ft)	150			250	300	
Base Capacity (vph)	588	567	1930	1238	420	2841
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.41	0.93	0.16	0.81	0.70

Intersection Summary

- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary
1: Nashville Hwy (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 12 Report
RG Phillips Consulting, LLC

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	207	214	1670	186	315	1850
Future Volume (veh/h)	207	214	1670	186	315	1850
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	223	230	1796	200	339	1989
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	484	478	1975	1103	360	2725
Arrive On Green	0.14	0.14	0.56	0.56	0.16	0.77
Sat Flow, veh/h	3456	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	223	230	1796	200	339	1989
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1781	1777
Q Serve(g_s), s	8.3	16.6	63.5	6.1	20.5	41.5
Cycle Q Clear(g_c), s	8.3	16.6	63.5	6.1	20.5	41.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	484	478	1975	1103	360	2725
V/C Ratio(X)	0.46	0.48	0.91	0.18	0.94	0.73
Avail Cap(c_a), veh/h	592	527	1975	1103	366	2725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	40.0	27.9	7.4	47.0	8.6
Incr Delay (d2), s/veh	0.7	0.8	7.7	0.4	31.9	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	15.3	26.2	10.2	14.5	12.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.0	40.7	35.6	7.8	78.9	10.4
LnGrp LOS	E	D	D	A	E	B
Approach Vol, veh/h	453		1996			2328
Approach Delay, s/veh	48.2		32.8			20.4
Approach LOS	D		C			C
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	29.5	84.8		25.6		114.4
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0
Max Green Setting (Gmax), s	23.0	73.0		24.0		103.0
Max Q Clear Time (g_c+I1), s	22.5	65.5		18.6		43.5
Green Ext Time (p_c), s	0.1	5.3		1.0		16.8
Intersection Summary						
HCM 7th Control Delay, s/veh			28.2			
HCM 7th LOS			C			

2026 Projected Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Intersection

Int Delay, s/veh 5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	219	155	5	176	5	142	5	5	5	5	97
Future Vol, veh/h	122	219	155	5	176	5	142	5	5	5	5	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	50	50	-	-	-	-	-	25	-	-
Veh in Median Storage, #	0	-	-	0	-	-	1	-	-	1	-	-
Grade, %	-	0	-	0	-	-	0	-	-	0	-	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	133	238	168	5	191	5	154	5	5	5	5	105

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	197	0	0	407	0	0	708	711	238	711	877	194
Stage 1	-	-	-	-	-	-	503	503	-	205	205	-
Stage 2	-	-	-	-	-	-	205	208	-	506	672	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1376	-	-	1152	-	-	349	358	801	348	287	847
Stage 1	-	-	-	-	-	-	551	541	-	797	732	-
Stage 2	-	-	-	-	-	-	797	730	-	549	455	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1376	-	-	1152	-	-	271	322	801	307	258	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	363	388	-	397	338	-
Stage 1	-	-	-	-	-	-	498	489	-	793	729	-
Stage 2	-	-	-	-	-	-	689	727	-	487	411	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.94	0.22	22.32	10.49
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	370	1376	-	-	1152	-	-	397	789
HCM Lane V/C Ratio	0.446	0.096	-	-	0.005	-	-	0.014	0.14
HCM Ctrl Dly (s/v)	22.3	7.9	-	-	8.1	-	-	14.2	10.3
HCM Lane LOS	C	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	2.2	0.3	-	-	0	-	-	0	0.5

Intersection

Int Delay, s/veh 0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	65	1843	40	0	2165
Future Vol, veh/h	0	65	1843	40	0	2165
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	-	100	-	-
Veh in Median Storage, #	-	-	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	0	71	2003	43	0	2353

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	- 1002	0	0 - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	- 6.94	-	- - -
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	- 3.32	-	- - -
Pot Cap-1 Maneuver	0 241	-	- 0 -
Stage 1	0	-	- 0 -
Stage 2	0	-	- 0 -
Platoon blocked, %	-	-	- - -
Mov Cap-1 Maneuver	- 241	-	- - -
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	26.03	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	241	-
HCM Lane V/C Ratio	-	-	0.293	-
HCM Ctrl Dly (s/v)	-	-	26	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	1.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	2	34	25	4	29	30	1883	23	37	2112	57
Future Volume (vph)	28	2	34	25	4	29	30	1883	23	37	2112	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.857				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1596	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.488						0.044			0.043		
Satd. Flow (perm)	909	1596	0	1863	1863	1583	82	3539	1583	80	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39				78			82			82
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3000			2010	
Travel Time (s)		38.4			39.1			37.2			24.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	32	2	39	29	5	33	34	2164	26	43	2428	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	41	0	29	5	33	34	2164	26	43	2428	66
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (%)	10.7%	10.7%		10.7%	10.7%	10.7%	10.7%	67.9%	10.7%	10.7%	67.9%	10.7%
Maximum Green (s)	8.5	8.5		8.5	8.5	8.0	8.0	88.5	8.5	8.0	88.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2026 Projected Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	17.6	7.3		9.4	7.3	10.2	104.6	100.8	112.3	106.3	103.7	124.7
Actuated g/C Ratio	0.13	0.05		0.07	0.05	0.07	0.75	0.72	0.80	0.76	0.74	0.89
v/c Ratio	0.15	0.34		0.24	0.05	0.18	0.23	0.85	0.02	0.29	0.93	0.05
Control Delay (s/veh)	52.5	27.7		62.6	64.0	2.0	12.7	11.1	0.0	13.8	27.4	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.5	27.7		62.6	64.0	2.0	12.7	11.1	0.0	13.8	27.4	0.6
LOS	D	C		E	E	A	B	B	A	B	C	A
Approach Delay (s/veh)		38.6			32.9			11.0			26.5	
Approach LOS		D			C			B			C	
Queue Length 50th (ft)	26	2		26	4	0	3	141	0	9	~1260	0
Queue Length 95th (ft)	55	39		51	19	0	m4	1119	m0	26	#1331	7
Internal Link Dist (ft)		1609			1642			2920			1930	
Turn Bay Length (ft)	150			125		250	400		350	400		375
Base Capacity (vph)	215	133		130	113	196	158	2547	1291	157	2622	1419
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.31		0.22	0.04	0.17	0.22	0.85	0.02	0.27	0.93	0.05

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 49 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay (s/veh): 19.7

Intersection LOS: B

Intersection Capacity Utilization 80.4%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Nashville Hwy (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Dr



Queues

Synchro 12 Report

4: Nashville Hwy (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Dr RG Phillips Consulting, LLC

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	32	41	29	5	33	34	2164	26	43	2428	66
v/c Ratio	0.15	0.34	0.24	0.05	0.18	0.23	0.85	0.02	0.29	0.93	0.05
Control Delay (s/veh)	52.5	27.7	62.6	64.0	2.0	12.7	11.1	0.0	13.8	27.4	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.5	27.7	62.6	64.0	2.0	12.7	11.1	0.0	13.8	27.4	0.6
Queue Length 50th (ft)	26	2	26	4	0	3	141	0	9	~1260	0
Queue Length 95th (ft)	55	39	51	19	0	m4	1119	m0	26	#1331	7
Internal Link Dist (ft)		1609		1642			2920			1930	
Turn Bay Length (ft)	150		125		250	400		350	400		375
Base Capacity (vph)	215	133	130	113	196	158	2547	1291	157	2622	1419
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.31	0.22	0.04	0.17	0.22	0.85	0.02	0.27	0.93	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

Synchro 12 Report

4: Nashville Hwy (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Dr RG Phillips Consulting, LLC

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	2	34	25	4	29	30	1883	23	37	2112	57
Future Volume (veh/h)	28	2	34	25	4	29	30	1883	23	37	2112	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	2	39	29	5	33	34	2164	26	43	2428	66
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	4	78	147	92	142	119	2435	1140	159	2449	1149
Arrive On Green	0.04	0.05	0.05	0.03	0.05	0.05	0.04	0.69	0.69	0.04	0.69	0.69
Sat Flow, veh/h	1781	78	1519	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	32	0	41	29	5	33	34	2164	26	43	2428	66
Grp Sat Flow(s),veh/h/ln	1781	0	1597	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	0.0	3.5	2.1	0.4	2.7	0.8	68.6	0.7	0.9	93.9	1.7
Cycle Q Clear(g_c), s	2.3	0.0	3.5	2.1	0.4	2.7	0.8	68.6	0.7	0.9	93.9	1.7
Prop In Lane	1.00		0.95	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	0	81	147	92	142	119	2435	1140	159	2449	1149
V/C Ratio(X)	0.18	0.00	0.50	0.20	0.05	0.23	0.29	0.89	0.02	0.27	0.99	0.06
Avail Cap(c_a), veh/h	224	0	97	195	114	161	156	2435	1140	188	2449	1149
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	0.0	64.7	59.9	63.4	59.2	38.3	17.7	5.6	27.5	21.3	5.5
Incr Delay (d2), s/veh	0.5	0.0	4.7	0.6	0.2	0.8	1.3	5.3	0.0	0.9	16.3	0.1
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	1.1	0.0	1.5	1.0	0.2	1.1	0.8	24.6	0.2	0.9	36.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.2	0.0	69.4	60.5	63.7	60.0	39.6	23.1	5.7	28.4	37.6	5.6
LnGrp LOS	E		E	E	E	E	D	C	A	C	D	A
Approach Vol, veh/h	73				67		2224				2537	
Approach Delay, s/veh	65.4				60.5		23.1				36.6	
Approach LOS	E				E		C				D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.1	103.0	11.2	13.6	12.7	102.4	11.5	13.4				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	88.5	8.5	8.5	8.0	88.5	8.5	8.5				
Max Q Clear Time (g_c+I1), s	2.8	95.9	4.1	5.5	2.9	70.6	4.3	4.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			31.2									
HCM 7th LOS			C									

2026 Projected Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

APPENDIX C
TRIP GENERATION

HONEY FARM - TRIP GENERATION SUMMARY

Land Use	Trip Generation				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	4292	76	53	202	202
Fast-Food Restaurant with Drive-Through Window	3086	150	144	113	105
Fast Casual Restaurant	534	4	4	46	37
Future Retail	326	12	8	27	27
Multifamily Housing (Low-Rise)	1190	18	58	60	35
Townhomes	1322	22	66	61	43
Mini-Warehouse	142	5	4	7	8
Health Department	622	39	10	20	46
Totals	11514	326	347	536	503

Land Use	Internal Trip Reduction				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	858	15	11	40	40
Fast-Food Restaurant with Drive-Through Window	617	30	29	23	21
Fast Casual Restaurant	107	1	1	9	7
Future Retail	65	2	2	5	5
Multifamily Housing (Low-Rise)	238	4	12	12	7
Townhomes	264	4	13	12	9
Mini-Warehouse	28	1	1	1	2
Health Department	124	8	2	4	9
Totals	2301	65	71	106	100

Internal Trip Reduction		
Daily %	AM %	PM %
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%

Land Use	Total External Trips				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	3434	61	42	162	162
Fast-Food Restaurant with Drive-Through Window	2469	120	115	90	84
Fast Casual Restaurant	427	3	3	37	30
Future Retail	261	10	6	22	22
Multifamily Housing (Low-Rise)	952	14	46	48	28
Townhomes	1058	18	53	49	34
Mini-Warehouse	114	4	3	6	6
Health Department	498	31	8	16	37
Totals	9213	261	276	430	403

Land Use	Primary - External Trips				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	2747	49	34	109	109
Fast-Food Restaurant with Drive-Through Window	1235	61	59	45	42
Fast Casual Restaurant	320	3	3	28	23
Future Retail	196	10	6	15	15
Multifamily Housing (Low-Rise)	952	14	46	48	28
Townhomes	1058	18	53	49	34
Mini-Warehouse	114	4	3	6	6
Health Department	498	31	8	16	37
Total Primary Trips	7120	190	212	316	294

Primary Trip Percentage		
Daily %	AM %	PM %
80%	80%	67%
50%	51%	50%
75%	100%	75%
75%	100%	66%
100%	100%	100%
100%	100%	100%
100%	100%	100%
100%	100%	100%

Land Use	Pass-By - External Trips				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	687	12	8	53	53
Fast-Food Restaurant with Drive-Through Window	1234	59	56	45	42
Fast Casual Restaurant	107	0	0	9	7
Future Retail	65	0	0	7	7
Multifamily Housing (Low-Rise)	0	0	0	0	0
Townhomes	0	0	0	0	0
Mini-Warehouse	0	0	0	0	0
Health Department	0	0	0	0	0
Total Passby Trips	2093	71	64	114	109

Pass-by Trip Percentage		
Daily %	AM %	PM %
20%	20%	33%
50%	49%	50%
25%	0%	25%
25%	0%	34%
0%	0%	0%
0%	0%	0%
0%	0%	0%
0%	0%	0%

Land Use: 850 Supermarket

Description

A supermarket is a free-standing retail store that sells a complete assortment of food, beverage, food preparation materials, and household products. A supermarket may also provide additional products and services such as a bakery, dry cleaning, floral arrangements, greeting cards, a limited-service bank, and a pharmacy.

Additional Data

In prior editions of *Trip Generation Manual*, a separate land use code was assigned to a discount supermarket. With the addition of new supermarket data points, an examination of the database reveals very little difference between trip generation rates for the traditional supermarket and a reported discount supermarket. This examination looked at both the small discount supermarkets and the large discount supermarkets. As a result, all types of supermarkets are included in this land use database.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Illinois, Kentucky, Maryland, Minnesota, Nevada, New Jersey, New York, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

213, 221, 236, 251, 273, 305, 359, 365, 438, 440, 442, 447, 448, 514, 520, 537, 552, 577, 610, 715, 716, 728, 738, 746, 854, 870, 882, 893, 917, 926, 935, 946, 959, 961, 966, 975, 1004, 1009, 1025, 1058, 1063, 1064

Land Use: 934

Fast-Food Restaurant with Drive-Through Window

Description

This land use includes any fast-food restaurant with a drive-through window. This type of restaurant is characterized by a large drive-through and large carry-out clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. The restaurant does not provide table service. A patron generally orders from a menu board and pays before receiving the meal. A typical duration of stay for an eat-in patron is less than 30 minutes. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

If the restaurant has outdoor seating, its area is not included in the overall gross floor area. For a restaurant that has significant outdoor seating, the number of seats may be more reliable than GFA as an independent variable on which to establish a trip generation rate.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alaska, Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

163, 164, 168, 180, 181, 241, 245, 278, 294, 300, 301, 319, 338, 340, 342, 358, 389, 438, 502, 552, 577, 583, 584, 617, 640, 641, 704, 715, 728, 810, 866, 867, 869, 885, 886, 927, 935, 962, 977, 1050, 1053, 1054

Land Use: 930

Fast Casual Restaurant

Description

A fast casual restaurant is a sit-down restaurant with no (or very limited) wait staff or table service. A customer typically orders off a menu board, pays for food before the food is prepared, and seats themselves. The menu generally contains higher-quality, made-to-order food items with fewer frozen or processed ingredients than at a fast-food restaurant. Most patrons eat their meal within the restaurant, but a significant proportion of the restaurant sales can be carry-out orders. A fast casual restaurant typically serves lunch and dinner; some serve breakfast. A typical duration of stay for an eat-in customer is 40 minutes or less. Fine dining restaurant (Land Use 931), high-turnover (sit-down) restaurant (Land Use 932), and fast-food restaurant without drive-through window (Land Use 933) are related uses.

Additional Data

The fast casual restaurant study sites included in this land use did not have a drive-through window.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 2010s in Minnesota, South Carolina, Washington, and Wisconsin.

Source Numbers

861, 869, 939, 959, 962, 1048

Land Use: 822

Strip Retail Plaza (<40k)

Description

A strip retail plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has less than 40,000 square feet of gross leasable area (GLA). Because a strip retail plaza is open-air, the GLA is the same as the gross floor area of the building.

The 40,000 square feet GFA threshold between strip retail plaza and shopping plaza (Land Use 821) was selected based on an examination of the overall shopping center/plaza database. No shopping plaza with a supermarket as its anchor is smaller than 40,000 square feet GLA.

Shopping center (>150k) (Land use 820), shopping plaza (40-150k) (Land Use 821), and factory outlet center (Land Use 823) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Delaware, Florida, New Jersey, Ontario (CAN), South Dakota, Vermont, Washington, and Wisconsin.

Source Numbers

304, 358, 423, 428, 437, 507, 715, 728, 936, 960, 961, 974, 1009

Land Use: 220

Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.
- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.
- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.
- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Land Use: 215

Single-Family Attached Housing

Description

Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Additional Data

The database for this land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by-side in a row and each with an outside entrance).

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Utah, Virginia, and Wisconsin.

Source Numbers

168, 204, 211, 237, 305, 306, 319, 321, 357, 390, 418, 525, 571, 583, 638, 735, 868, 869, 870, 896, 912, 959, 1009, 1046, 1056, 1058, 1077

Land Use: 151

Mini-Warehouse

Description

A mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as “self-storage” facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Colorado, Massachusetts, Minnesota, Nevada, New Jersey, Texas, and Utah.

Source Numbers

212, 403, 551, 568, 642, 708, 724, 850, 868, 876, 1024, 1035

Land Use: 720

Medical-Dental Office Building

Description

A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility. General office building (Land Use 710) and clinic (Land Use 630) are related uses.

Land Use Subcategory

Analysis of medical-dental office building data found that trip generation rates are measurably different for sites located within or adjacent to a hospital campus and sites that are stand-alone. Data plots are presented for these two land use subcategories.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Connecticut, Kentucky, Maryland, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Virginia, Washington, and Wisconsin.

Source Numbers

104, 109, 120, 157, 184, 209, 211, 253, 287, 294, 295, 304, 357, 384, 404, 407, 423, 444, 509, 601, 715, 867, 879, 901, 902, 908, 959, 972

Proposed Honey Farm Walmart Neighborhood Market
Trip Generation
AM Peak Hour

VEHICLE TRIPS BEFORE REDUCTION								
Land Use & Data Source	Location	Independent Variable	Size	Time Period	Method	Entry Split%	Exit Split%	Total
					Rate/Equation			
					Average			
850 - Supermarket	General Urban/Suburban	1000 Sq. Ft. GFA	45	AM Peak Hour	Average 2.86	76	53	P
934 - Fast-Food Restaurant with Drive-Through Window	General Urban/Suburban	1000 Sq. Ft. GFA	6.6	AM Peak Hour	Average 44.61	150	144	294
	General Urban/Suburban	1000 Sq. Ft. GFA	5.5	AM Peak Hour	Average 1.43	51%	49%	
930 - Fast Casual Restaurant	General Urban/Suburban	1000 Sq. Ft. GFA		AM Peak Hour		4	4	8
822 - Strip Retail Plaza (<40k)	General Urban/Suburban	1000 Sq. Ft. GLA	6	AM Peak Hour	Best Fit (LOG) $\ln(T) = 0.66\ln(X) + 1.84$	50%	8	20
	General Urban/Suburban	Dwelling Units	174	AM Peak Hour	Best Fit (LIN) $T = 0.31(X) + 22.85$	18	58	76
215 - Single-Family Attached Housing	General Urban/Suburban	Dwelling Units	180	AM Peak Hour	Best Fit (LIN) $T = 0.52(X) - 5.70$	24%	66	88
151 - Mini-Warehouse	General Urban/Suburban	1000 Sq. Ft. GFA	98.28	AM Peak Hour	Average 0.09	25%	4	9
	General Urban/Suburban	1000 Sq. Ft. GFA	17	AM Peak Hour	Best Fit (LOG) $\ln(T) = 0.90\ln(X) + 1.34$	5	41%	49
720 - Medical-Dental Office Building - Stand-Alone	General Urban/Suburban	1000 Sq. Ft. GFA		AM Peak Hour		39	10	
NEW VEHICLE TRIPS								
Land Use						New Vehicle Trips		
						Entry	Exit	Total
850 - Supermarket						76	53	129
934 - Fast-Food Restaurant with Drive-Through Window						150	144	294
930 - Fast Casual Restaurant						4	4	8
822 - Strip Retail Plaza (<40k)						12	8	20
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit						18	58	76
215 - Single-Family Attached Housing						22	66	88
151 - Mini-Warehouse						5	4	9
720 - Medical-Dental Office Building - Stand-Alone						39	10	49
RESULTS								
Site Totals								
New Vehicle Trips						Entry	Exit	Total
						326	347	673

Data Source: Trip Generation Manual, 11th Ed

Proposed Honey Farm Walmart Neighborhood Market
Trip Generation
PM Peak Hour

VEHICLE TRIPS BEFORE REDUCTION								
Land Use & Data Source	Location	Independent Variable	Size	Time Period	Method	Entry Split%	Exit Split%	Total
					Rate/Equation			
					Best Fit (LOG)			
					$\ln(T) = 0.81\ln(X) + 2.92$			
850 - Supermarket	General Urban/Suburban	1000 Sq. Ft. GFA	45	PM Peak Hour	Average	202	202	P
934 - Fast-Food Restaurant with Drive-Through Window	General Urban/Suburban	1000 Sq. Ft. GFA	6.6	PM Peak Hour	33.03	113	105	218
					Best Fit (LIN)	52%	48%	
930 - Fast Casual Restaurant	General Urban/Suburban	1000 Sq. Ft. GFA	5.5	PM Peak Hour	46	46	37	83
					$T = 17.96(X) - 15.94$	55%	45%	
822 - Strip Retail Plaza (<40k)	General Urban/Suburban	1000 Sq. Ft. GLA	6	PM Peak Hour	27	27	27	54
					Best Fit (LOG)	50%	50%	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	General Urban/Suburban	Dwelling Units	174	PM Peak Hour	$\ln(T) = 0.71\ln(X) + 2.72$	60	35	95
					Best Fit (LIN)	63%	37%	
215 - Single-Family Attached Housing	General Urban/Suburban	Dwelling Units	180	PM Peak Hour	Best Fit (LIN)	61	43	104
					$T = 0.43(X) + 20.55$	59%	41%	
151 - Mini-Warehouse	General Urban/Suburban	1000 Sq. Ft. GFA	98.28	PM Peak Hour	Average	7	8	15
					$T = 0.60(X) - 3.93$	47%	53%	
720 - Medical-Dental Office Building - Stand-Alone	General Urban/Suburban	1000 Sq. Ft. GFA	17	PM Peak Hour	Best Fit (LIN)	20	46	66
					$T = 4.07(X) - 3.17$	30%	70%	
NEW VEHICLE TRIPS								
Land Use					New Vehicle Trips			
	Entry	Exit			Total			
850 - Supermarket	202	202			404			
934 - Fast-Food Restaurant with Drive-Through Window	113	105			218			
930 - Fast Casual Restaurant	46	37			83			
822 - Strip Retail Plaza (<40k)	27	27			54			
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	60	35			95			
215 - Single-Family Attached Housing	61	43			104			
151 - Mini-Warehouse	7	8			15			
720 - Medical-Dental Office Building - Stand-Alone	20	46			66			
RESULTS								
Site Totals		Entry	Exit	Total				
New Vehicle Trips		536	503	1039				

Data Source: Trip Generation Manual, 11th Ed

Proposed Honey Farm Walmart Neighborhood Market Trip Generation Weekday

VEHICLE TRIPS BEFORE REDUCTION								
Land Use & Data Source	Location	Independent Variable	Size	Time Period	Method Rate/Equation	Entry Split%	Exit Split%	Total
850 - Supermarket	General Urban/Suburban	1000 Sq. Ft. GFA	45	Weekday	Best Fit (LIN) T = 83.39(X) + 539.33	2146	2146	P
934 - Fast-Food Restaurant with Drive-Through Window	General Urban/Suburban	1000 Sq. Ft. GFA	6.6	Weekday	Average 467.48	50%	50%	3086
930 - Fast Casual Restaurant	General Urban/Suburban	1000 Sq. Ft. GFA	5.5	Weekday	Average 97.14	267	267	534
822 - Strip Retail Plaza (<40k)	General Urban/Suburban	1000 Sq. Ft. GLA	6	Weekday	Average 54.45	163	163	326
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	General Urban/Suburban	Dwelling Units	174	Weekday	Best Fit (LIN) T = 6.41(X) + 75.31	595	595	1190
215 - Single-Family Attached Housing	General Urban/Suburban	Dwelling Units	180	Weekday	Best Fit (LIN) T = 7.62(X) - 50.48	661	661	1322
151 - Mini-Warehouse	General Urban/Suburban	1000 Sq. Ft. GFA	98.28	Weekday	Average 1.45	71	71	142
720 - Medical-Dental Office Building - Stand-Alone	General Urban/Suburban	1000 Sq. Ft. GFA	17	Weekday	Best Fit (LIN) T = 42.97(X) - 108.01	311	311	622
NEW VEHICLE TRIPS								
Land Use					New Vehicle Trips			
					Entry	Exit	Total	
850 - Supermarket					2146	2146	4292	
934 - Fast-Food Restaurant with Drive-Through Window					1543	1543	3086	
930 - Fast Casual Restaurant					267	267	534	
822 - Strip Retail Plaza (<40k)					163	163	326	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit					595	595	1190	
215 - Single-Family Attached Housing					661	661	1322	
151 - Mini-Warehouse					71	71	142	
720 - Medical-Dental Office Building - Stand-Alone					311	311	622	
RESULTS								
Site Totals					Entry	Exit	Total	
New Vehicle Trips					5757	5757	11514	

Data Source: Trip Generation Manual, 11th Ed

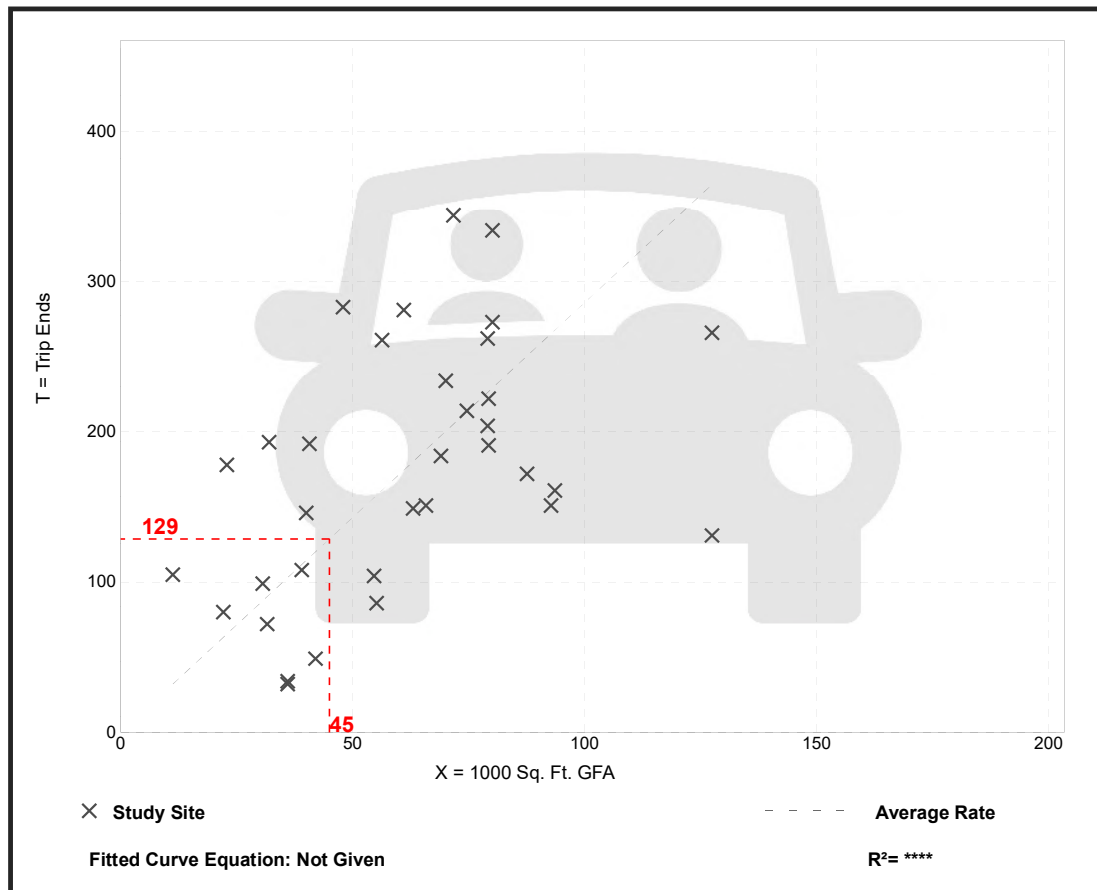
Supermarket (850)

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: 34
 Avg. 1000 Sq. Ft. GFA: 61
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.86	0.89 - 9.35	1.45

Data Plot and Equation



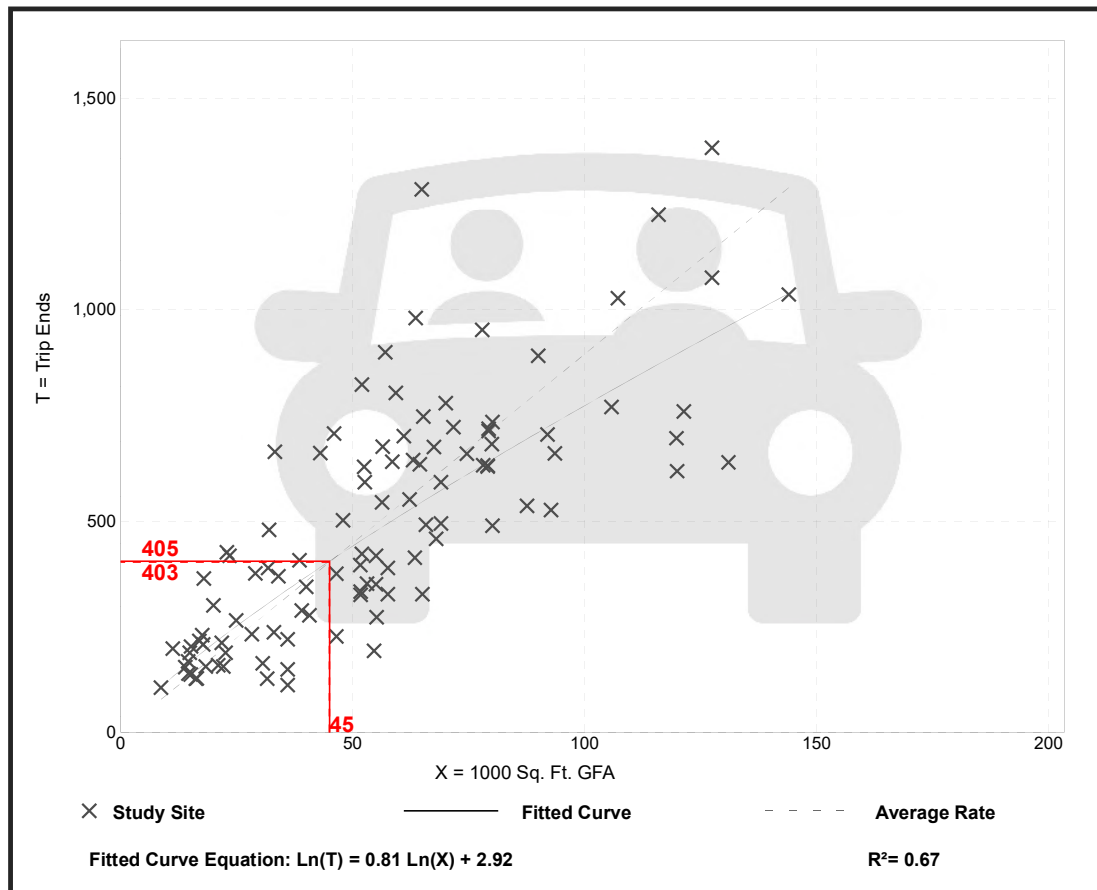
Supermarket (850)

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: 104
 Avg. 1000 Sq. Ft. GFA: 55
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
8.95	3.11 - 20.30	3.32

Data Plot and Equation



Supermarket (850)

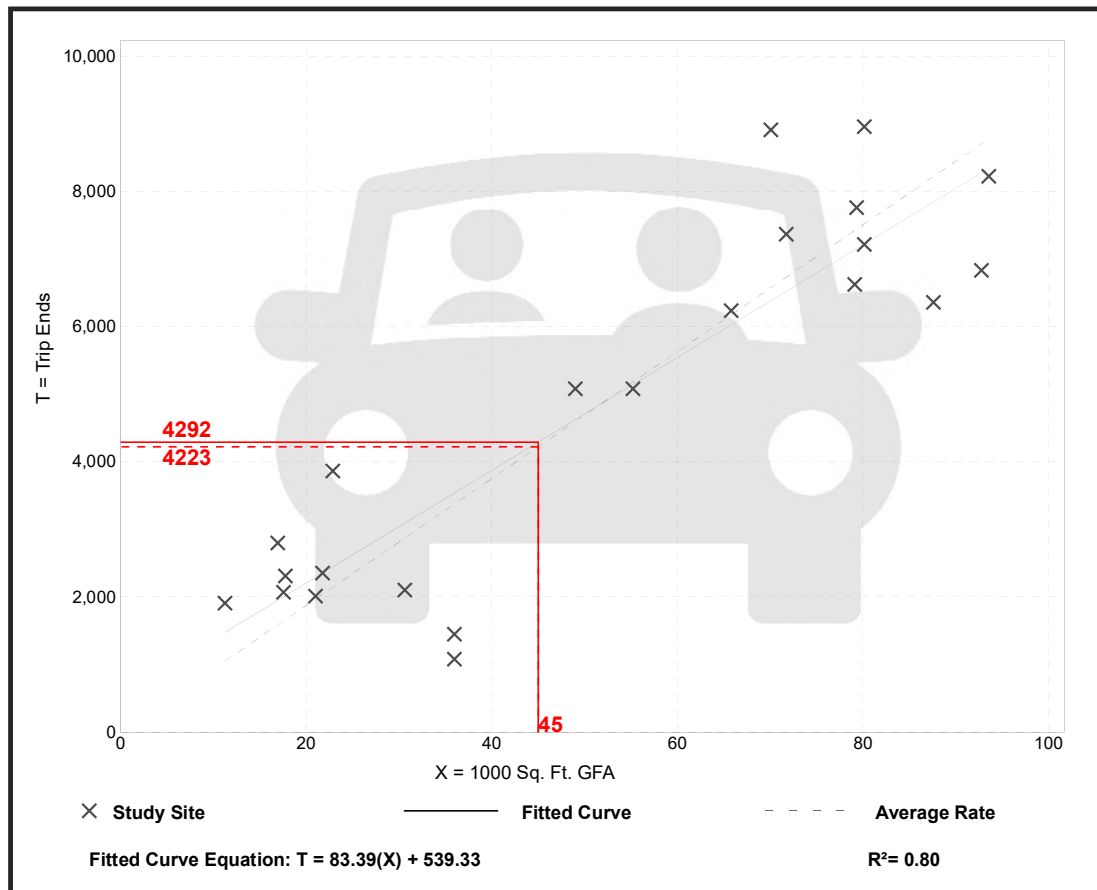
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. 1000 Sq. Ft. GFA: 52
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
93.84	30.09 - 170.24	27.05

Data Plot and Equation



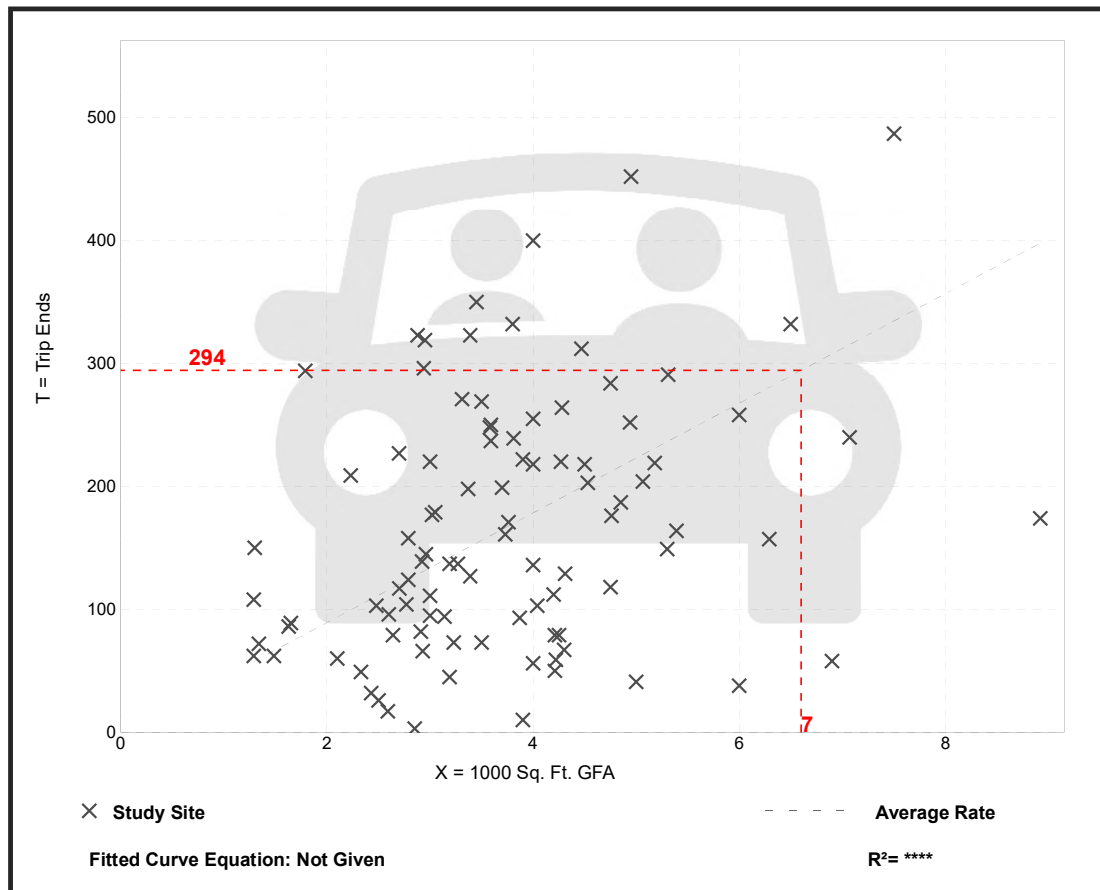
Fast-Food Restaurant with Drive-Through Window (934)

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: 96
 Avg. 1000 Sq. Ft. GFA: 4
 Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation



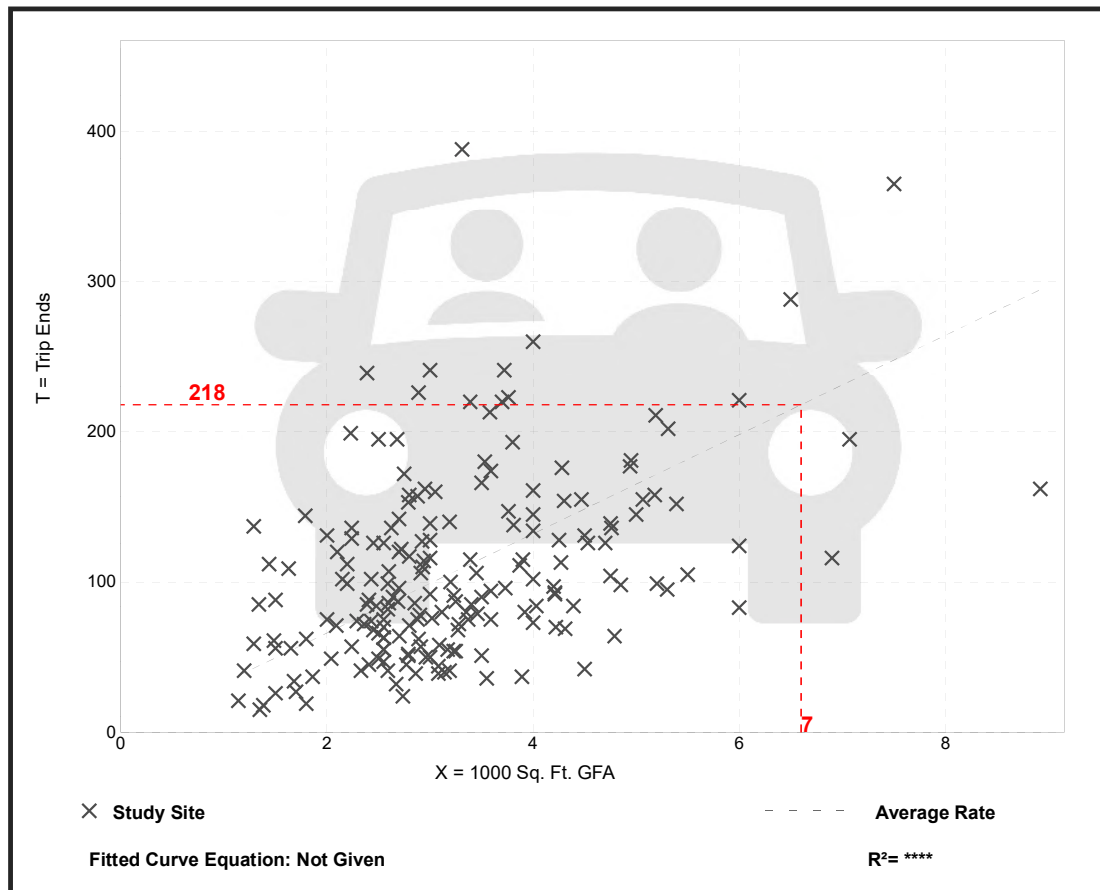
Fast-Food Restaurant with Drive-Through Window (934)

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: 190
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation



Fast-Food Restaurant with Drive-Through Window (934)

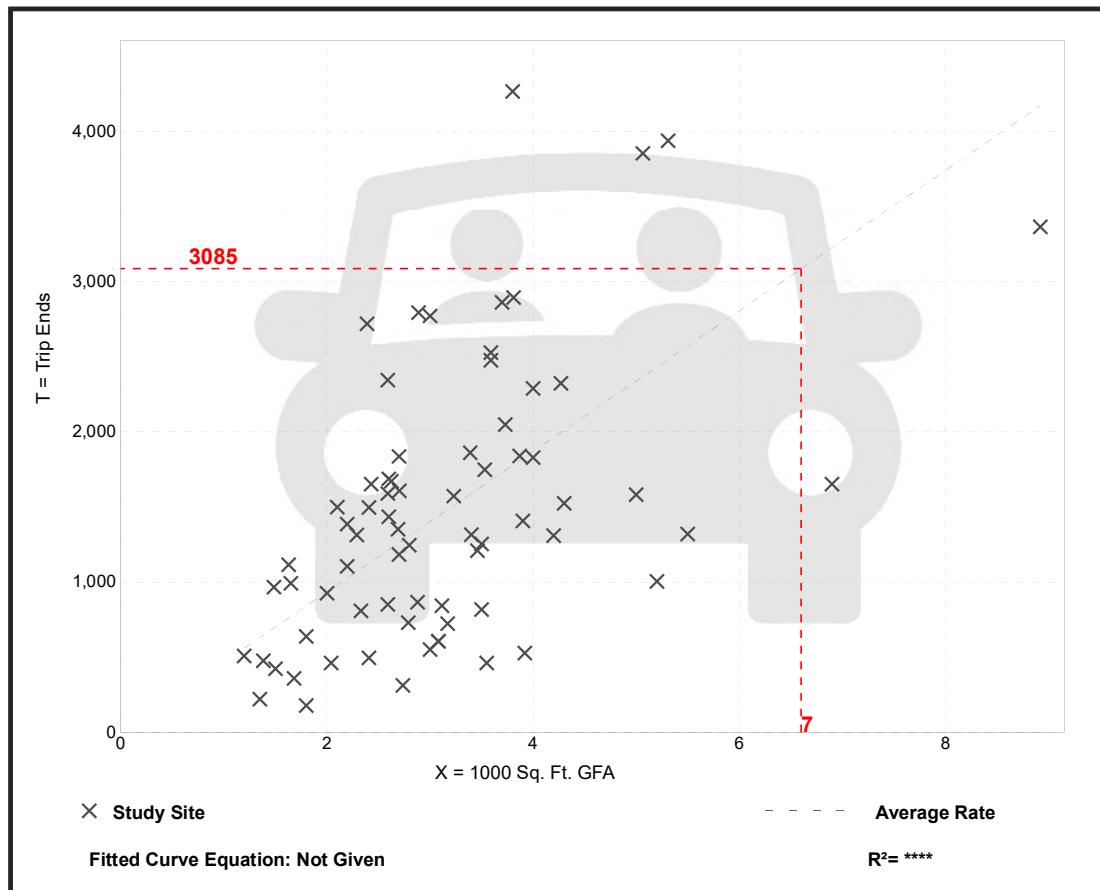
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 71
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
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



Fast Casual Restaurant (930)

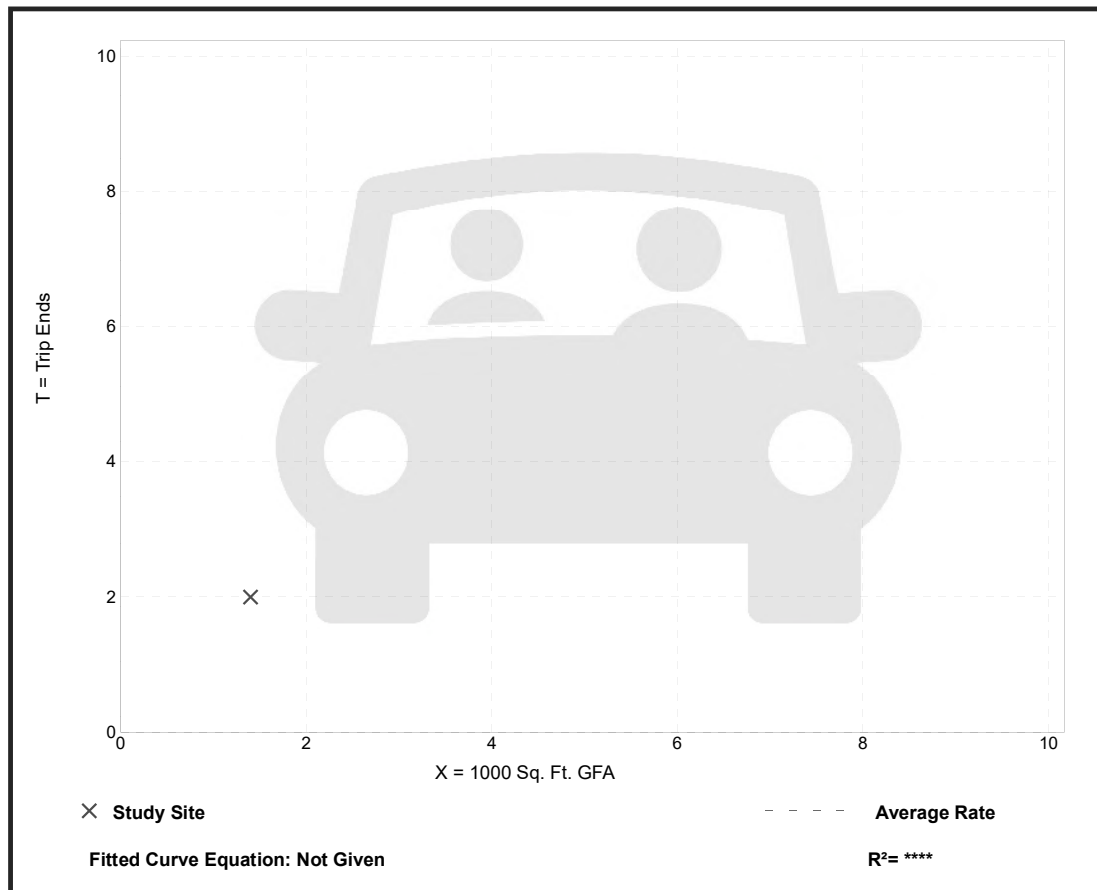
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 1
 Avg. 1000 Sq. Ft. GFA: 1
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.43	1.43 - 1.43	*

Data Plot and Equation

Caution – Small Sample Size



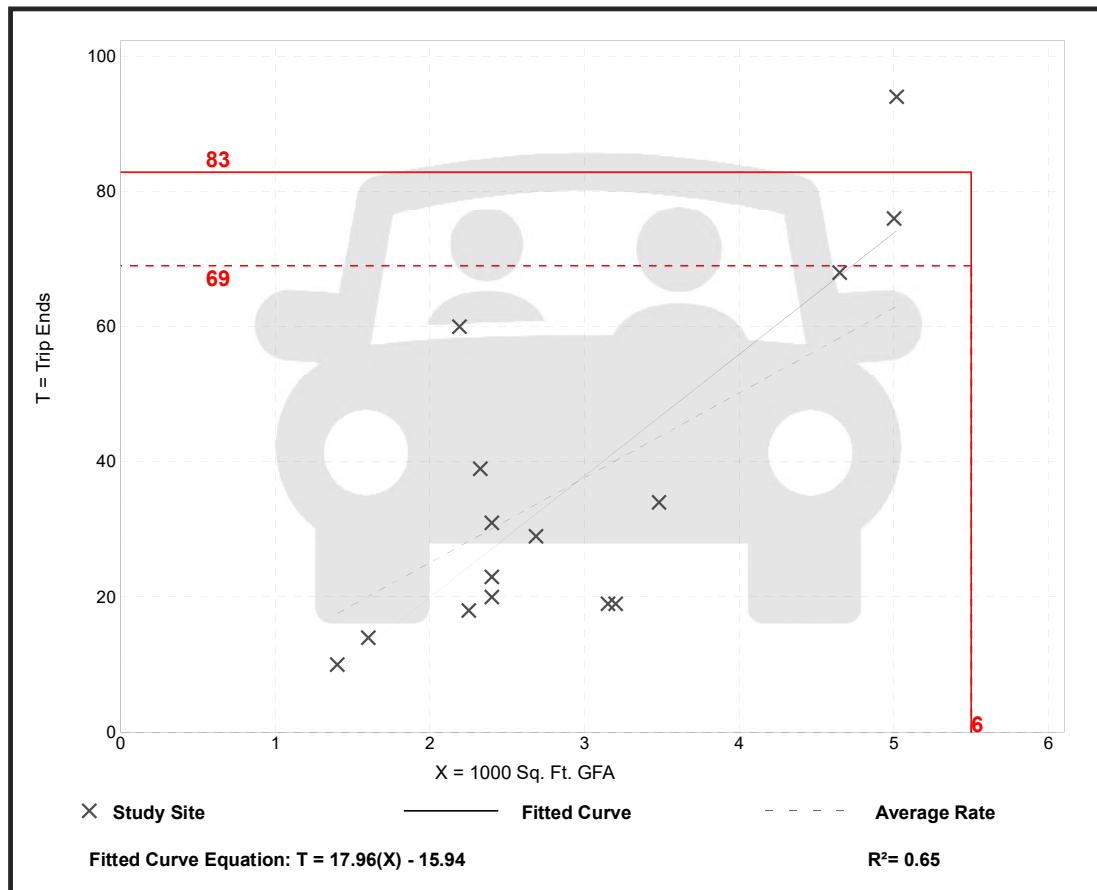
Fast Casual Restaurant (930)

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: 15
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
12.55	5.94 - 27.40	5.52

Data Plot and Equation



Fast Casual Restaurant (930)

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

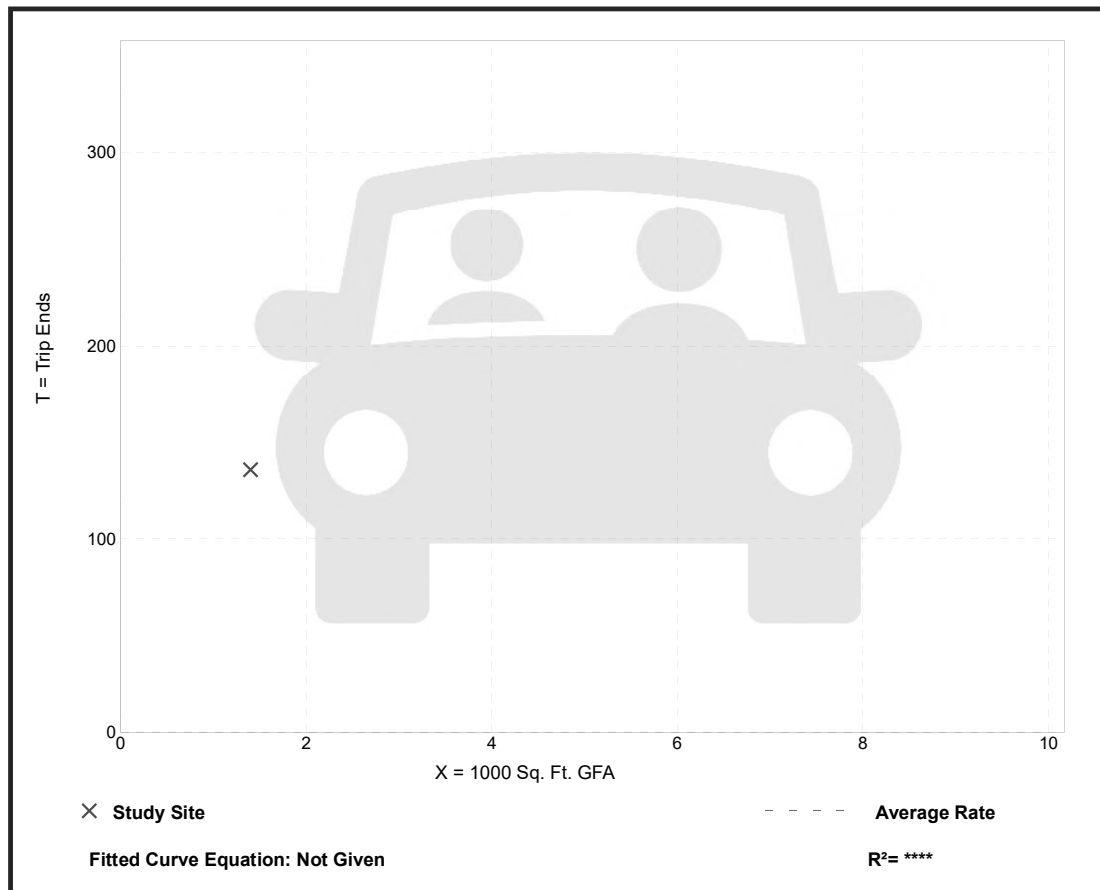
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 1
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
97.14	97.14 - 97.14	*

Data Plot and Equation

Caution – Small Sample Size



Strip Retail Plaza (<40k) (822)

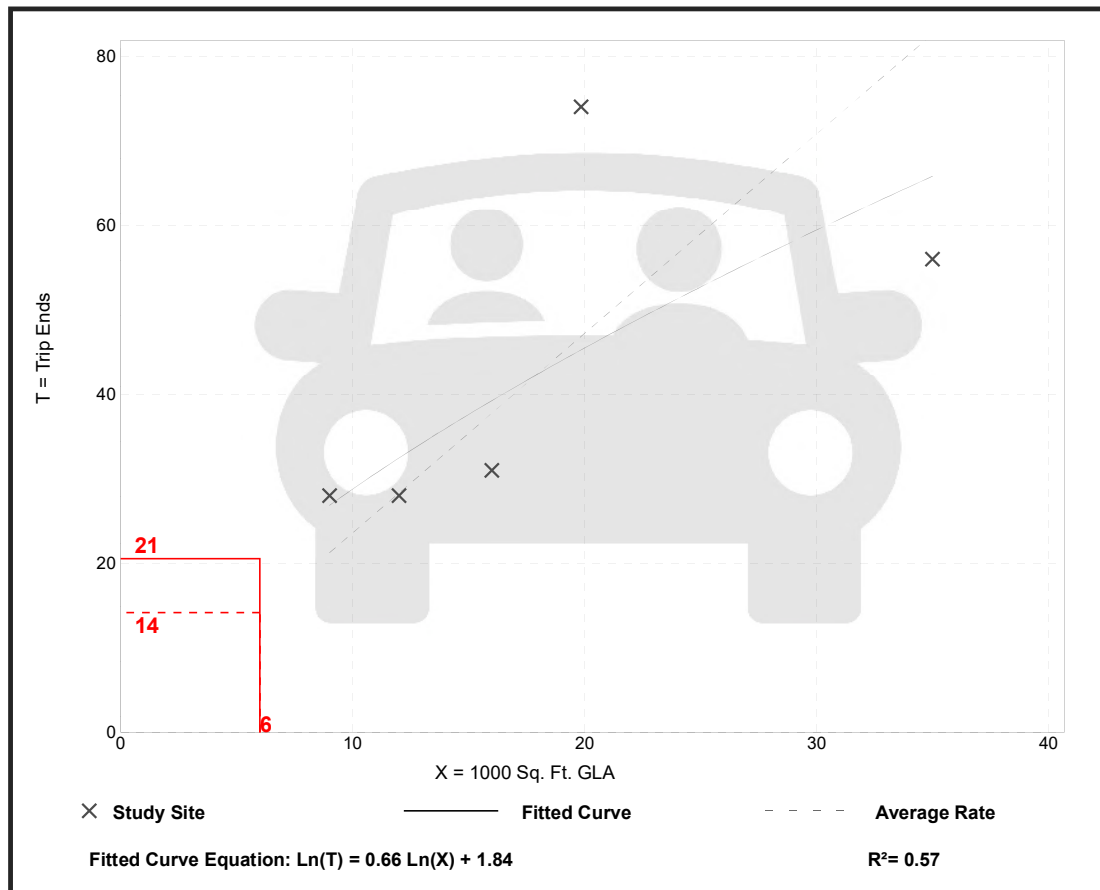
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 5
 Avg. 1000 Sq. Ft. GLA: 18
 Directional Distribution: 60% entering, 40% exiting

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



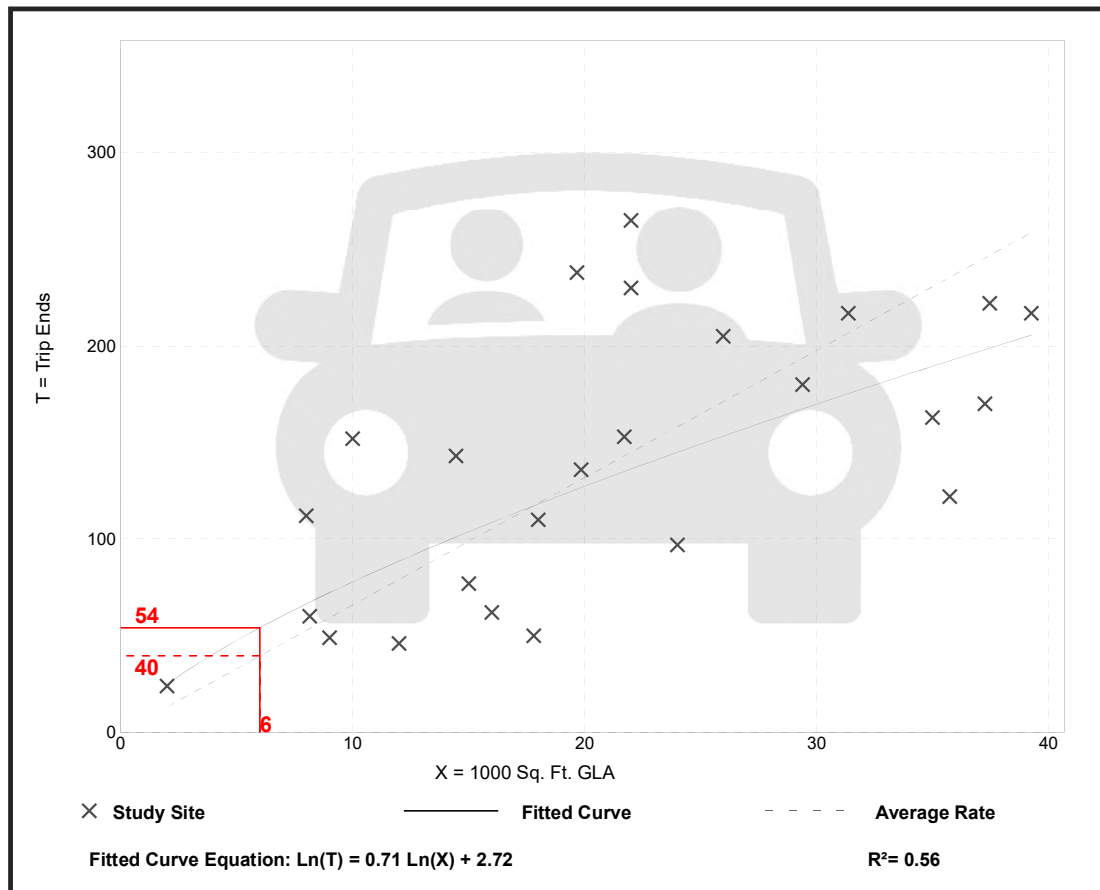
Strip Retail Plaza (<40k) (822)

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



Strip Retail Plaza (<40k) (822)

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

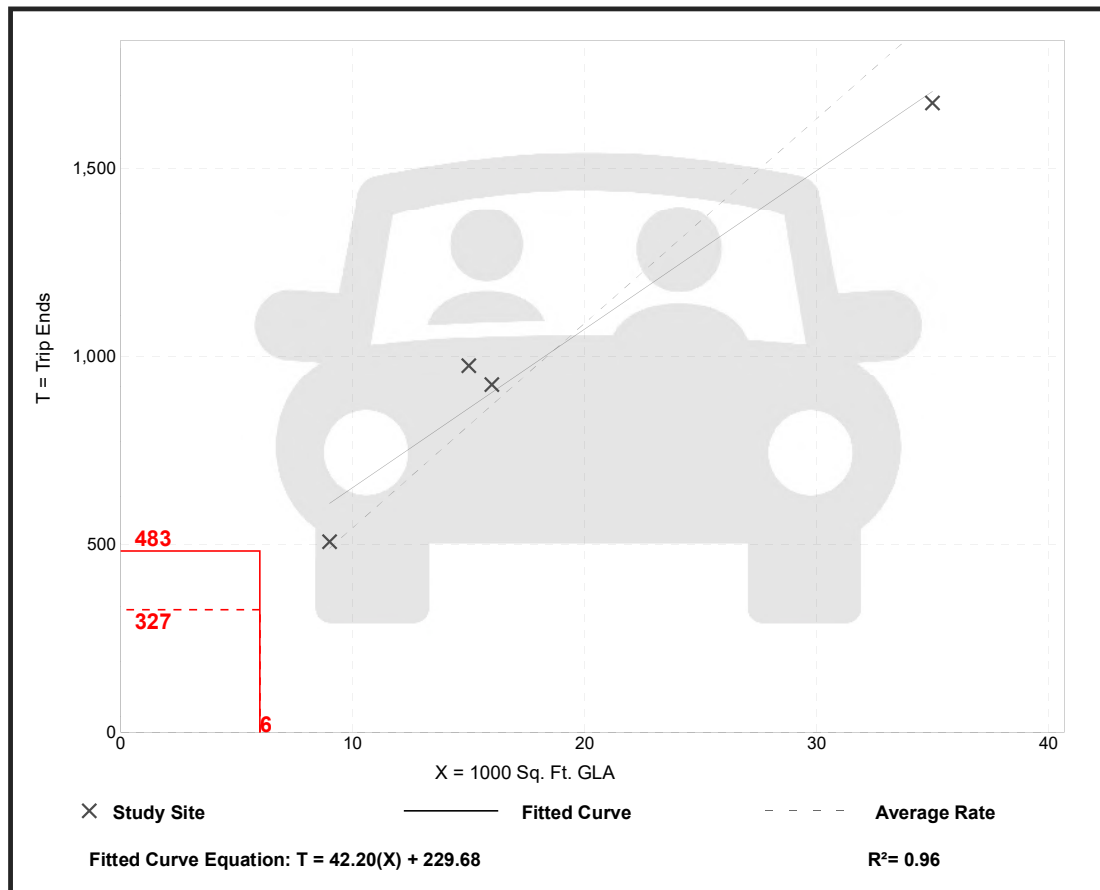
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. 1000 Sq. Ft. GLA: 19
Directional Distribution: 50% entering, 50% exiting

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



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

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: 49

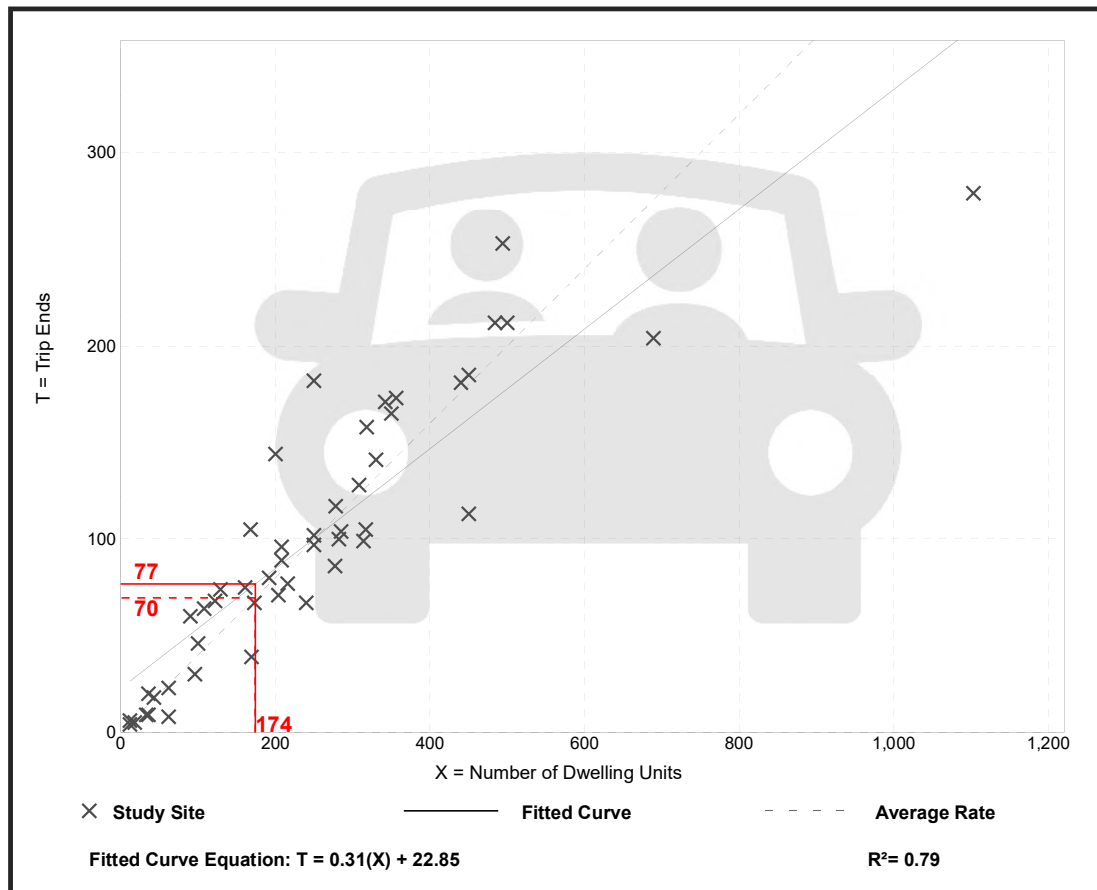
Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



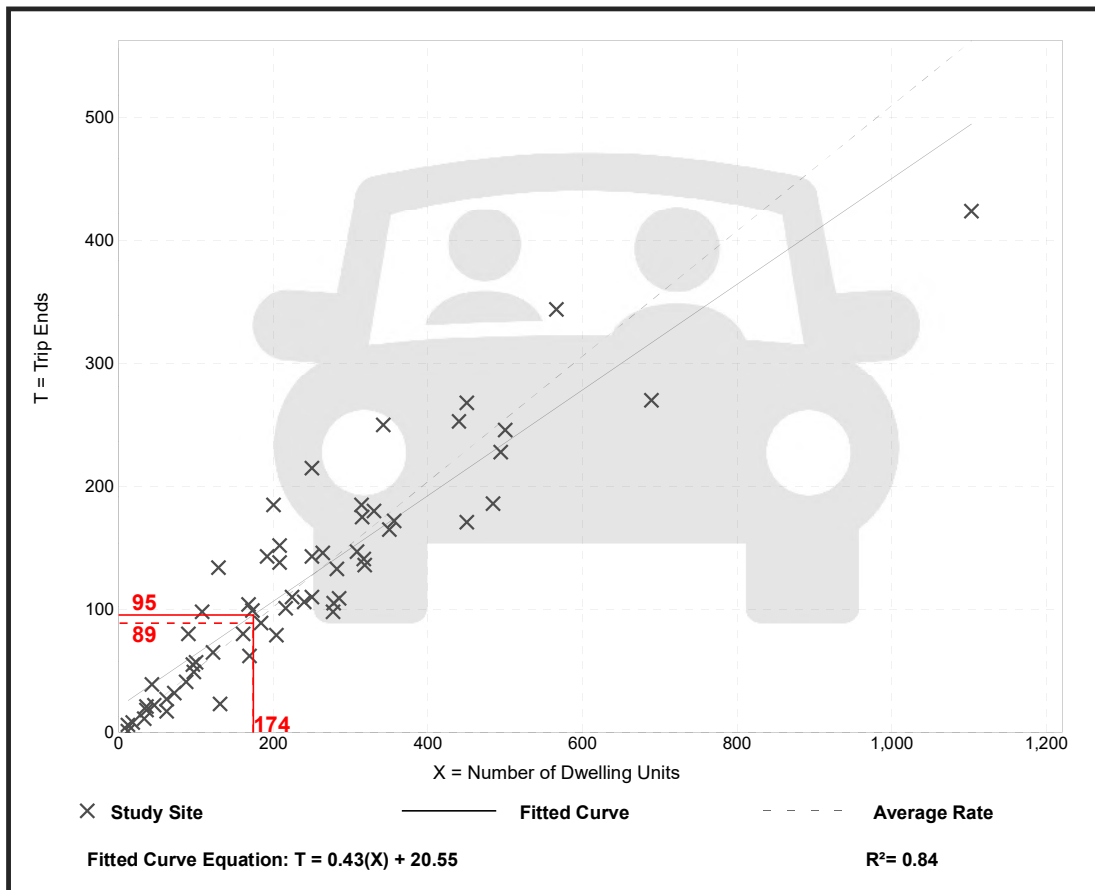
Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
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: 59
 Avg. Num. of Dwelling Units: 241
 Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

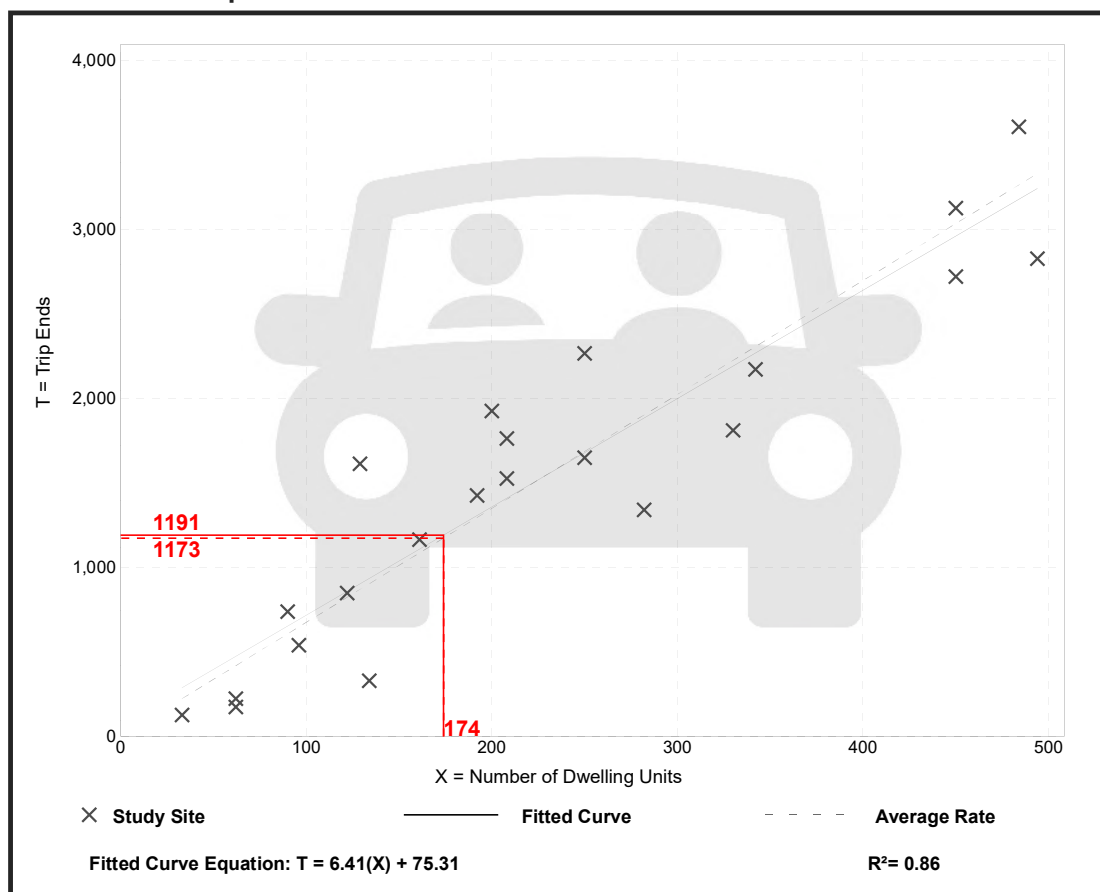
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 46

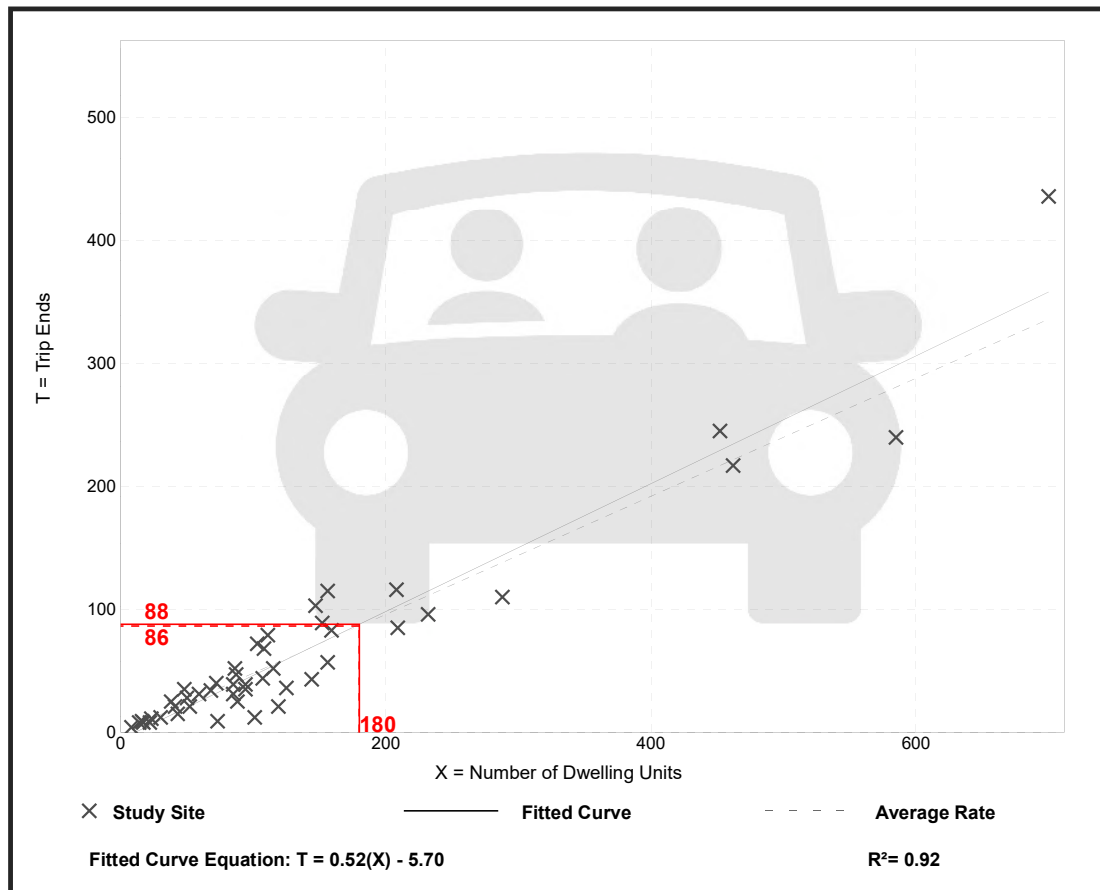
Avg. Num. of Dwelling Units: 135

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 51

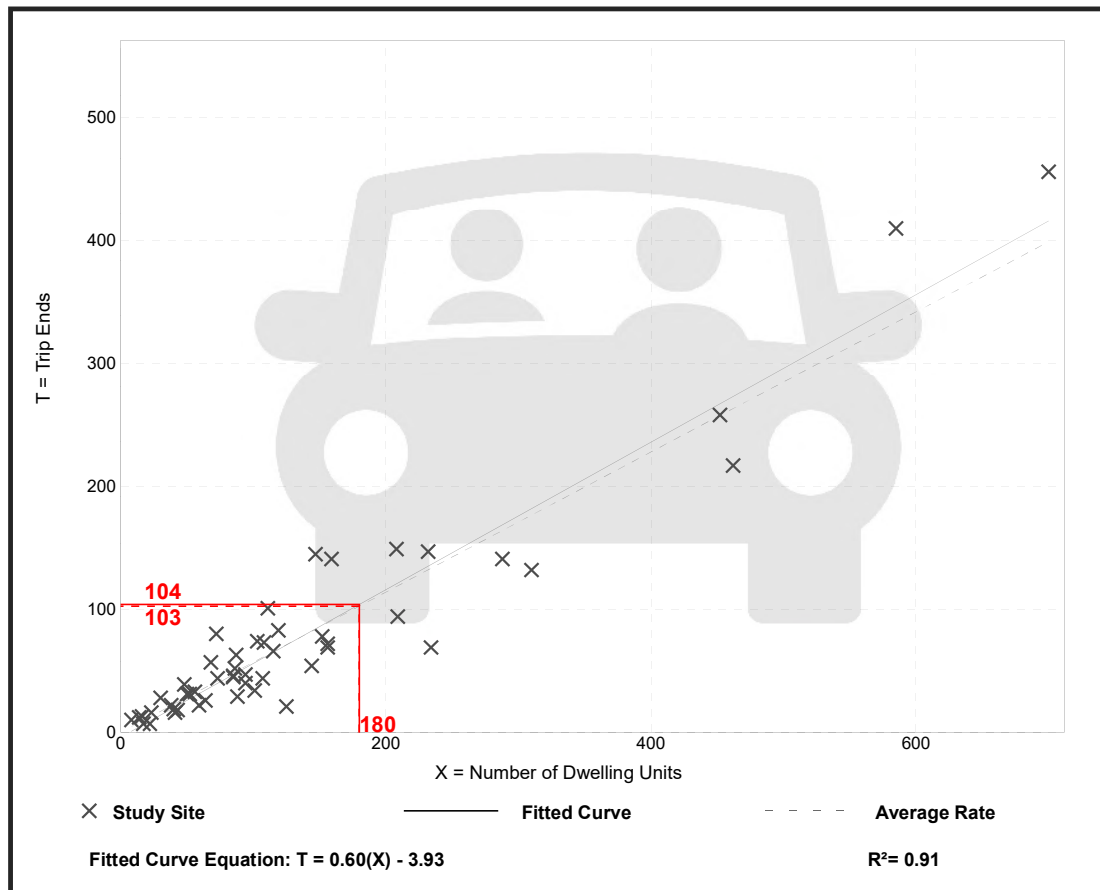
Avg. Num. of Dwelling Units: 136

Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Single-Family Attached Housing (215)

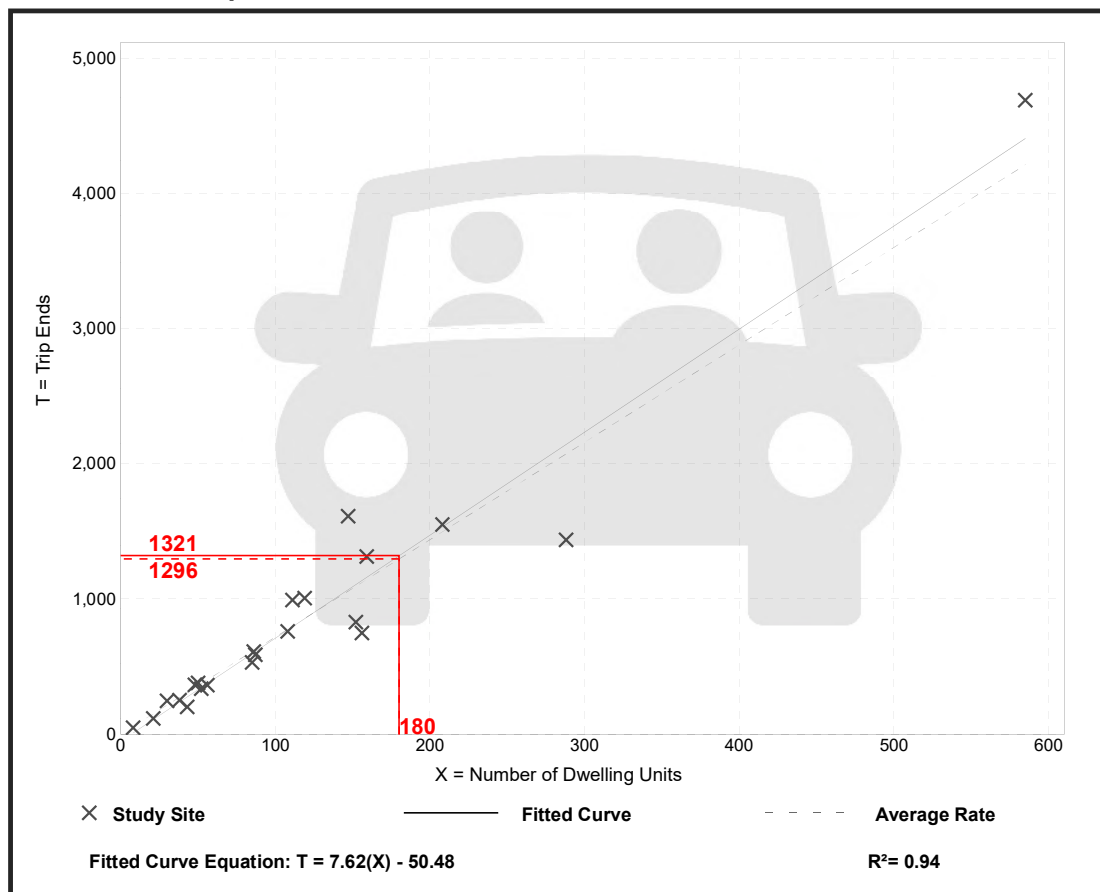
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 120
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



Trip Gen Manual, 11th Edition

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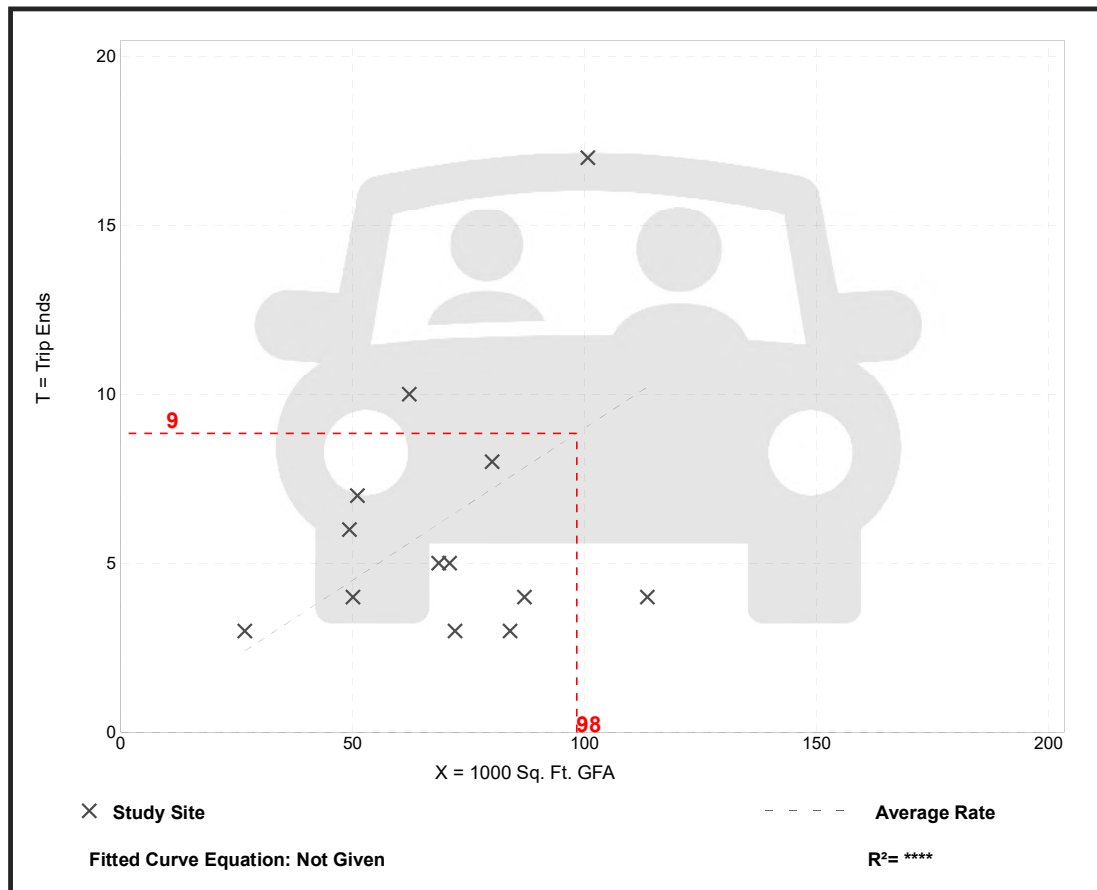
Mini-Warehouse (151)

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: 13
 Avg. 1000 Sq. Ft. GFA: 70
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.09	0.04 - 0.17	0.05

Data Plot and Equation



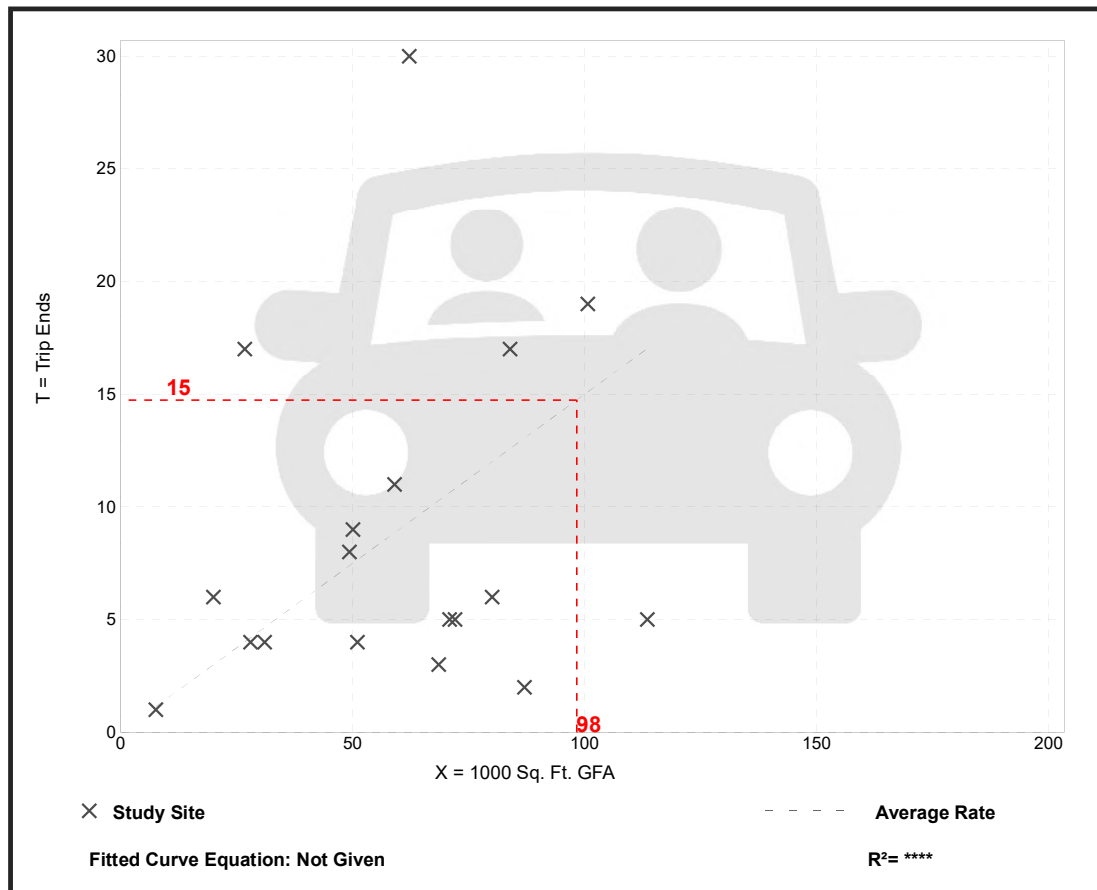
Mini-Warehouse (151)

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: 18
 Avg. 1000 Sq. Ft. GFA: 59
 Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.02 - 0.64	0.14

Data Plot and Equation



Mini-Warehouse (151)

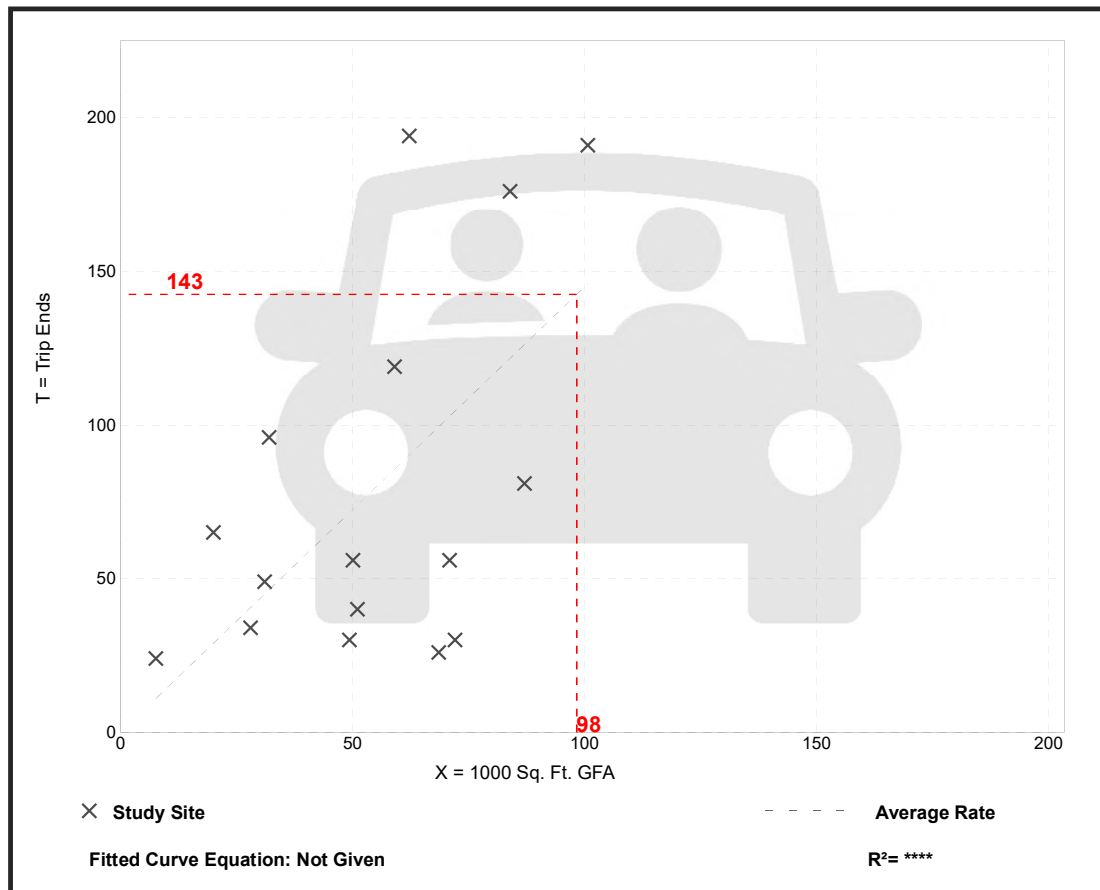
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 55
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.45	0.38 - 3.25	0.92

Data Plot and Equation



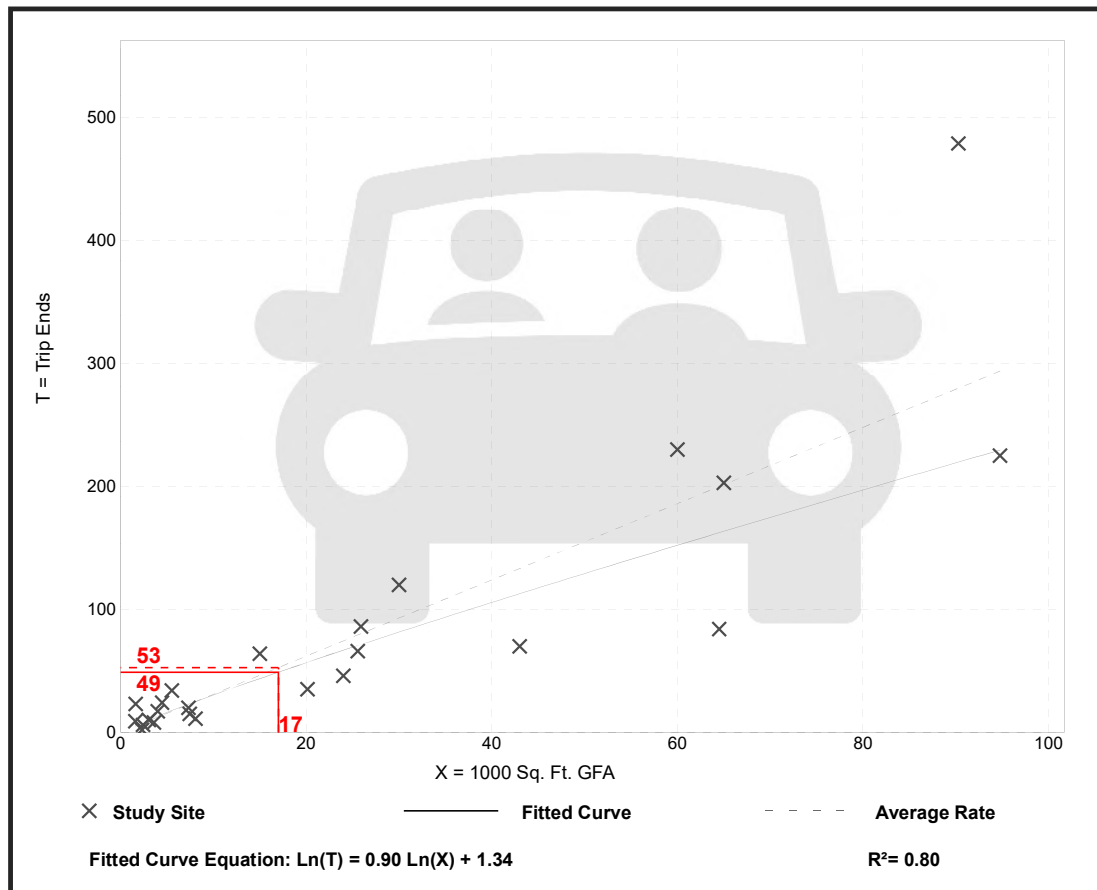
Medical-Dental Office Building - Stand-Alone (720)

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: 24
 Avg. 1000 Sq. Ft. GFA: 25
 Directional Distribution: 79% entering, 21% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.10	0.87 - 14.30	1.49

Data Plot and Equation



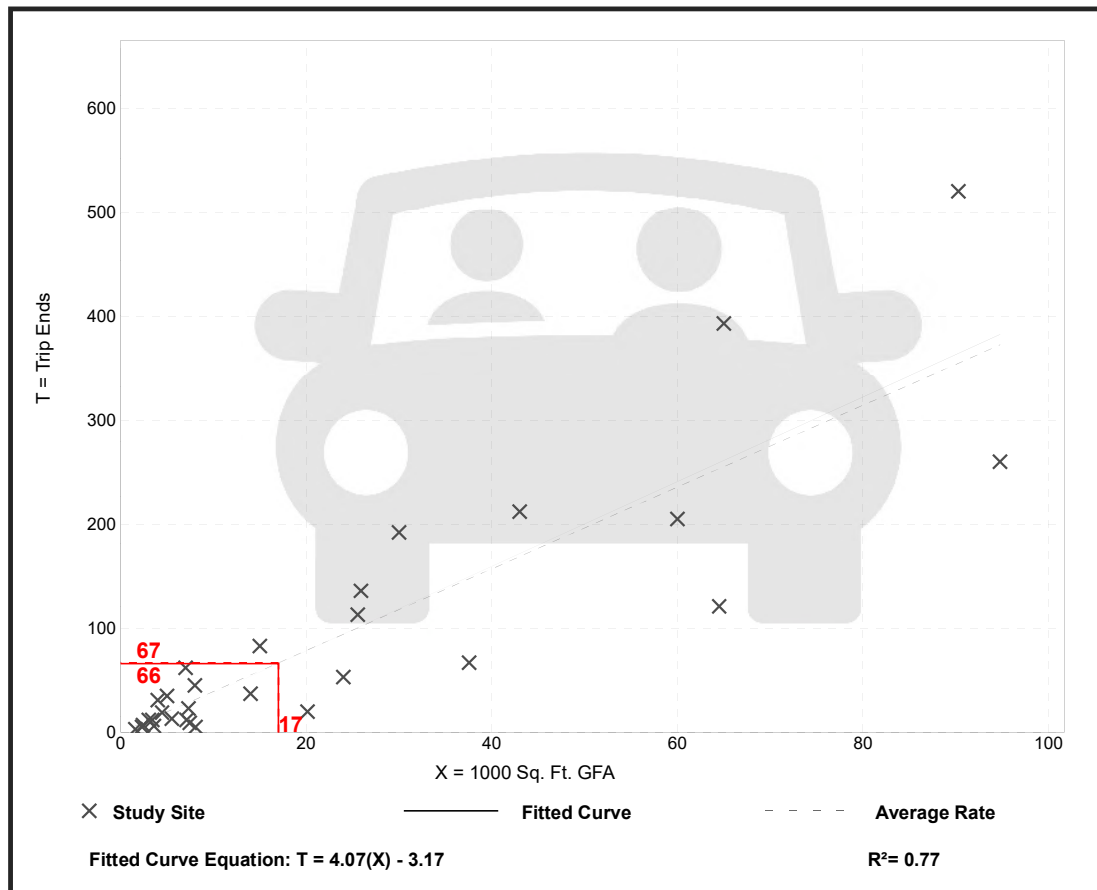
Medical-Dental Office Building - Stand-Alone (720)

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: 30
 Avg. 1000 Sq. Ft. GFA: 23
 Directional Distribution: 30% entering, 70% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.93	0.62 - 8.86	1.86

Data Plot and Equation



Medical-Dental Office Building - Stand-Alone (720)

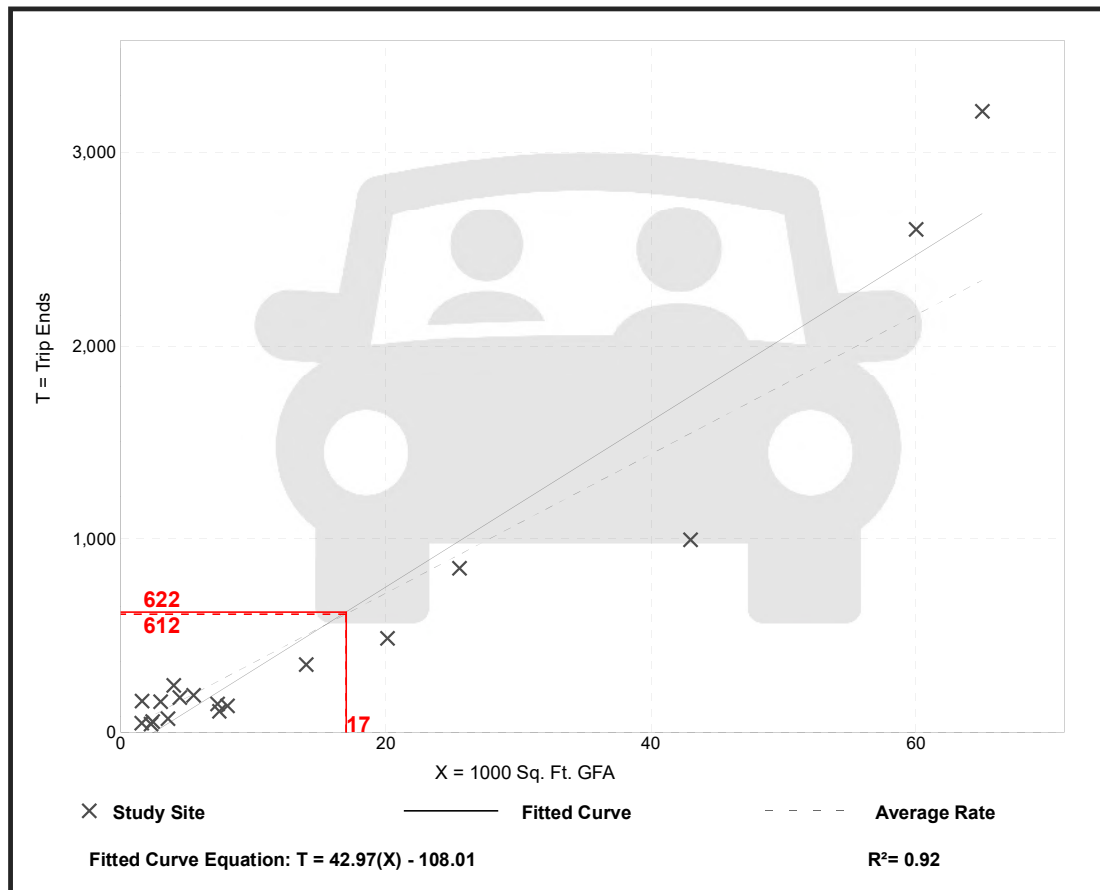
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 18
Avg. 1000 Sq. Ft. GFA: 15
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
36.00	14.52 - 100.75	13.38

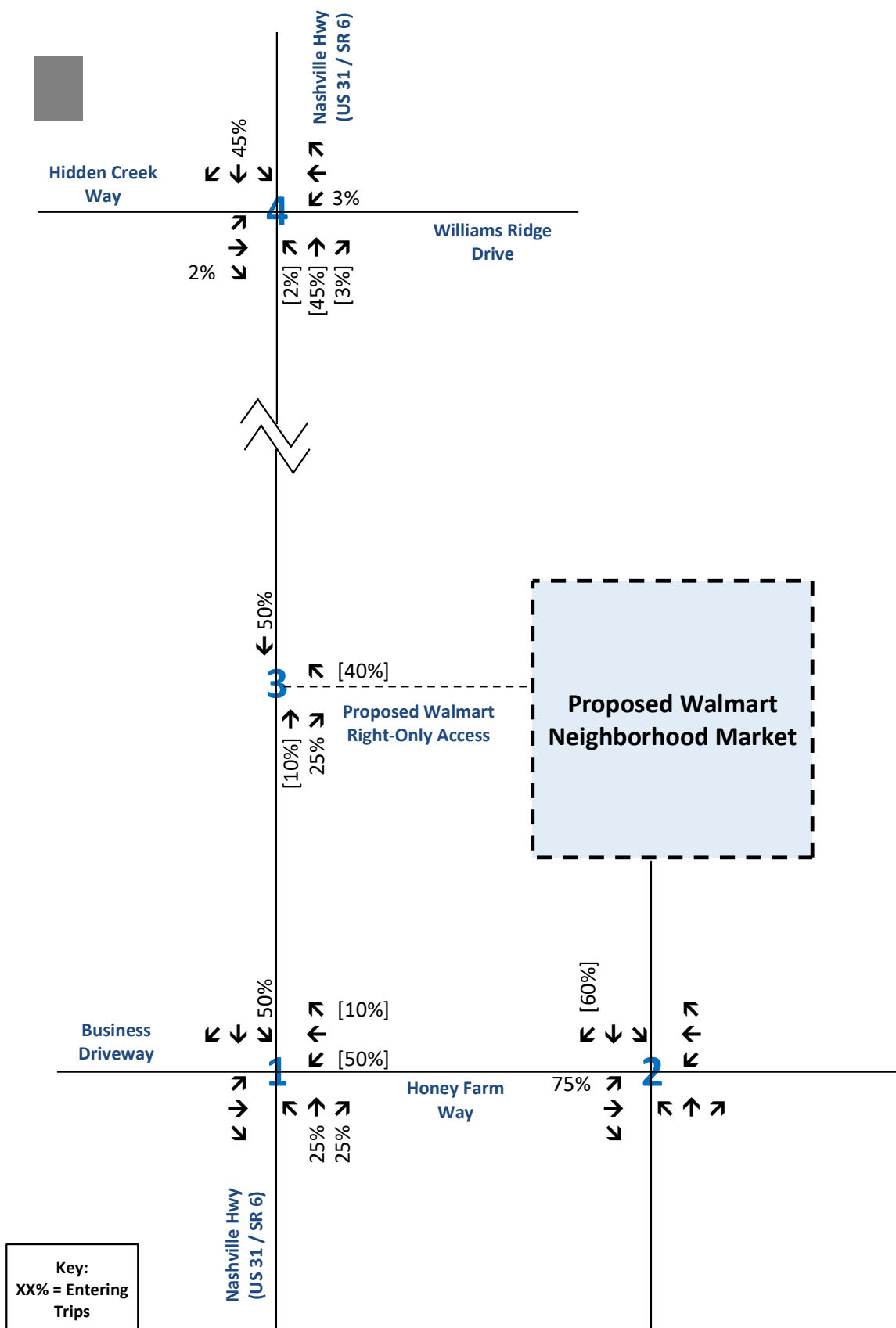
Data Plot and Equation



APPENDIX D

TRIP DISTRIBUTION

PRIMARY TRIP DISTRIBUTIONS



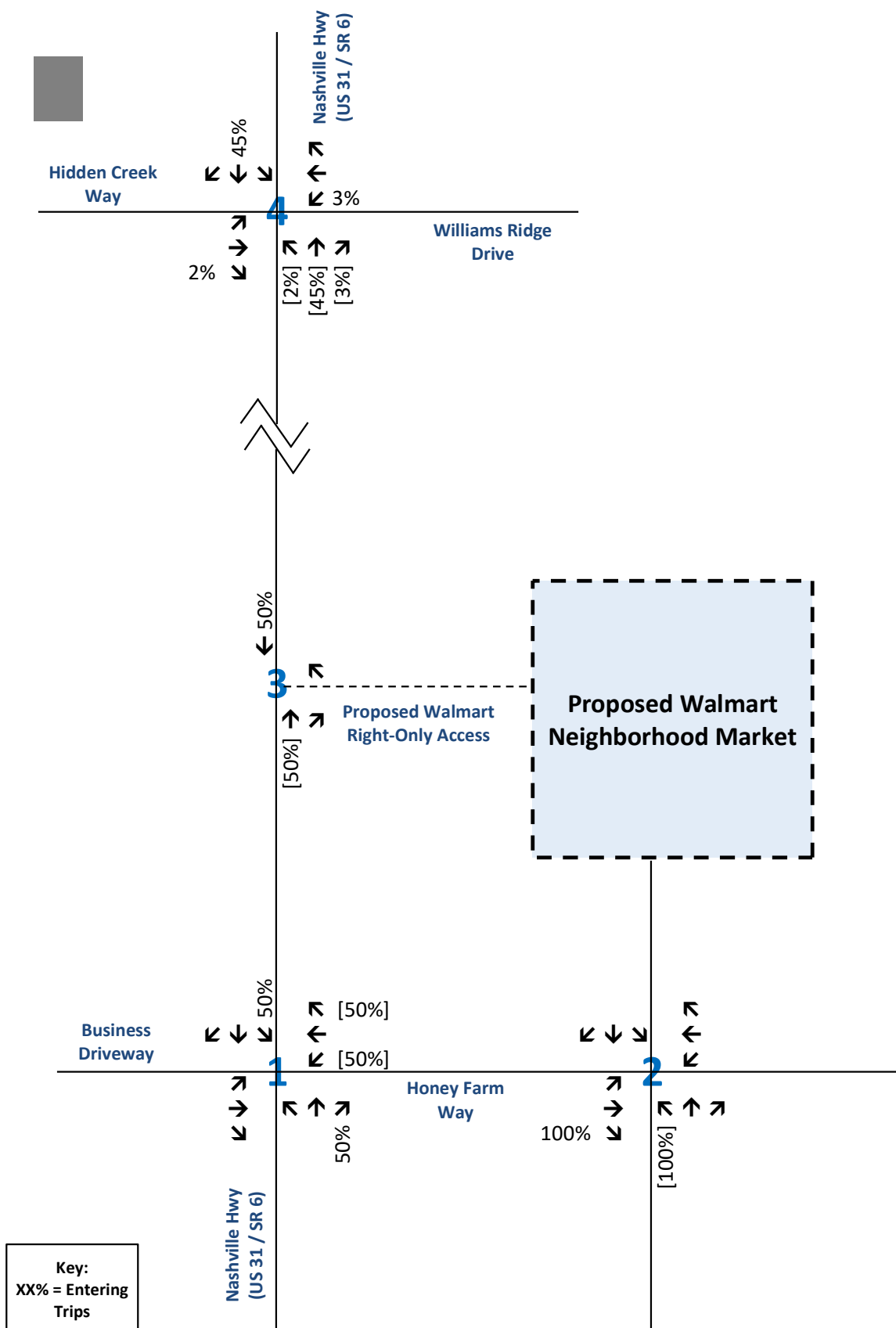
Trip Distribution Worksheet

Primary Trip Distribution - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

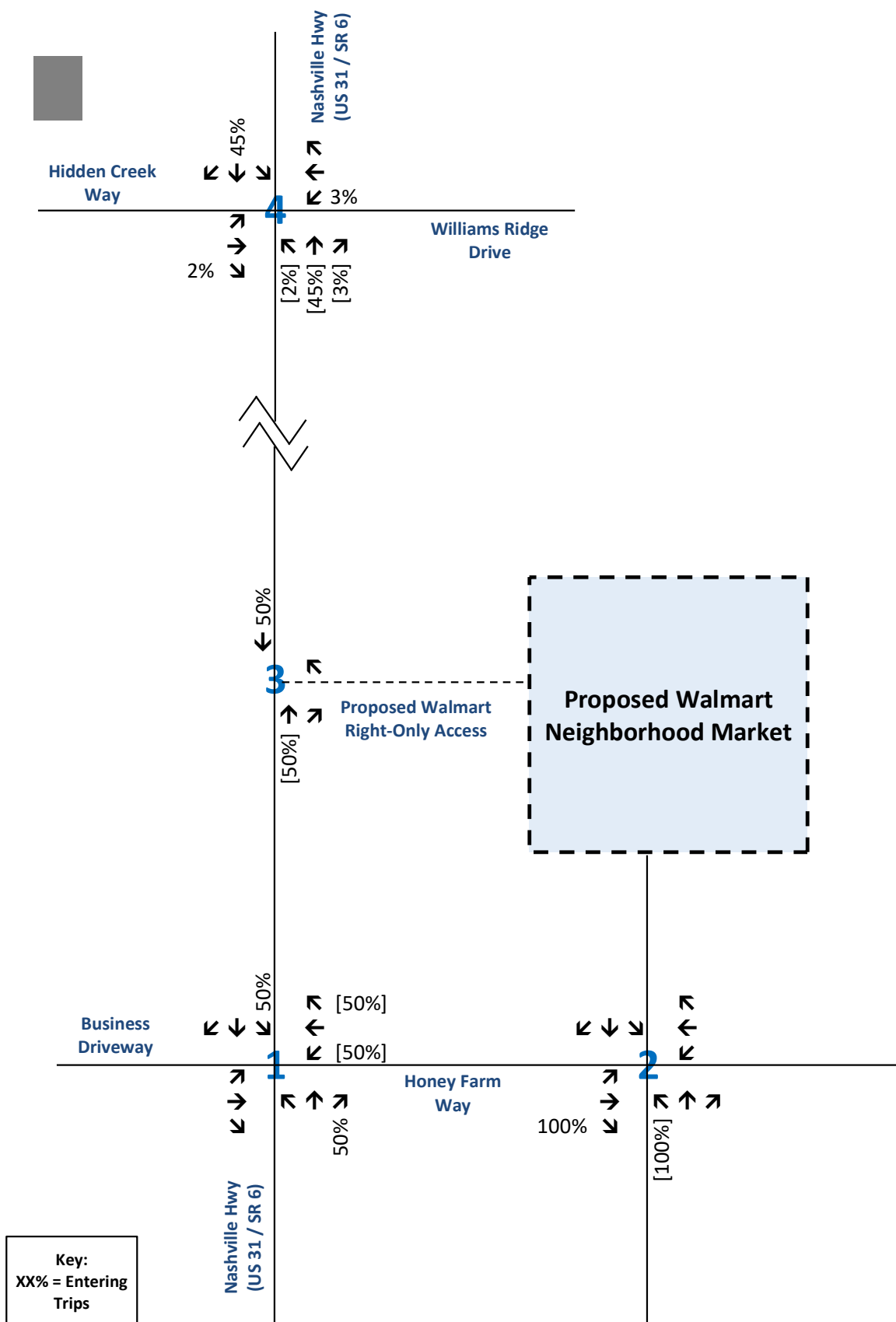
Columbia, Tennessee





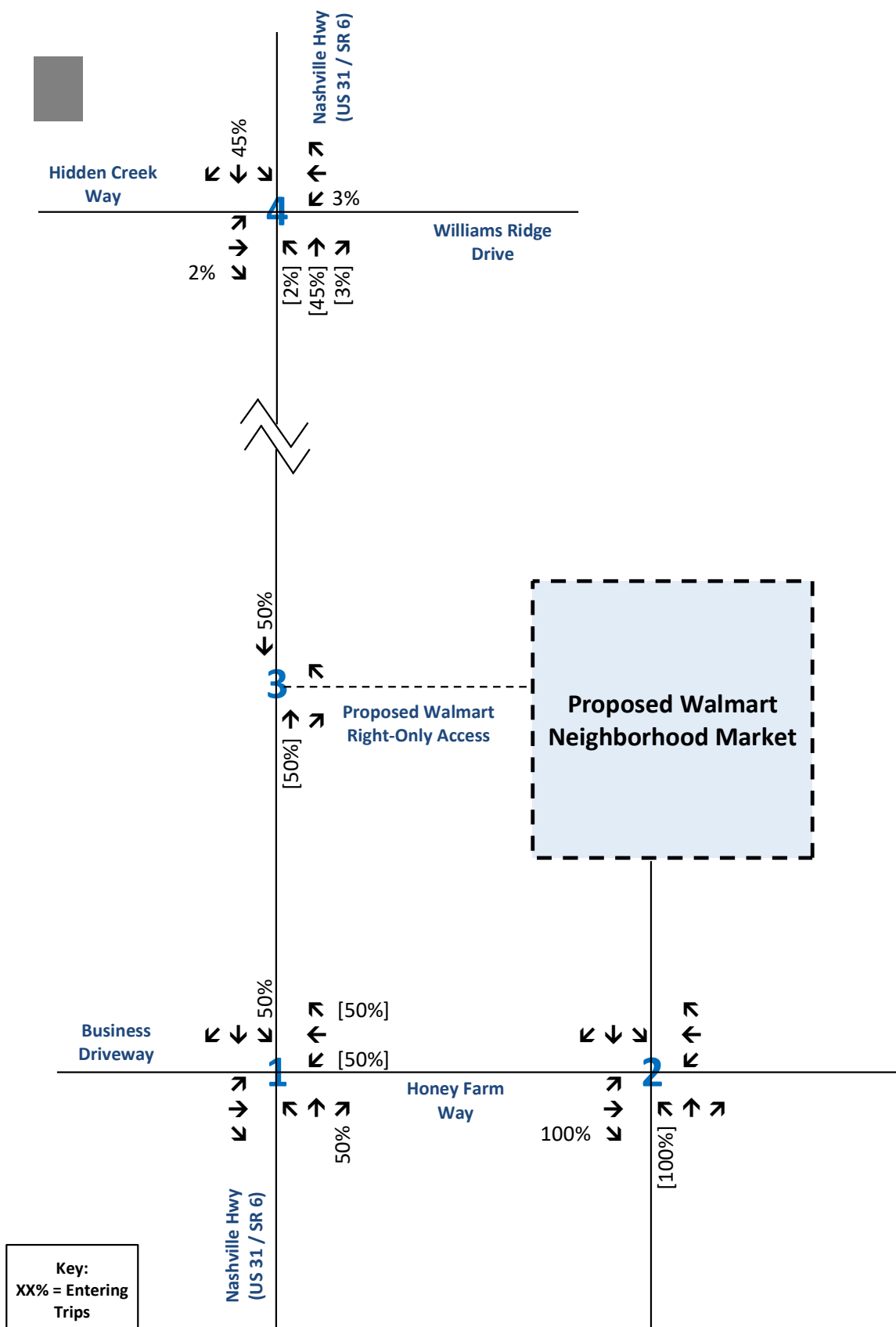
Trip Distribution Worksheet
Primary Trip Distribution - Fast-Food Restaurant with Drive-Through
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





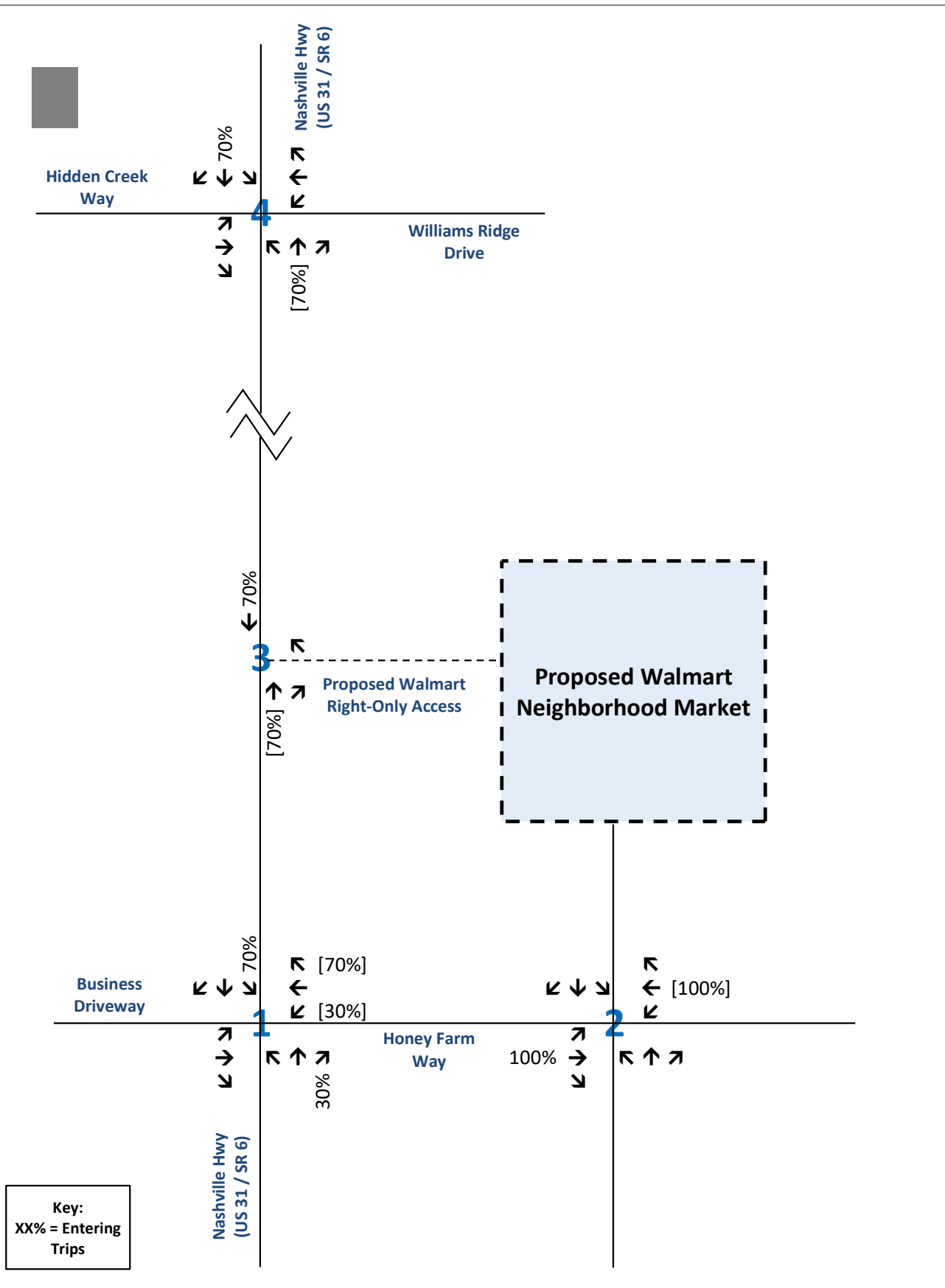
Trip Distribution Worksheet
Primary Trip Distribution - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





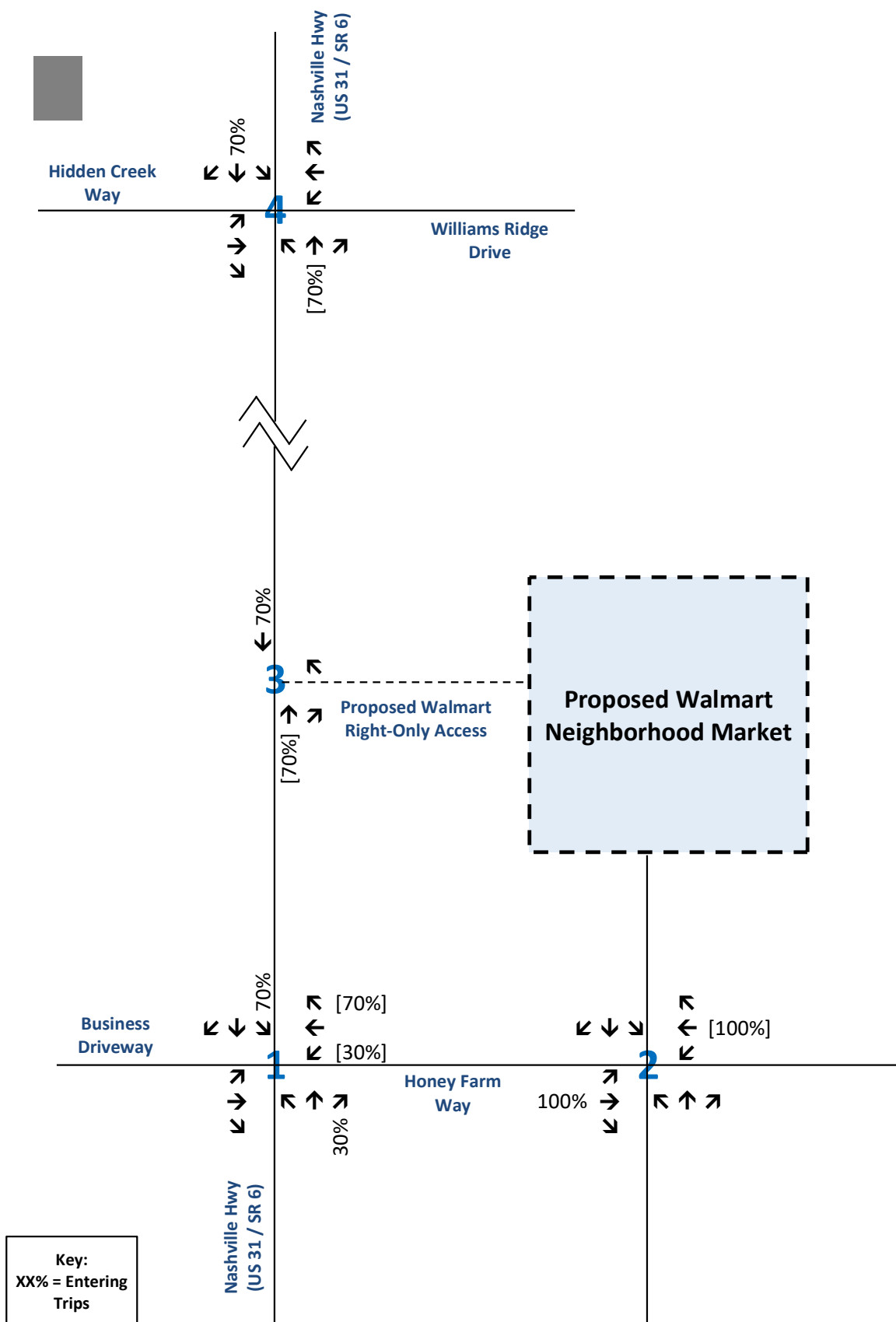
Trip Distribution Worksheet
Primary Trip Distribution - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





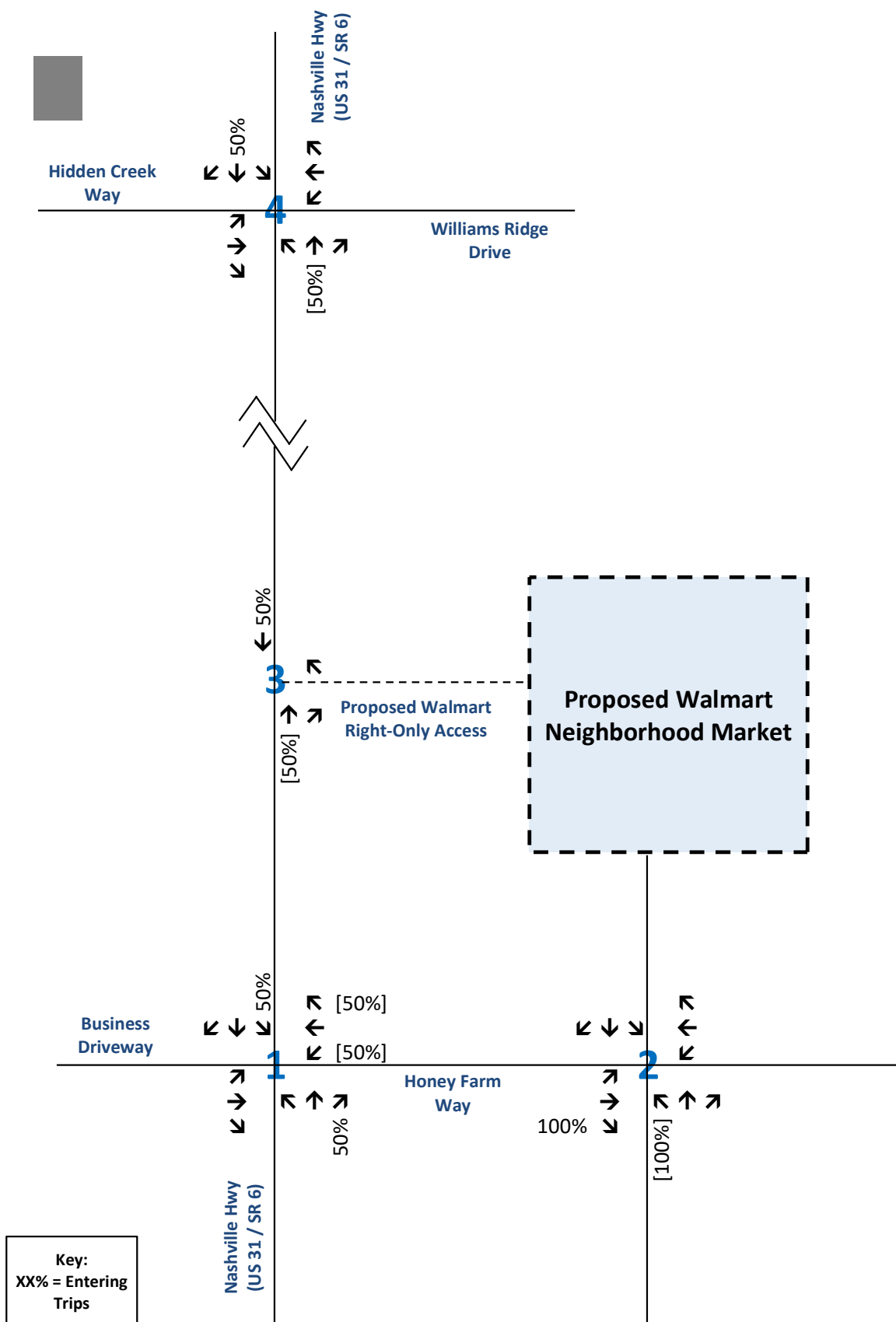
Trip Distribution Worksheet
Primary Trip Distribution - Multifamily Housing (Low-Rise)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





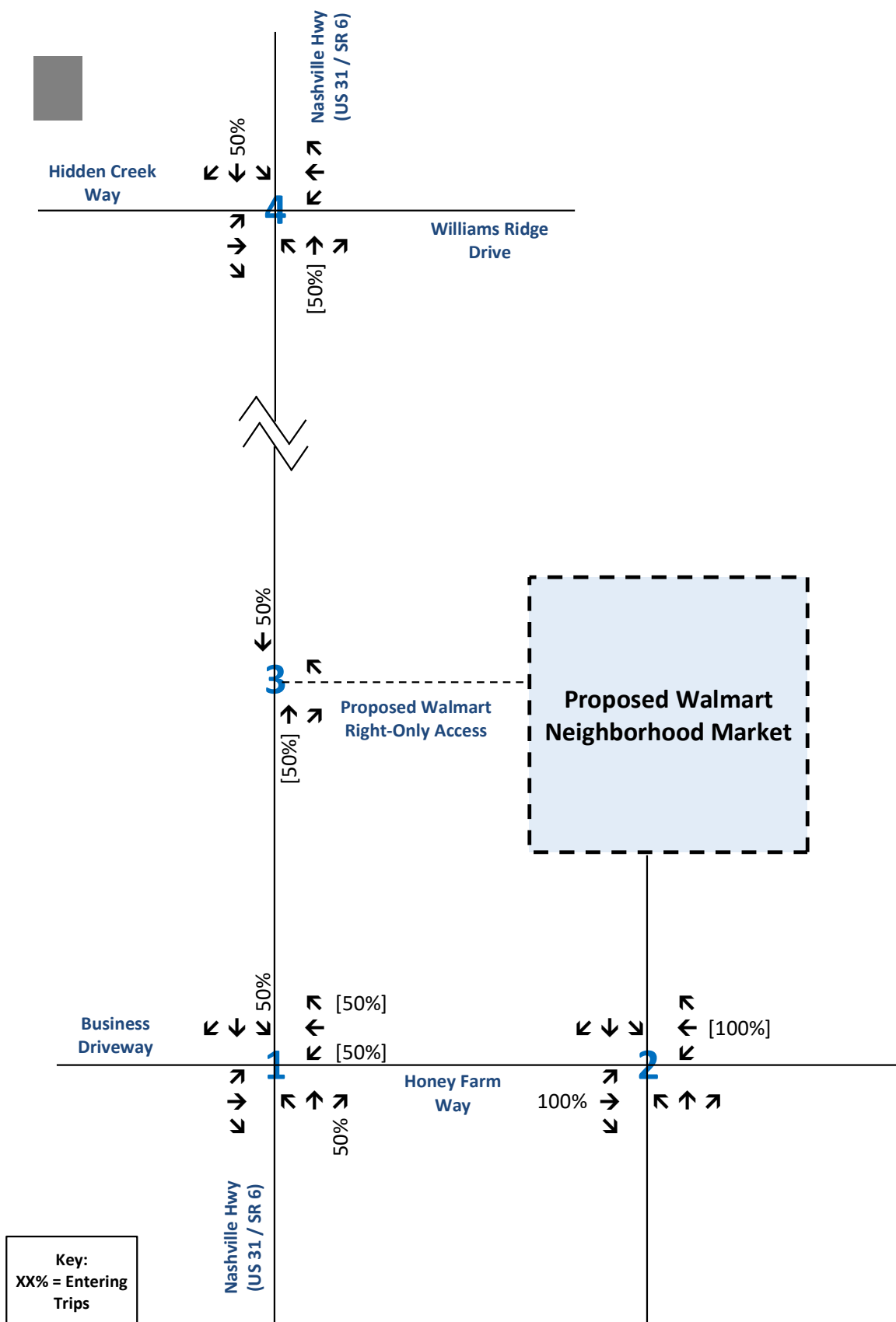
Trip Distribution Worksheet
Primary Trip Distribution - Townhomes
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Trip Distribution Worksheet
Primary Trip Distribution - Mini-Warehouse
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee

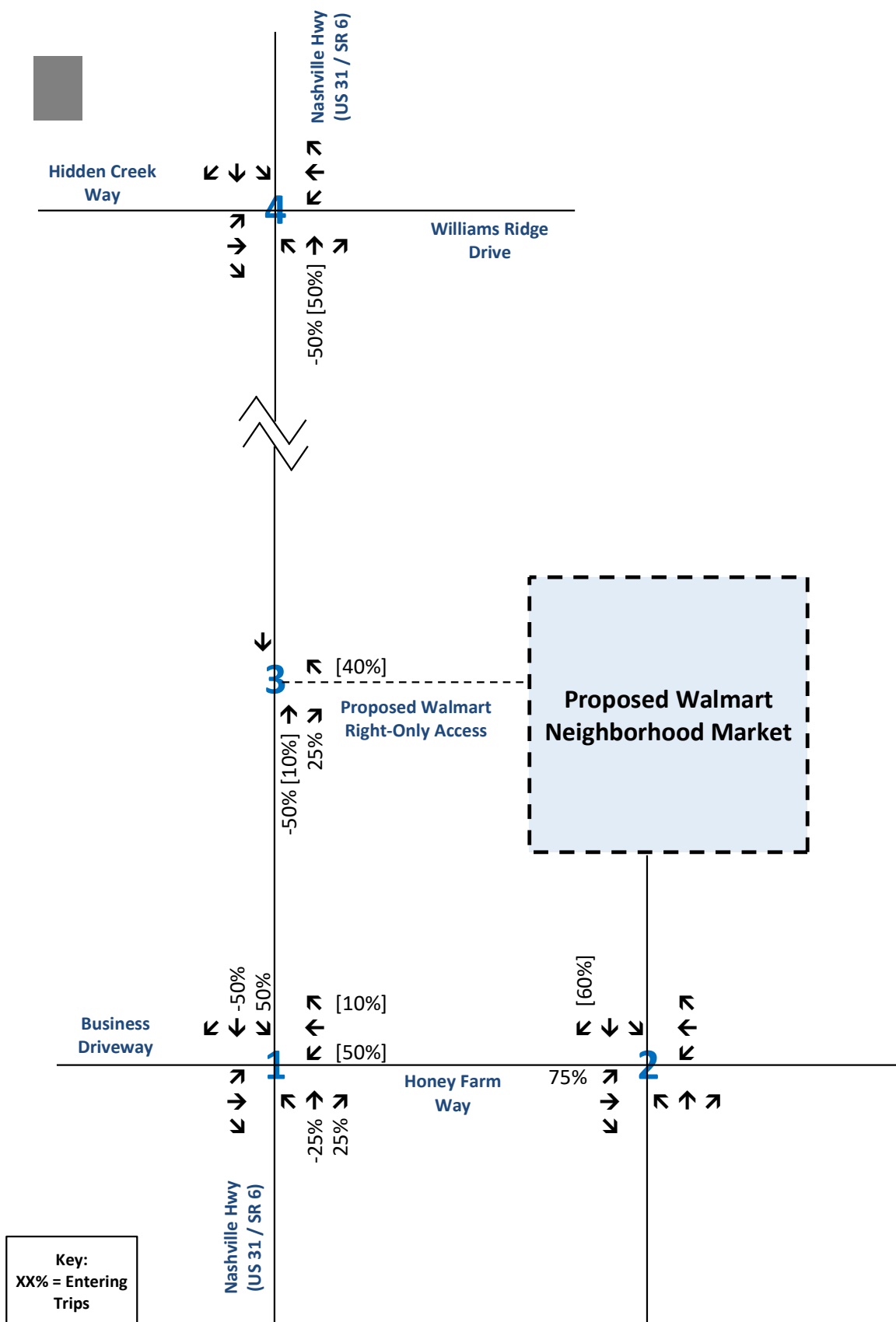




Trip Distribution Worksheet
Primary Trip Distribution - Health Department
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



PASS-BY TRIP DISTRIBUTIONS



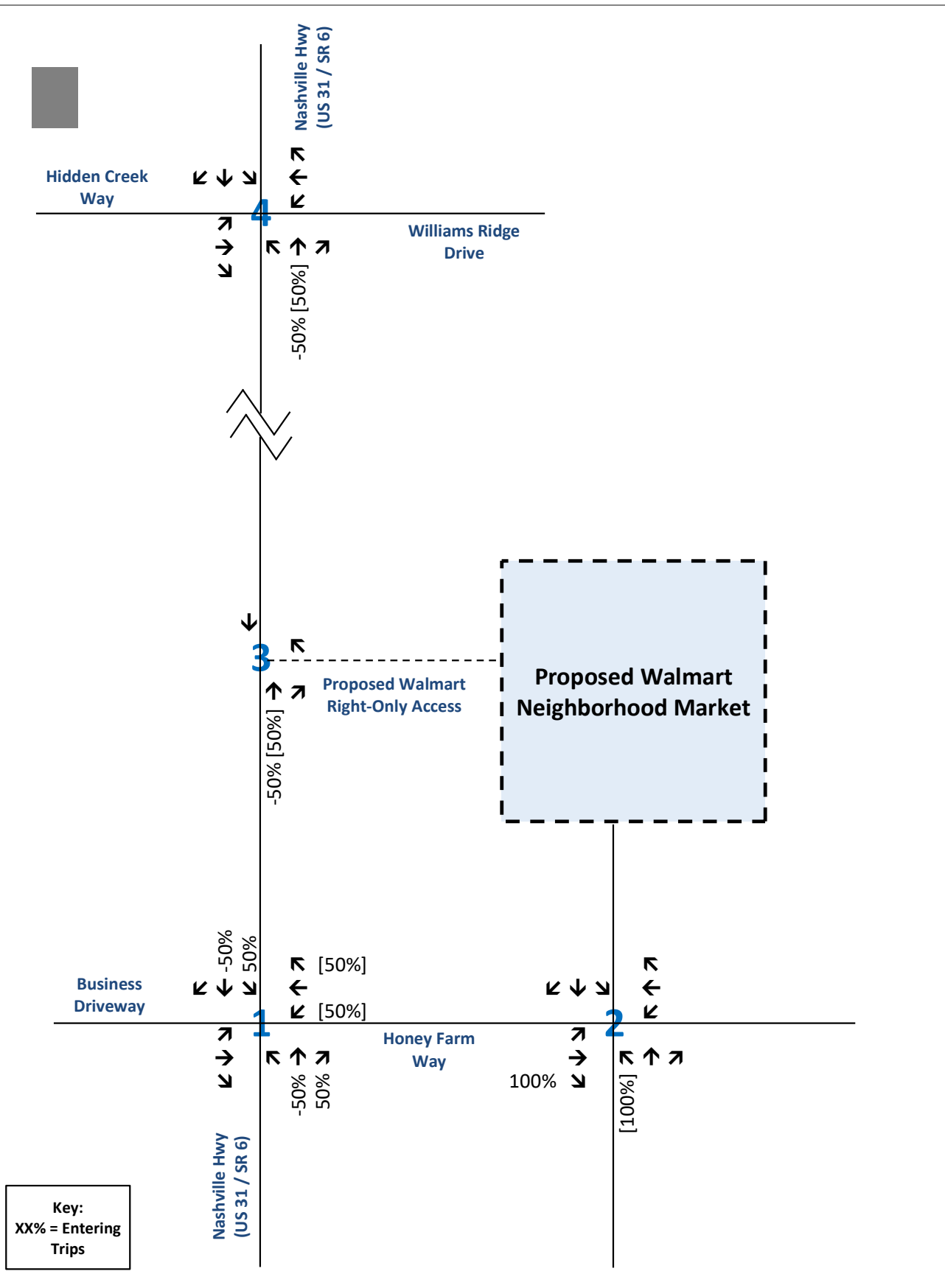
Trip Distribution Worksheet

Pass-by Trip Distribution - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee

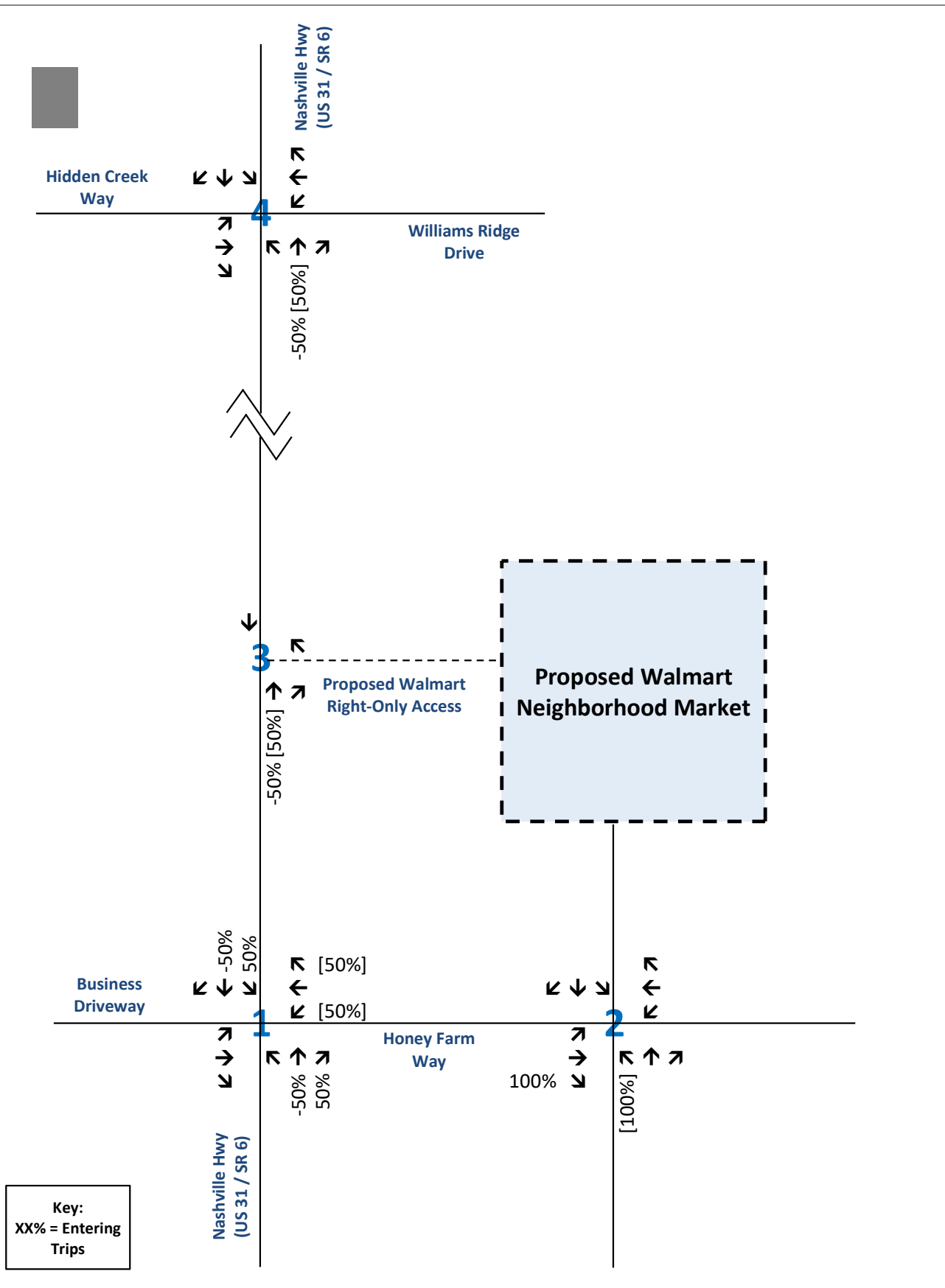




Trip Distribution Worksheet

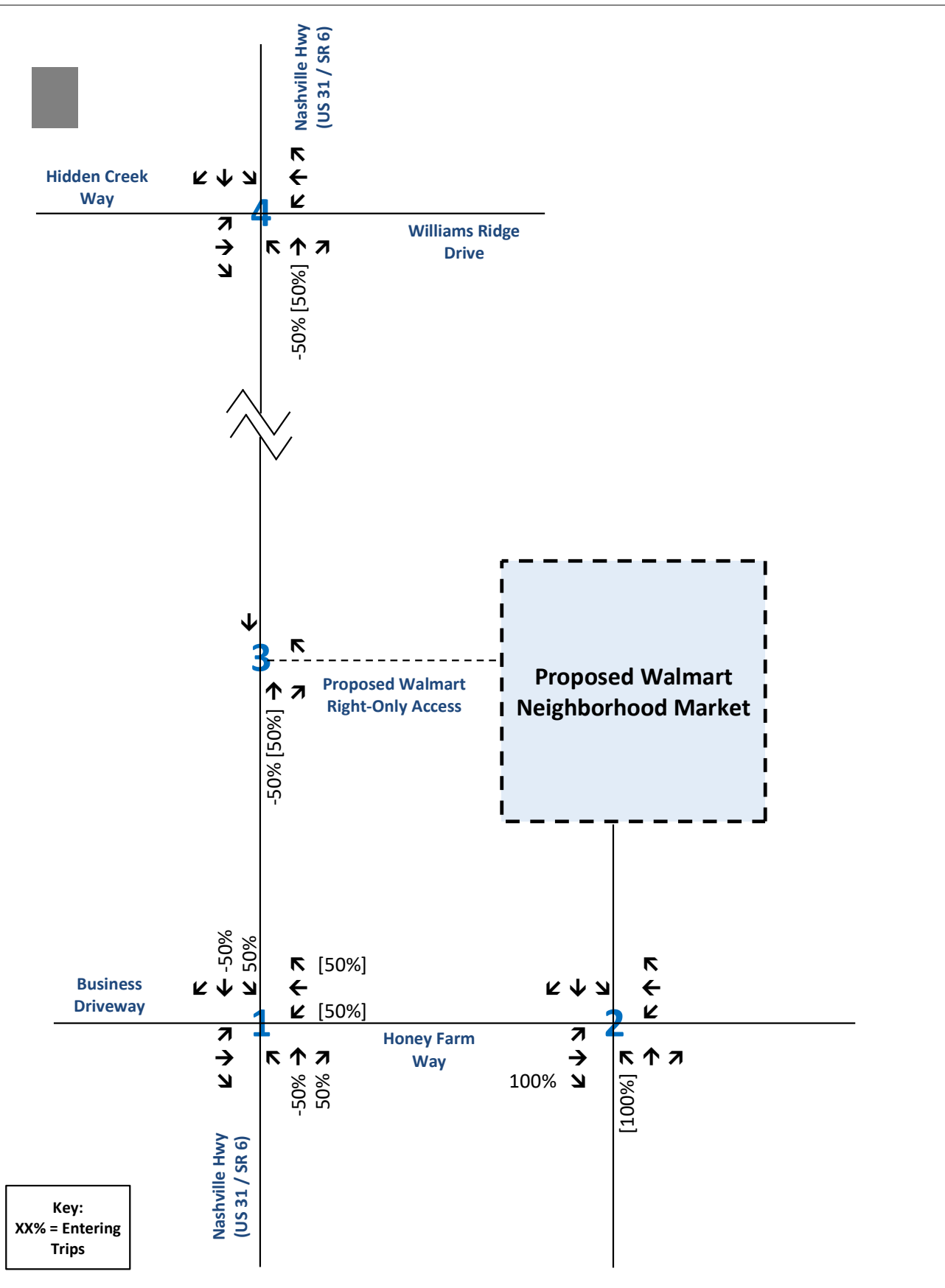
Pass-by Trip Distribution - Fast-Food Restaurant with Drive-Through
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Trip Distribution Worksheet
Pass-by Trip Distribution - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





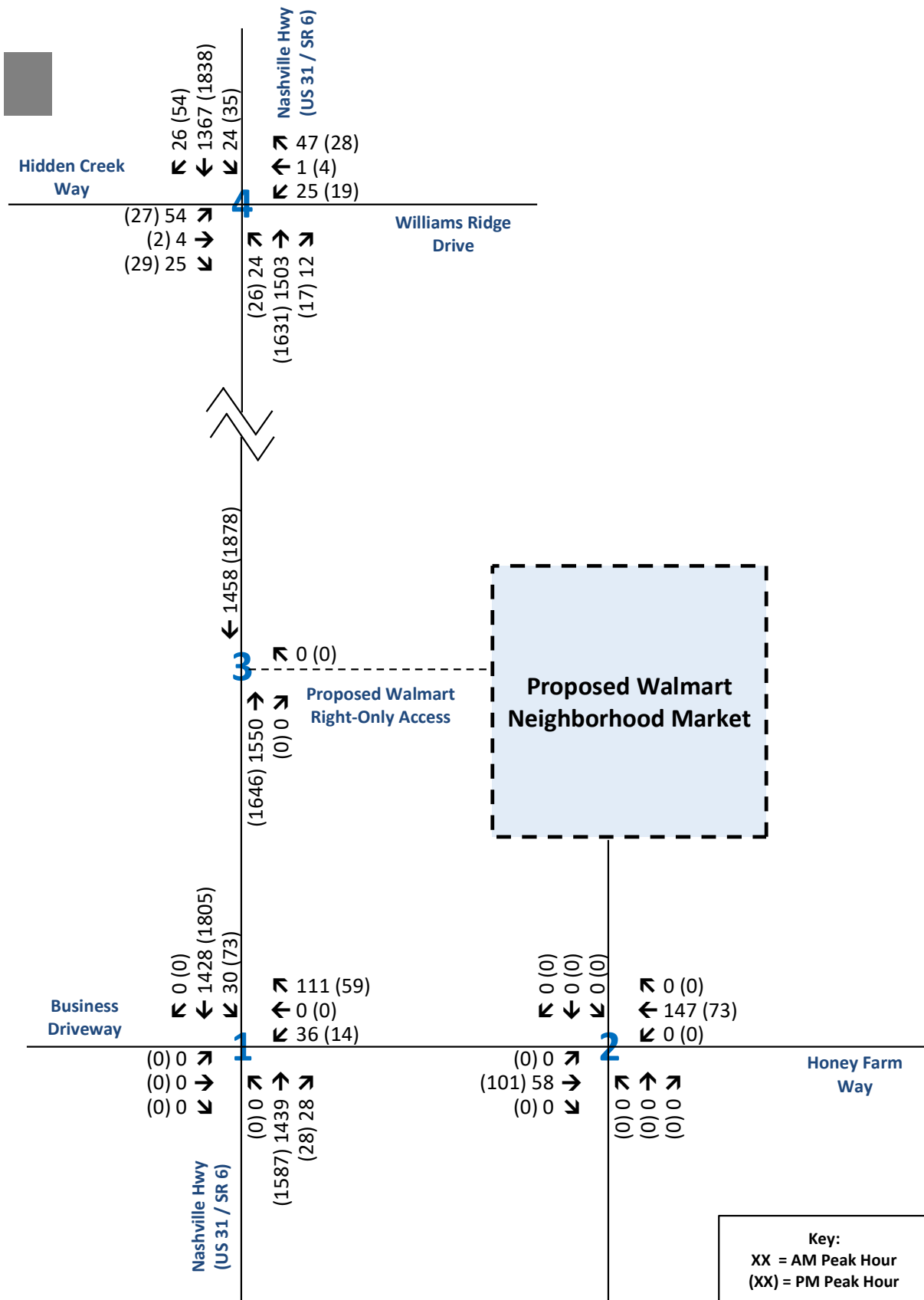
Trip Distribution Worksheet
Pass-by Trip Distribution - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



APPENDIX E
TRAFFIC ASSIGNMENT

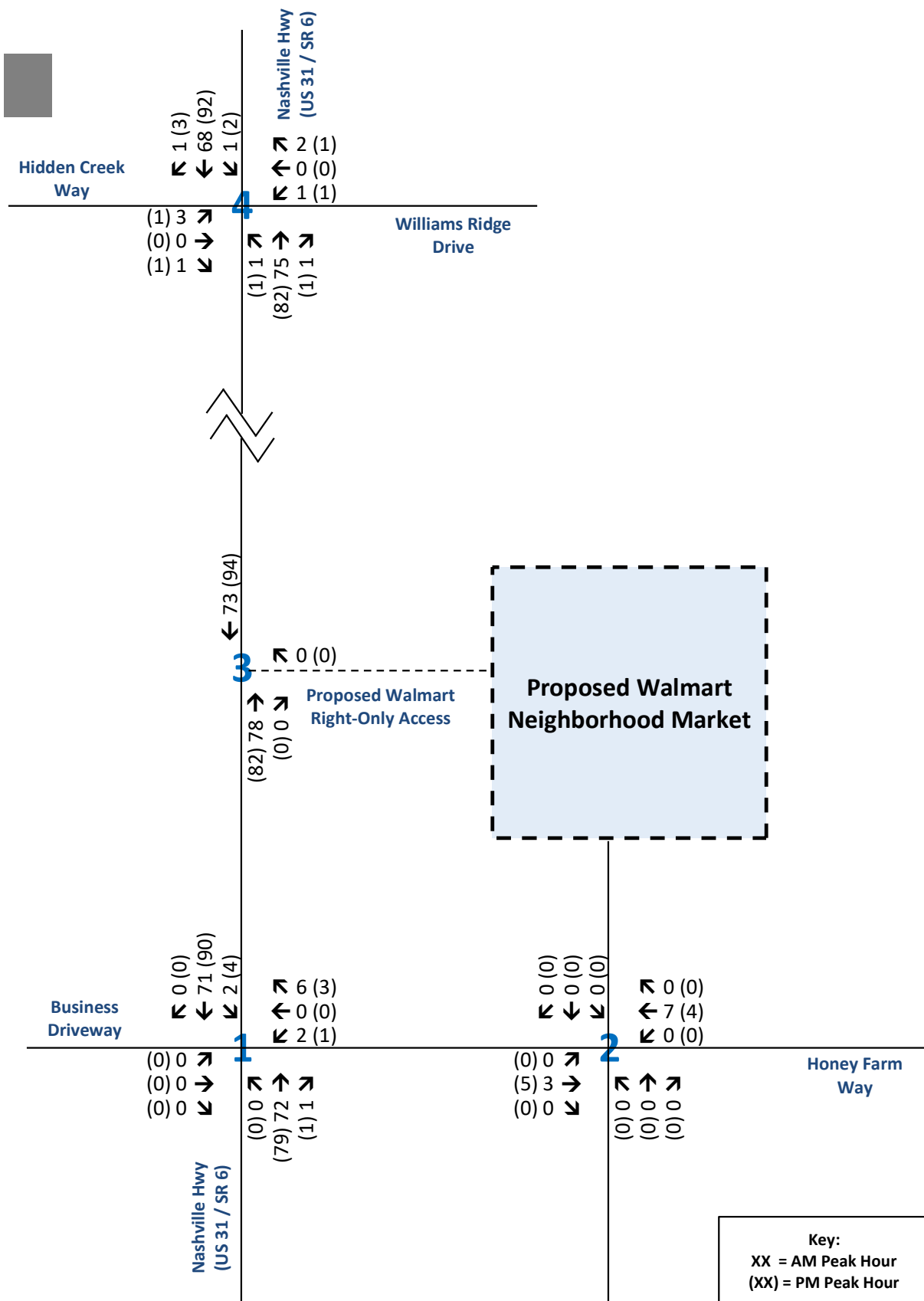
TRAFFIC ASSIGNMENT WORKSHEETS

AM & PM PEAK HOURS



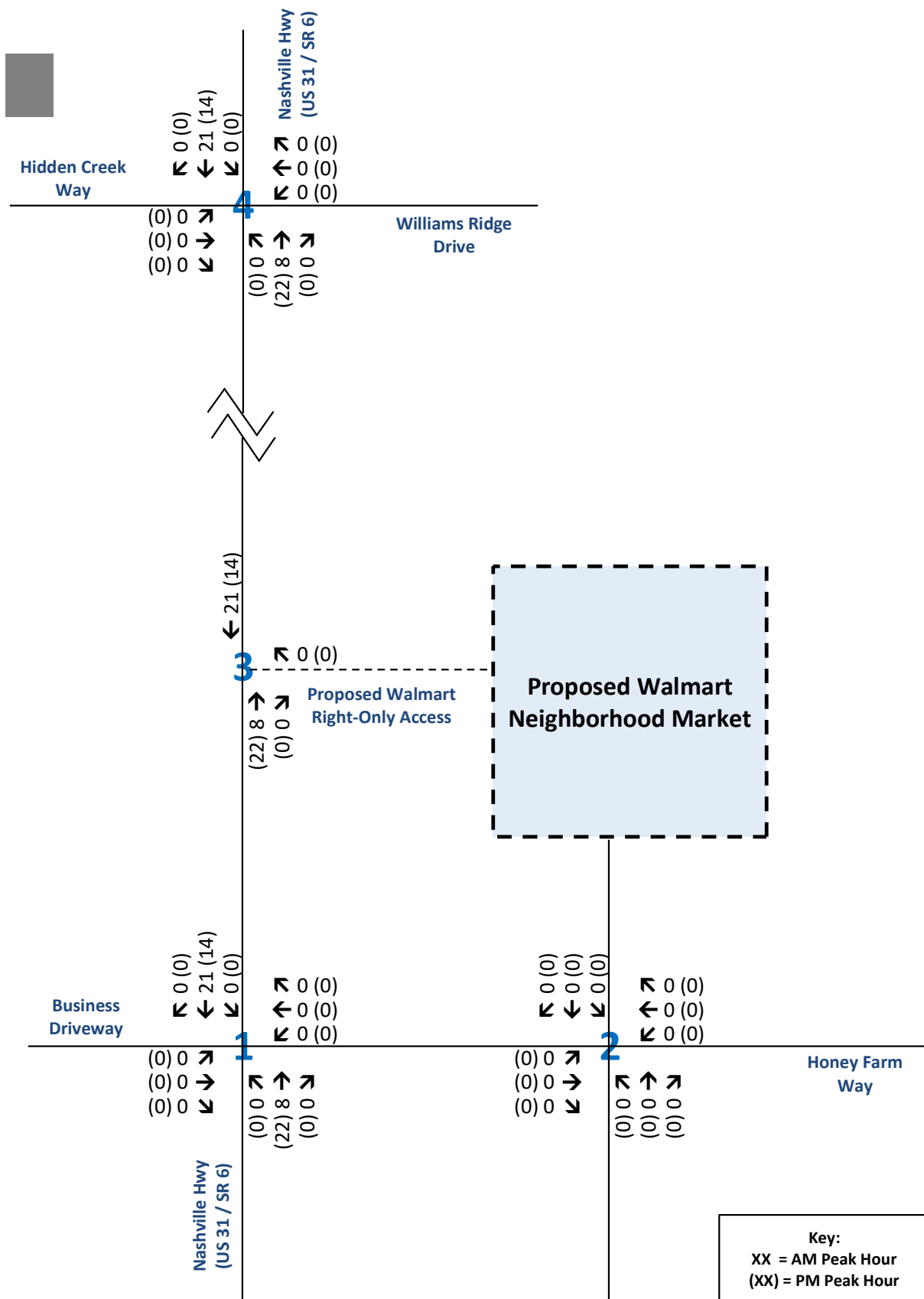
Traffic Assignment Worksheet
Existing Traffic Volumes (2024)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





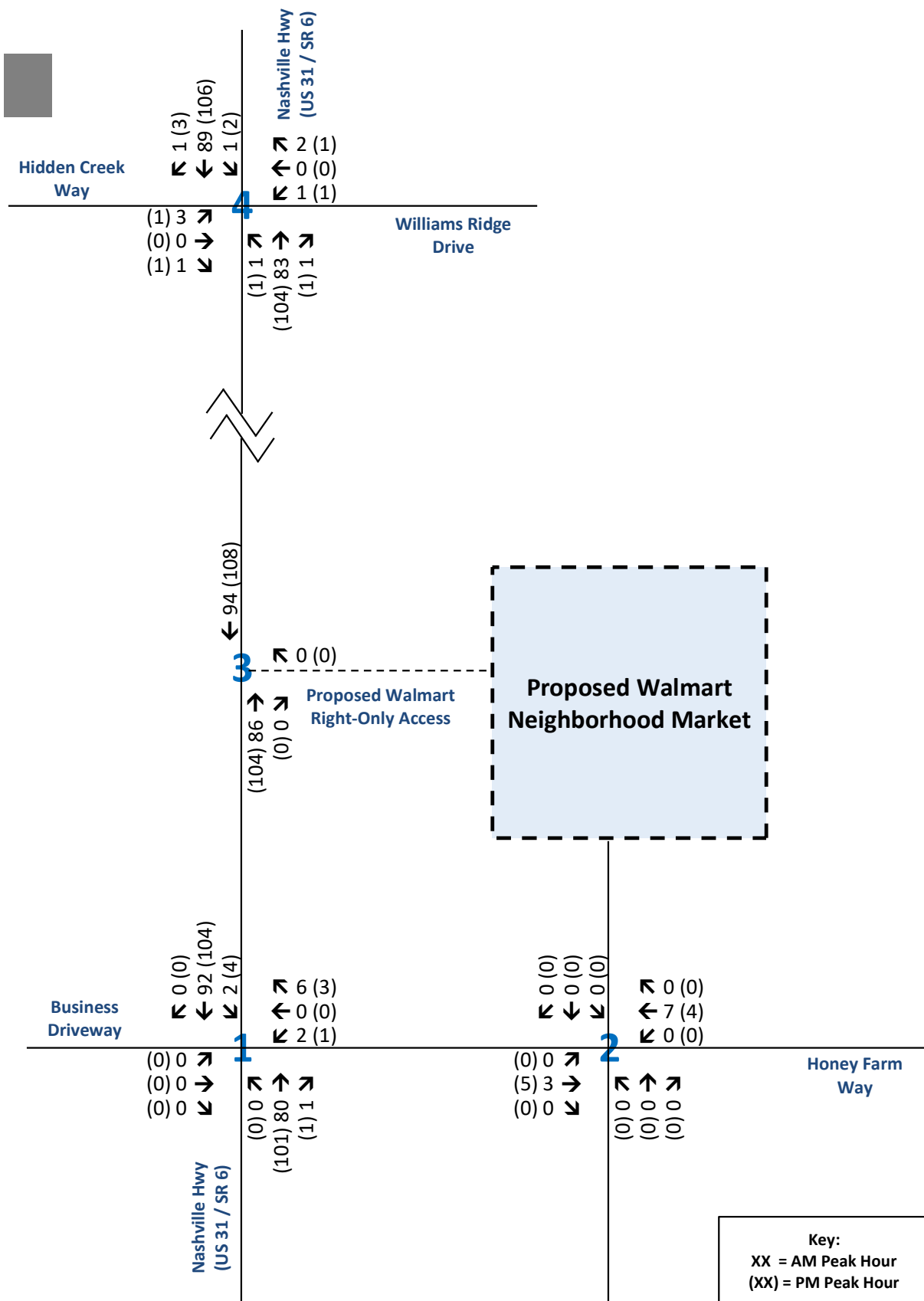
Traffic Assignment Worksheet
Background - Historical Growth Only (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





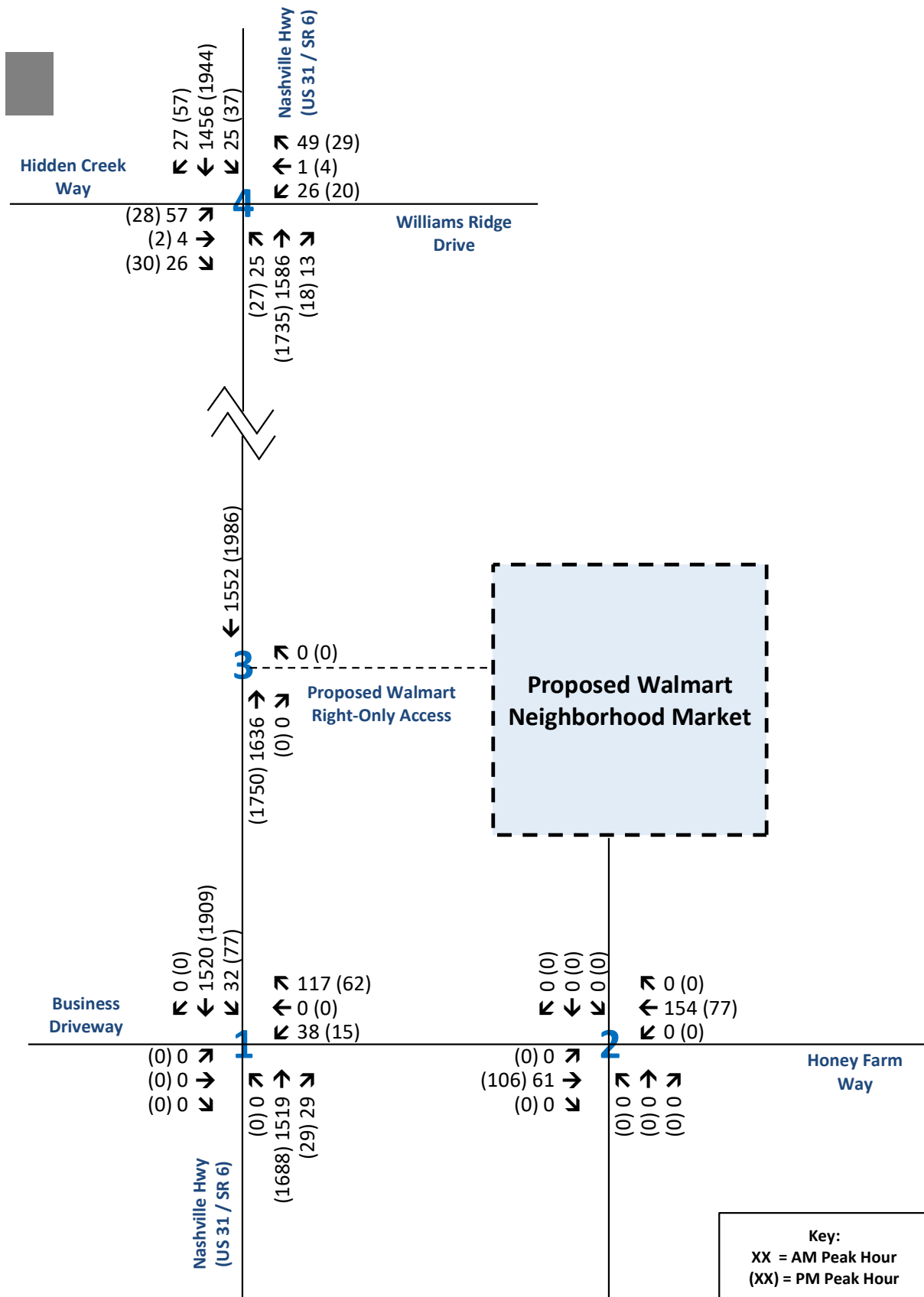
Traffic Assignment Worksheet
Off-Site Traffic Assignment - 2558 Nashville Highway
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





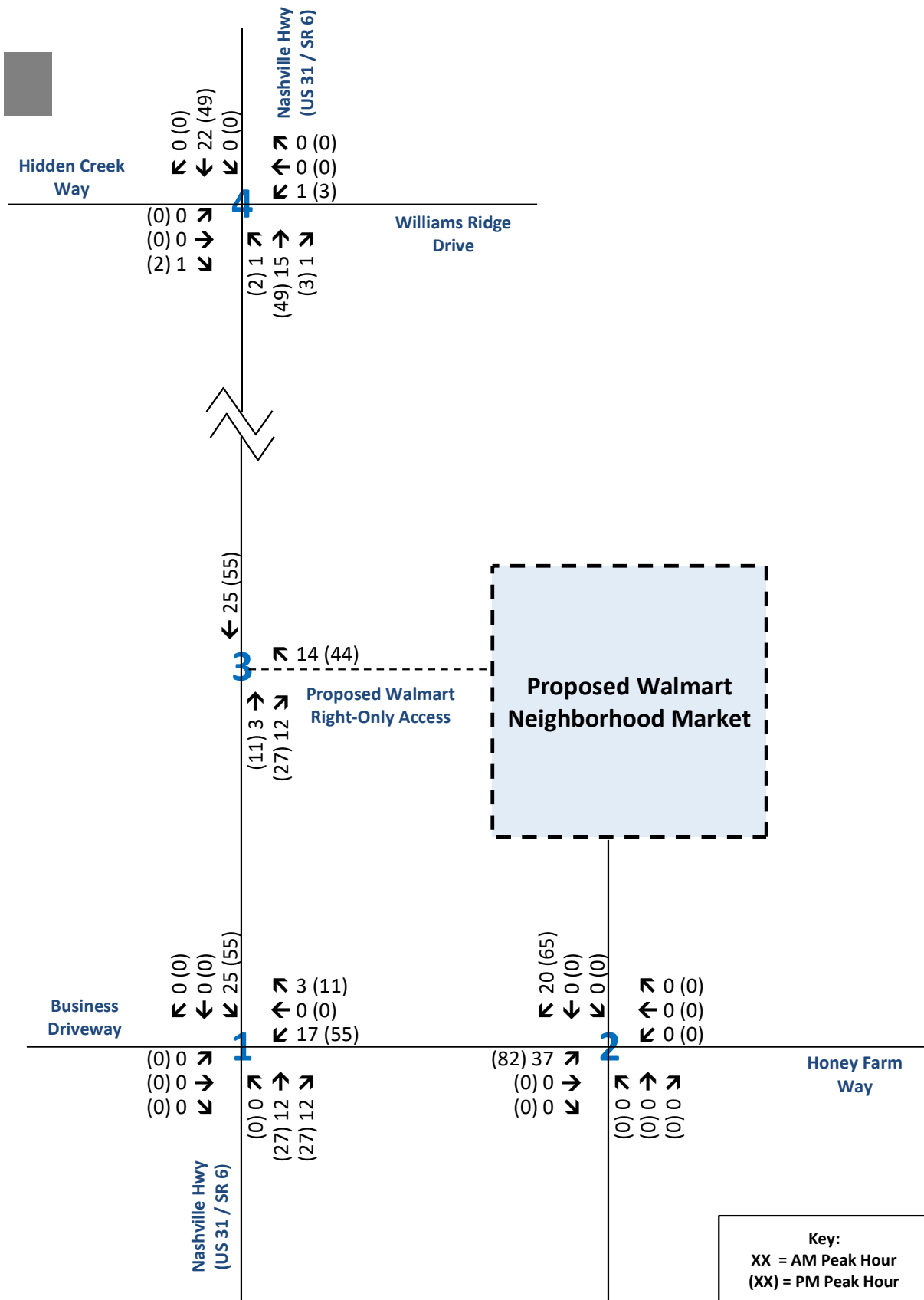
Traffic Assignment Worksheet
Background (Growth + Offsite)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Background Traffic Volumes (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





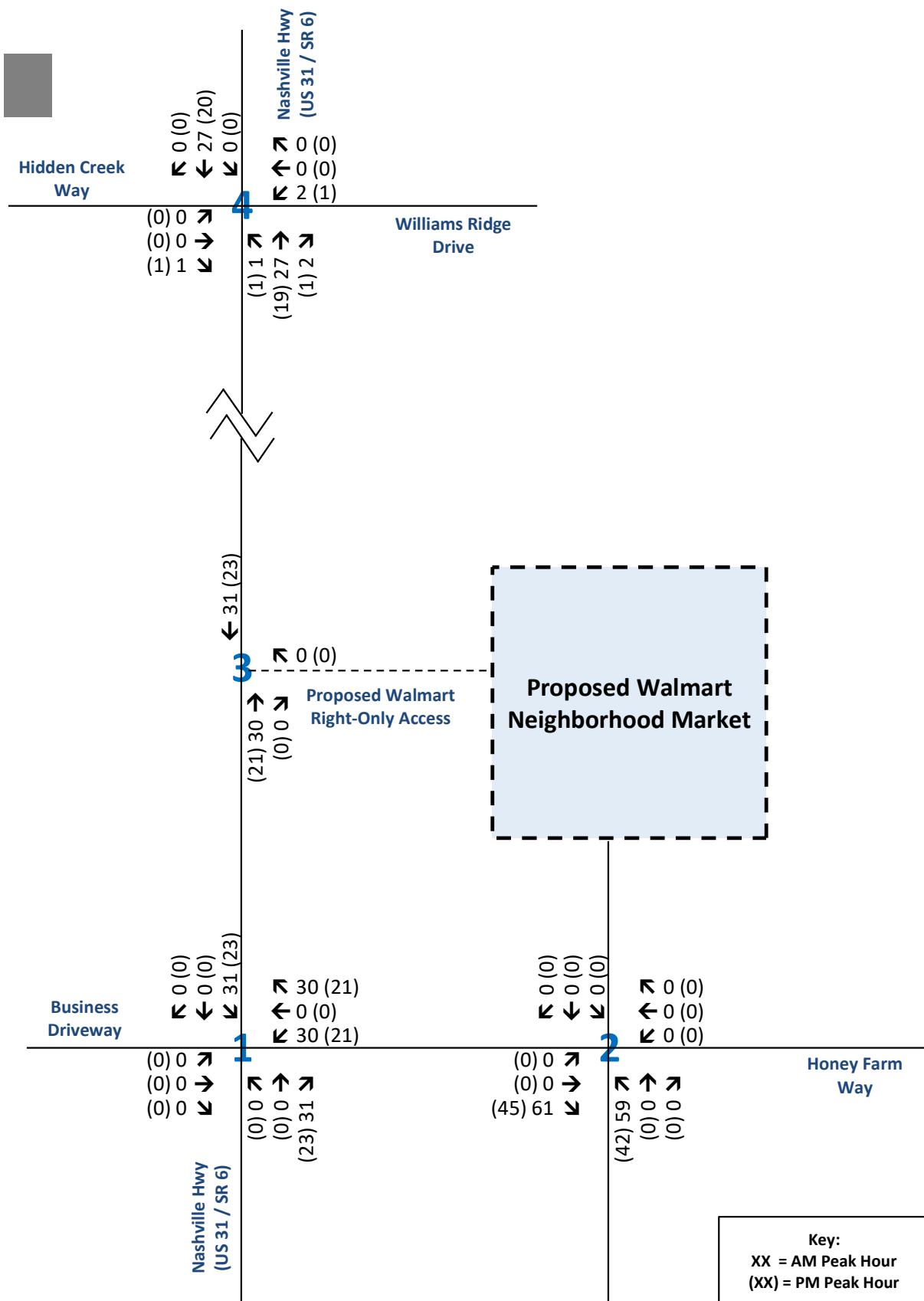
Traffic Assignment Worksheet

Primary Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





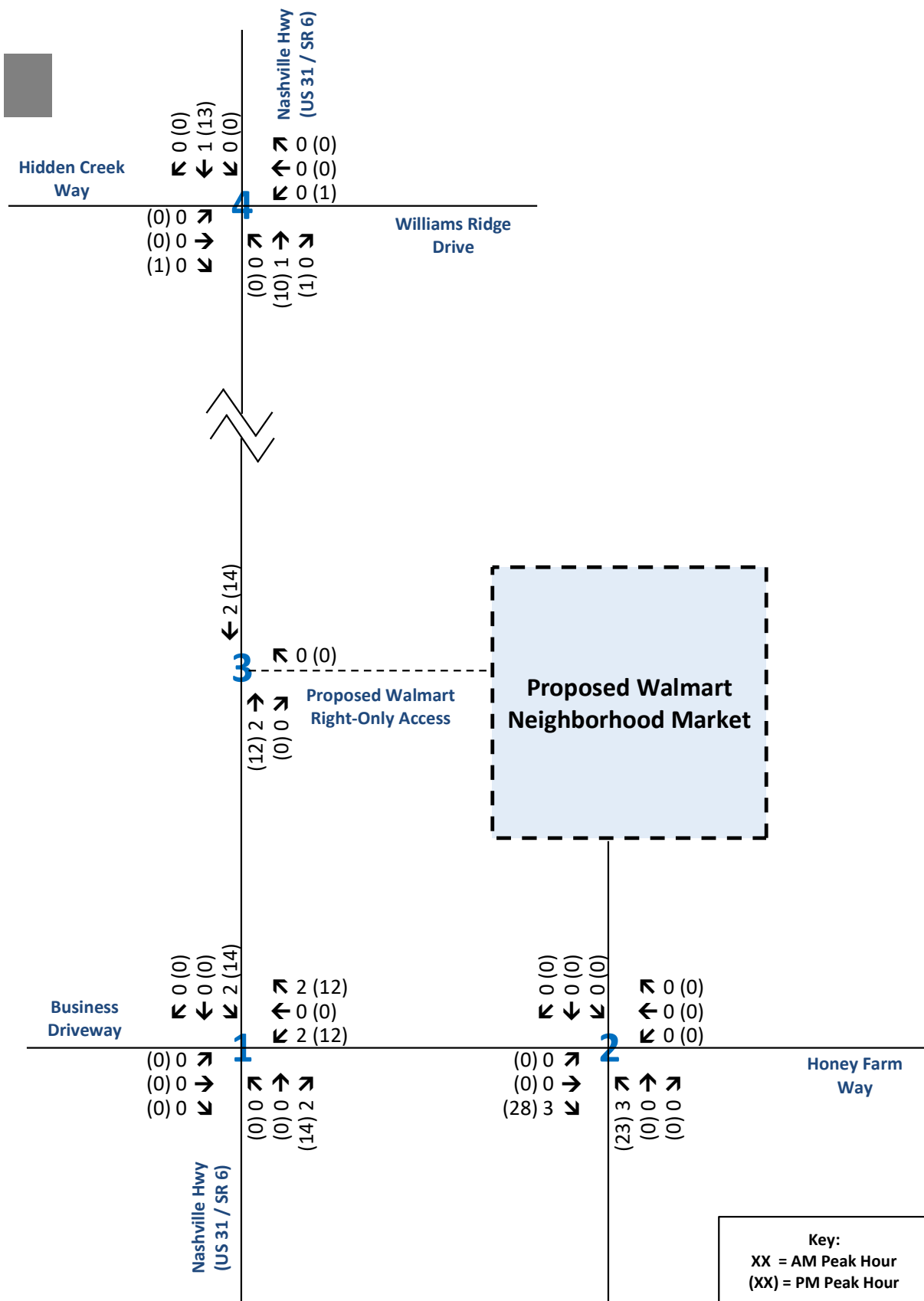
Traffic Assignment Worksheet

Primary Traffic Assignment - Fast-Food Restaurant with Drive-Through

Honey Farm - Walmart Neighborhood Market

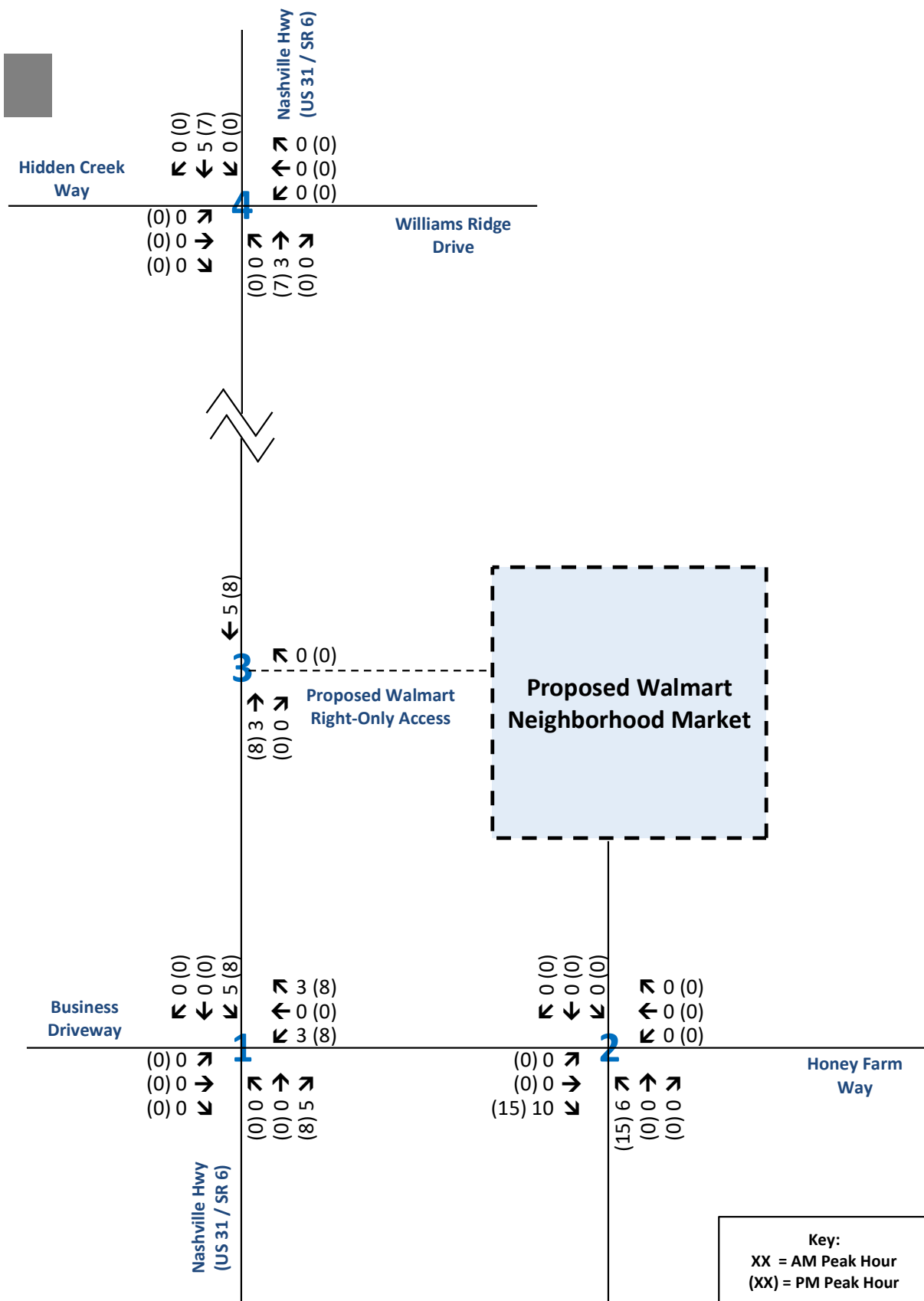
Columbia, Tennessee





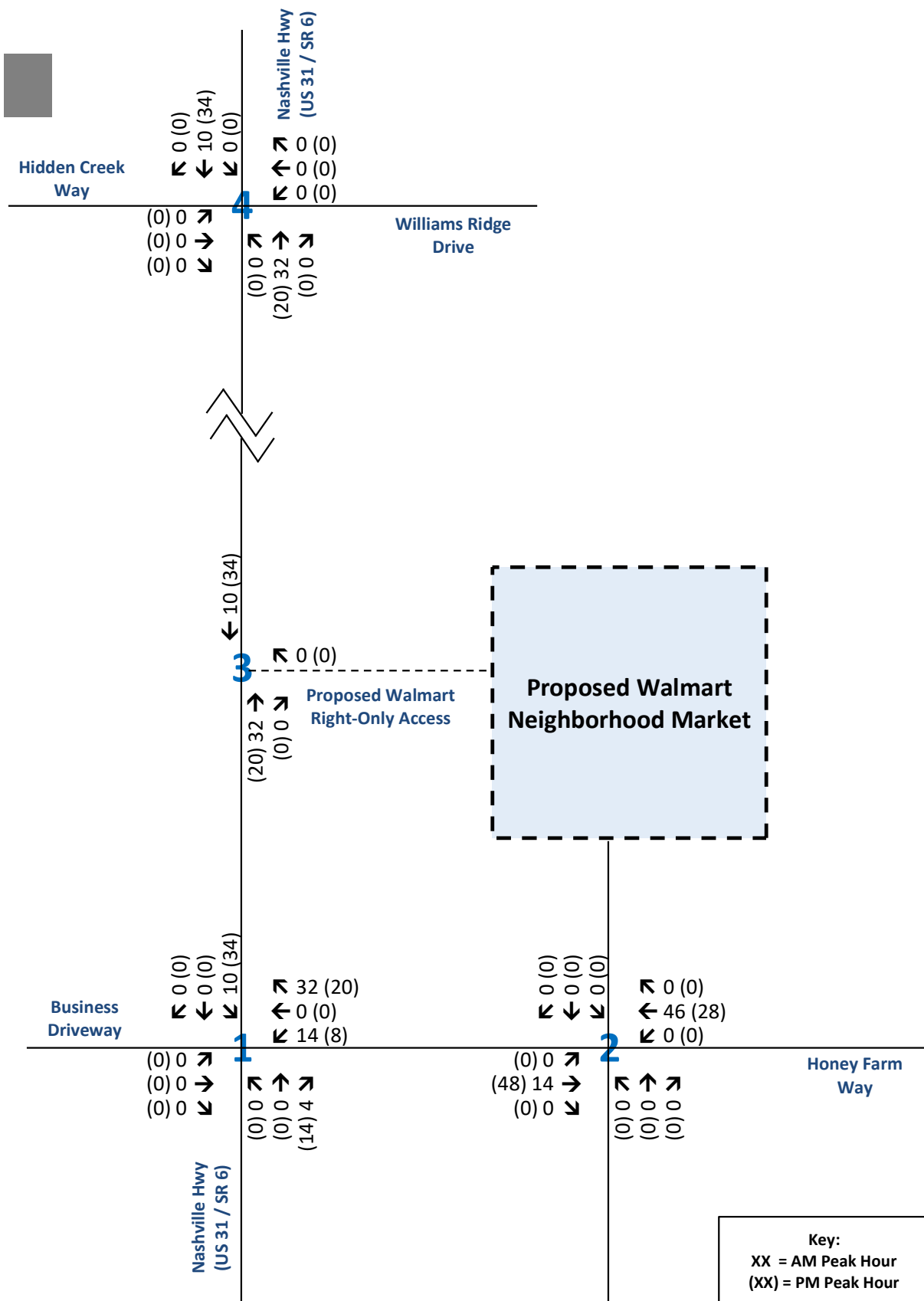
Traffic Assignment Worksheet
Primary Traffic Assignment - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





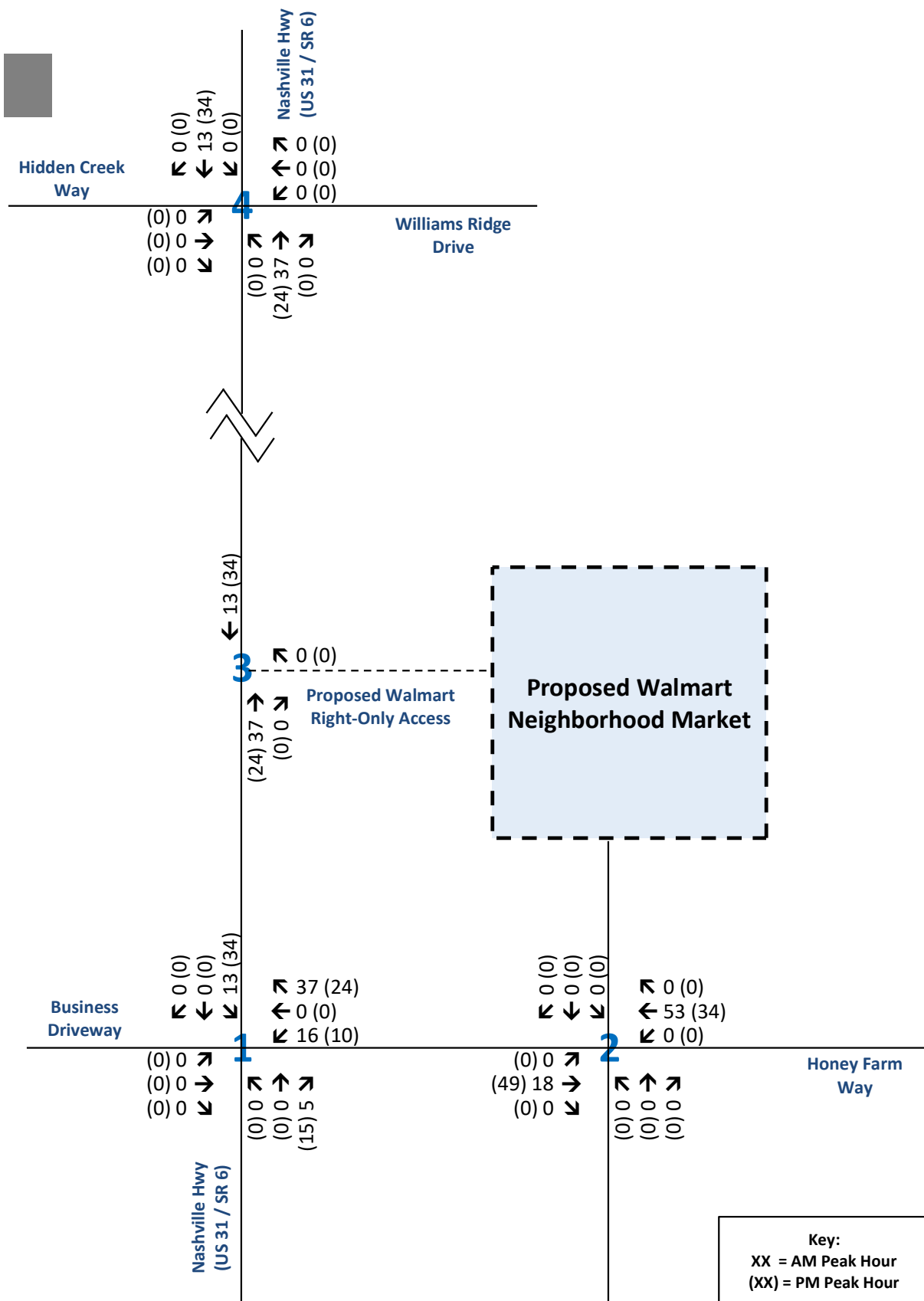
Traffic Assignment Worksheet
Primary Traffic Assignment - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





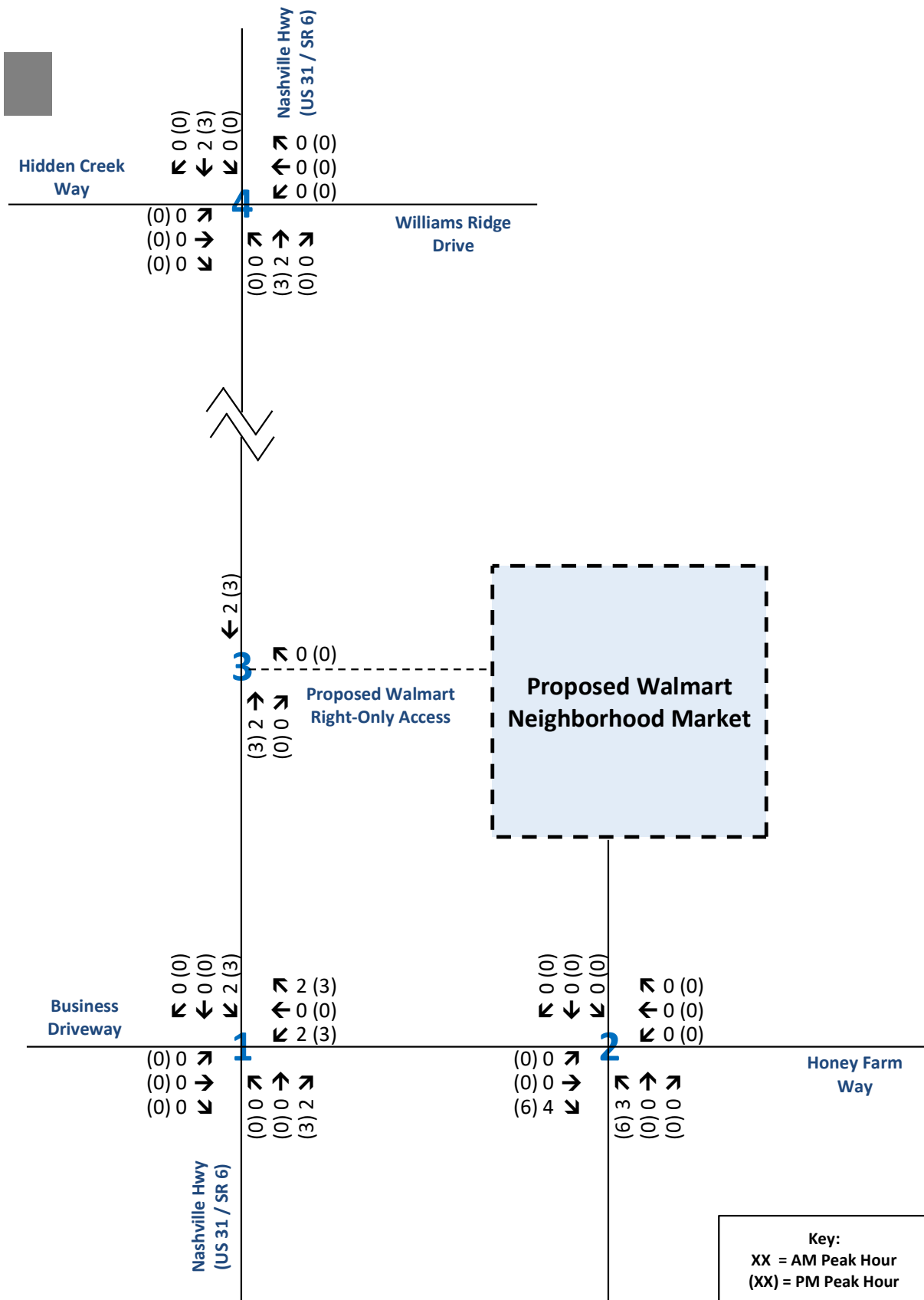
Traffic Assignment Worksheet
Primary Traffic Assignment - Multifamily Housing (Low-Rise)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





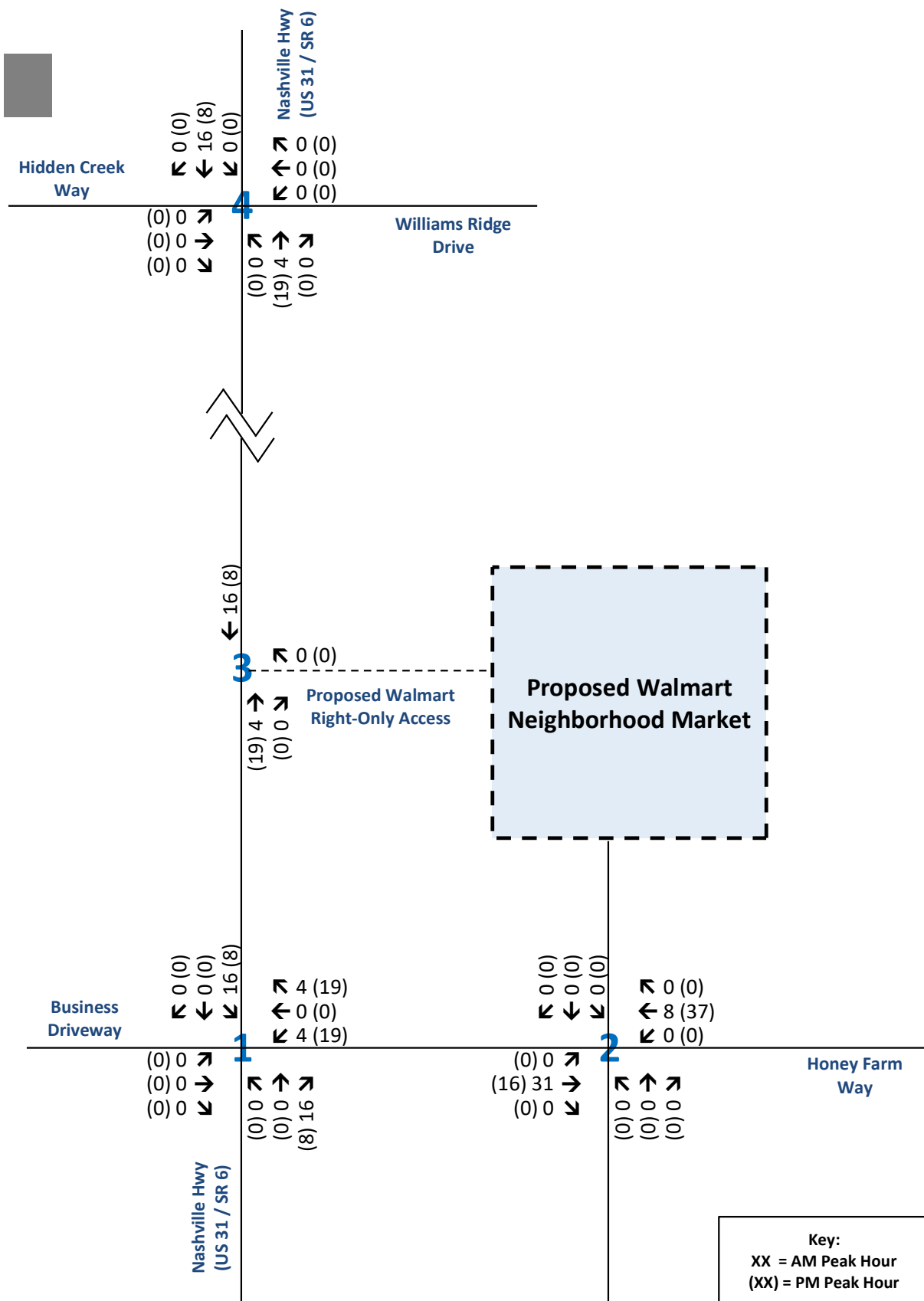
Traffic Assignment Worksheet
Primary Traffic Assignment - Townhomes
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





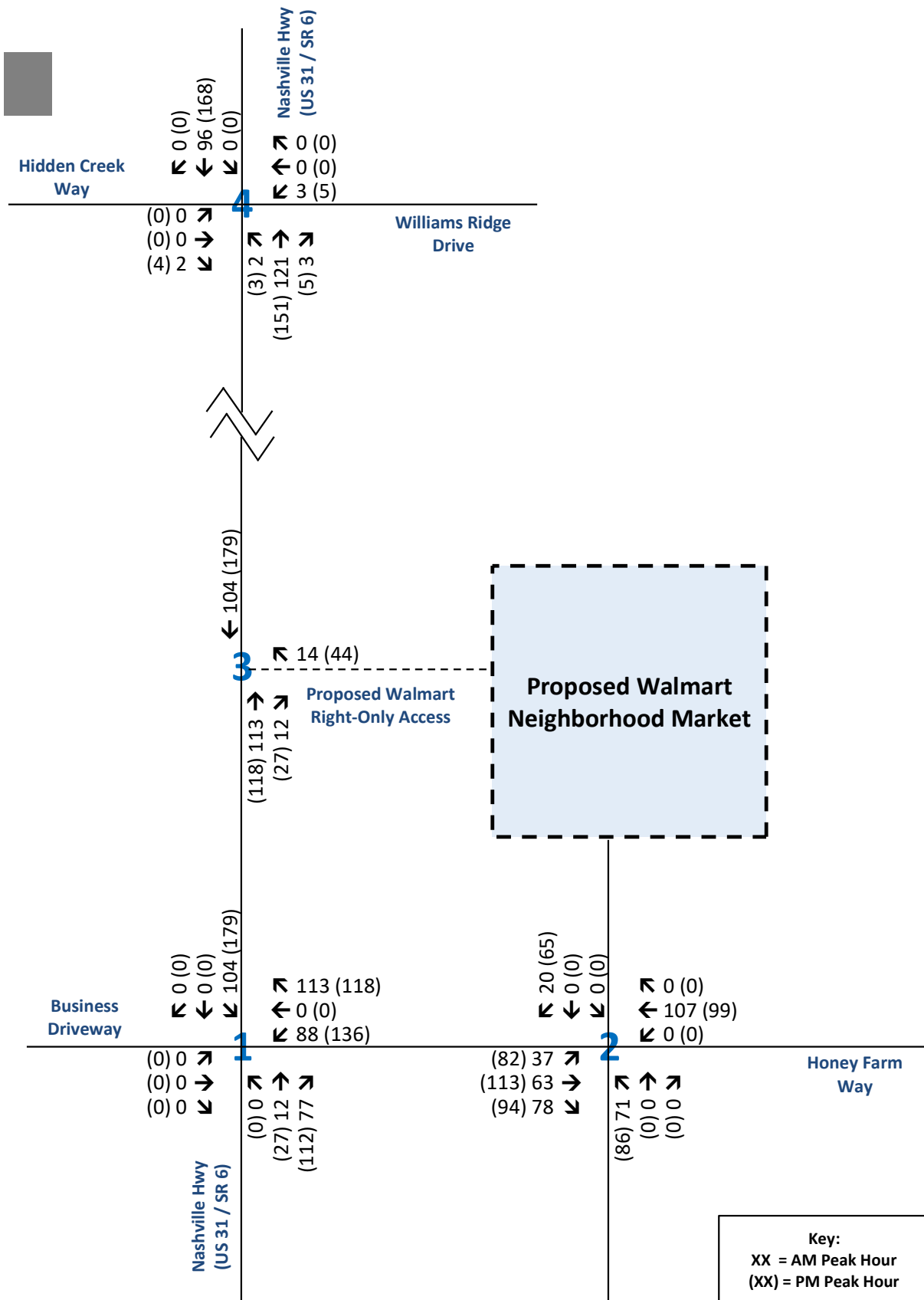
Traffic Assignment Worksheet
Primary Traffic Assignment - Mini-Warehouse
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





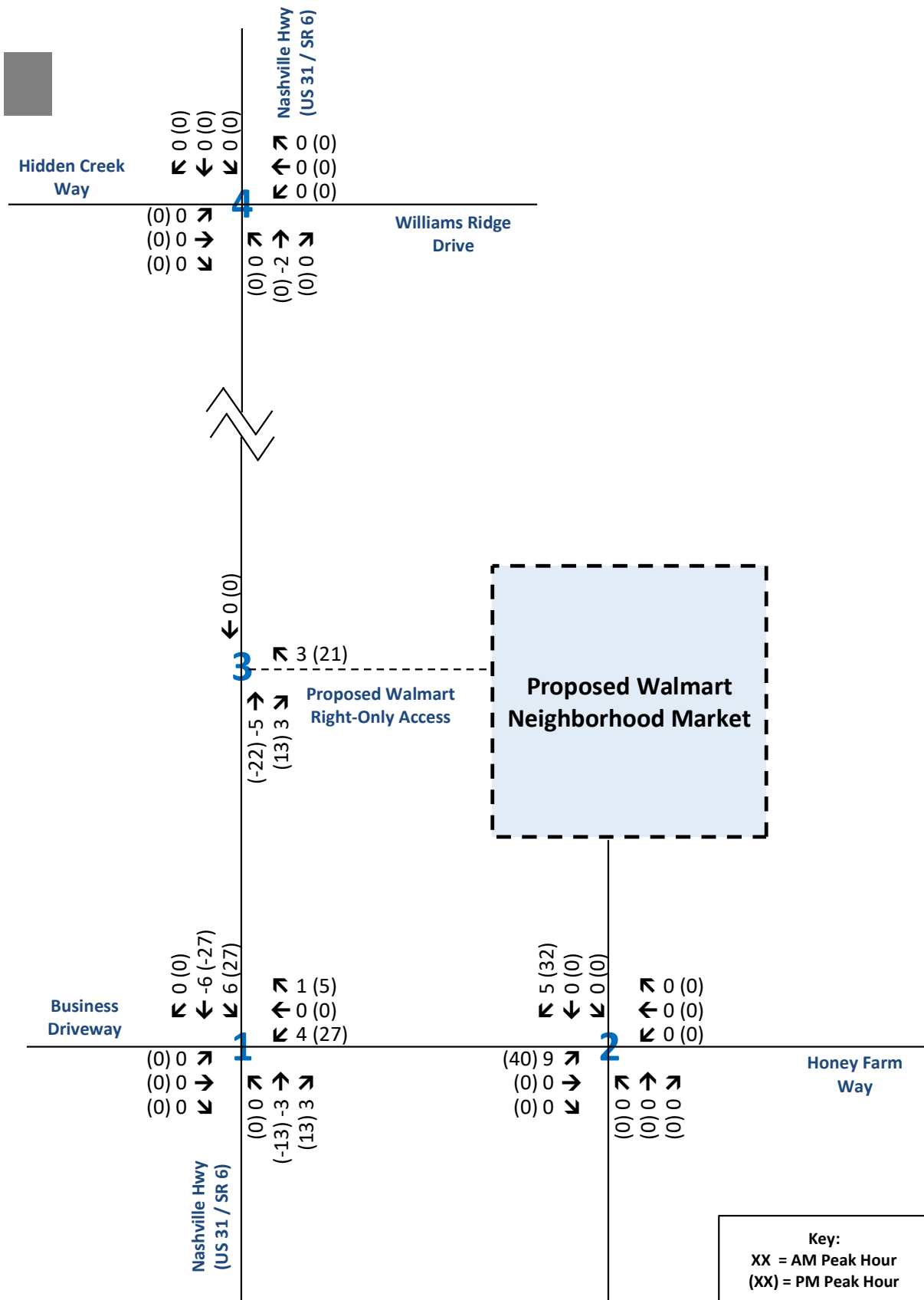
Traffic Assignment Worksheet
Primary Traffic Assignment - Health Department
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Total Primary Traffic Assignment
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





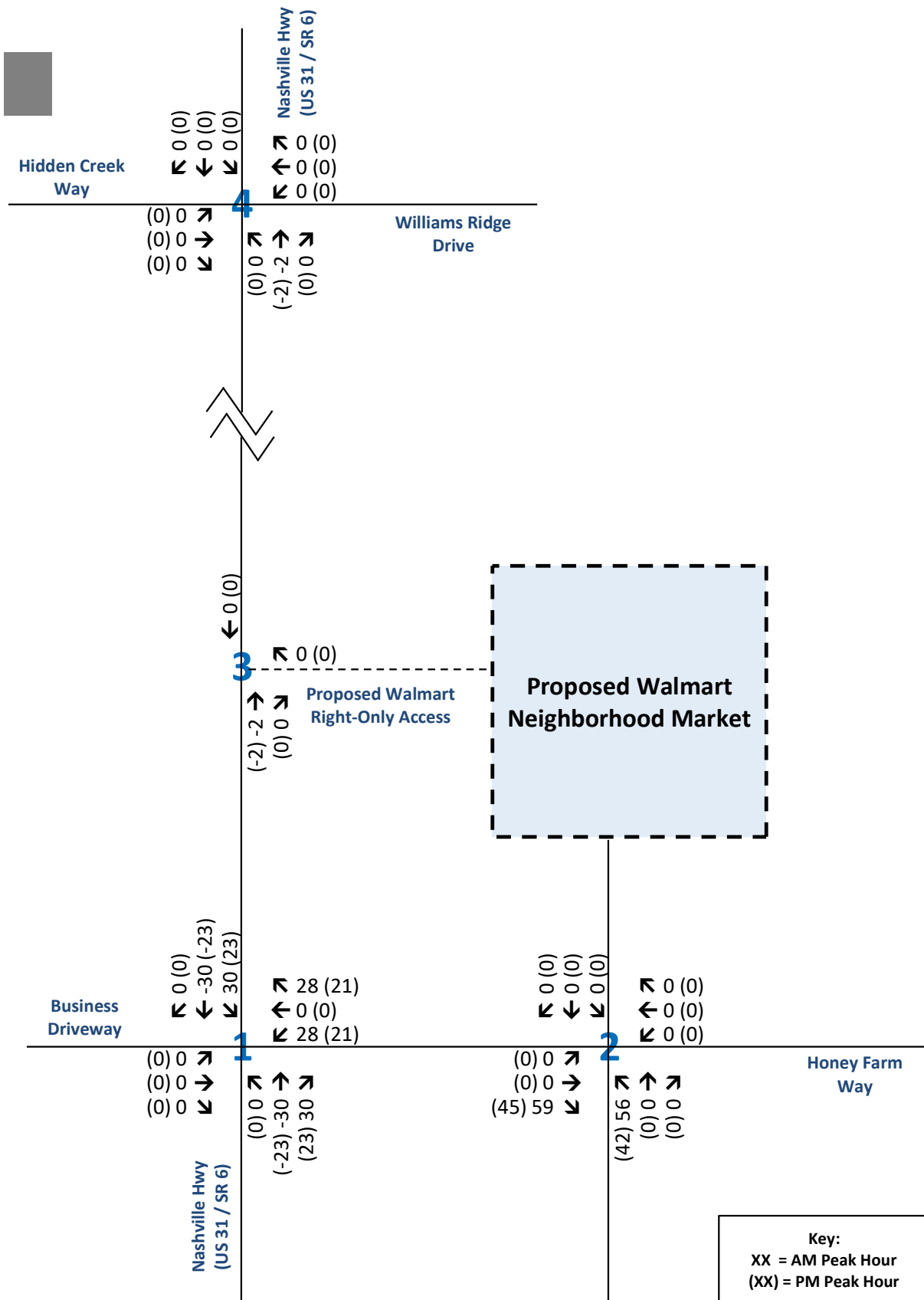
Traffic Assignment Worksheet

Pass-by Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





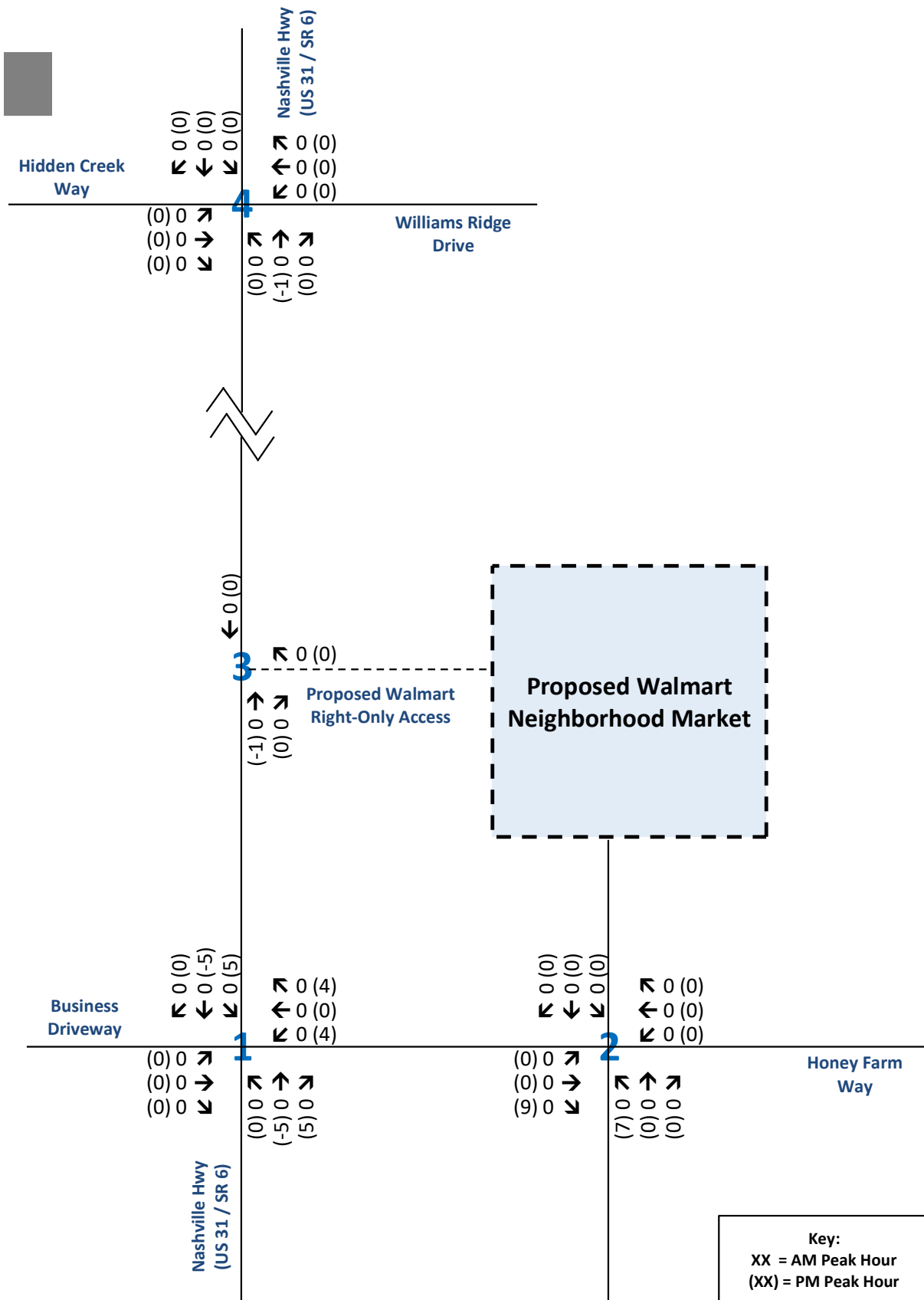
Traffic Assignment Worksheet

Pass-by Traffic Assignment - Fast-Food Restaurant with Drive-Through

Honey Farm - Walmart Neighborhood Market

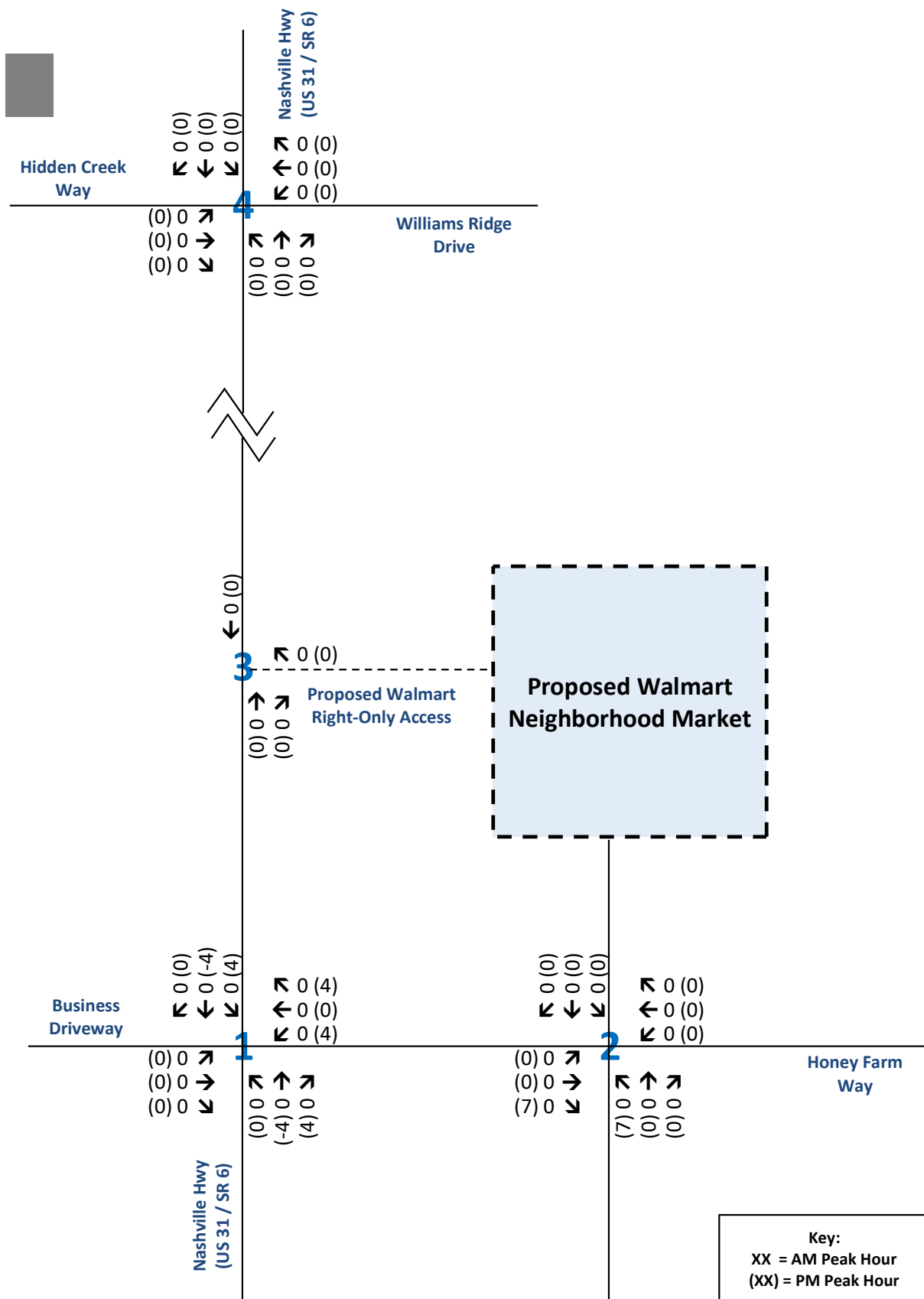
Columbia, Tennessee





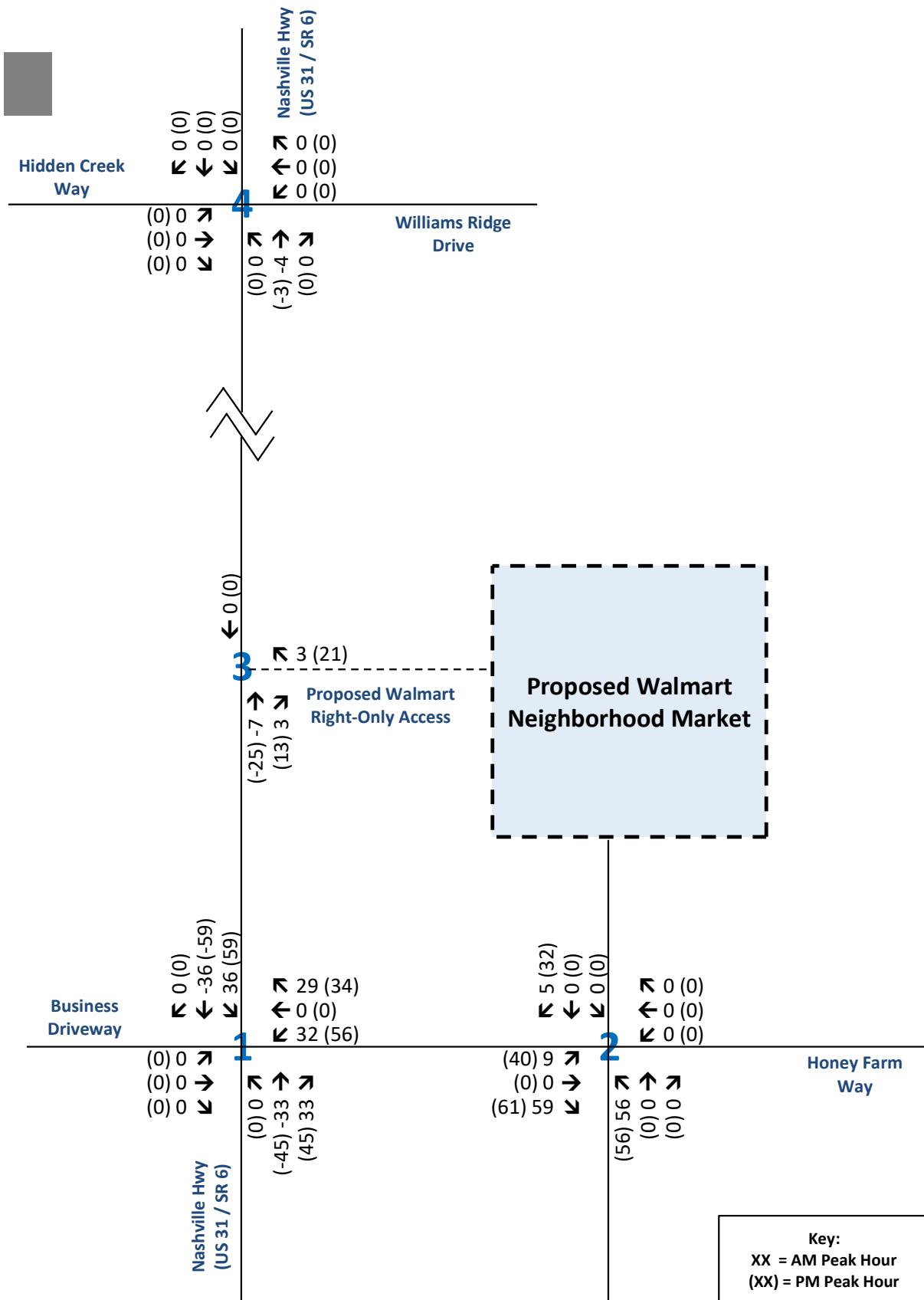
Traffic Assignment Worksheet
 Pass-by Traffic Assignment - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





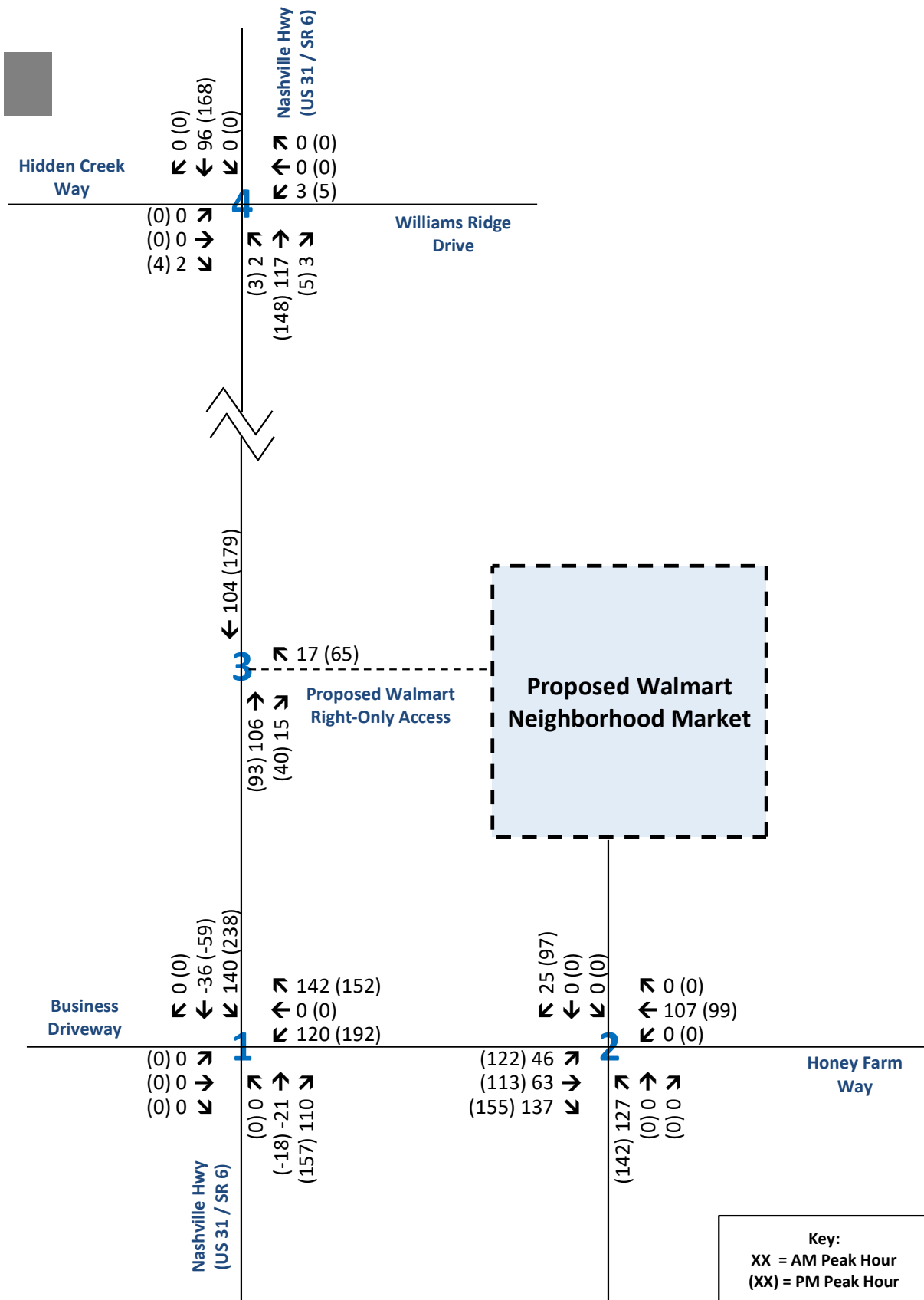
Traffic Assignment Worksheet
 Pass-by Traffic Assignment - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Total Passby Traffic Assignment
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



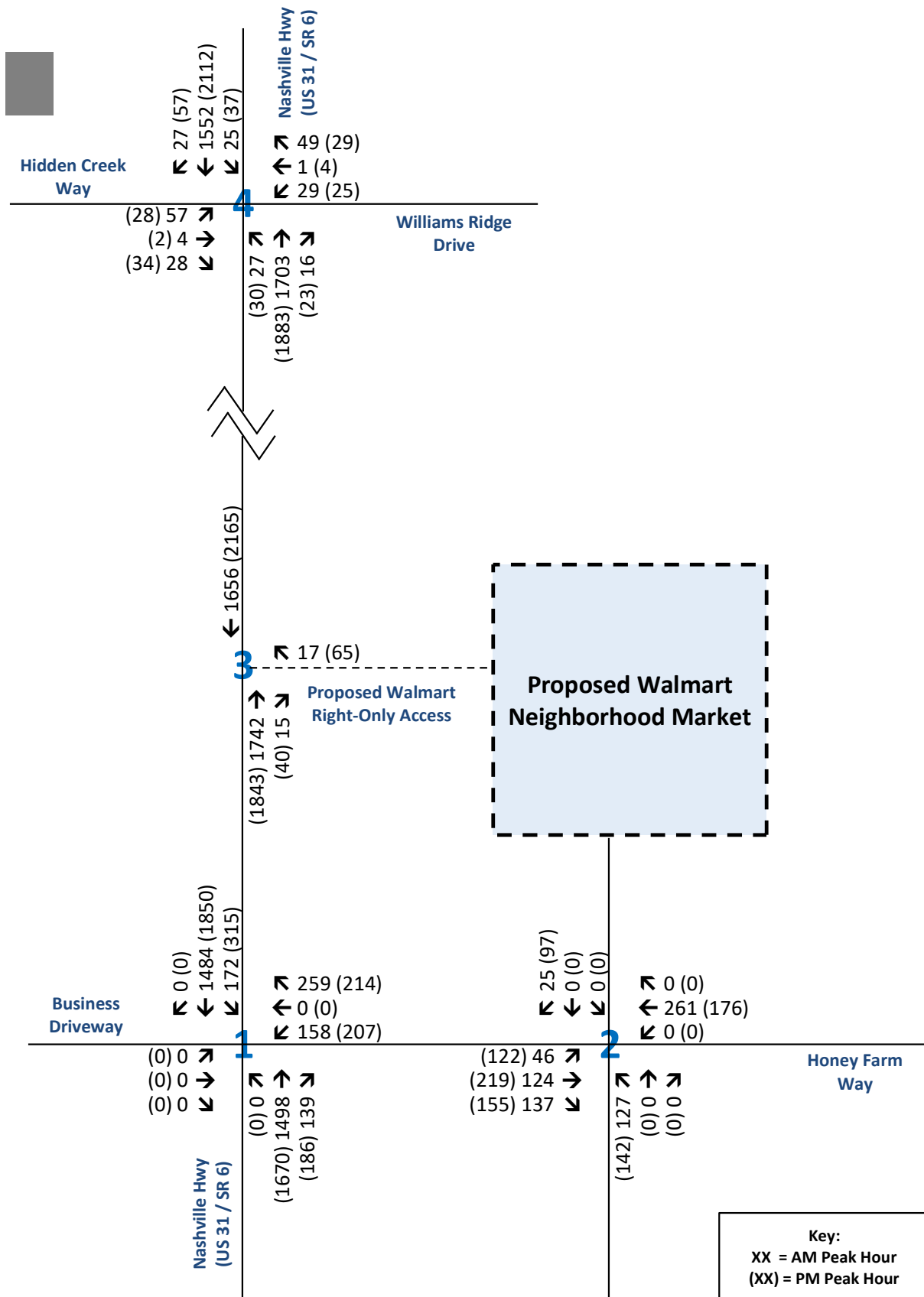


Traffic Assignment Worksheet

Site Generated Traffic

Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



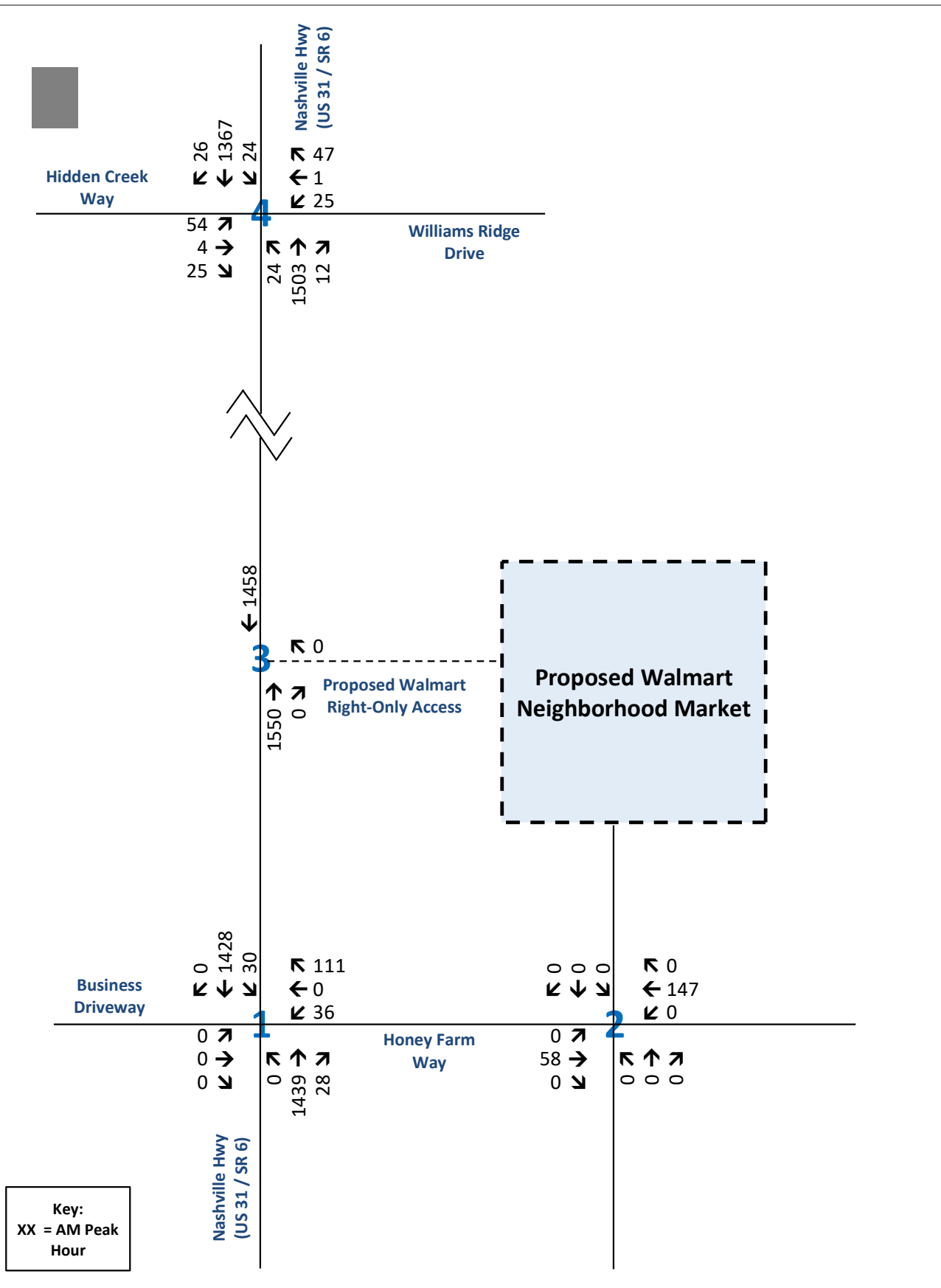


Traffic Assignment Worksheet
Total Projected Traffic at Buildout (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



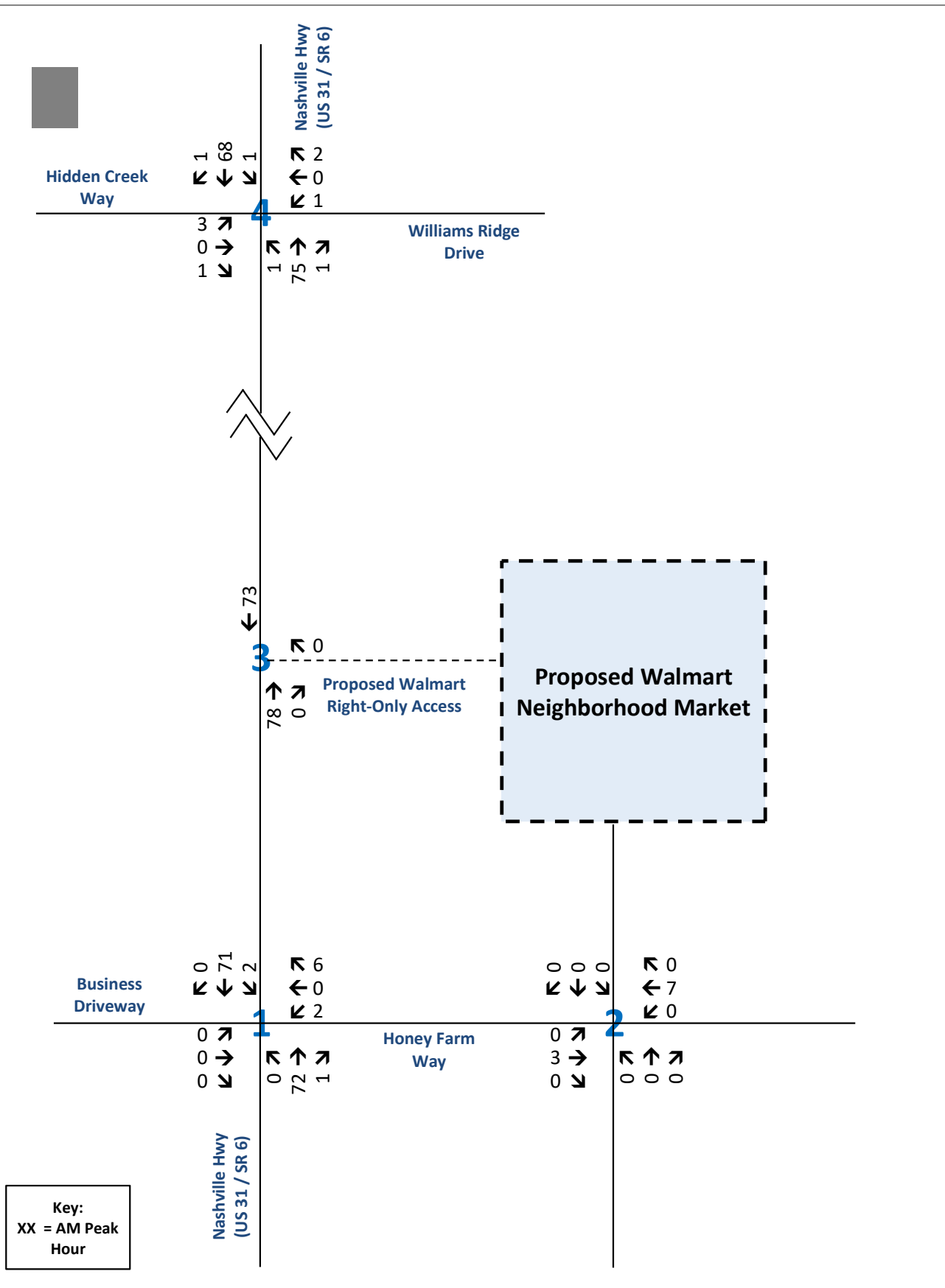
TRAFFIC ASSIGNMENT WORKSHEETS

AM PEAK HOUR



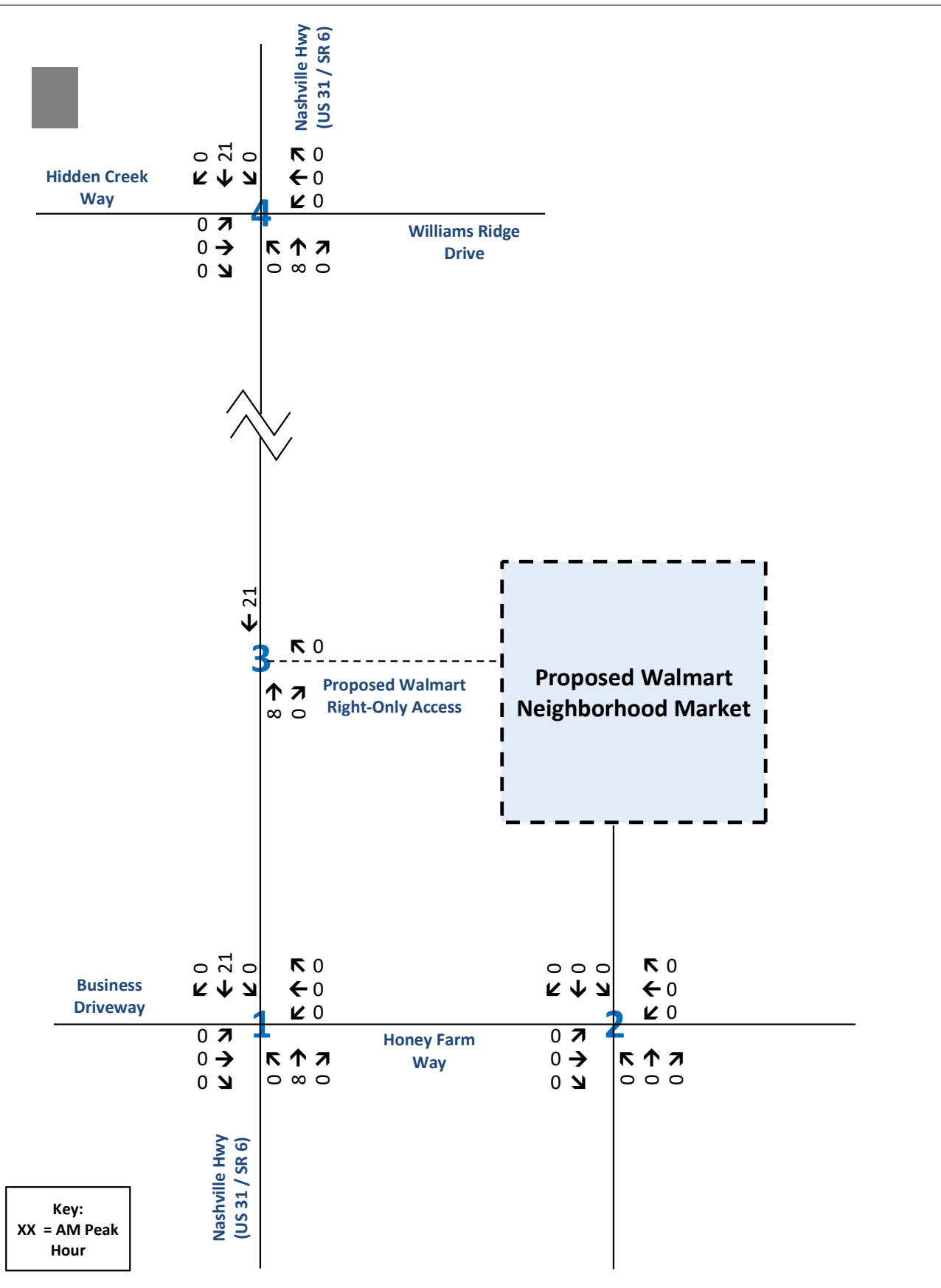
Traffic Assignment Worksheet
Existing Traffic Volumes (2024)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





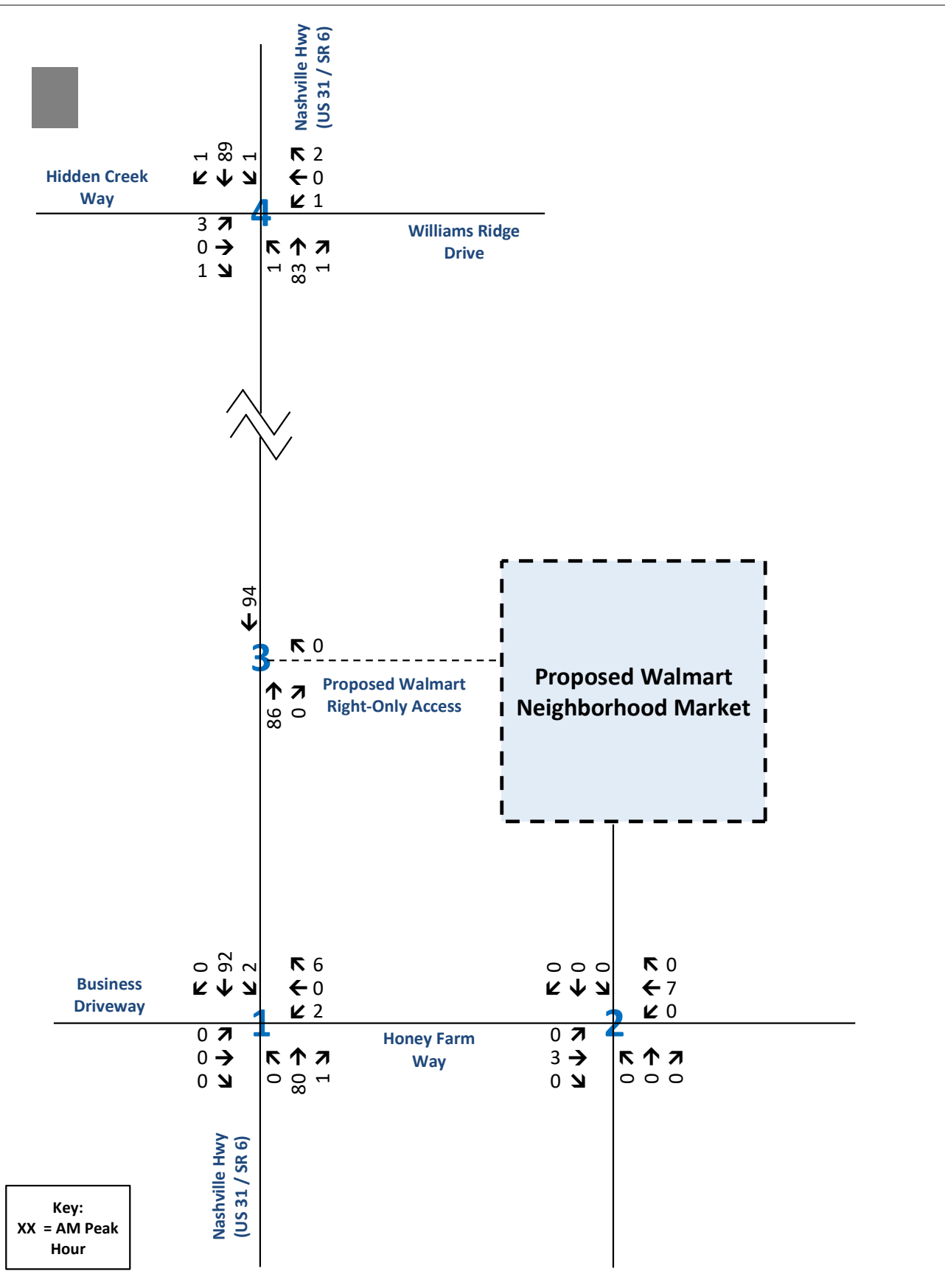
Traffic Assignment Worksheet
Background - Historical Growth Only (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





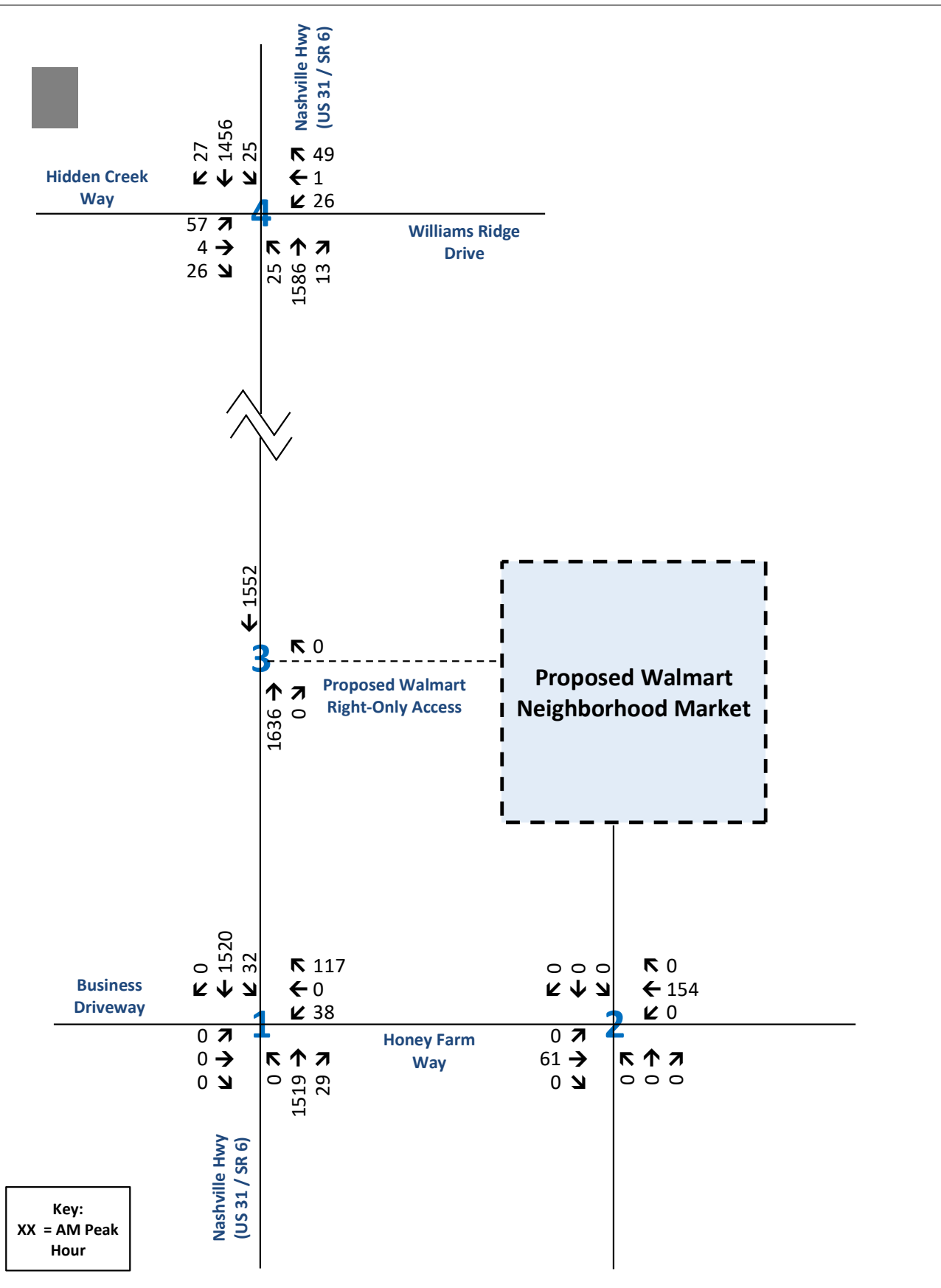
Traffic Assignment Worksheet
Off-Site Traffic Assignment - 2558 Nashville Highway
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





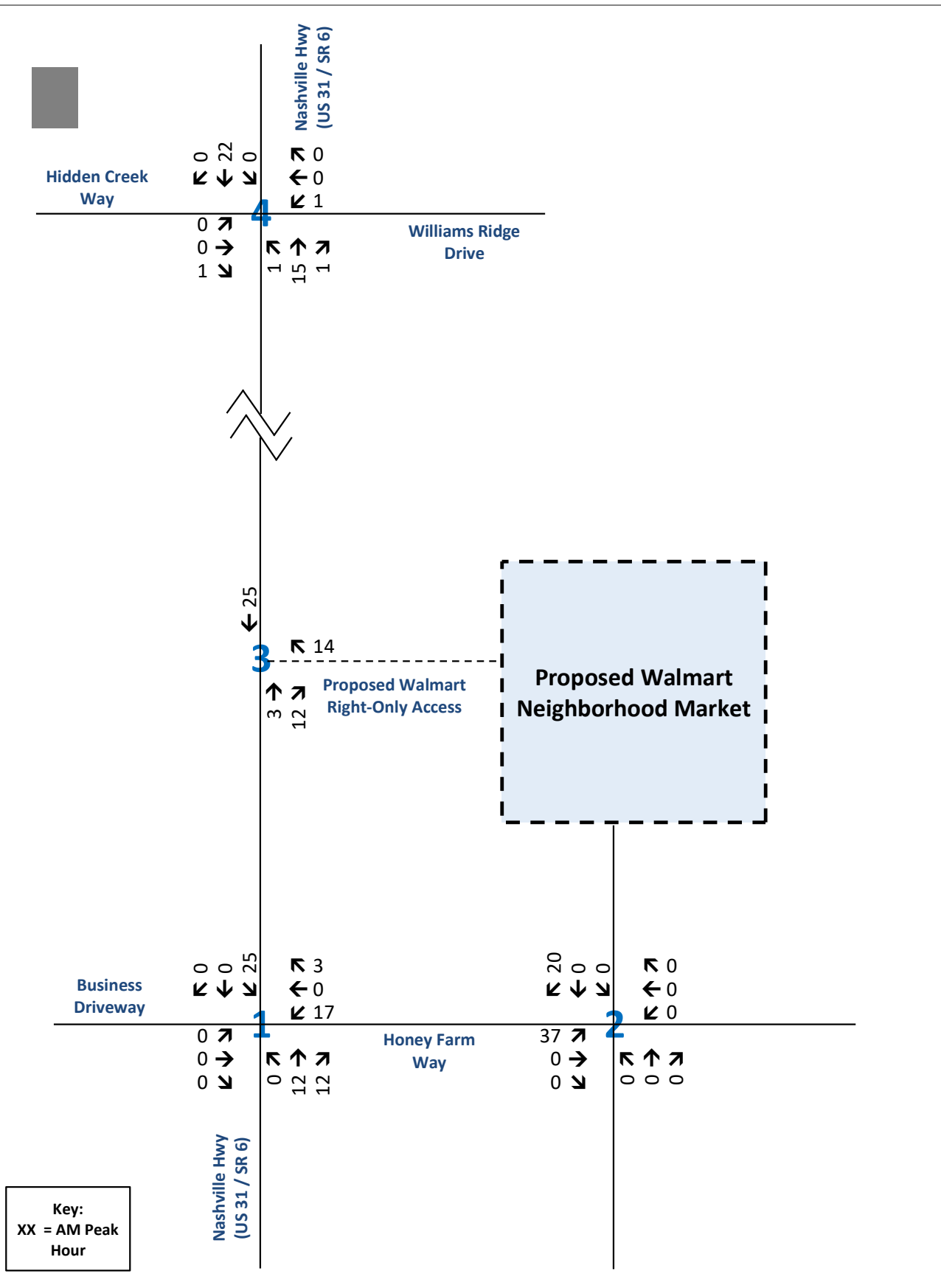
Traffic Assignment Worksheet
Background (Growth + Offsite)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





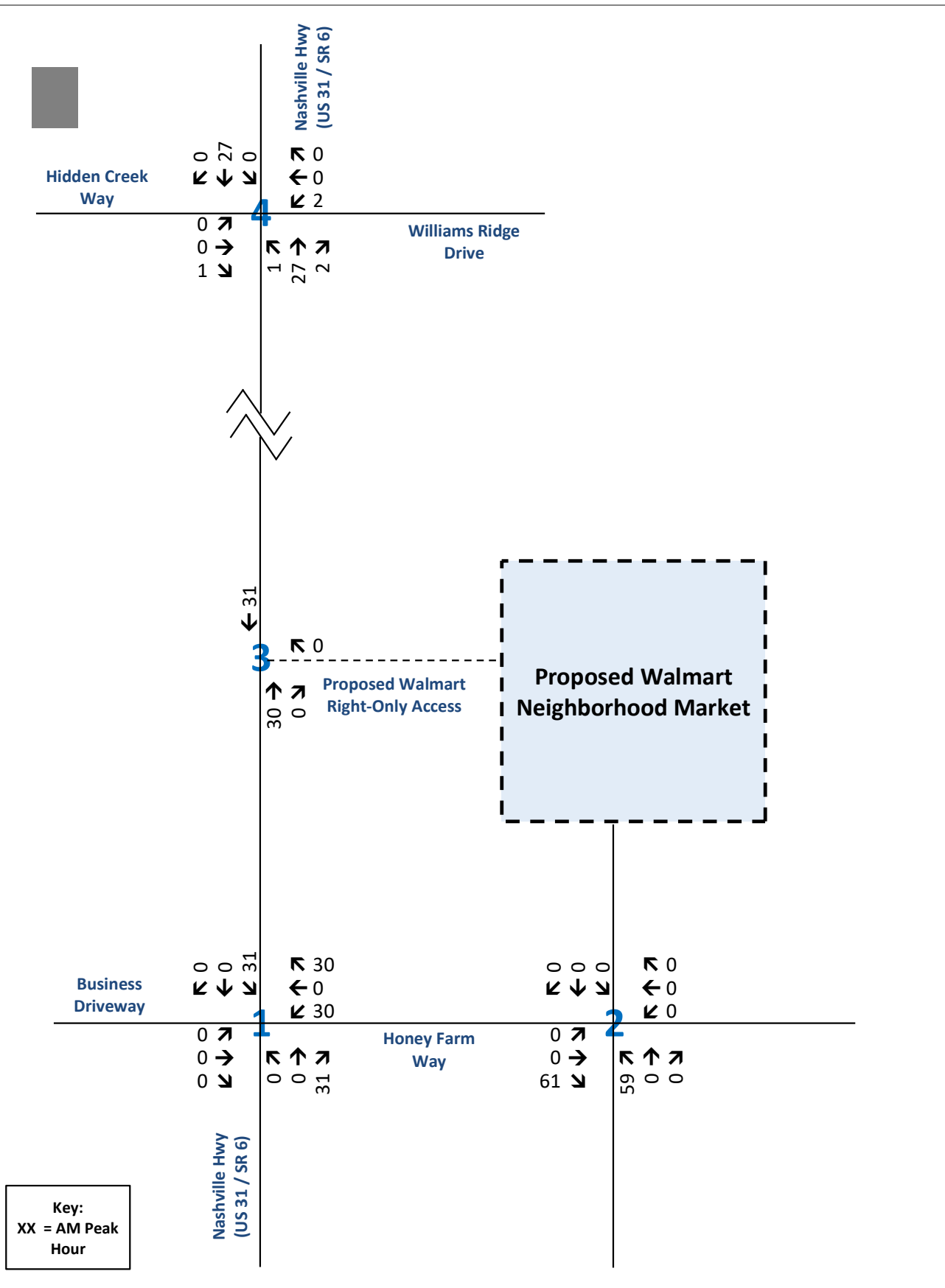
Traffic Assignment Worksheet
Background Traffic Volumes (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





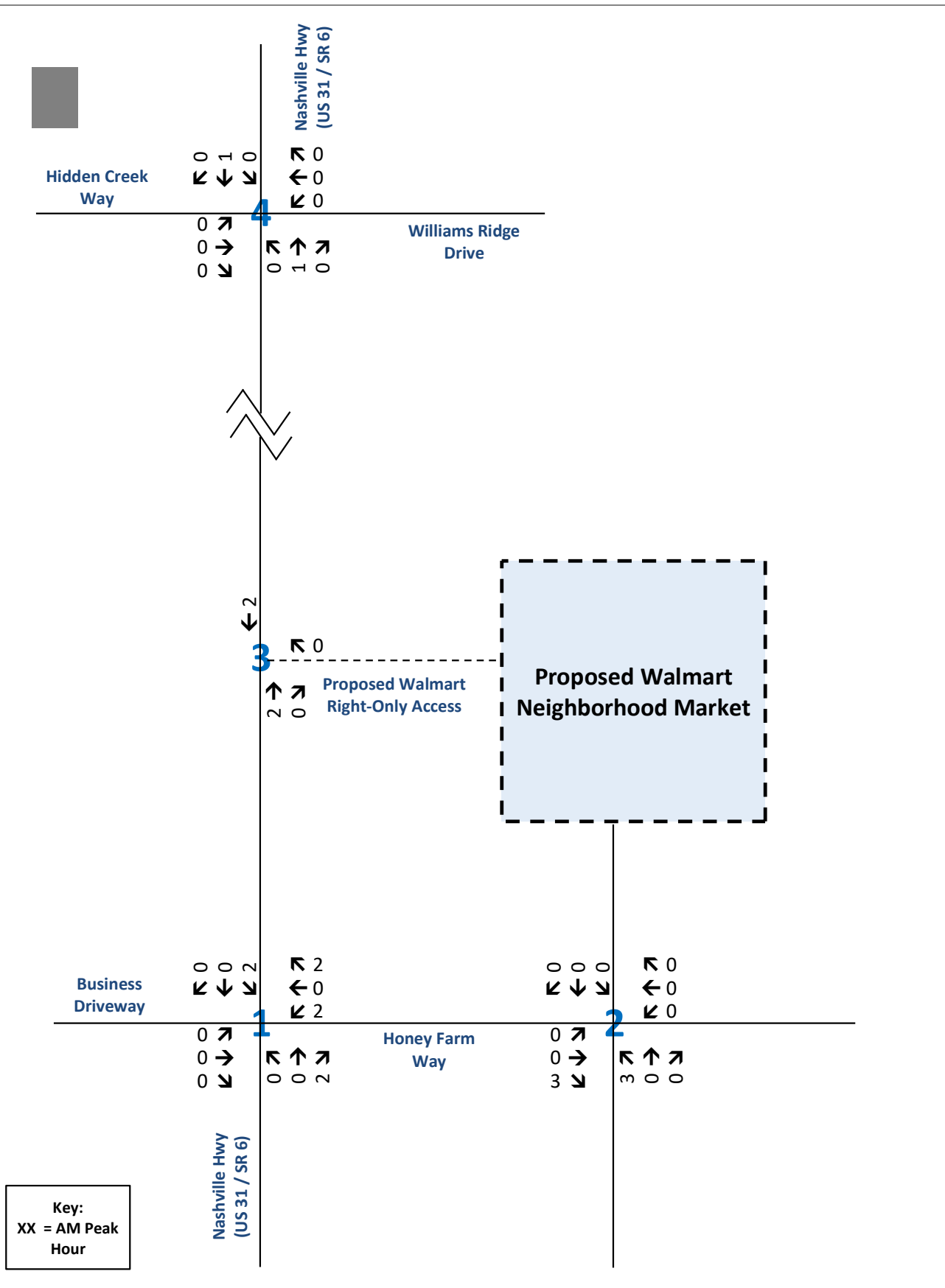
Traffic Assignment Worksheet
Primary Traffic Assignment - Grocery Store (Walmart Neighborhood Market)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





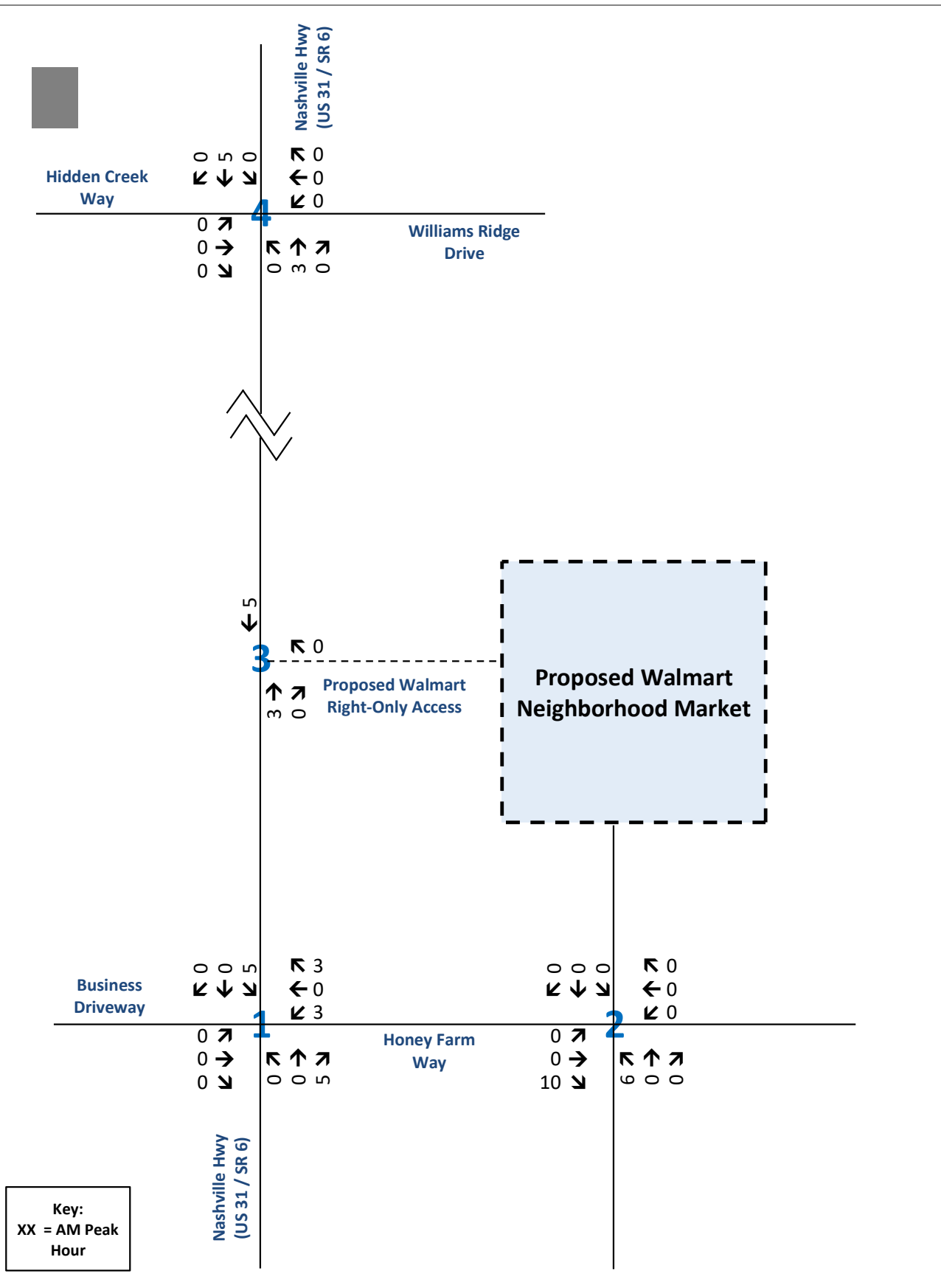
Traffic Assignment Worksheet
Primary Traffic Assignment - Fast-Food Restaurant with Drive-Through
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





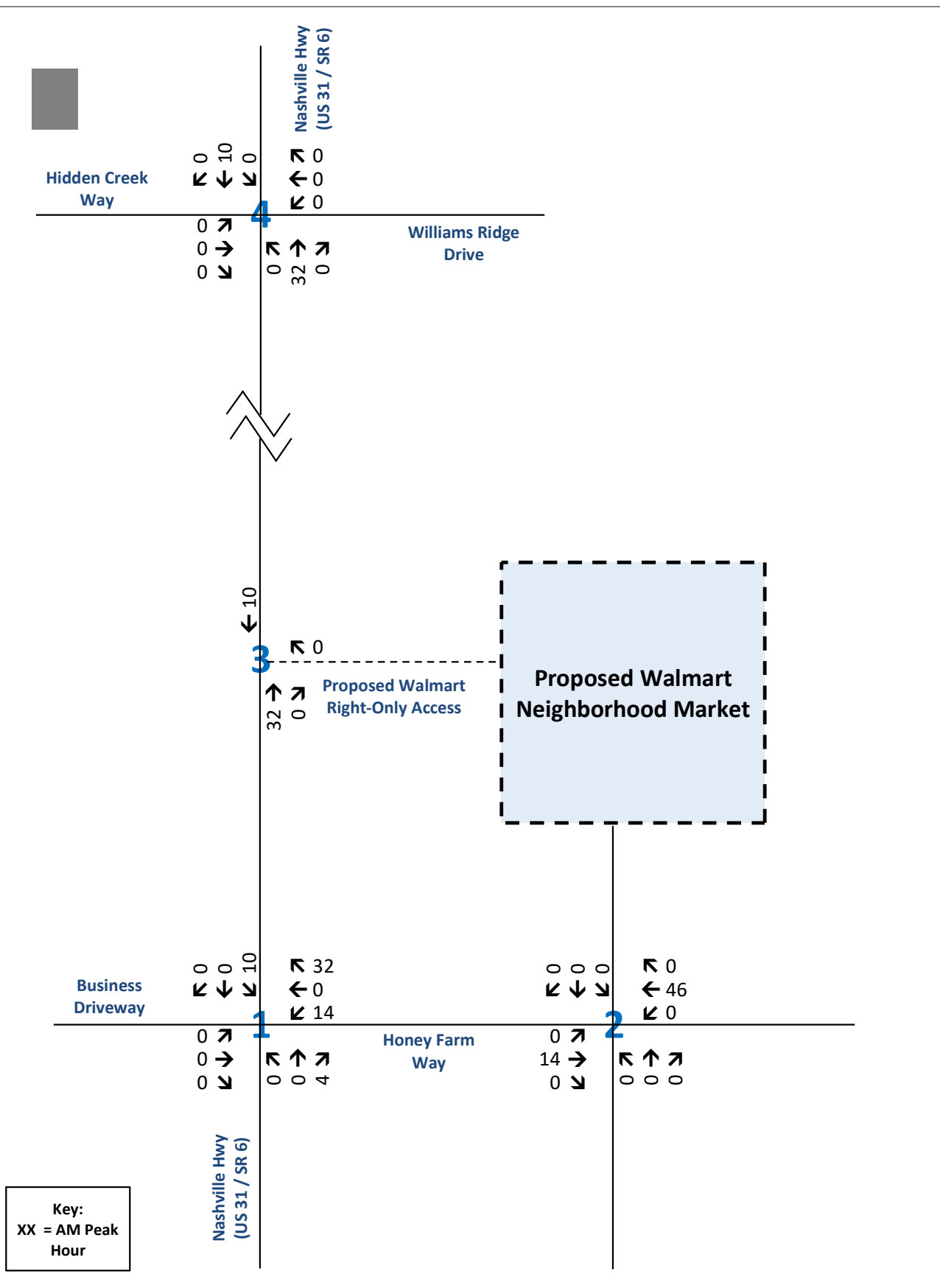
Traffic Assignment Worksheet
Primary Traffic Assignment - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





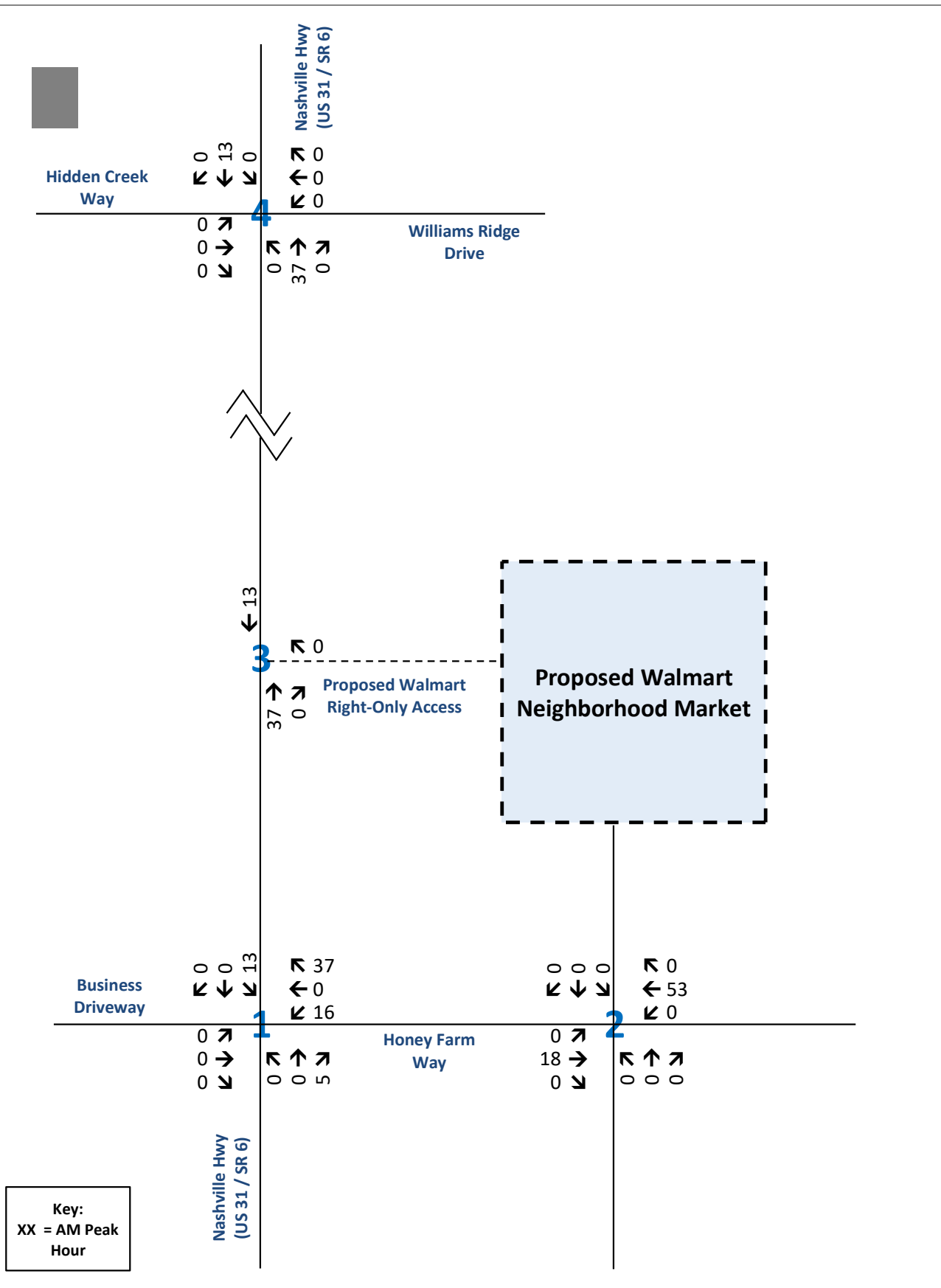
Traffic Assignment Worksheet
Primary Traffic Assignment - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





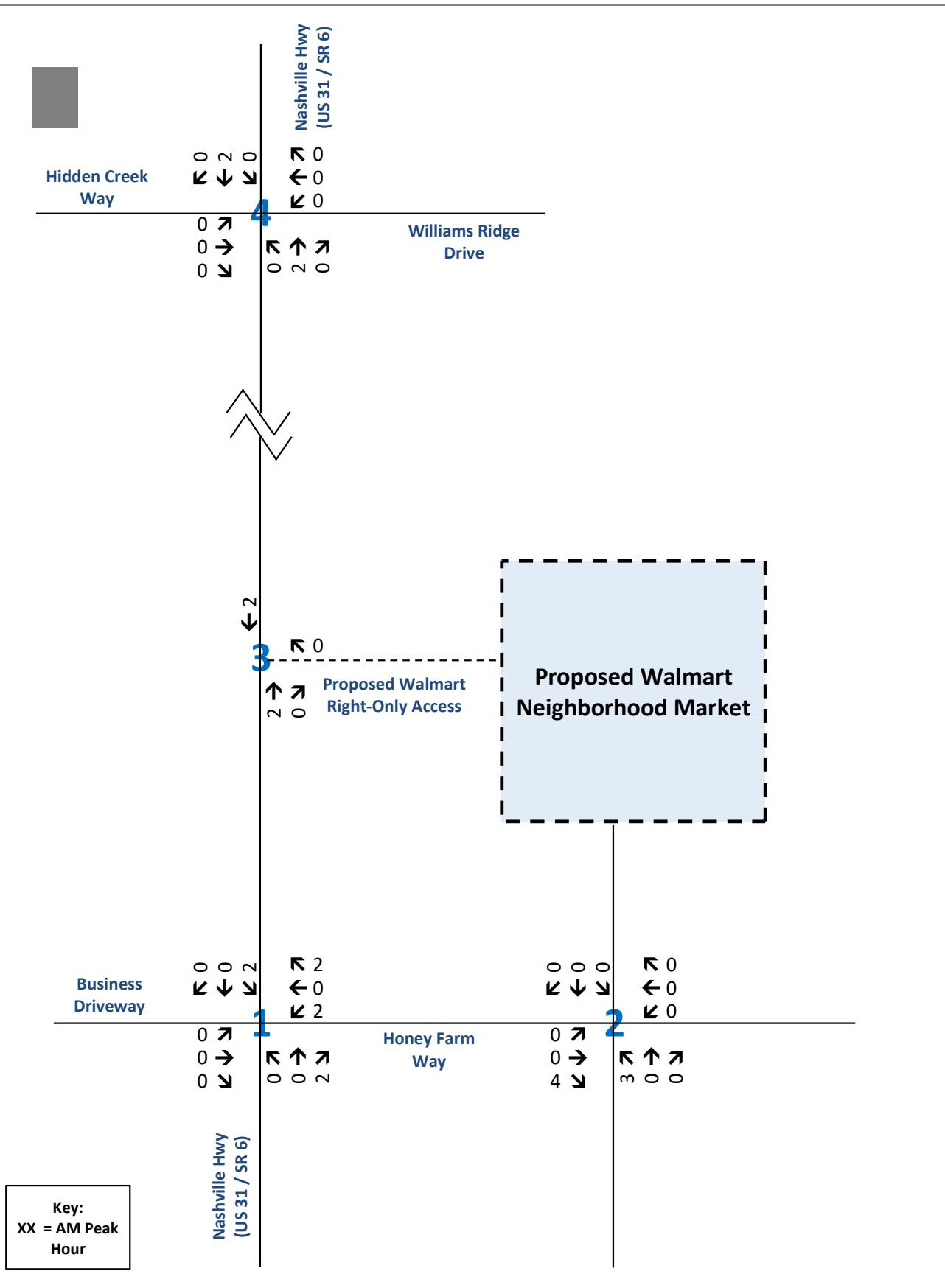
Traffic Assignment Worksheet
Primary Traffic Assignment - Multifamily Housing (Low-Rise)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





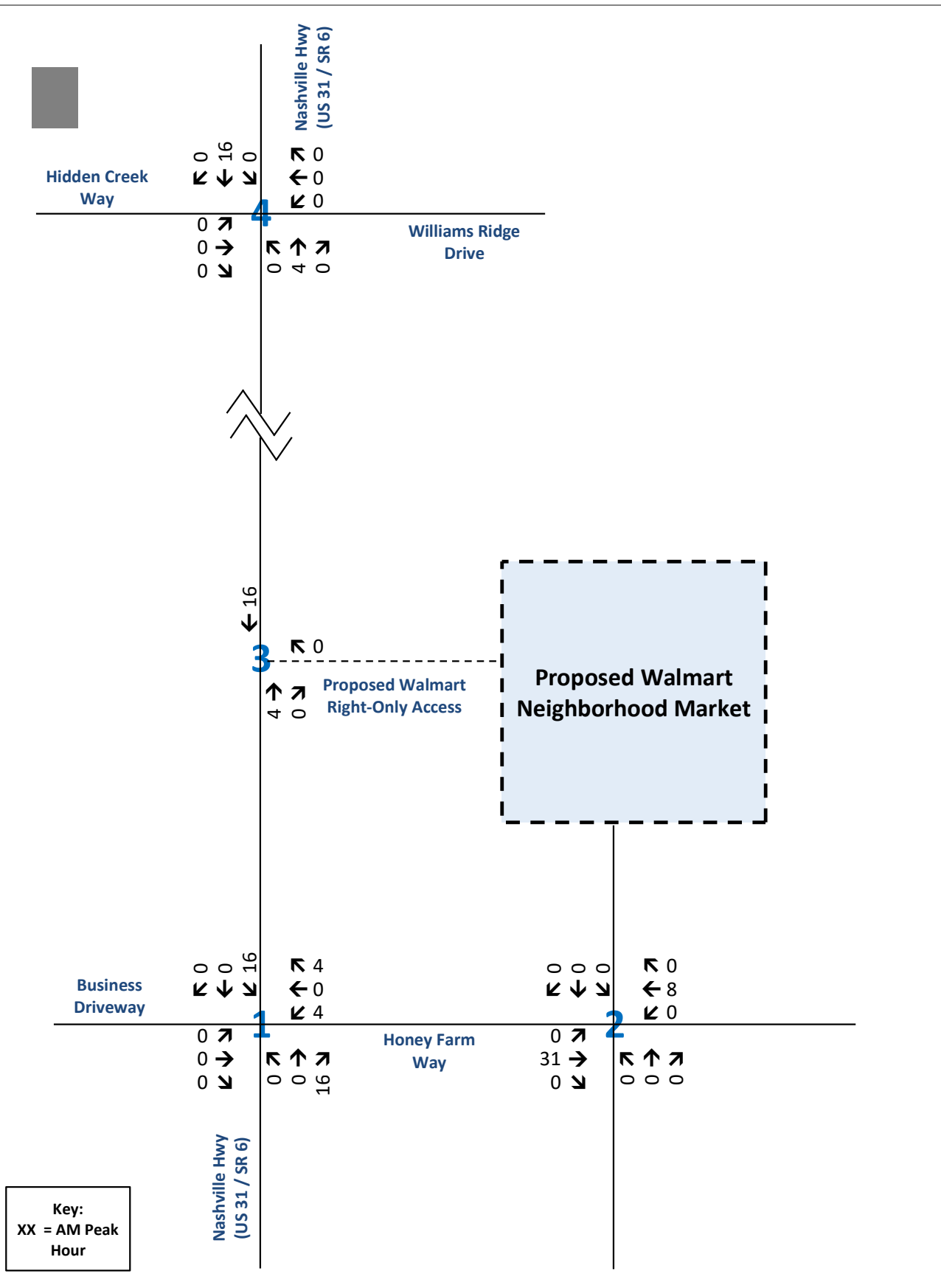
Traffic Assignment Worksheet
Primary Traffic Assignment - Townhomes
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





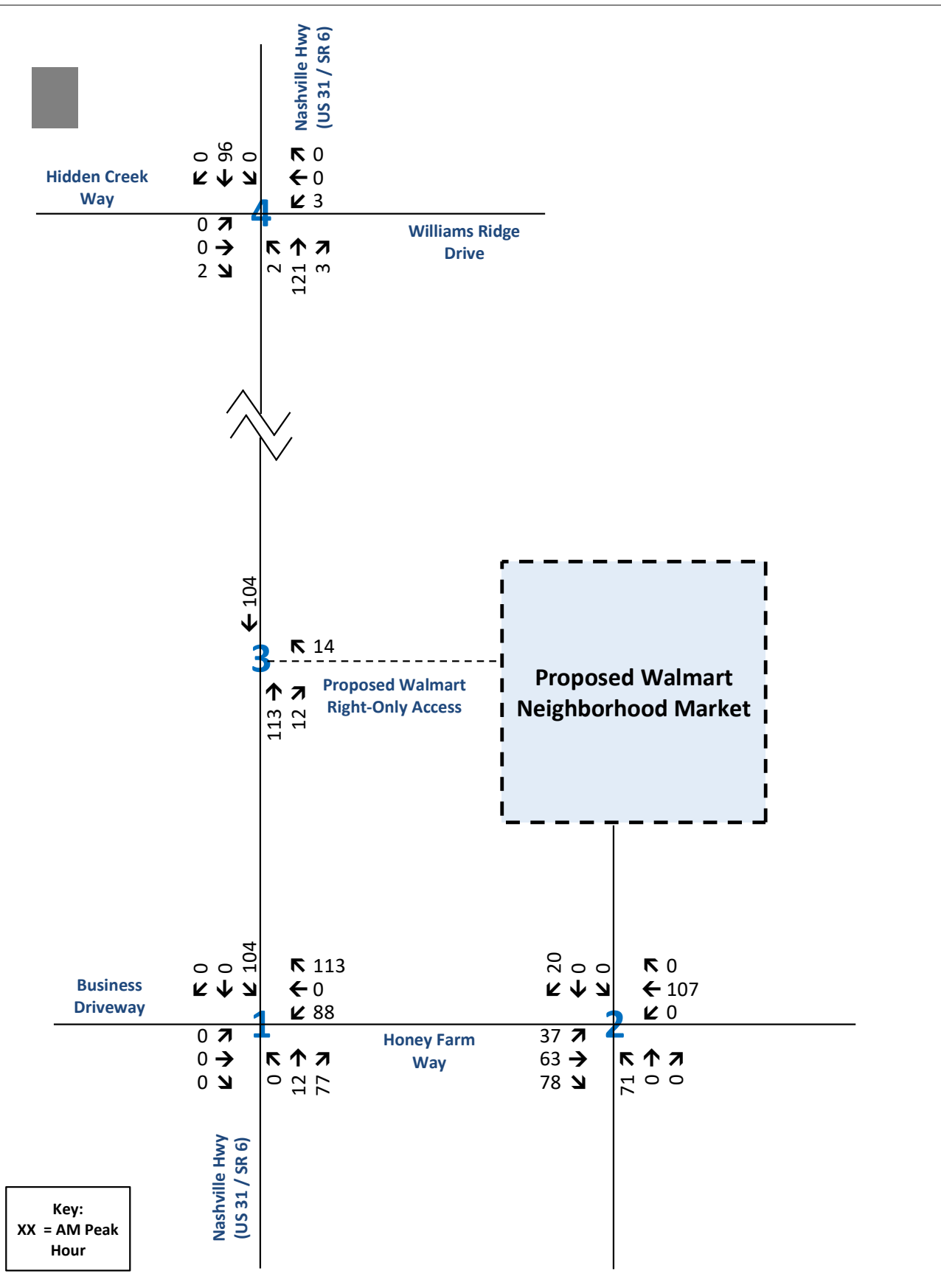
Traffic Assignment Worksheet
Primary Traffic Assignment - Mini-Warehouse
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





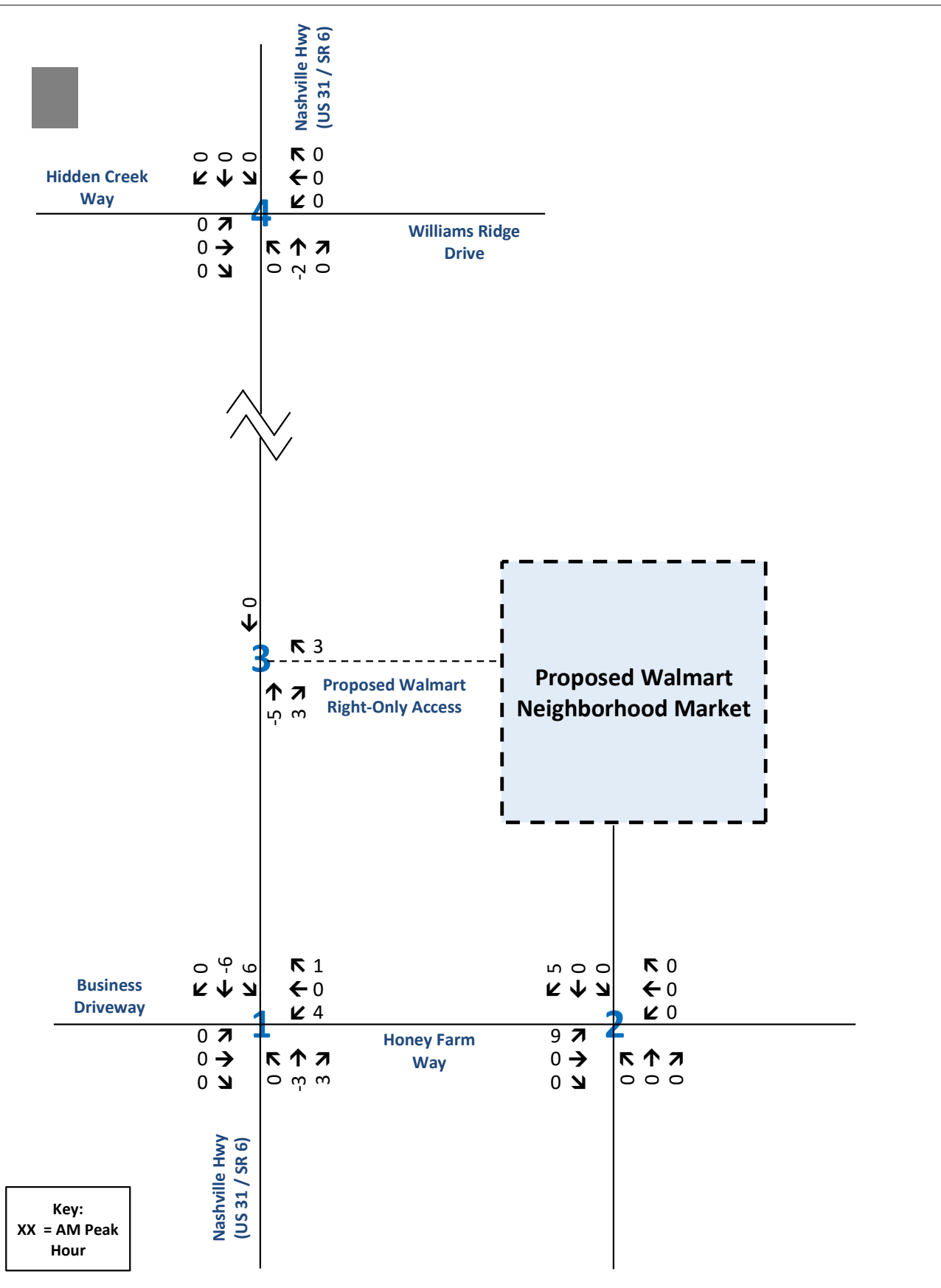
Traffic Assignment Worksheet
Primary Traffic Assignment - Health Department
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Total Primary Traffic Assignment
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





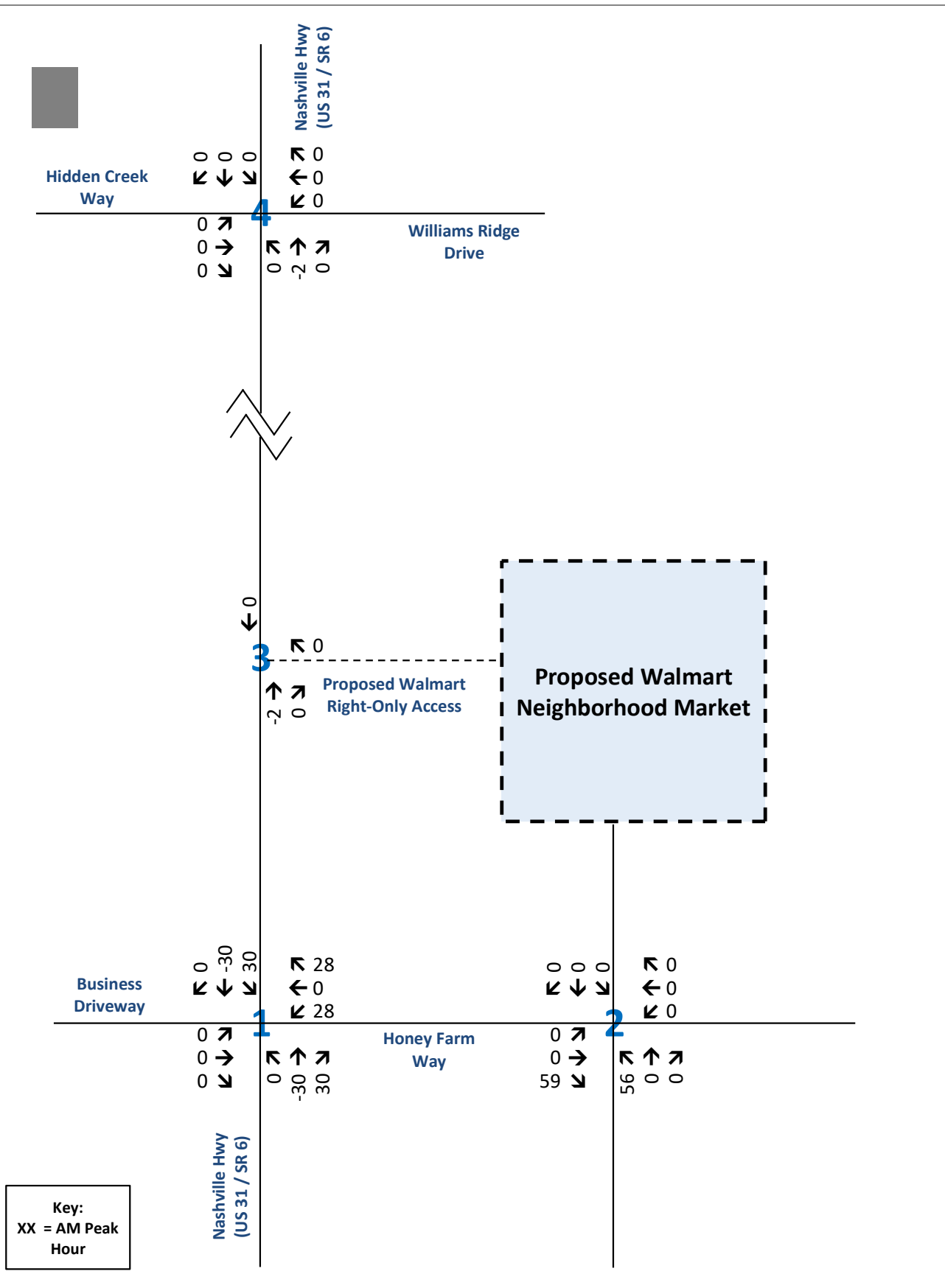
Traffic Assignment Worksheet

Pass-by Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

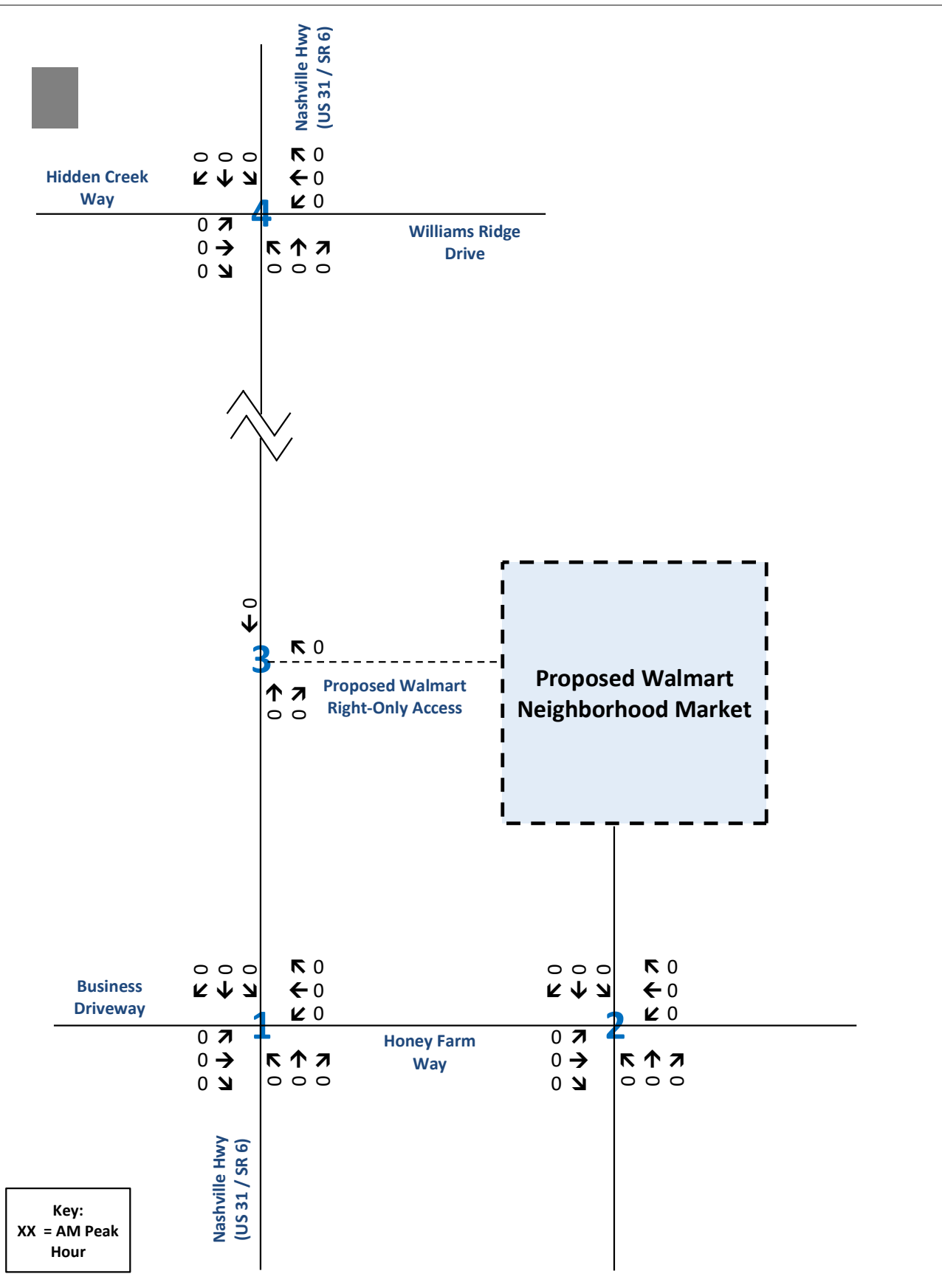
Columbia, Tennessee





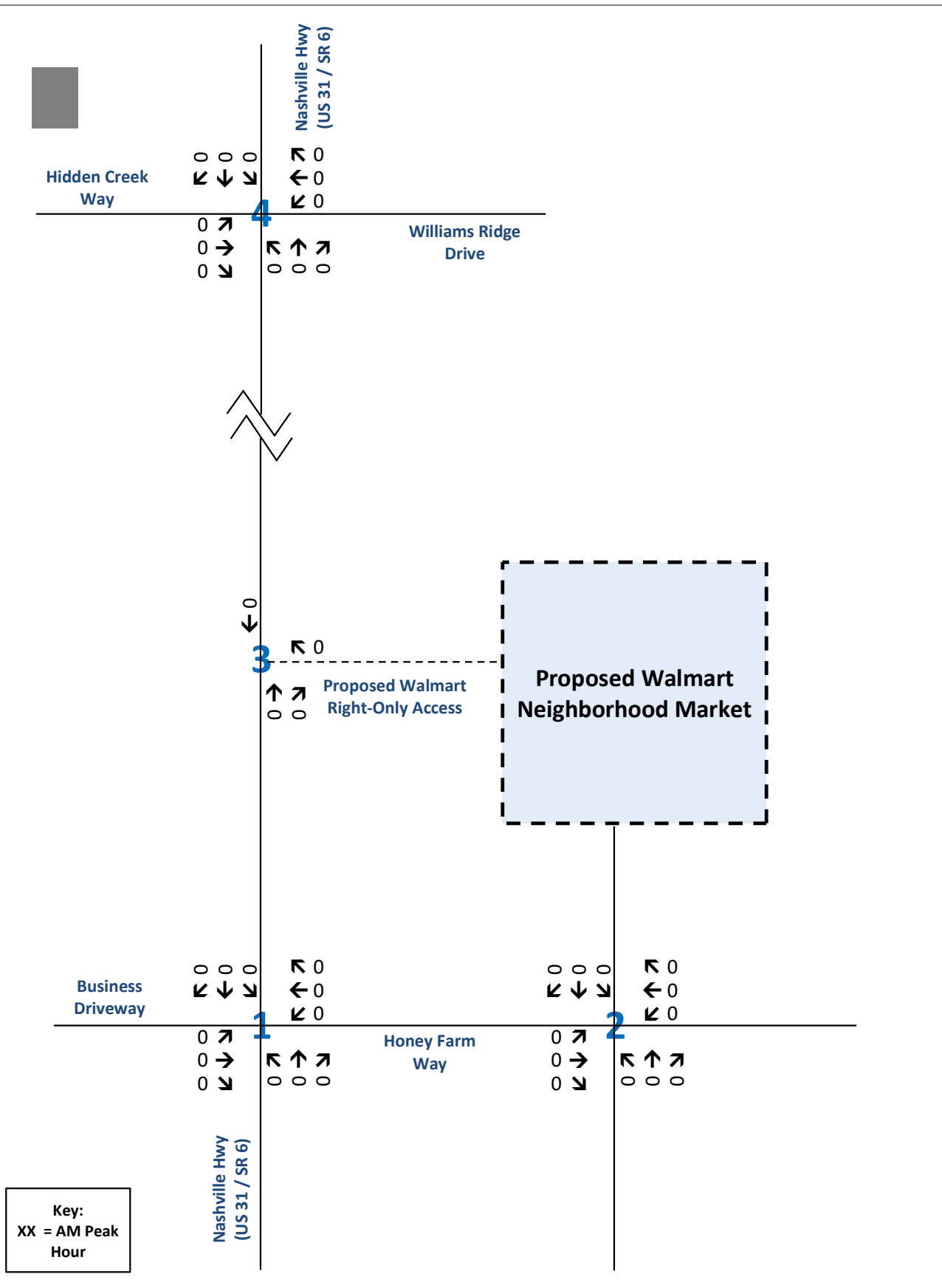
Traffic Assignment Worksheet
Pass-by Traffic Assignment - Fast-Food Restaurant with Drive-Through
 Honey Farm - Walmart Neighborhood Market
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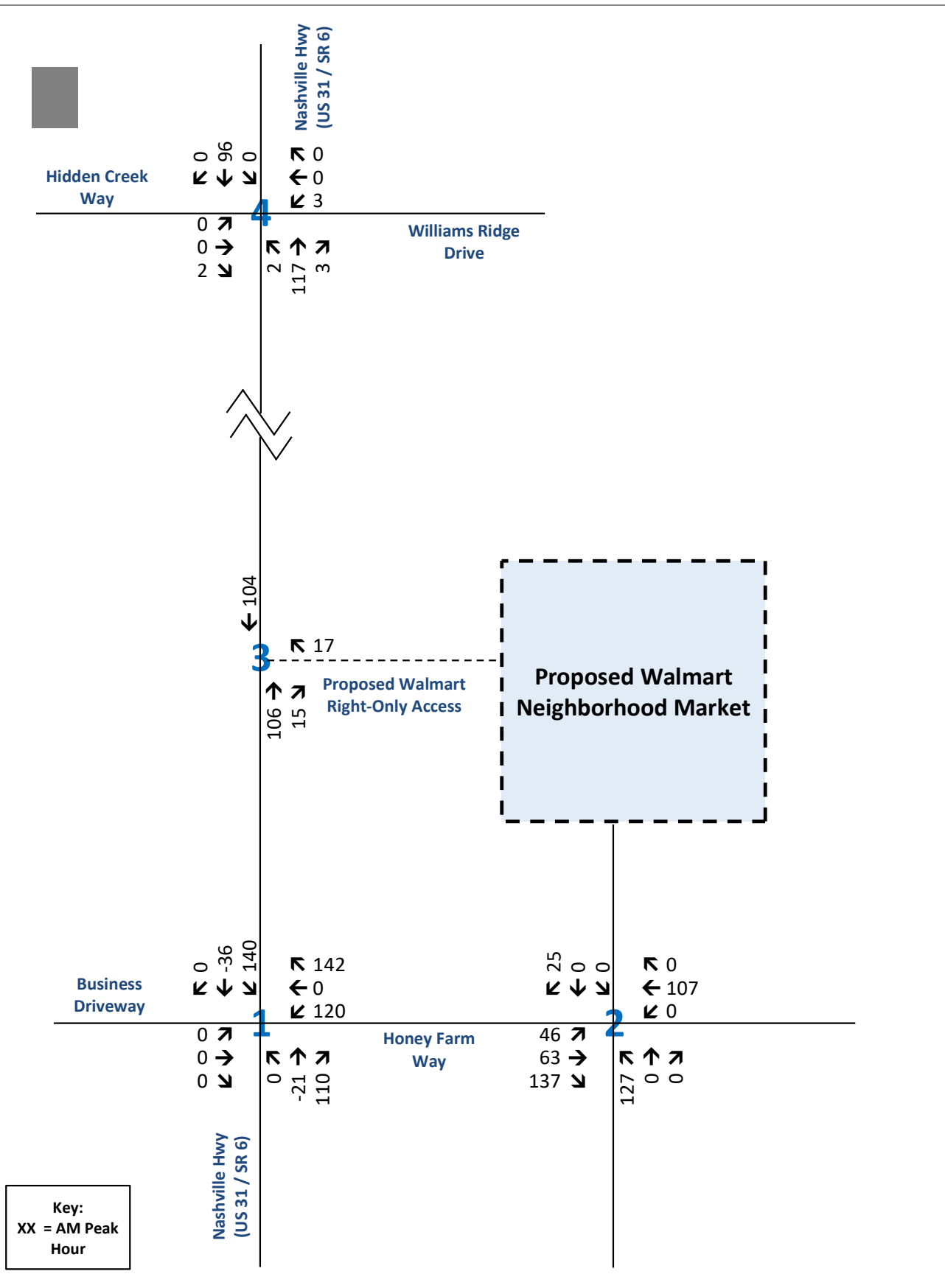
Traffic Assignment Worksheet
Pass-by Traffic Assignment - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





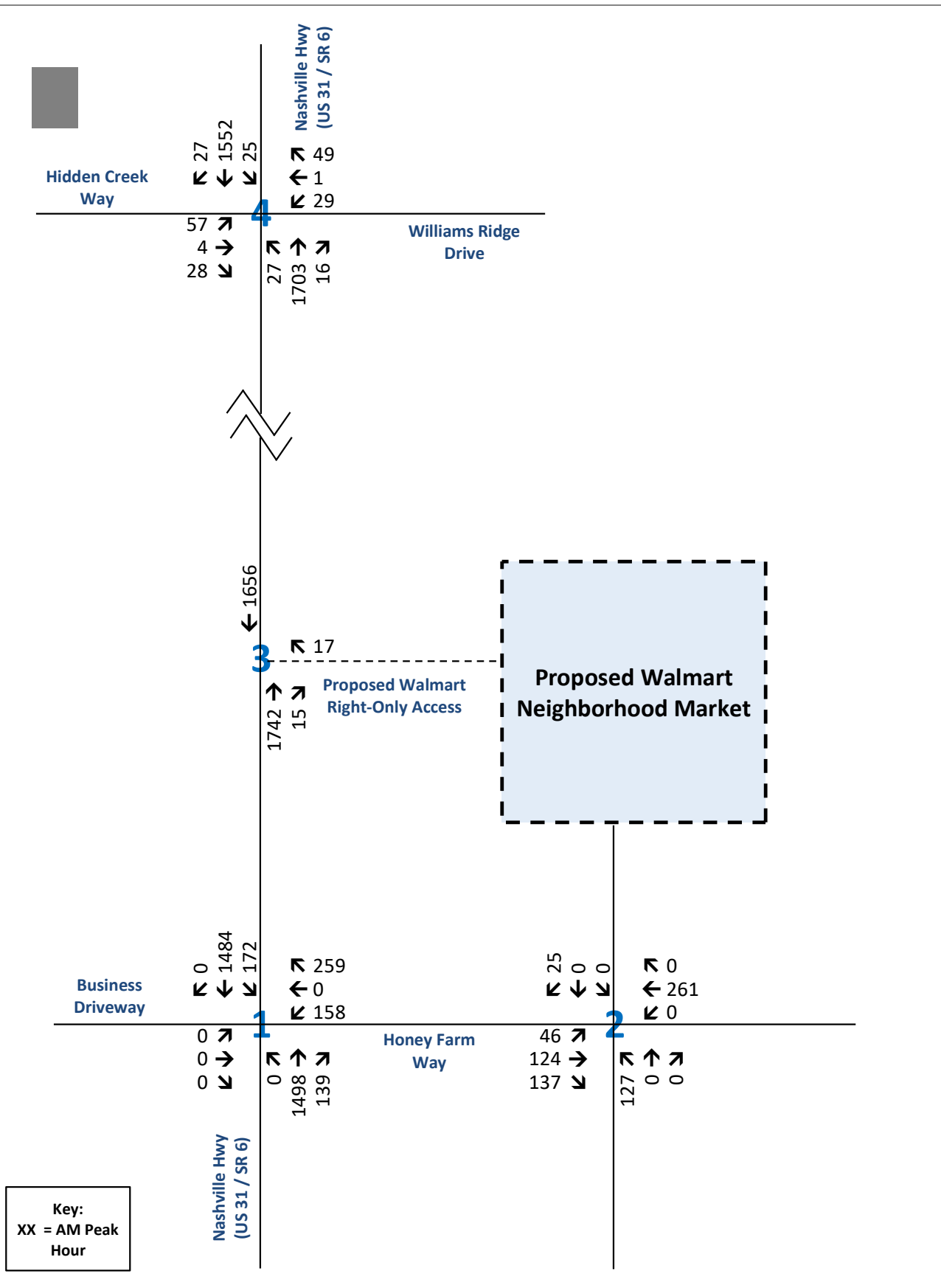
Traffic Assignment Worksheet
Pass-by Traffic Assignment - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Site Generated Traffic
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



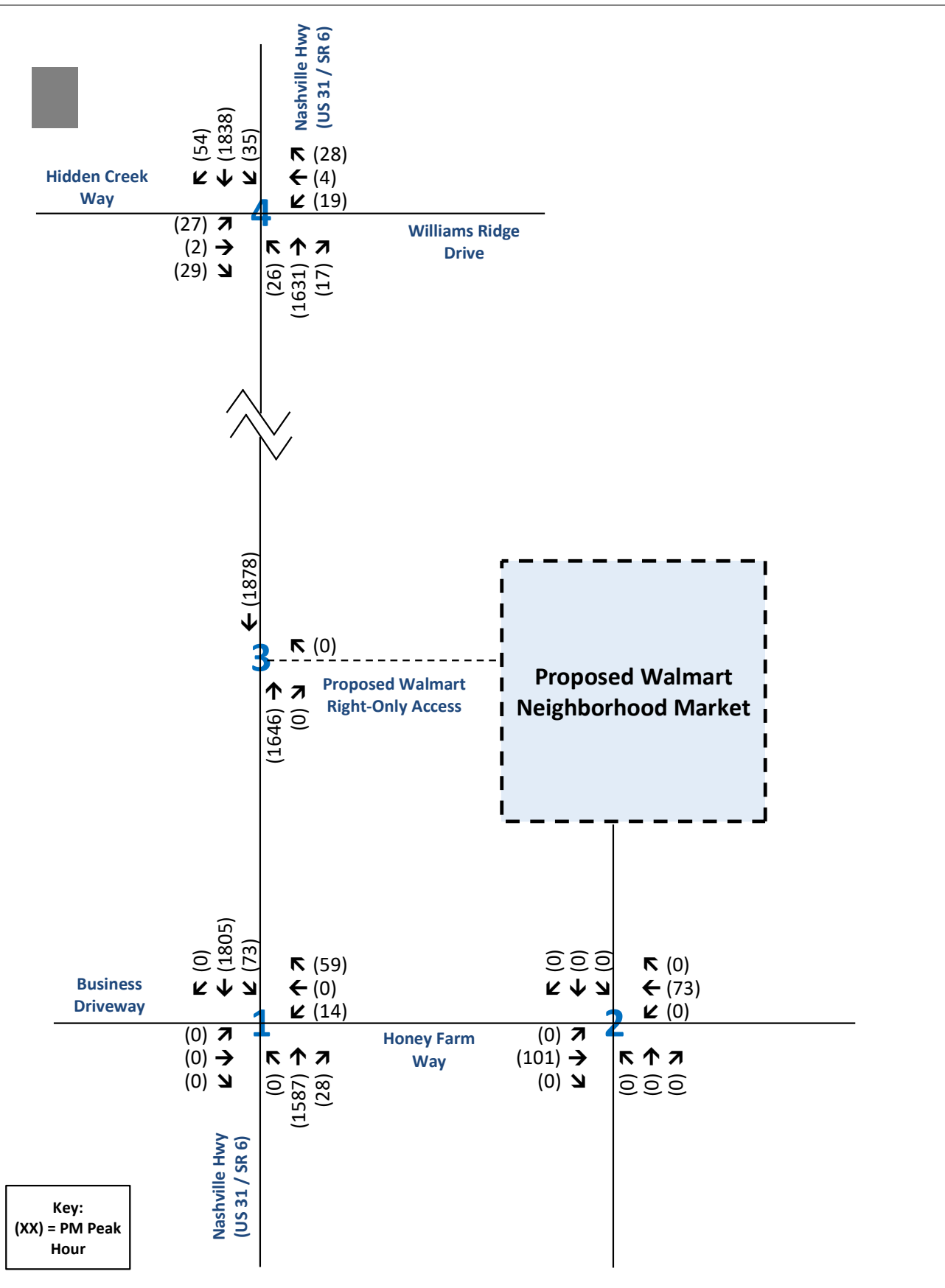


Traffic Assignment Worksheet
Total Projected Traffic at Buildout (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



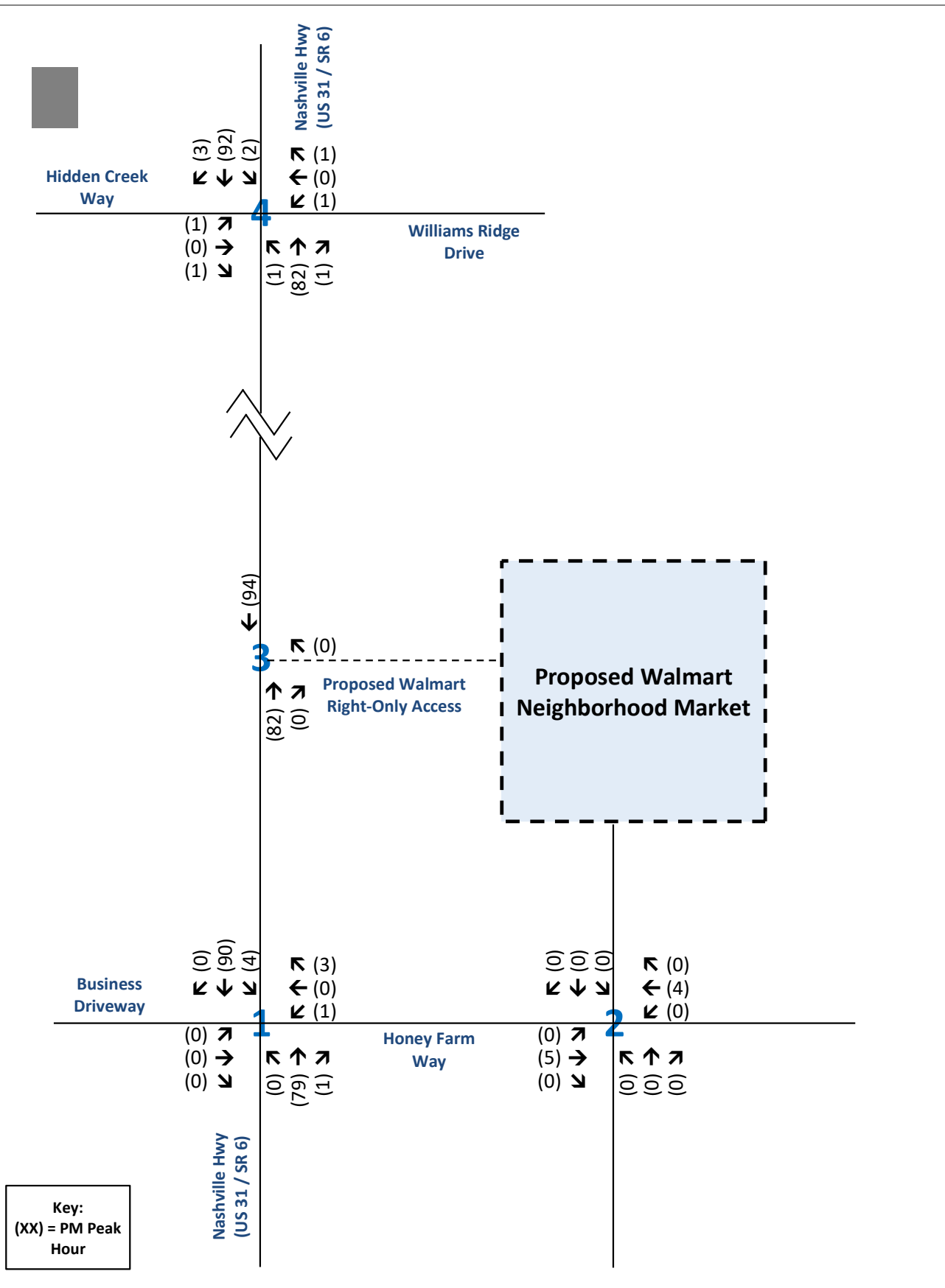
TRAFFIC ASSIGNMENT WORKSHEETS

PM PEAK HOUR



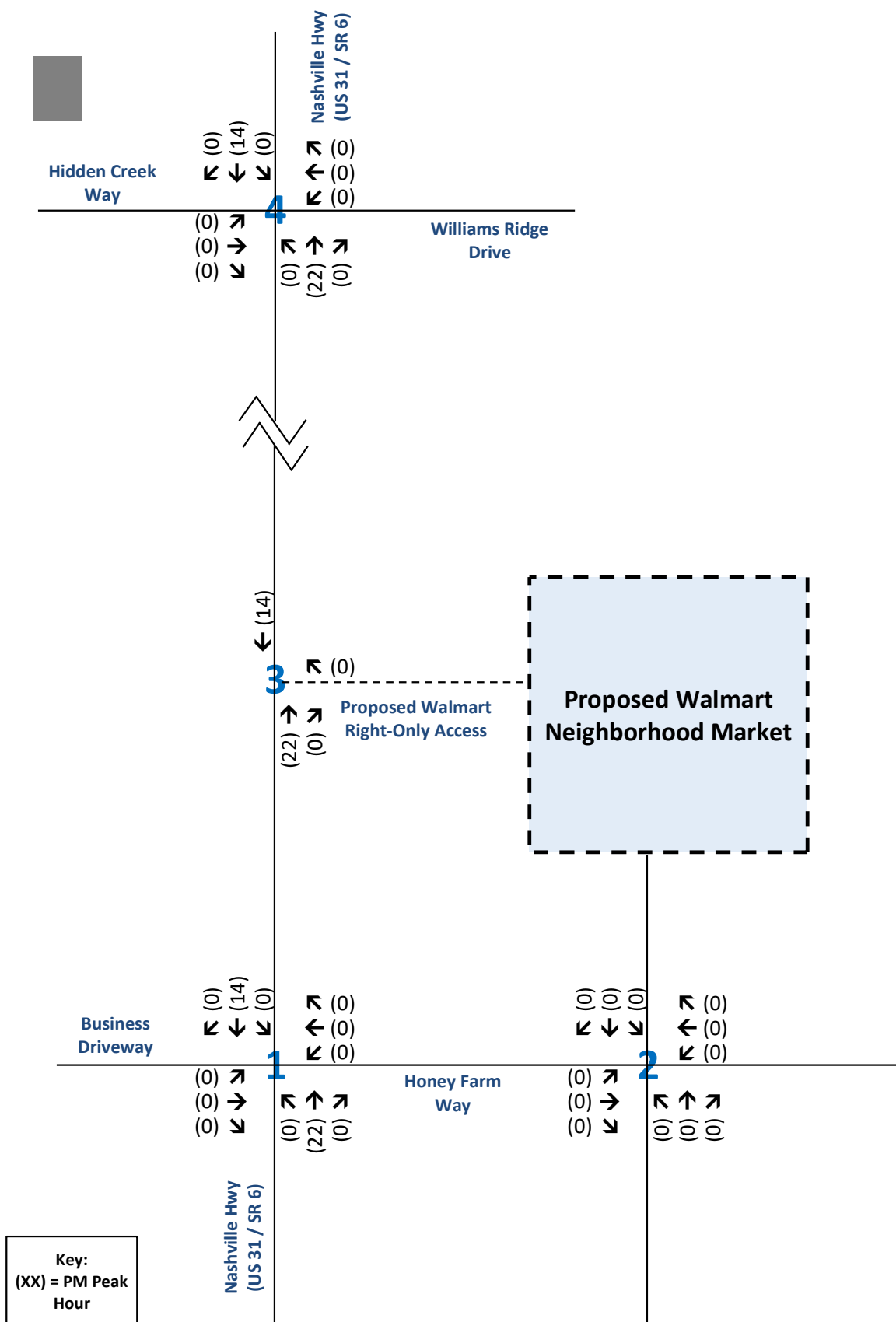
Traffic Assignment Worksheet
Existing Traffic Volumes (2024)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





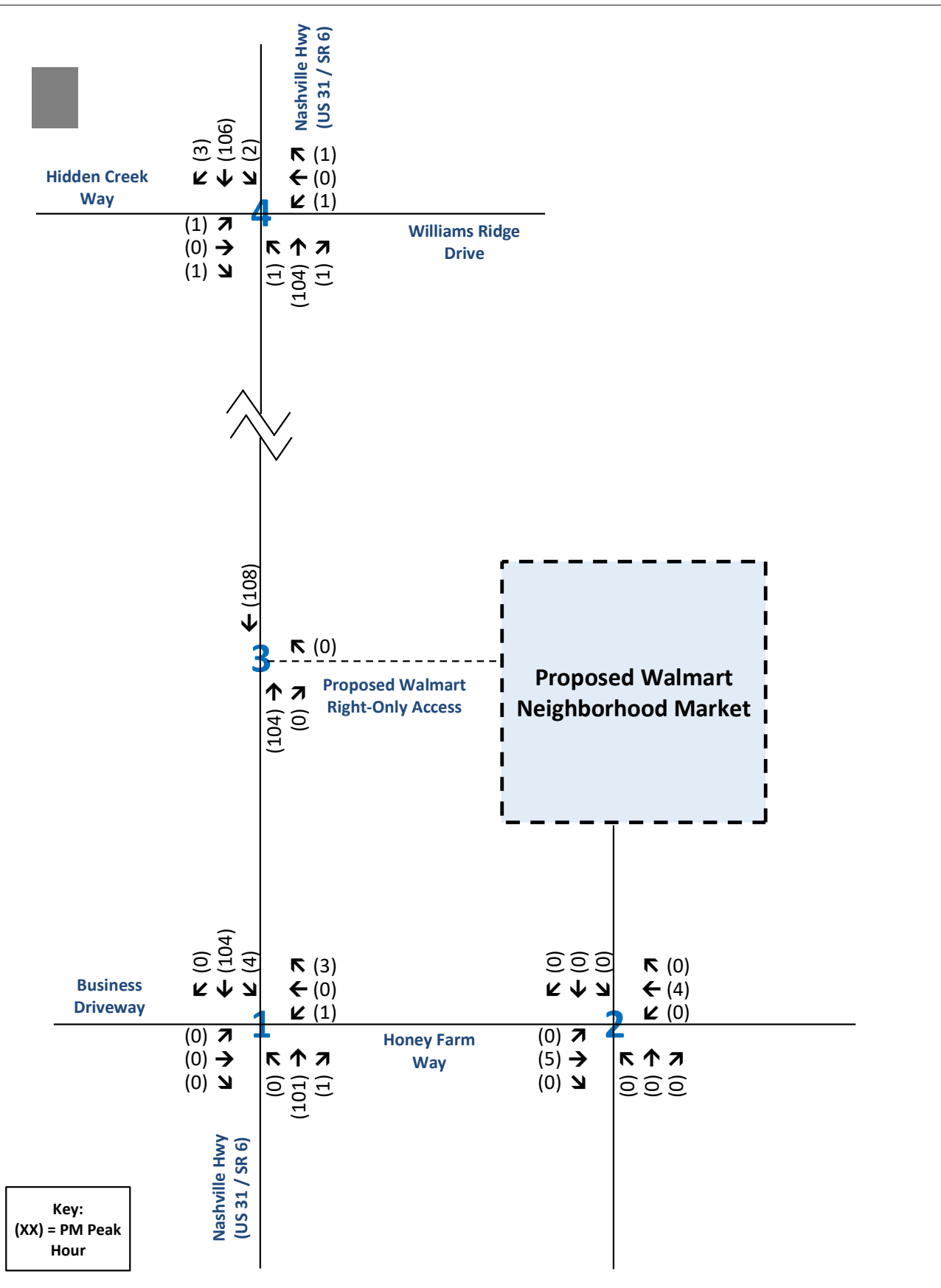
Traffic Assignment Worksheet
Background - Historical Growth Only (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





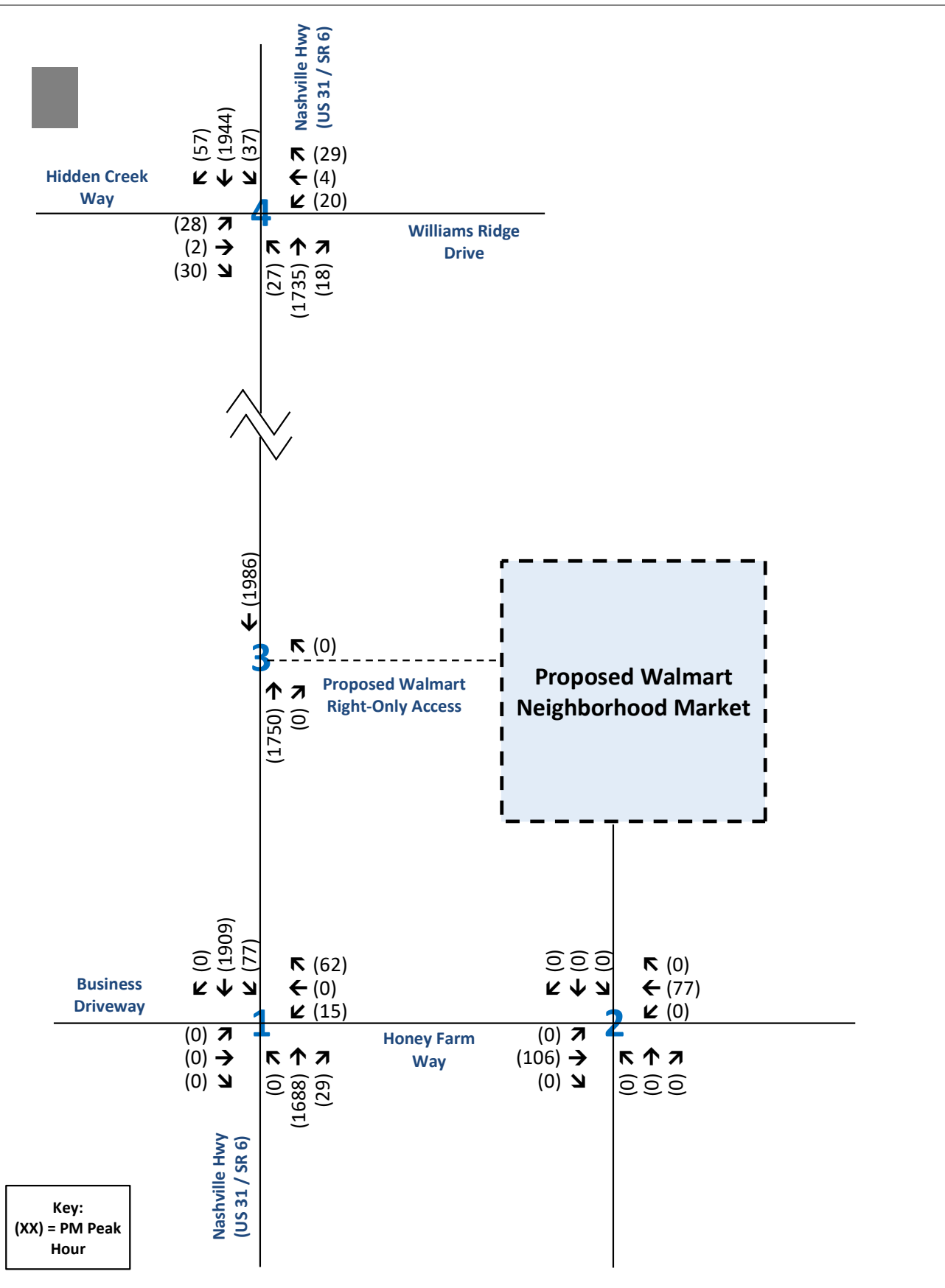
Traffic Assignment Worksheet
Off-Site Traffic Assignment - 2558 Nashville Highway
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





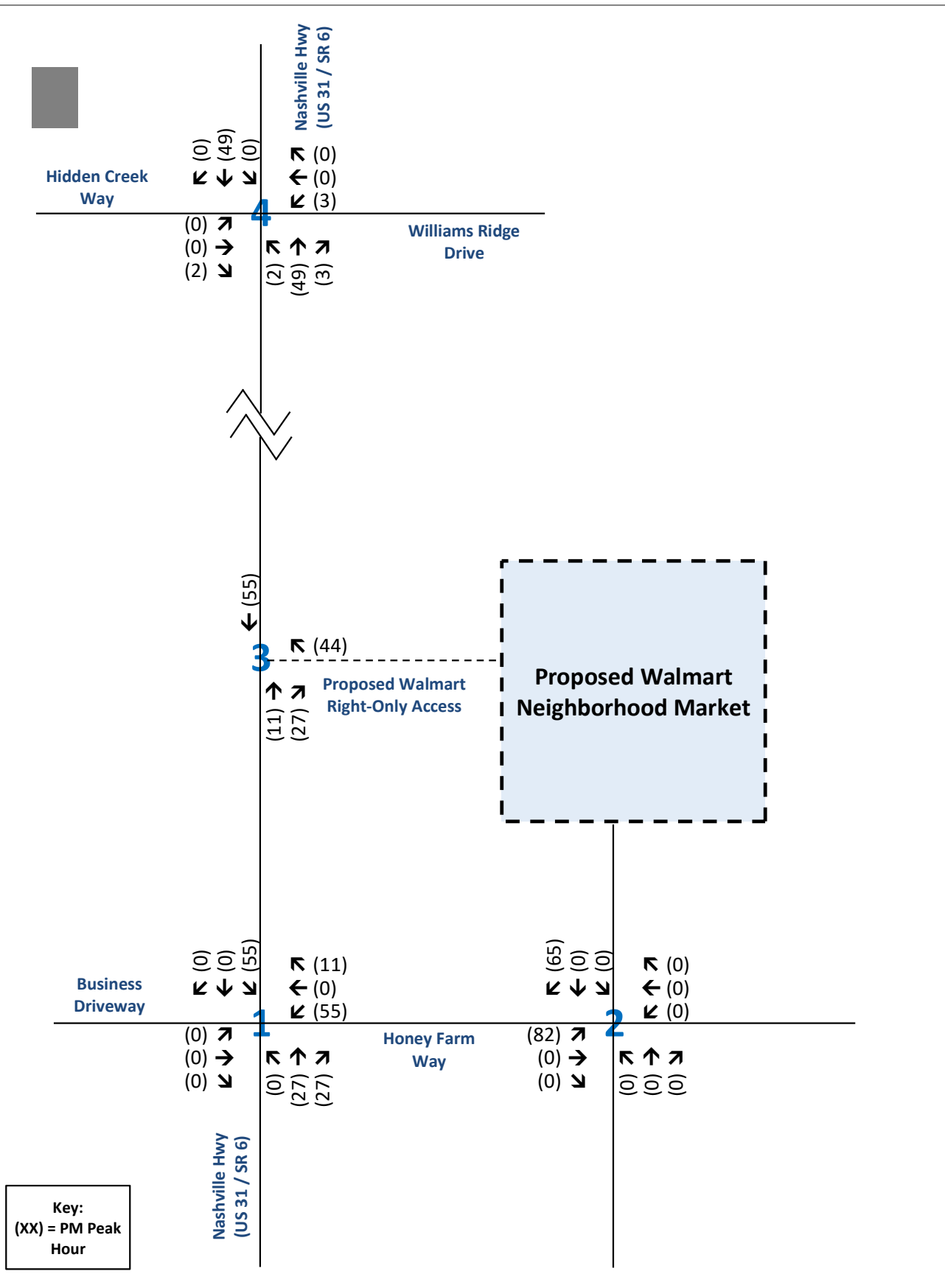
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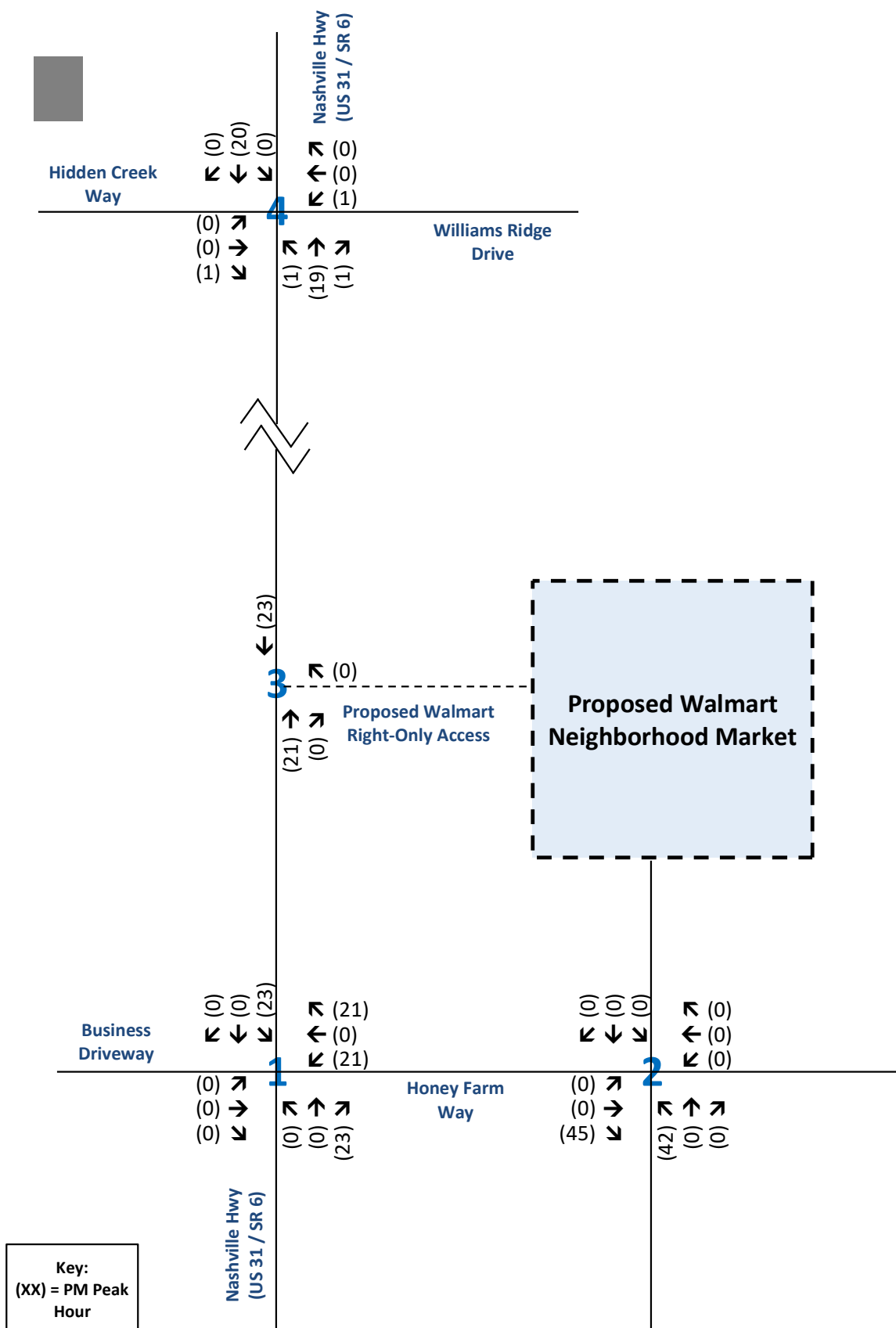
Traffic Assignment Worksheet

Primary Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

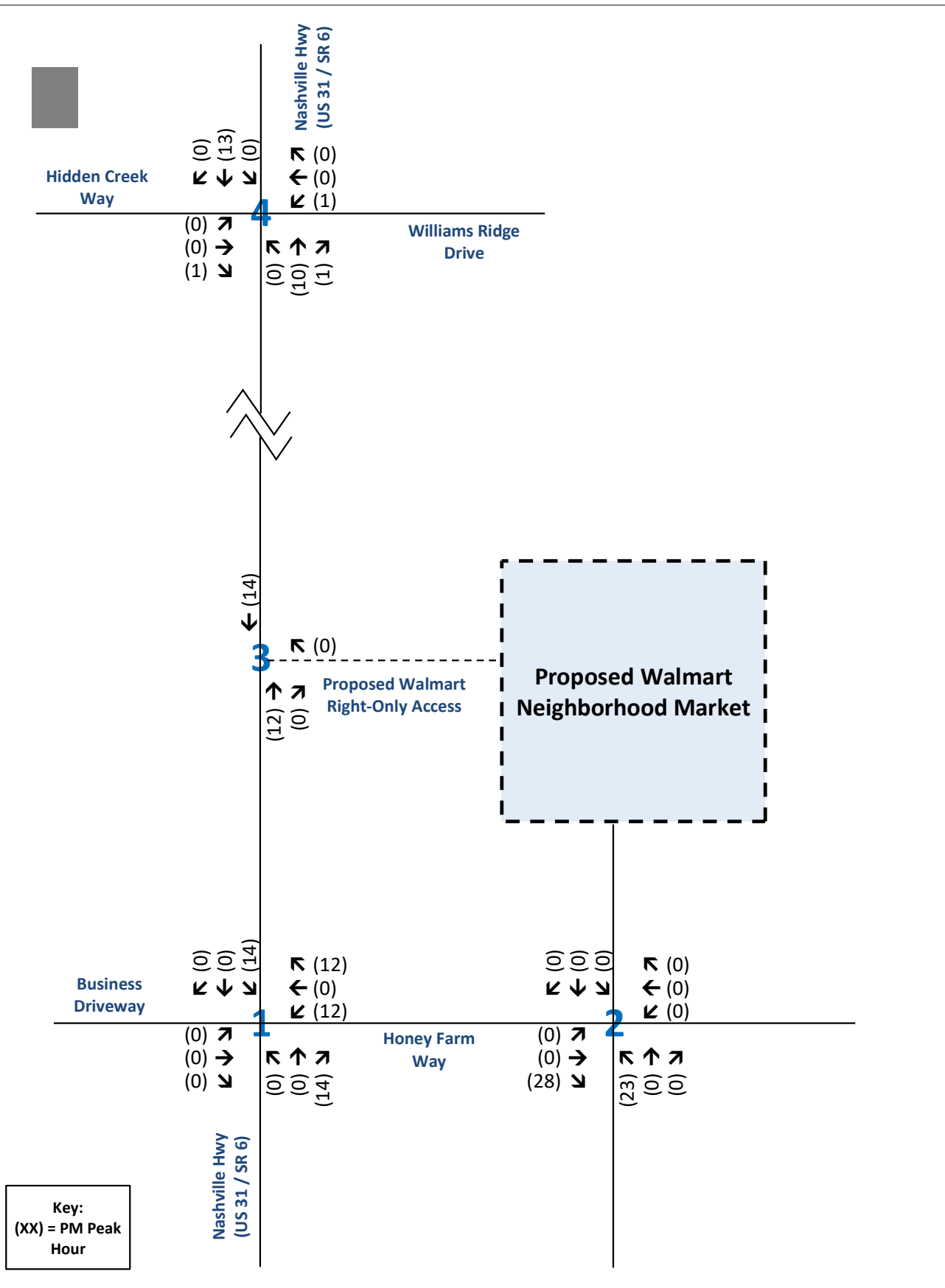
Columbia, Tennessee





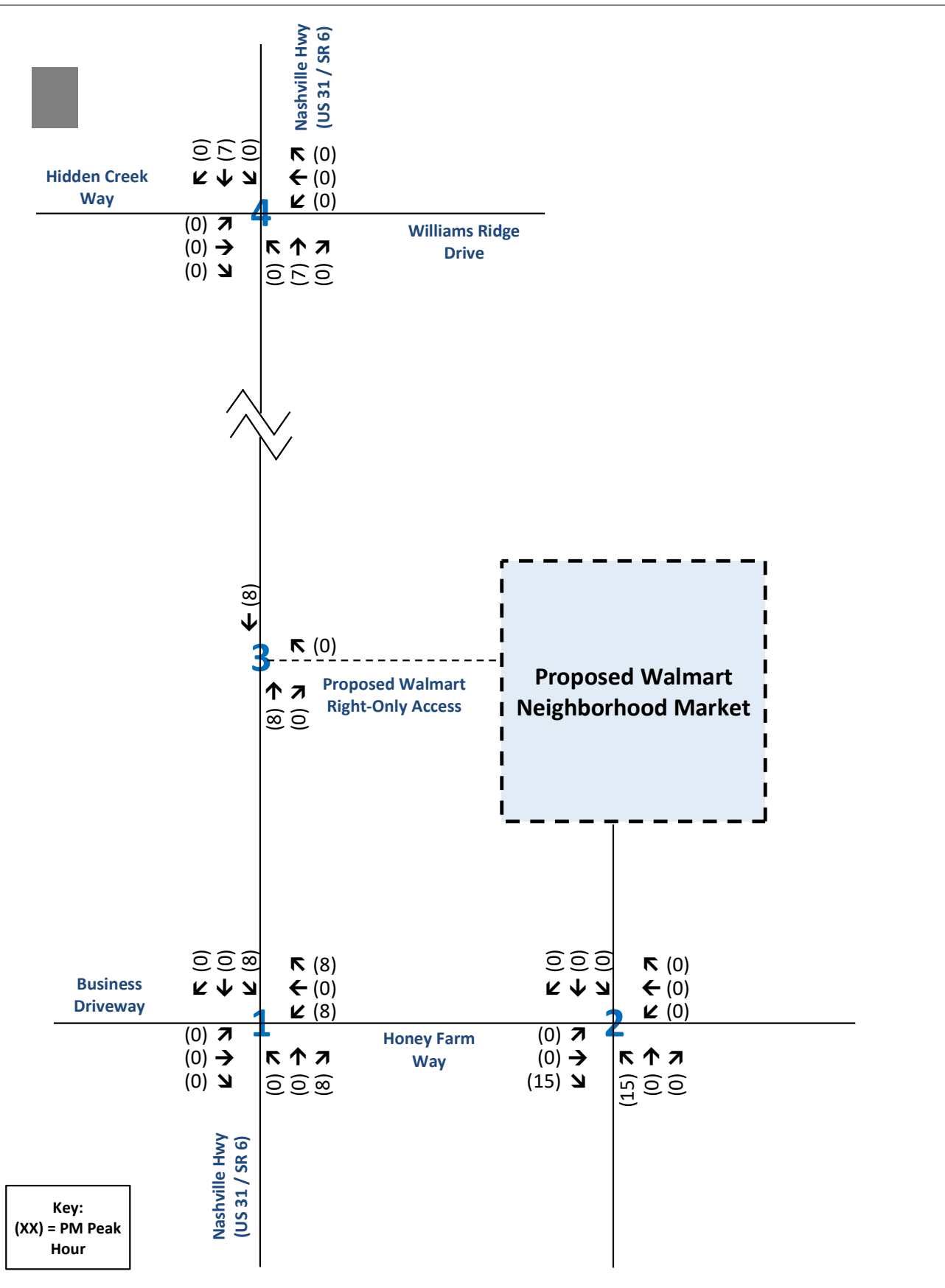
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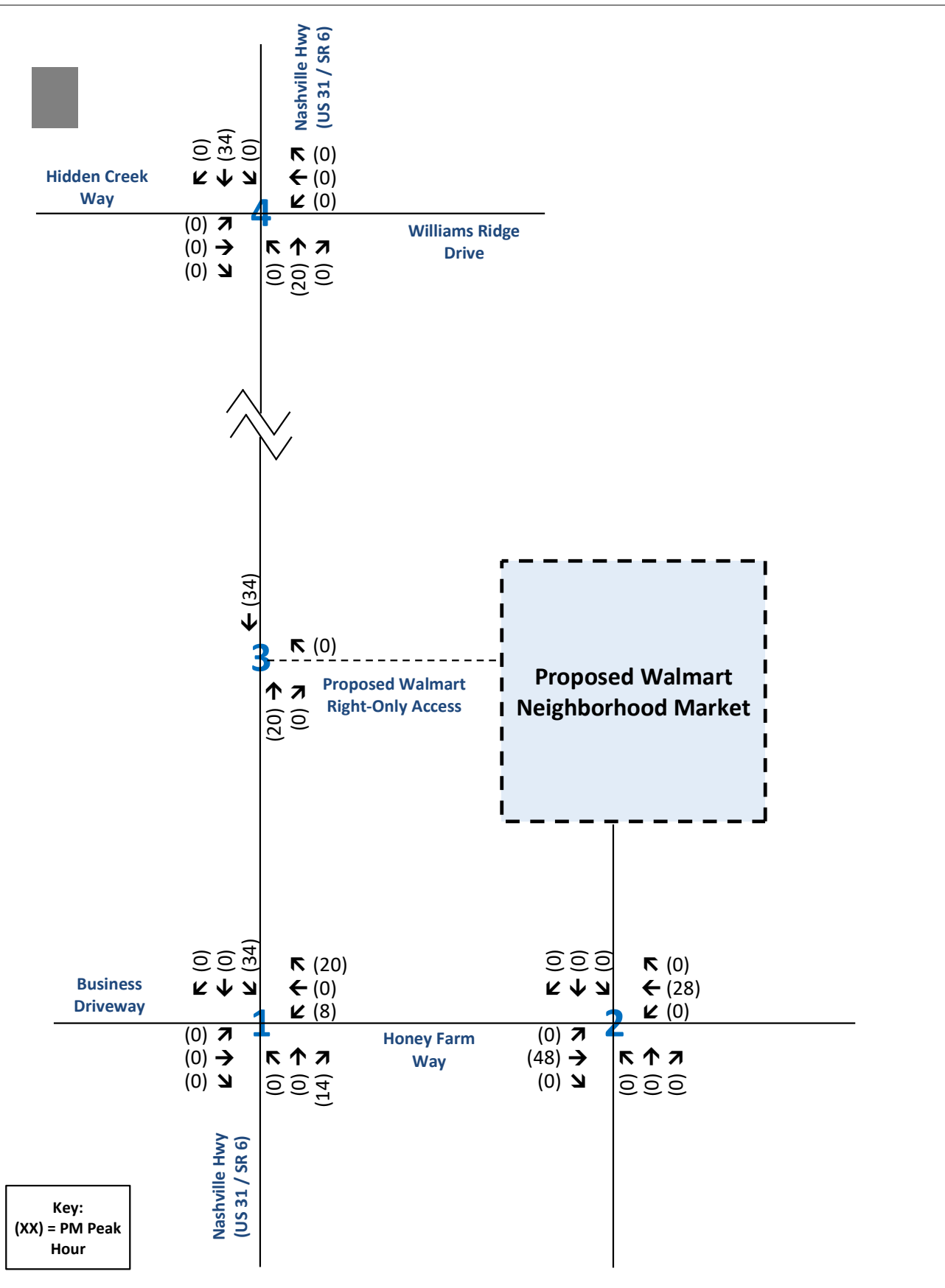
Traffic Assignment Worksheet
Primary Traffic Assignment - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





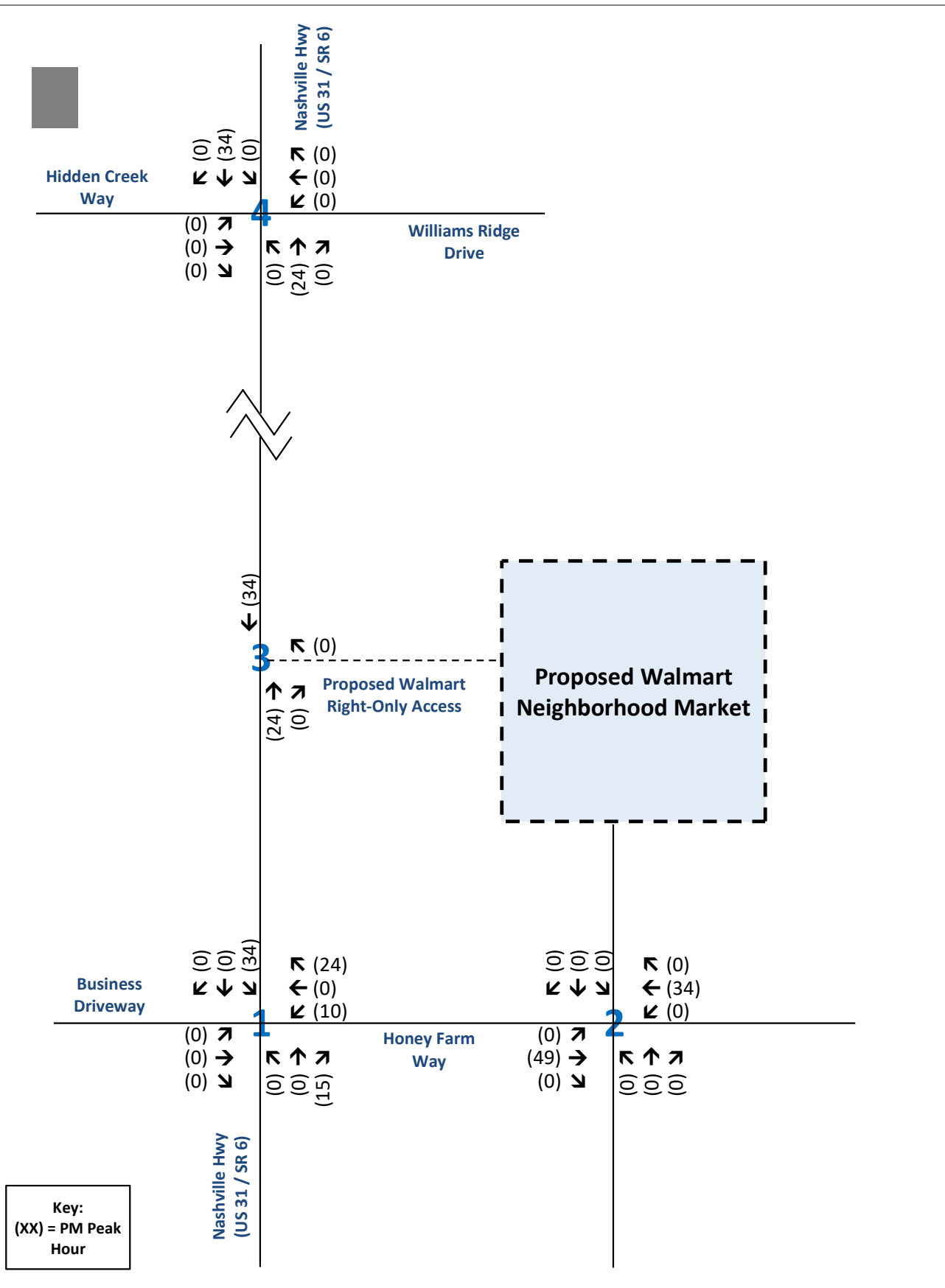
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Primary Traffic Assignment - Future Retail
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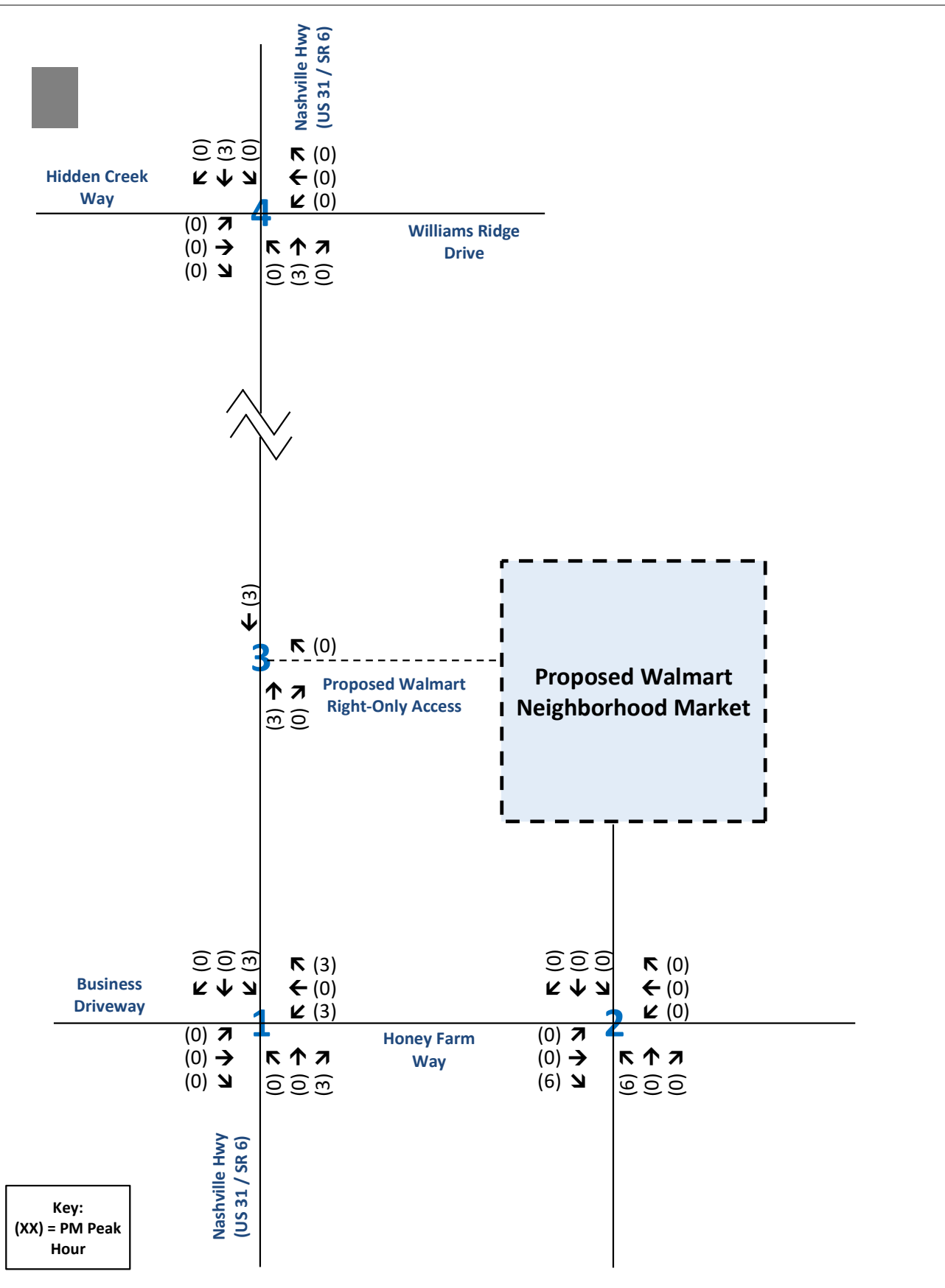
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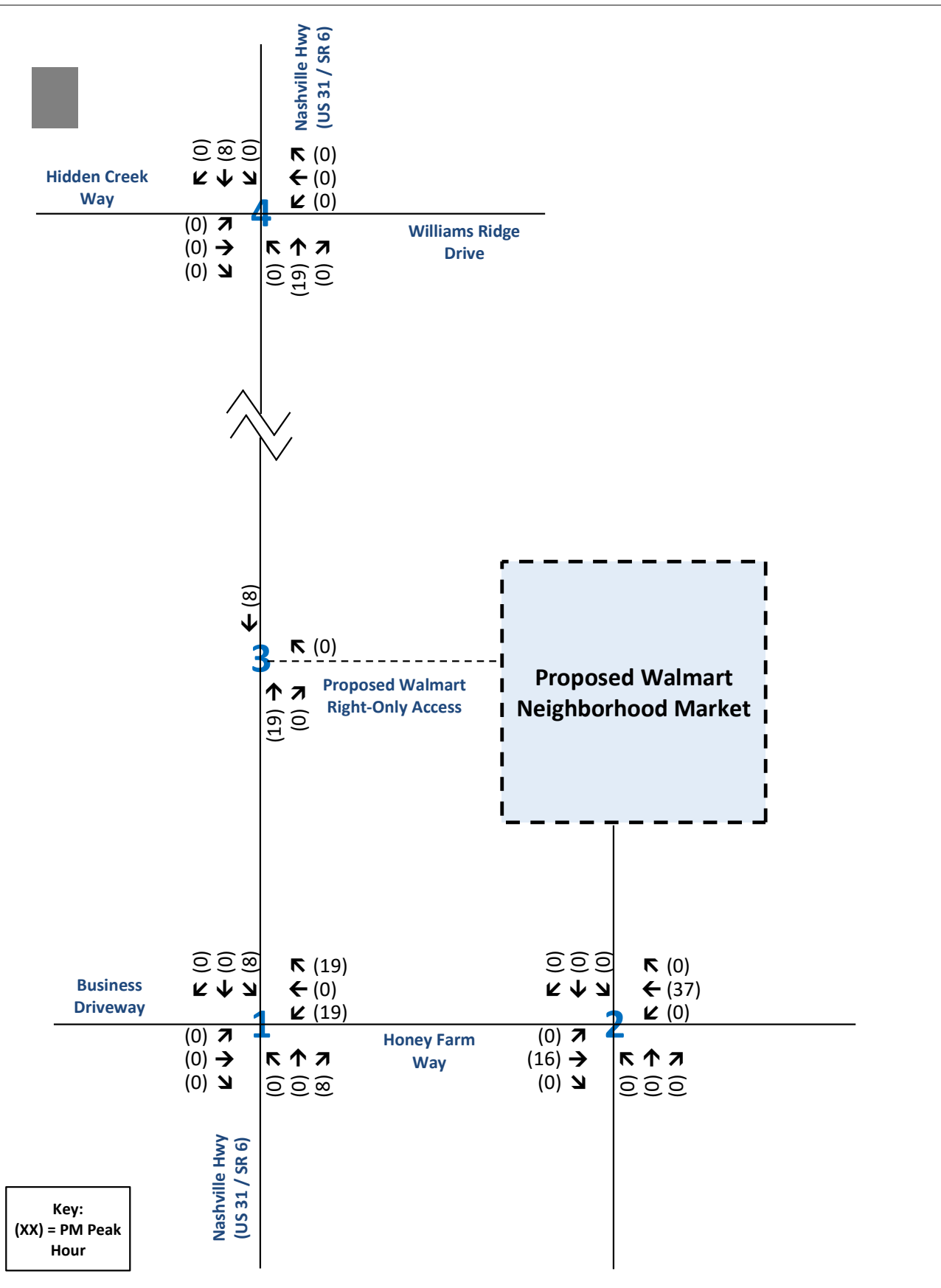
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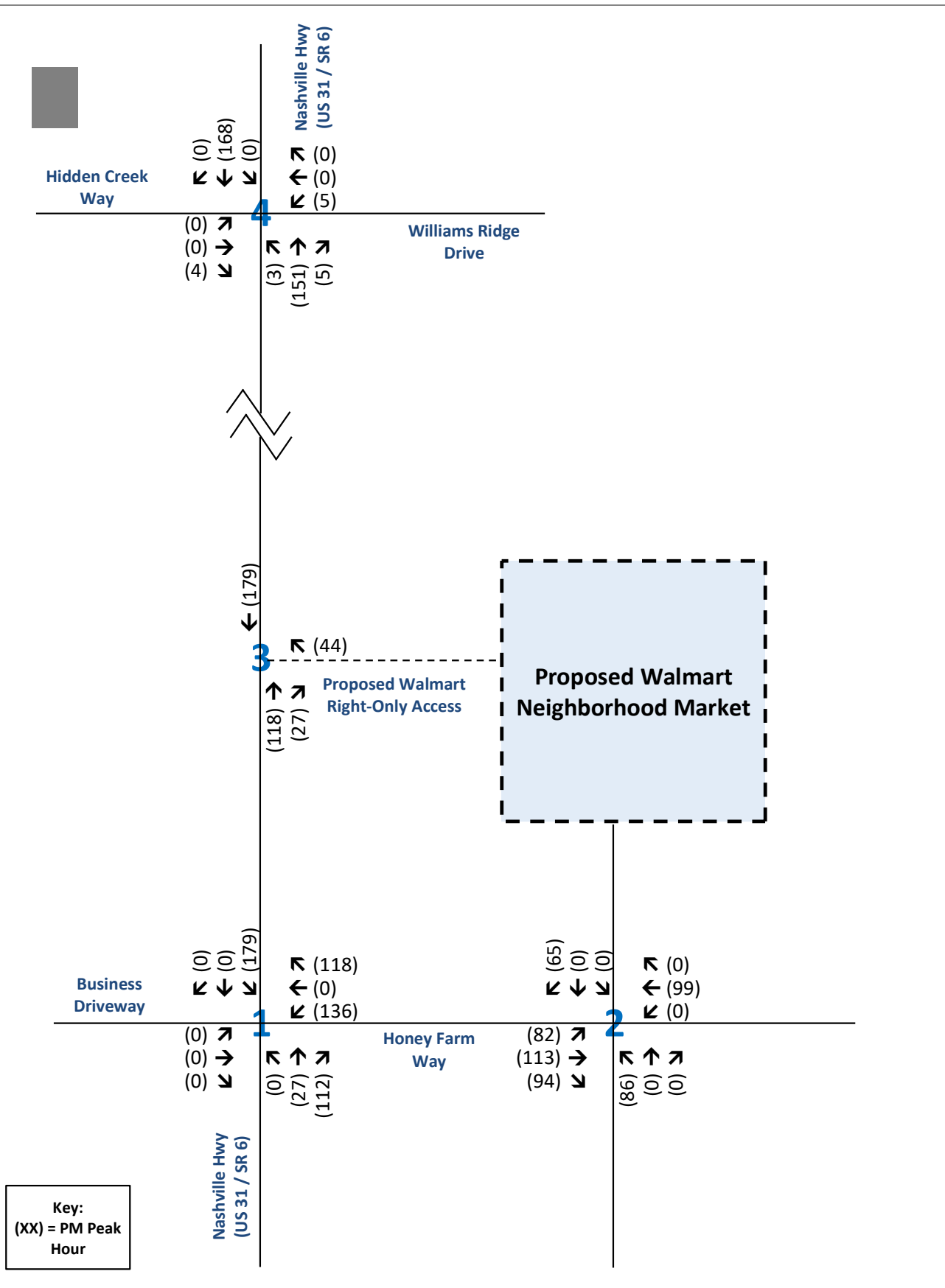
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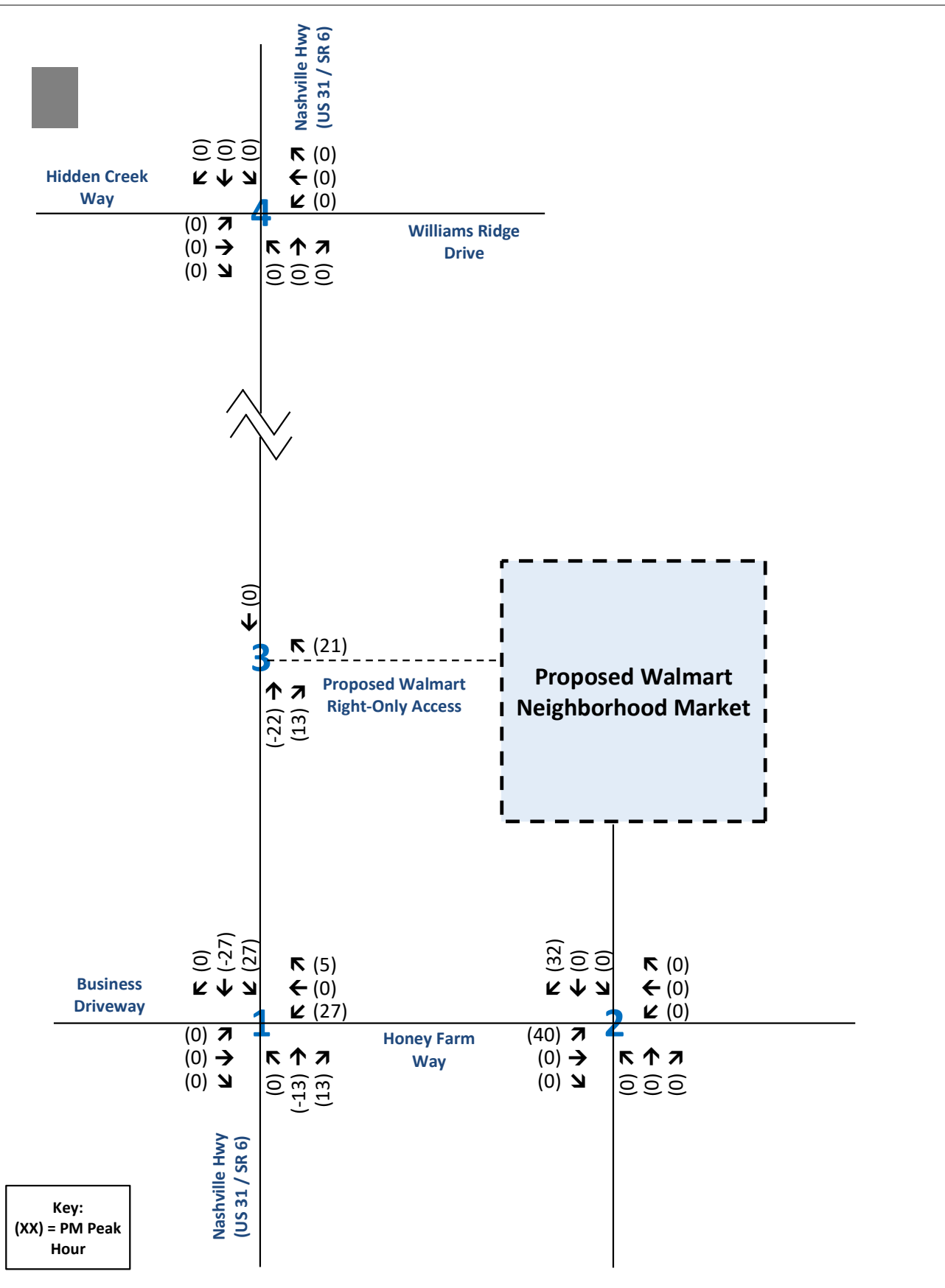
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Primary Traffic Assignment - Health Department
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Total Primary Traffic Assignment
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





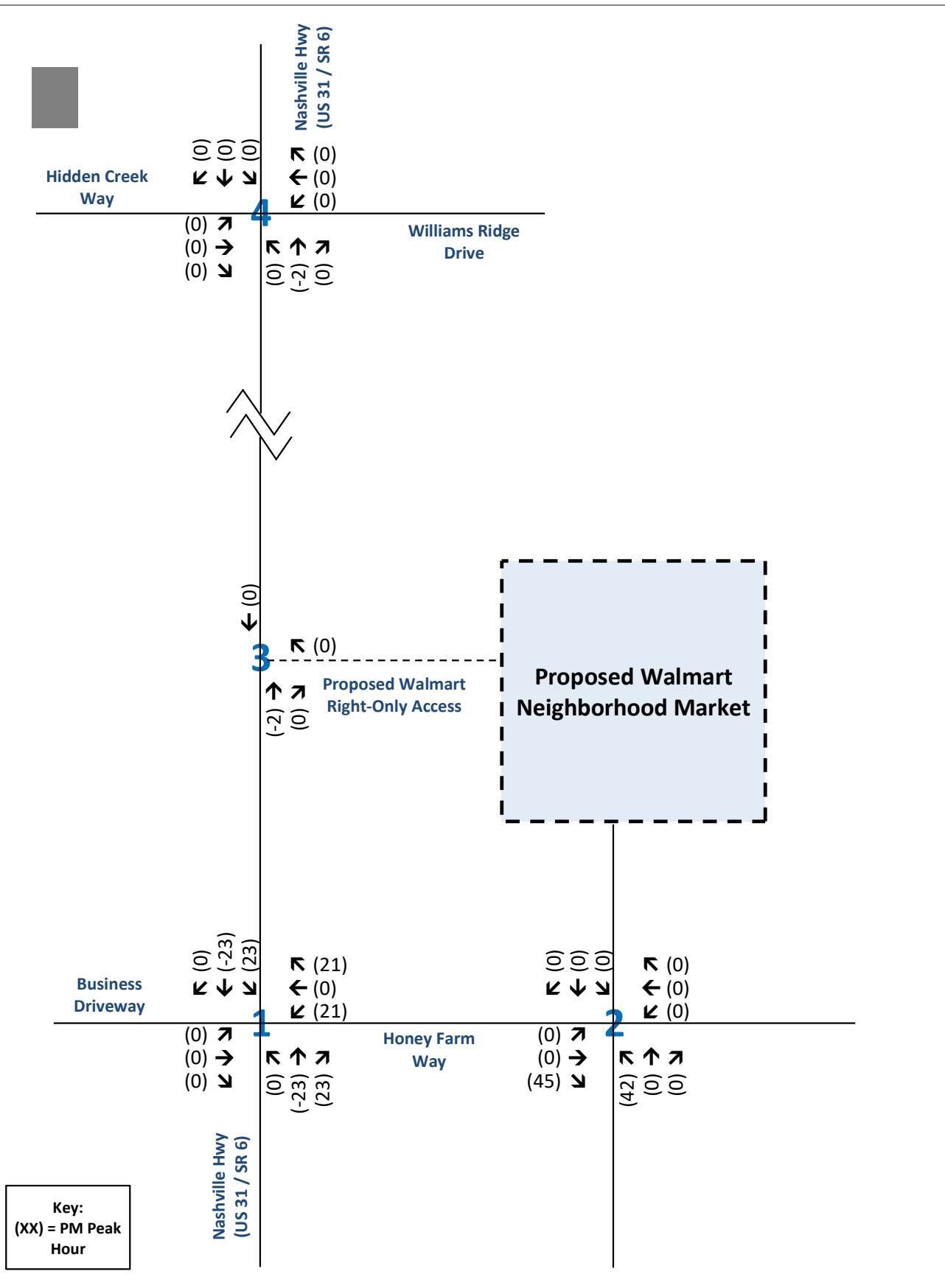
Traffic Assignment Worksheet

Pass-by Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

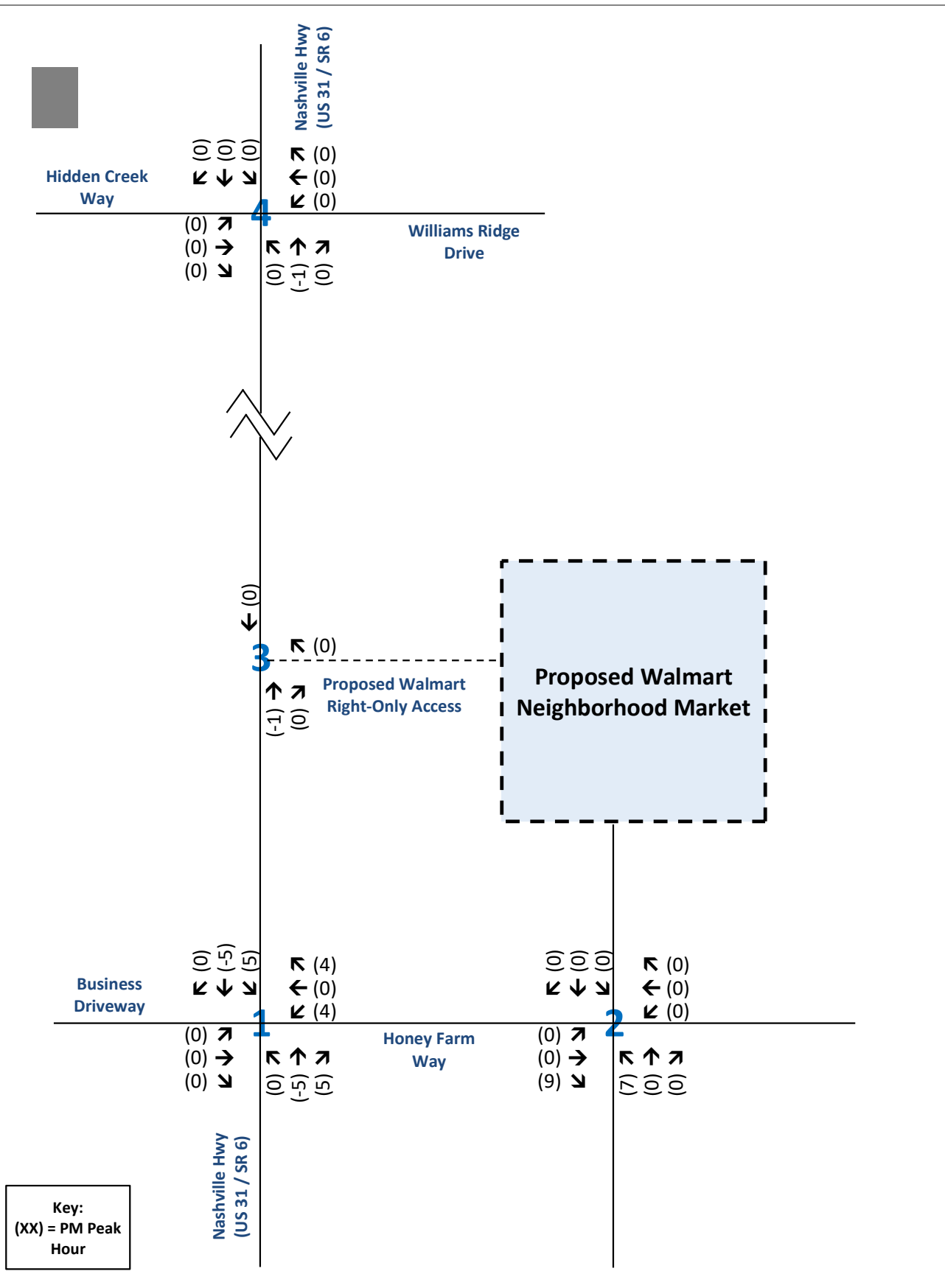
Columbia, Tennessee





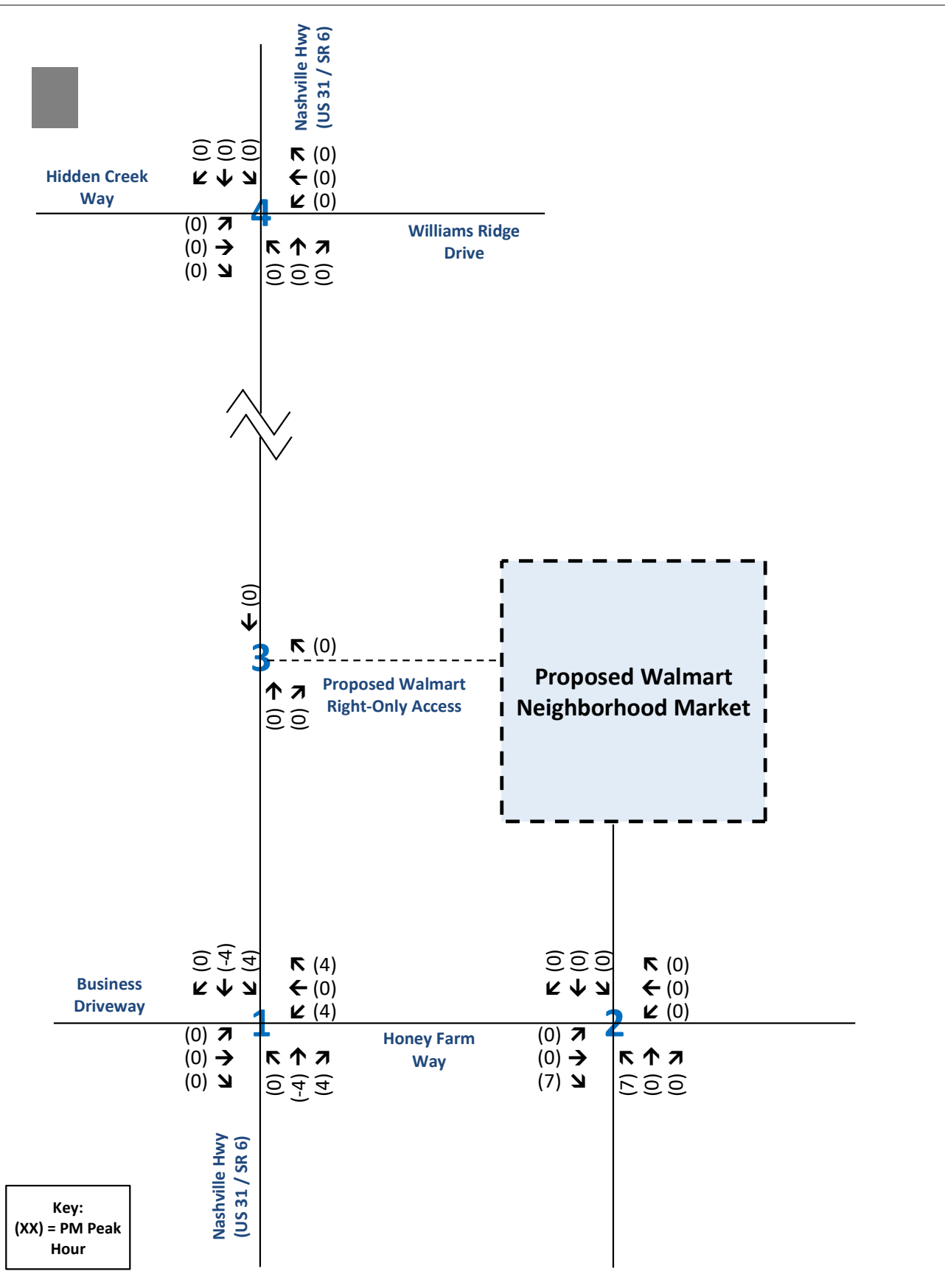
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 Honey Farm - Walmart Neighborhood Market
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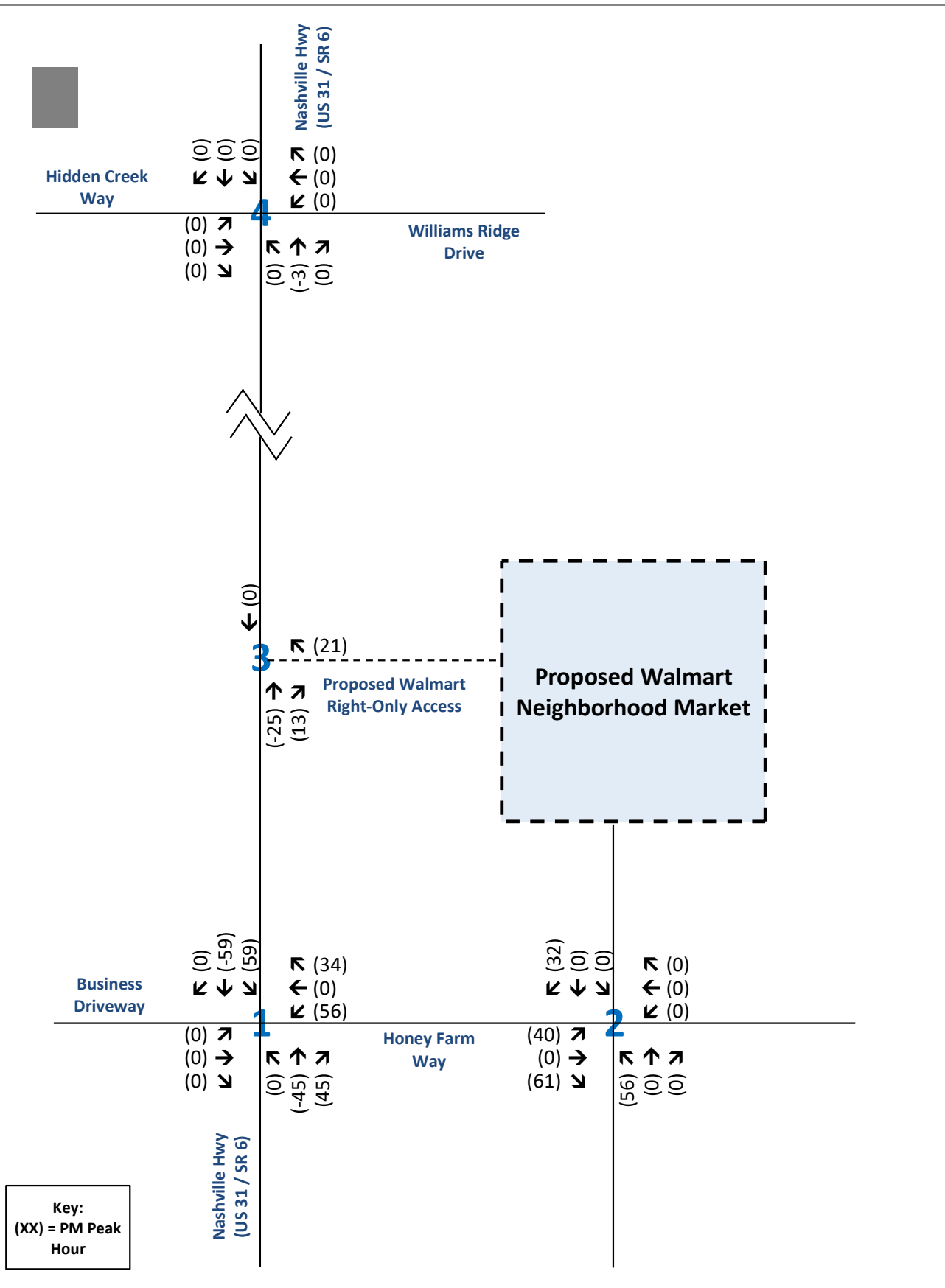
Traffic Assignment Worksheet
Pass-by Traffic Assignment - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





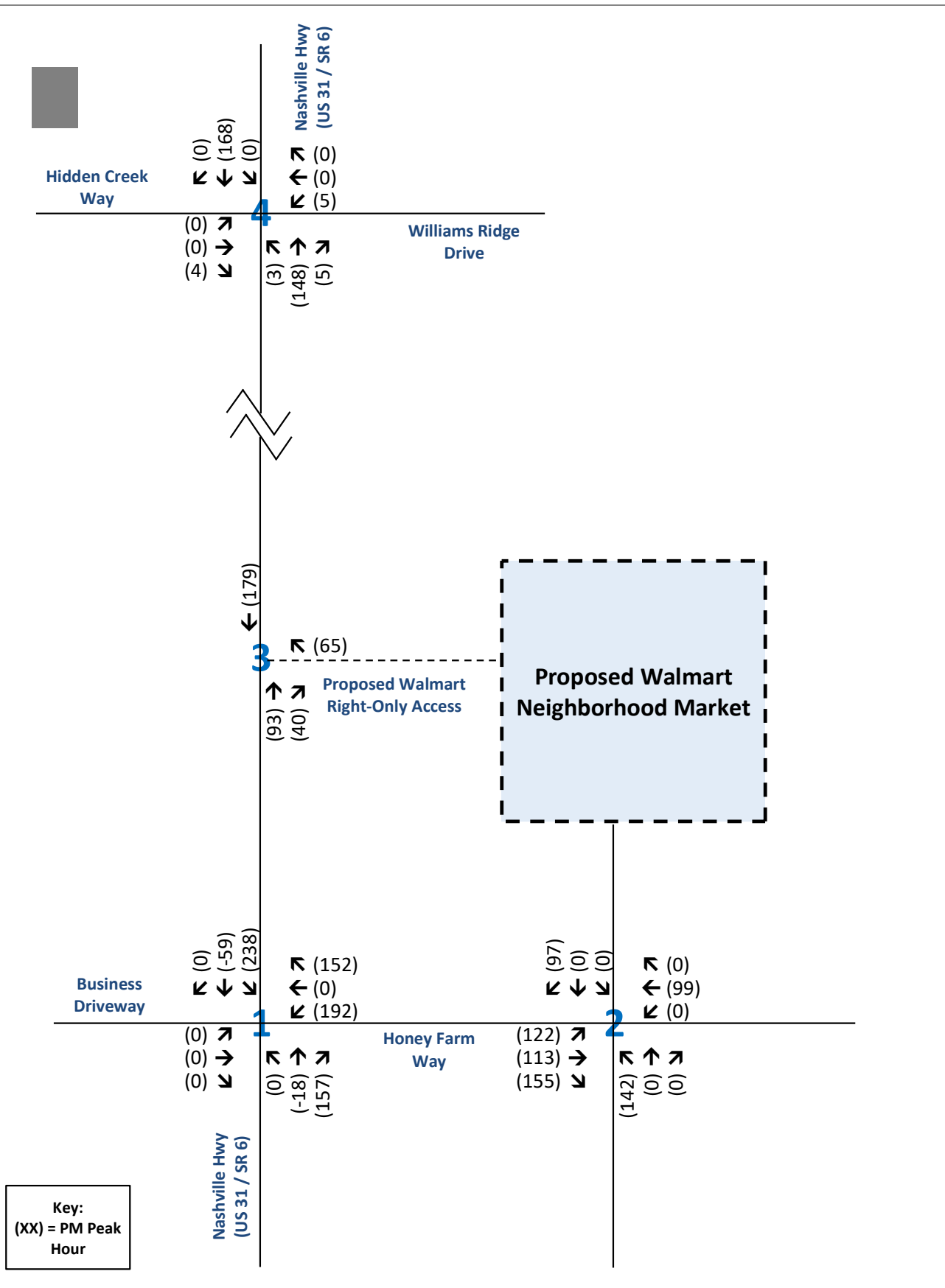
Traffic Assignment Worksheet
Pass-by Traffic Assignment - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





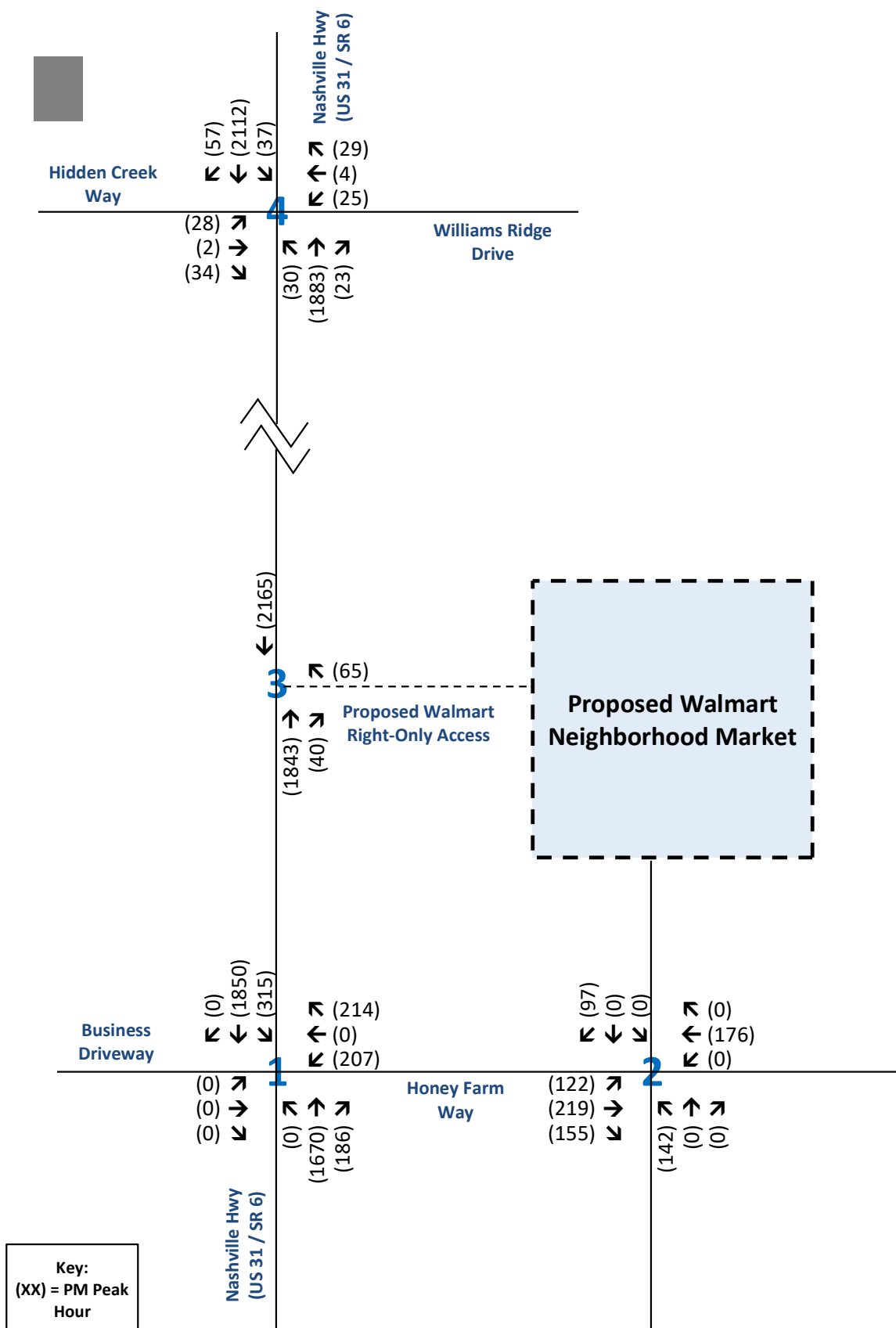
Traffic Assignment Worksheet
Total Passby Traffic Assignment
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Site Generated Traffic
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Total Projected Traffic at Buildout (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



APPENDIX F
TURN LANE
EVALUATIONS

RIGHT TURN LANE
EVALUATIONS

RIGHT TURN LANE EVALUATION

Based on NCHRP 457

PROJECT: **Proposed Walmart Neighborhood Market - Honey Farm Crossing**

LOCATION: **#2 - Honey Farm Way & Walmart Access / Commercial Access**

SECENARIO: **2026 Projected Traffic Volumes**

TIME PERIOD: **AM Peak Hour**

DIRECTION: **Westbound**

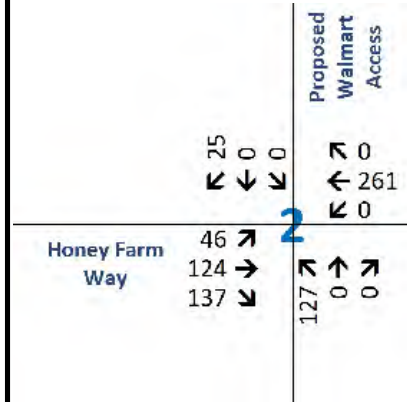


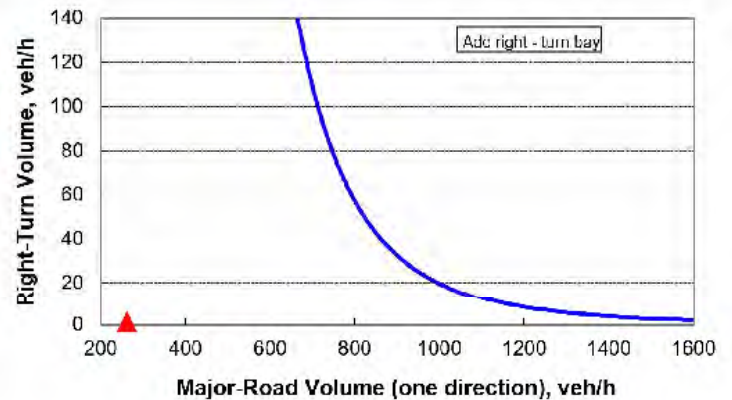
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	262
Right-turn volume, veh/h:	1

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	12420
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



RIGHT TURN LANE EVALUATION

Based on NCHRP 457

PROJECT: **Proposed Walmart Neighborhood Market - Honey Farm Crossing**

LOCATION: **#2 - Honey Farm Way & Walmart Access / Commercial Access**

SECENARIO: **2026 Projected Traffic Volumes**

TIME PERIOD: **PM Peak Hour**

DIRECTION: **Westbound**

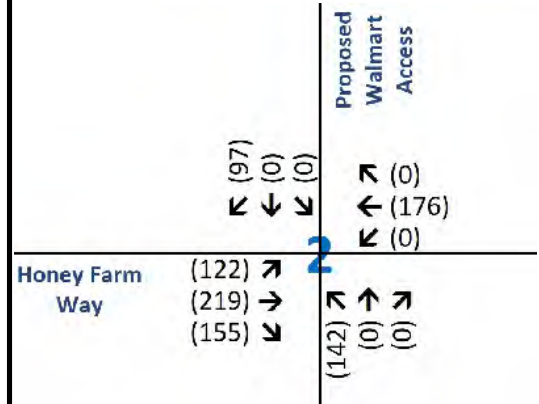


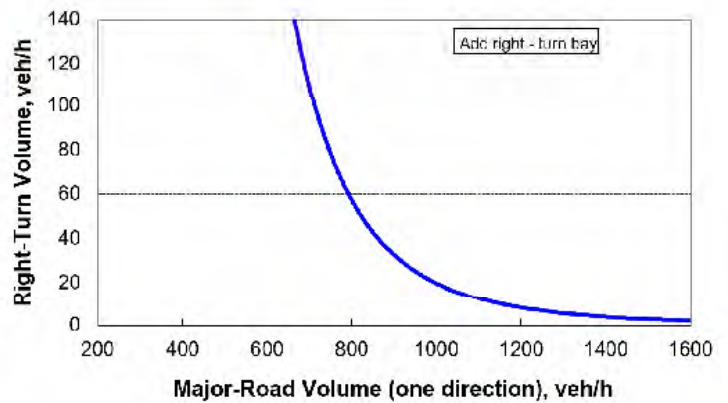
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	177
Right-turn volume, veh/h:	1

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	82211
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



RIGHT TURN LANE EVALUATION

Based on NCHRP 457

PROJECT: **Proposed Walmart Neighborhood Market - Honey Farm Crossing**

LOCATION: **#3 - Nashville Hwy & Proposed Walmart Right-Only Access**

SECENARIO: **2026 Projected Traffic Volumes**

TIME PERIOD: **AM Peak Hour**

DIRECTION: **Northbound**



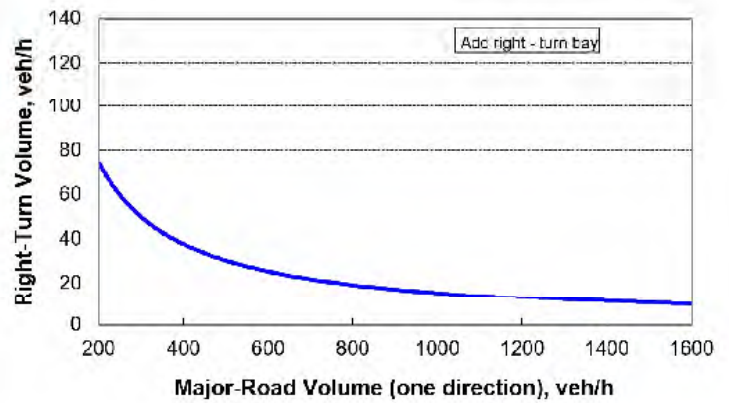
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	1-lane roadway
Variable	Value
Major-road speed, mph:	55
Major-road volume (one direction), veh/h:	1757
Right-turn volume, veh/h:	15

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	9
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Add right-turn bay.	



RIGHT TURN LANE EVALUATION

Based on NCHRP 457

PROJECT: **Proposed Walmart Neighborhood Market - Honey Farm Crossing**

LOCATION: **#3 - Nashville Hwy & Proposed Walmart Right-Only Access**

SECENARIO: **2026 Projected Traffic Volumes**

TIME PERIOD: **PM Peak Hour**

DIRECTION: **Northbound**

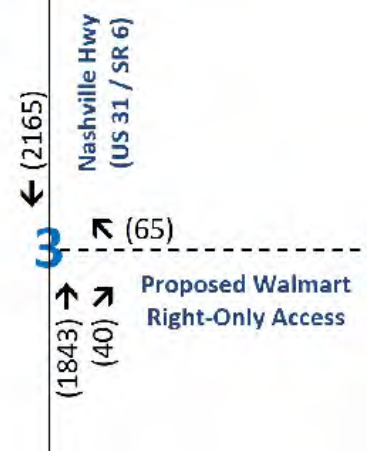
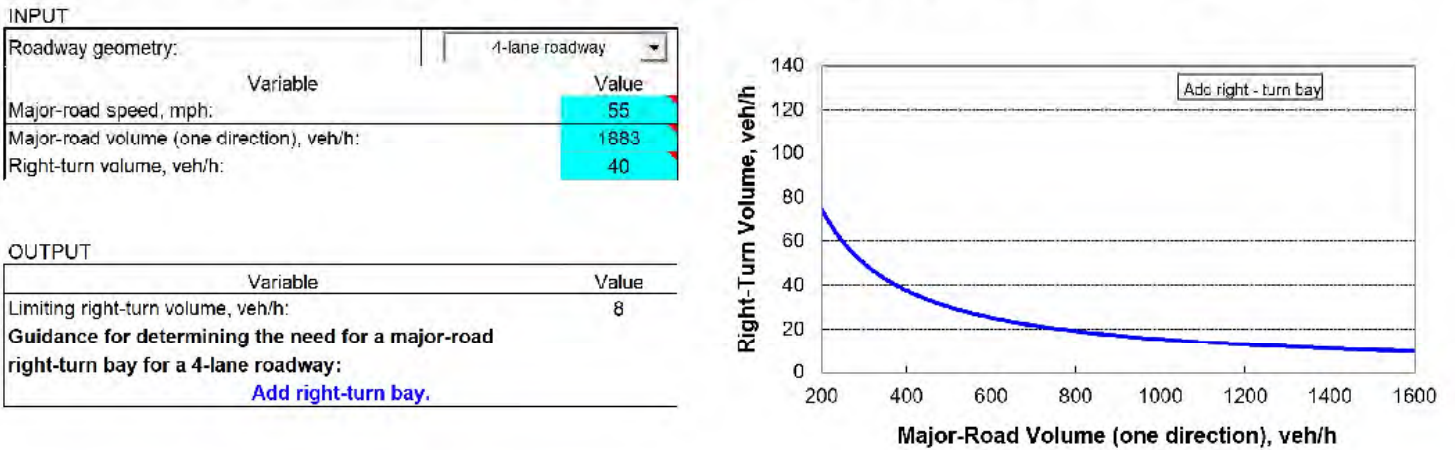


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.





January 21, 2025

City of Columbia
700 N Garden Street
Columbia, TN 38401

Re: Deviation Requests
#03908-1000 Walmart Neighborhood Market

To Whom It May Concern:

This letter is to request the following deviations:

DEVIATION REQUEST 1

ORDINANCE REQUIREMENT: ARTICLE 4.3.16.D.7.A. REQUIRES FOUNDATION PLANTINGS TO BE PLACED WITHIN 5 FEET OF THE BUILDING PERIMETER

PROPOSED VARIANCE: PLACE PLANTER BOXES ALONG THE FRONT DRIVE AISLE AWAY FROM THE BUILDING WALL.

JUSTIFICATION: DUE TO THE PRESENCE OF FAT CLAYS ONSITE WHICH HAVE THE POTENTIAL TO SWELL WHEN THESE CLAYS ABSORB WATER, WE ARE PROPOSING TO PROVIDE PLANTERS FURTHER AWAY FROM THE BUILDING WALL TO HELP REDUCE THE SWELL POTENTIAL RIGHT ADJACENT TO THE BUILDING WALL.

DEVIATION REQUEST 2

ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT – MIXED USE REQUIRES THE LOT/BUILDING SITE WIDTH TO BE A MINIMUM OF 18' AND A MAXIMUM OF 180'.

PROPOSED VARIANCE: REMOVE THE MAXIMUM REQUIREMENT.

JUSTIFICATION: IN ORDER TO HAVE A TYPICAL GROCERY STORE FOR OUR CLIENT, THE BUILDING MUST BE 250' IN WIDTH TO ACCOMMODATE THE NECESSARY FACILITIES TO MEET AND SERVE THE CUSTOMERS' NEEDS. TO LIMIT THIS WIDTH LIMITS WHAT COULD BE DEVELOPED ON THIS PARCEL. WE REQUEST THIS DEVIATION TO BEST MEET OUR CLIENT'S NEEDS AND BEST SERVE THEIR CUSTOMERS. ADDITIONALLY, BUILDABLE LOT #2 IS THE REMAINING PART OF THE PARCEL THAT EXCEEDS THE MAXIMUM WIDTH.

DEVIATION REQUEST 3

ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT – MIXED USE REQUIRES ONLY PARKING IN THE 3RD LAYER.

PROPOSED VARIANCE: ALLOW PARKING IN ALL LAYERS.

JUSTIFICATION: OUR CLIENT'S STANDARD BUILDING ENTRANCE IS IN THE FRONT OF THE BUILDING FOR SAFETY PURPOSES DUE TO THE TRUCK TRAFFIC BEHIND THE STORE. THIS CONFIGURATION IS FOR THE SAFETY OF THE CUSTOMERS AS WELL AS THE EMPLOYEES.

IT ALSO ALLOWS FOR THE SAFEST AND MOST EFFICIENT PEDESTRIAN WALKING PATHS TO AND FROM THE BUILDING. ADDITIONALLY, THE PHARMACY DRIVE THROUGH WILL BE PLACED ON THE NORTH SIDE OF THE BUILDING TO AVOID VEHICLES DRIVING NEAR THE TRUCK DOCKS AT THE REAR OF THE BUILDING AND TO PREVENT THE DRIVE THRU TO NOT FACE A PUBLIC STREET AND BE IN THE 3RD LAYER. IT IS NOT FEASIBLE TO SCREEN THE DRIVE-THRU BEYOND THE LANDSCAPING SHOWN IN THE SURROUNDING LANDSCAPED AREAS WITHOUT CAUSING BLIND SPOTS FOR THE DRIVERS GOING THROUGH THE DRIVE-THRU.

DEVIATION REQUEST 4

ORDINANCE REQUIREMENT: TABLE 4.3.11.H.-1 LOT/BUILDING SITE/PARCEL BUFFER REQUIRES A 75' BUFFER DEPTH WITH A BUFFER COMPOSED OF EVERGREENS FOR A PUD-MU.

PROPOSED VARIANCE: REQUESTING 4.3.11.I.C. A MODIFIED BUFFER, FENCE, OR SCREENING ADEQUATELY MITIGATES ANY POTENTIAL DELETERIOUS IMPACT TO ABUTTING PARCELS.

JUSTIFICATION: THERE IS A RESIDENTIAL PARCEL TO THE NORTH OF THE PROPOSED DEVELOPMENT. HOWEVER, WITH THE LIMITED PARCEL AREA AND TOPOGRAPHY OF THE SITE, WE CANNOT PROVIDE THE REQUIRED 75' BUFFER. ADDITIONALLY, THERE IS AN EXISTING 40' ELECTRIC EASEMENT AND 30' WATER EASEMENT THAT CREATES A 70' EASEMENT ALONG THE NORTHERN PROPERTY LINE. WITHIN THE EASEMENTS IS A 36" WATER LINE AND OVERHEAD ELECTRICAL/TELECOMMUNICATION LINES. DUE TO THESE EASEMENT AND UTILITY LINES, WE ARE PROPOSING TO PLACE A 6' WOODEN FENCE JUST SOUTH OF THE EXISTING PRIVATE DRIVE TO PROVIDE SCREENING AND TO ALLOW ACCESS TO THE EXISTING UTILITIES IN THIS AREA.

DEVIATION REQUEST 5

ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT – MIXED USE REQUIRES THE PRINCIPAL BUILDING TO BE A MINIMUM OF 2 STORIES.

PROPOSED VARIANCE: ALLOW A 1-STORY BUILDING

JUSTIFICATION: OUR CLIENT'S TYPICAL STORE DESIGN DOES NOT INCLUDE A SECOND STORY DUE TO THE DIFFICULTY OF PROVIDING CUSTOMER ACCESS WITH A SHOPPING CART TO A SECOND STORY. THE CLIENT HAS CHANGED THE PROTOTYPICAL BUILDING ELEVATIONS TO PROVIDE A TALLER VESTIBULE, ADDED BUILDING ELEMENTS TO BREAK UP THE MASS OF THE BUILDING, AND HAS ADDED ADDITIONAL ELEMENT TO MAKE IT APPEAR THERE IS A SECOND STORY. WE BELIEVE THE PROPOSED BUILDING, AS DESIGNED, IS MODERN, STREAMLINED, AND CLEAN, OFFERING A POSITIVE AESTHETIC CONTRIBUTION TO THE NEIGHBORHOOD.

DEVIATION REQUEST 6

ORDINANCE REQUIREMENT: ARTICLE 4.3.6.D.3 STATES EACH RETAINING WALL SHALL BE SCREENED BY A ROW OF EVERGREEN SHRUBS, PLANTED EVERY FIVE FEET ON CENTER, AT THE BASE OF THE WALL. SHRUBS SHALL BE A MINIMUM OF 30 INCHES IN HEIGHT AT THE TIME OF PLANTING.

PROPOSED VARIANCE: NO RETAINING WALL SCREENING.

JUSTIFICATION: THE RETAINING WALL IS TO THE REAR OF THE PROPERTY BEHIND THE PROPOSED BUILDING. THESE REQUIRED SHRUBS WOULD NOT SCREEN THE PROPOSED WALL.

DEVIATION REQUEST 7

ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT – MIXED USE REQUIRES A 70% MINIMUM OF THE TOTAL FAÇADE AREA FOR THE SHOPFRONT SHOULD BE GLAZED

PROPOSED VARIANCE: REDUCTION IN THE MINIMUM FAÇADE GLAZING MINIMUM.

JUSTIFICATION: ADDITIONAL GLAZING WAS PROVIDED WITHIN CENTER PORTION OF FRONT FAÇADE (FAÇADE #2) AND PERCENTAGE OF GLAZING VALUES WERE PROVIDED FOR EACH PORTION OF THE FAÇADE. THE PROPOSED ELEVATION DESIGN INCLUDES A COMBINATION OF TRANSPARENT AND SPANDREL GLAZING TO PROVIDE 24% GLAZING STRATEGICALLY PLACED ON THE FRONT ELEVATION. 70% GLAZING WAS NOT MET, SO A VARIANCE WILL BE ANTICIPATED FOR PROPOSED DESIGN.

Thank you,



Olivia DuPuy, EI
Carlson Consulting Engineers, Inc.



January 21, 2025

City of Columbia
700 N Garden Street
Columbia, TN 38401

Re: Preliminary PUD Project Narrative
#03908-1000 Walmart Neighborhood Market

To Whom It May Concern:

This letter is to address all comments from the DRC Meeting on January 7, 2025. Please see our responses in red.

Planning

The case planner for this project is Austin Brass. My email is abrass@columbiatn.gov. Please respond to all comments with a formal upload of changes accompanied by a comment response letter by the deadline date listed. (see PDF markup attached)

1. Indicate Crosswalks to Sidewalk. Sidewalk is required to be relocated to south section of internal drive. Zoning Ordinance requires sidewalk to be located on same side of street section that development is occurring.

The crosswalk has been added from the pick-up spaces to the sidewalk located to the north. However, the other location of the crosswalk that was indicated by city staff is deemed unnecessary because the sidewalk was relocated to south of the drive. This is to ensure the sidewalk is on the development side to align with city code. Please see the Site Plan for this modification.
2. (Deviation request 6) Lot/ Building Sites have maximum 180 ft. Add Building Site Maximum callout to ensure conformity. The creation of multiple building sites on the site development plan can conform with parking lots located on individual building sites as a principle use. See comment 3

The additional principle lots have been created. Please see the Internal Drive plan for the additional lots and dimensions. Buildable Lots #4 and #5 meet the requirements. Buildable Lots #1 and #6 fall within the allowable lot width variance of 20% of the maximum lot width. However, for Buildable Lots #2 and #3, please see Deviation Request 2.
3. By creating an individual building site for the Wal Mart building footprint only, the 90 percent frontage build-out requirement may be achieved. In addition, this will allow the deviation of the 10' side yard setback to be eliminated.

The building has been placed on its own principle lot. Therefore, the 90 percent frontage build-out requirement and 10' side yard setback deviation requests have been eliminated.
4. Deviation request 3 as listed can be eliminated. This requirement is for the establishment of a new PUD district. This is an existing legal lot of record within an already Zoned PUD district subject to the development standards as such.

This request has been eliminated since it does not apply.

5. Deviation request 5 does not allow for a pylon sign in a PUD district as stated. A pylon pole sign would not be accepted; however, a low profile pylon with monument would be in keeping with PUD precedent approvals. Please submit detail that conforms to monument sign standards as outlined in the Zoning Ordinance.

Please refer to the HFA letter for this response.

6. ADA parking spots do not terminate into a landscape island as required.

ADA parking spaces terminate into a landscape island. Please see the Site Plan for this revision.

7. See Limited Use Standards Table 4.3.9-A-1 Parking Lots as principle uses indicating that parking lots require a wall or continuous evergreen hedgerow of at least 24 inches and fence of no more than 48 inches in height be placed around the perimeter of the parking area.

Fencing and an extension of the hedge planting has been added around the limits of the parking. Please see the Site Plan and the Planting Plan for this revision.

8. Hedge Screen Required to screen parking areas 3ft. This hedge screen shall be applied to landscape islands where parking islands abut internal drive.

A planting screen has been added along the limits of the internal drive. Please see the Planting Plan for this revision.

9. Indicate height of retaining wall. If supporting grade of 8ft. or higher than grade at property line, 10' setback required

The retaining wall specifies the maximum height on the Site Plan to be 9-feet. The retaining wall meets the 10' setback requirement as shown on the Site Plan.

10. Indicate call out of area of drive section that is internal drive. Note the PUDE and indicate as private. See DS-39 Internal Drive Standards on page 94 of ESS

Please see the Site Plan for the note referring to the PUDE, and the Internal Drive Layout for the Internal Drive Standards detail.

11. Deviation request would be required for not containing 5' planter strip among this section of internal drive. The Zoning Ordinance allows for tree wells to be added in lieu of planting strips. Please add tree wells, 1 per 50 feet along sidewalk area. In addition, please add more planter boxes to ensure that Zoning Ordinance foundation landscaping requirement can be met.

Tree wells have been added along with additional planter boxes. See Site Plan for the modification. Please refer to Deviation Request 1 for the request to use planter boxes and tree wells in place of the 5' planter strip.

12. Provide detail of fence. As noted a fence of this height would not be permitted in this layer. 3.5-4ft would be maximum height permitted. In addition, there is a 6' tall wood fence proposed on the northern boundary line. Height is exceeding 3.5-4 ft in 1st layer.

Please the Site Plan for the 3' Three Rail Smooth Top Aluminum Picket Fence detail. The 6' wooden fence along the northern boundary is being proposed in place of the screening buffer due to the easements and utility lines along the northern boundary. Please see Deviation Request 4.

13. Primary material indicates Stucco painted over CMU block. Please provide clarity that material is authentic stucco and not a painted CMU block. Exposed CMU block is prohibited

Please refer to the HFA letter for this response.

14. The Ordinance requires a facade greater than 100' to be differentiated so that it appears to be two or more adjacent buildings. See facade articulation on pg. 162 in the ZO for a PUD-MU district.

Please refer to the HFA letter for this response.

15. The PUD MU district prohibits sheet metal. Provide a material type that adheres to this code standard.

Please refer to the HFA letter for this response.

16. The Zoning Ordinance requires a defined base, middle, and cap. The base can be achieved by a rowlock brick course. The material of EIFS on the cap is a prohibited material.
Please refer to the HFA letter for this response.
17. A shop front facade is required for use. with this facade, 70% glazing is required. Please indicate percentage of glazing.
Please refer to the HFA letter for this response.
18. Northeast parking area above drive-thru western exterior edge shall conform to internal drive details and landscape islands of sufficient size.
The landscape islands mentioned above have been modified to meet city requirements.
19. Northern Internal Drive section shall meet landscaping on both sides.
Plantings have been added to the islands mentioned above to meet city requirements.
20. Internal Drive street details should be shown for all such streets
The Internal Drive detail has been included on the Internal Drive Layout.
21. Stucco areas along the upper walls appear to be in a grid fashion as shown, what is the separating line material that is creating the look?
Please refer to the HFA letter for this response.
22. Any deviations from standards not listed as a requested deviation as specifically listed by the applicant shall conform to all standards of the Zoning Ordinance.
This comment has been acknowledged.
23. Parking ratio is 1 to 200 for retail food sales and 1 to 500 for general retail sales. Please clarify separation of uses to determine ratio. i.e., List ratio in this format as 1 to 200 as meeting the code ratio standards.
Please see the Site Analysis Table on the Site Plan for the parking requirements.

Engineering

24. Subject to site construction plans and traffic impact study.
This comment has been acknowledged
25. Deviation request 2 is not applicable as the proposed accesses are not "driveways" as they are internal drives.
This request has been eliminated.
26. Sidewalk location within Nashville Hwy subject to TDOT approval.
After further conversations with the case planner, the sidewalk within Nashville Highway has been eliminated.
27. Show proposed Honey Farm Way improvements. Improvements and signalization shall be constructed prior to any certificate of occupancy.
This comment has been acknowledged. Improvements are shown on the plans.
28. Provide commitment letter for all traffic improvements with timing for installation of said improvements.
The developer is preparing a commitment letter that will be turned in at a later date.

29. Site access on Honey Farm Way appears to be misaligned with Leafcutter Bee Rd. Outbound should consist of shared through-left and an exclusive right turn lane. Right turn lane and radius may need adjustment to account for turning movements with site construction plans.

Please see the Site Plan for the realignment of the drive. The outbound consists of shared through-left and an exclusive right turn lane.

30. Minimum grass strip width for an internal drive is 5 feet in width. See detail DS-39

All curbed islands and landscaped areas have been modified to meet this requirement.

31. Minimum 3 feet shoulder required for right turn lane on Nashville Hwy.

Please see the Site Plan for the 3' shoulder.

32. Note: an annotation indicating the max height of all retaining walls would be helpful.

The maximum height of the retaining wall has been added to the Site Plan.

Building

33. No comments.

Police

34. No comments provided.

Public Works

35. Please retain the attached City of Columbia Dumpster Guidelines & Accessibility Requirements for your reference. Private sanitation services must be utilized as the City does not provide compactor service.

This comment has been acknowledged, and the information has been passed on to the owner

City Attorney

36. No comments provided.

Wastewater

37. No comments.

Maury County Schools

38. No Comment.

Fire

39. Advisory note: reminder the FDC must be located within 100 feet of a fire hydrant

We will coordinate the location of the FDC with CPWS to ensure it meets all requirements.

ATT

40. ATT INTENDS TO SERVE. DEVELOPER TO CONTACT ATT FOR PROPOSED POLE RELOCATION. ATT HAS MULTIPLE FIBER & COPPER CABLES ON THE POLE. APPROPRIATE BILLING PROCESS TO BE FOLLOWED.

This comment has been acknowledged. We will coordinate with ATT for the proposed pole relocation.

Columbia Power

41. Columbia Power System has an existing power line near your proposed development. We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.

This comment has been acknowledged. The 12" water main extension and 20' utility easement along the front of the property are shown on the Utility Plan.

42. CPWS BB: Plan to Serve

Atmos Energy

43. Gas available along Nashville Hwy.

Duck River Electric Membership Corp

44. No comments.

Maury County Highway Dept.

45. No comment.

Maury County E911

46. No comments provided.

Columbia Water

47. A water availability letter was issued on December 18, 2024, it remains valid for 120 days. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements.

This comment has been acknowledged. We will coordinate with CPWS and Tennessee Department of Environment and Conservation to ensure all requirements are met.

Thank you,



Olivia DuPuy, EI
Carlson Consulting Engineers, Inc.



Code Comment Response 1

Project: Walmart Neighborhood Market #3908
2248 Nashville Hwy
Columbia, TN

Project #: 03908-1000
Permit #: 24-0535
Date: 01/21/2025

The information below is in response to the comments received by our office from JURISDICTION on the above referenced project, documents dated 01/07/2025.

Jurisdiction

Comment 5: Deviation request 5 does not allow for a pylon sign in a PUD district as stated. A pylon pole sign would not be accepted; however, a low profile pylon with monument would be in keeping with PUD precedent approvals. Please submit detail that conforms to monument sign standards as outlined in the Zoning Ordinance.

Response 5: See attached revised proposed signage. The proposed signage has been modified to be wrapped with like building materials and placed at a height that provides high visibility from Nashville Highway. Due to the landscaping requirements, a low profile monument sign would prevent visibility for southbound traffic on Nashville Highway. The proposed signage is strategically located at a height that allows the signage to be seen above the tree canopy.

Comment 13: Primary material indicates Stucco painted over CMU block. Please provide clarity that material is authentic stucco and not a painted CMU block. Exposed CMU block is prohibited.

Response 13: Material is intended to be authentic stucco as a wall finish and cornice type. See attached elevations clarifying material type and location.

Comment 14: The Ordinance requires a facade greater than 100' to be differentiated so that it appears to be two or more adjacent buildings. See facade articulation on pg. 162 in the ZO for a PUD-MU district.

Response 14: The front elevation has articulation treatment to differentiate the façade into 3 adjacent buildings. Open canopies and glazing was added to the center portion of the façade (Façade #2) to provide additional articulation. See attached elevations for reference.



- Comment 15:** The PUD MU district prohibits sheet metal. Provide a material type that adheres to this code standard.
- Response 15:** ACM Metal Panel was removed from materials and replaced with authentic stucco. See attached elevations for reference.
- Comment 16:** The Zoning Ordinance requires a defined base, middle, and cap. The base can be achieved by a rowlock brick course. The material of EIFS on the cap is a prohibited material.
- Response 16:** A rowlock brick course was added to the street-facing elevations. See attached elevations for reference.
- Comment 17:** A shop front facade is required for use. with this facade, 70% glazing is required. Please indicate percentage of glazing.
- Response 17:** Additional glazing was provided within center portion of front façade (Façade #2) and percentage of glazing values were provided for each portion of the façade. The proposed elevation design includes a combination of transparent and spandrel glazing to provide 24% glazing strategically placed on the front elevation. 70% glazing was not met, so a variance will be anticipated for proposed design.
- Comment 21:** Stucco areas along the upper walls appear to be in a grid fashion as shown, what is the separating line material that is creating the look?
- Response 21:** The separating lines are depicting control joints within the stucco material to add articulation and definition to the façade.

End of Code Comment Response 1

Kirsten M. Whitehead, AIA|NCARB|CPD
Team Lead/Architect
HFA-AE, LTD



DEVELOPMENT REVIEW COMMITTEE MEETING

Tuesday, January 7, 2025

ITEM NO.

24-0535

DESCRIPTION: 2248 Nashville Hwy Walmart Neighborhood Market

COMMENTS:

Planning

1. The case planner for this project is Austin Brass. My email is abrass@columbiatn.gov. Please respond to all comments with a formal upload of changes accompanied by a comment response letter by the deadline date listed. (see PDF markup attached
2. Indicate Crosswalks to Sidewalk. Sidewalk is required to be relocated to south section of internal drive. Zoning Ordinance requires sidewalk to be located on same side of street section that development is occurring.
3. (Deviation request 6) Lot/ Building Sites have maximum 180 ft. Add Building Site Maximum callout to ensure conformity. The creation of multiple building sites on the site development plan can conform with parking lots located on individual building sites as a principle use. See comment 3
4. By creating an individual building site for the Wal Mart building footprint only, the 90 percent frontage build-out requirement may be achieved. In addition, this will allow the deviation of the 10' side yard setback to be eliminated.
5. Deviation request 3 as listed can be eliminated. This requirement is for the establishment of a new PUD district. This is an existing legal lot of record within an already Zoned PUD district subject to the development standards as such.
6. Deviation request 5 does not allow for a pylon sign in a PUD district as stated. A pylon pole sign would not be accepted; however, a low profile pylon with monument would be in keeping with PUD precedent approvals. Please submit detail that conforms to monument sign standards as outlined in the Zoning Ordinance.
7. ADA parking spots do not terminate into a landscape island as required.
8. See Limited Use Standards Table 4.3.9-A-1 Parking Lots as principle uses indicating that parking lots require a wall or continuous evergreen hedgerow of at least 24 inches and fence of no more than 48 inches in height be placed around the perimeter of the parking area.
9. Hedge Screen Required to screen parking areas 3ft. This hedge screen shall be applied to landscape islands where parking islands abut internal drive.
10. Indicate height of retaining wall. If supporting grade of 8ft. or higher than grade at property line, 10' setback required

Development Review Committee
Technical Comments
24-0535
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11. Indicate call out of area of drive section that is internal drive. Note the PUDE and indicate as private. See DS-39 Internal Drive Standards on page 94 of ESS
12. Deviation request would be required for not containing 5' planter strip among this section of internal drive. The Zoning Ordinance allows for tree wells to be added in lieu of planting strips. Please add tree wells, 1 per 50 feet along sidewalk area. In addition, please add more planter boxes to ensure that Zoning Ordinance foundation landscaping requirement can be met.
13. Provide detail of fence. As noted a fence of this height would not be permitted in this layer. 3.5-4ft would be maximum height permitted. In addition, there is a 6' tall wood fence proposed on the northern boundary line. Height is exceeding 3.5-4 ft in 1st layer.
14. Primary material indicates Stucco painted over CMU block. Please provide clarity that material is authentic stucco and not a painted CMU block. Exposed CMU block is prohibited
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18. A shop front facade is required for use. with this facade, 70% glazing is required. Please indicate percentage of glazing.
19. Northeast parking area above drive-thru western exterior edge shall conform to internal drive details and landscape islands of sufficient size.
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21. Internal Drive street details should be shown for all such streets
22. Stucco areas along the upper walls appear to be in a grid fashion as shown, what is the separating line material that is creating the look?
23. Any deviations from standards not listed as a requested deviation as specifically listed by the applicant shall conform to all standards of the Zoning Ordinance.
24. Parking ratio is 1 to 200 for retail food sales and 1 to 500 for general retail sales. Please clarify separation of uses to determine ratio. i.e., List ratio in this format as 1 to 200 as meeting the code ratio standards.

Engineering

25. Subject to site construction plans and traffic impact study.
26. Deviation request 2 is not applicable as the proposed accesses are not "driveways" as they are internal drives.
27. Sidewalk location within Nashville Hwy subject to TDOT approval.
28. Show proposed Honey Farm Way improvements. Improvements and signalization shall be constructed prior to any certificate of occupancy.
29. Provide commitment letter for all traffic improvements with timing for installation of said improvements.

Development Review Committee
Technical Comments
24-0535
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- 30. Site access on Honey Farm Way appears to be misaligned with Leafcutter Bee Rd. Outbound should consist of shared through-left and an exclusive right turn lane. Right turn lane and radius may need adjustment to account for turning movements with site construction plans.
- 31. Minimum grass strip width for an internal drive is 5 feet in width. See detail DS-39
- 32. Minimum 3 feet shoulder required for right turn lane on Nashville Hwy.
- 33. Note: an annotation indicating the max height of all retaining walls would be helpful.

Building

- 34. No comments.

Police

- 35. No comments provided.

Public Works

- 36. Please retain the attached City of Columbia Dumpster Guidelines & Accessibility Requirements for your reference. Private sanitation services must be utilized as the City does not provide compactor service.

City Attorney

- 37. No comments provided.

Wastewater

- 38. No comments.

Maury County Schools

- 39. No Comment.

Fire

- 40. Advisory note: reminder the FDC must be located within 100 feet of a fire hydrant



ATT

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Columbia Power

42. Columbia Power System has an existing power line near your proposed development. We are willing to serve thi9s new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction. Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.
43. CPWS BB: Plan to Serve

Atmos Energy

44. Gas available along Nashville Hwy.

Duck River Electric Membership Corp

45. No comments.

Maury County Highway Dept.

46. No comment.

Maury County E911

47. No comments provided.

Columbia Water

48. A water availability letter was issued on December 18, 2024, it remains valid for 120 days. The availability of capacity to serve is based on a determination by the Fire Marshal of fire flow



requirements and the information submitted on the Water Service Availability Request application. Any off-site improvements detailed in the availability letter are the responsibility of the developer/owner. All public water system improvements are subject to the preparation and approval of detailed construction plans prepared in accordance with CPWS and Tennessee Department of Environment and Conservation requirements.

Resubmittal Guidelines

Please provide a comment response letter as well as digital copies of revised plans and supporting documentation. Submit all required documents electronically through the online portal: columbia.onlama.com. If the files are oversized, please provide a file sharing link.

Please contact the case planner identified in the Planning Comments with any questions about the review process.

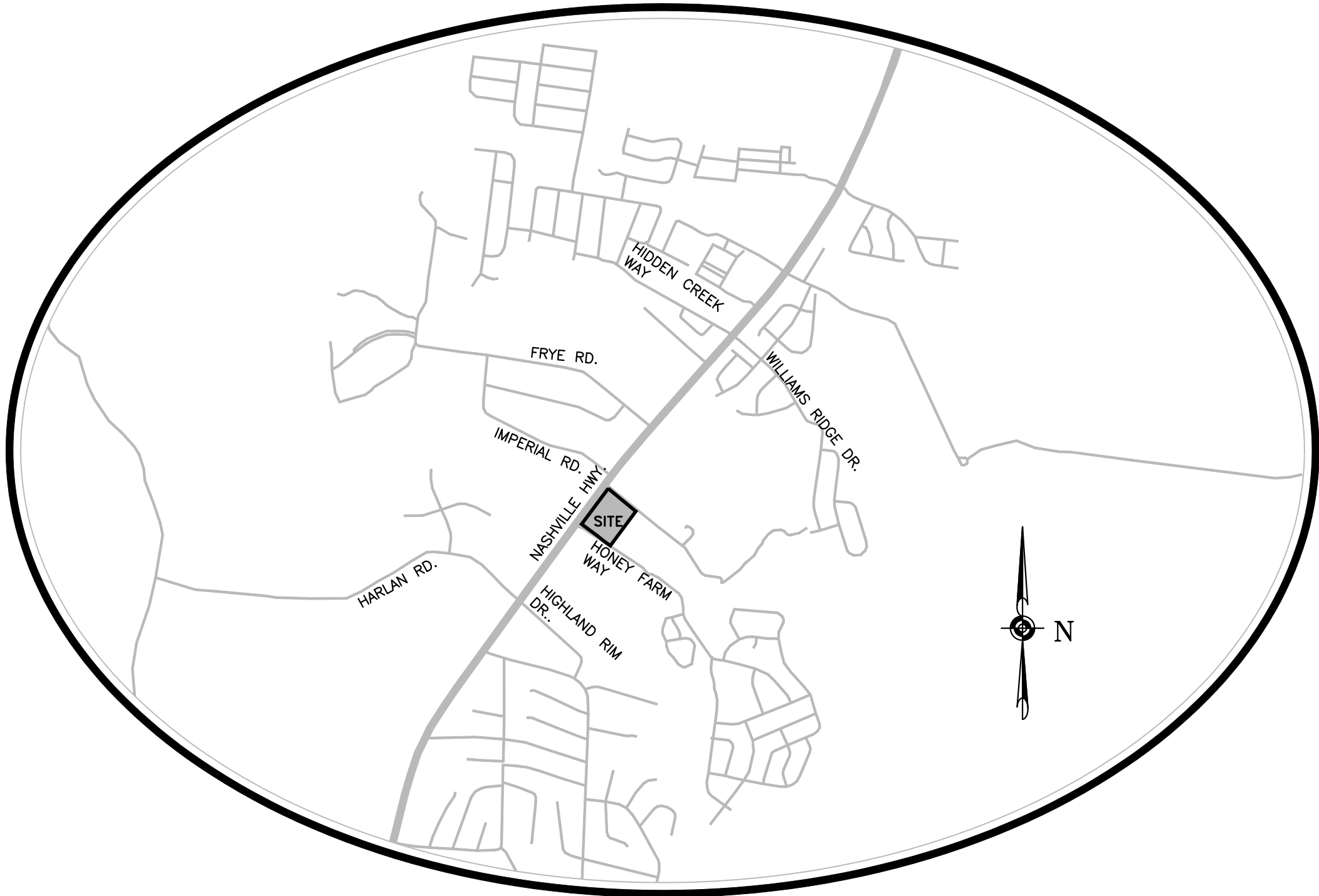
Please contact pkeltner@columbiatn.gov or srichardson@columbiatn.gov if you encounter difficulties with the online portal.

You will receive an invoice for required advertising and mailing fees. All fees must be paid by the Friday following resubmittal in order advance to the Planning Commission agenda.

NOTE: All resubmittals must demonstrate compliance with city standards prior to Planning Commission review. Requests which do not adhere to regulations and/or remain unresponsive to technical comments will not be forwarded to the next agenda until such items are amended. Final Plat applications which are not ready to proceed to Planning Commission following the first resubmittal deadline will be added to the following DRC agenda to confirm the status of required infrastructure and utilities. Applications which remain incomplete following two resubmittal deadlines will be closed.

PRELIMINARY PUD
WALMART NEIGHBORHOOD
MARKET #03908-1000
COLUMBIA, TENNESSEE
HONEY FARM WAY & NASHVILLE HWY

ADDRESS INFORMATION:
#03908-1000 WALMART NEIGHBORHOOD MARKET
2248 NASHVILLE HWY
COLUMBIA, TN 38401

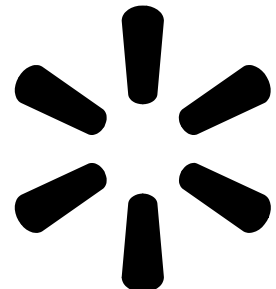


VICINITY MAP
NTS

INDEX OF SHEETS

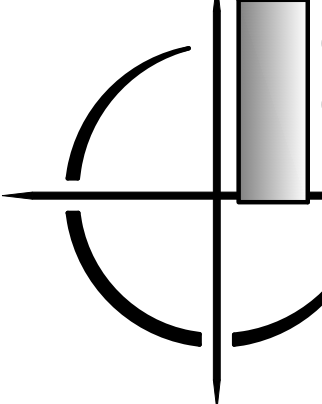
SHEET 1	TITLE SHEET
SHEET 2	SITE PLAN
SHEET 3	INTERNAL DRIVE LAYOUT
SHEET 4	PUD DEVIATION REQUESTS
SHEET 5	GRADING PLAN
SHEET 6	UTILITY PLAN
SHEET 7	PLANTING PLAN
SHEET 8	PHOTOMETRICS PLAN

DEVELOPED BY:

Walmart 

Save money. Live better.

WAL-MART REAL ESTATE BUSINESS TRUST
702 SW 8TH STREET
MAIL STOP 0505
BENTONVILLE, AR 72716-0505
(479) 360-4749
LEAH.TOMLINSON@WALMART.COM
ENGINEER:

 **CARLSON
CONSULTING
ENGINEERS, INC.**

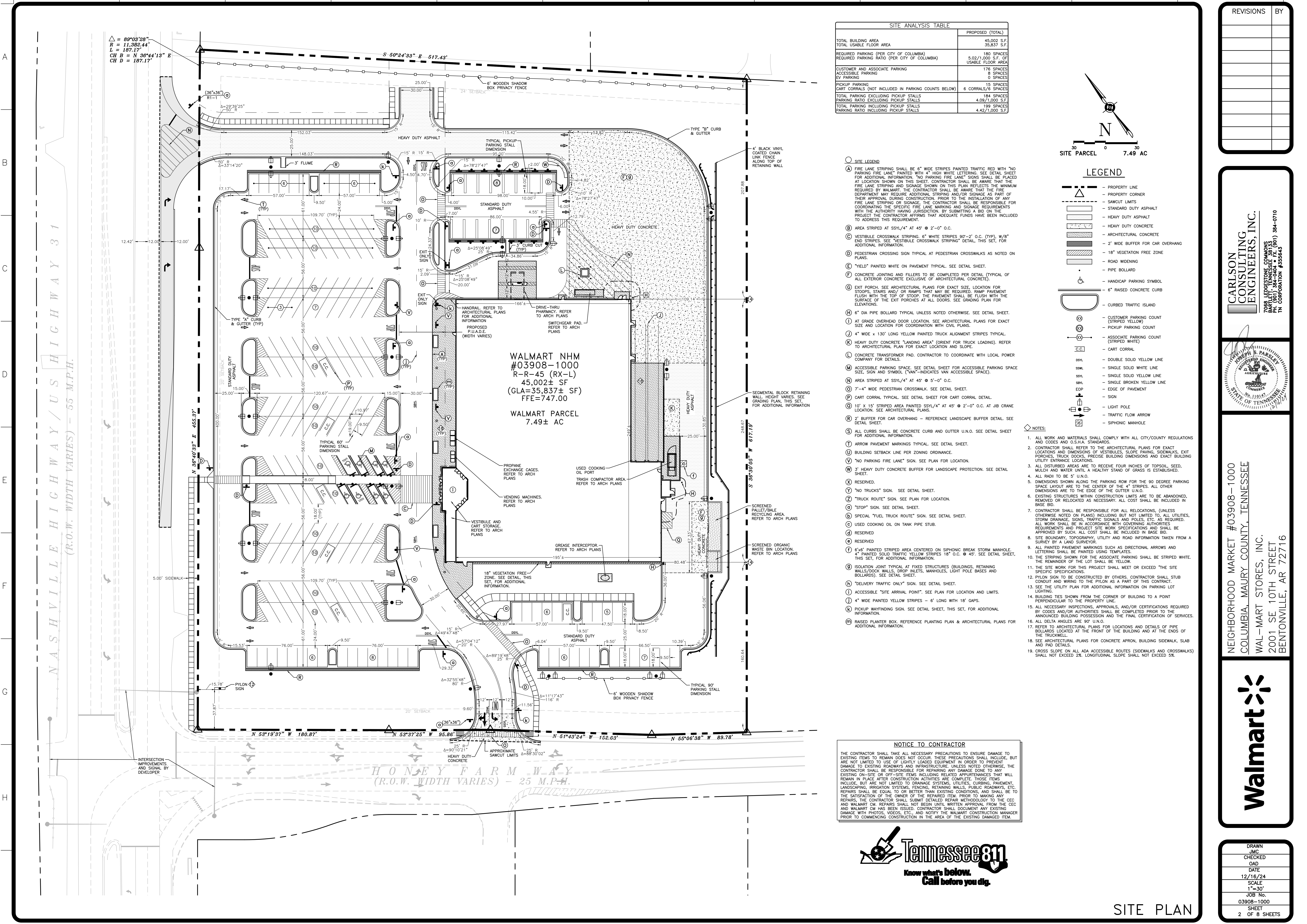
7068 Ledgestone Commons, Bartlett, TN 38133
Phone (901) 384-0404 • Fax (901) 384-0710
olviadupuy@carlsonconsulting.net

THE SITEWORK FOR THE WALMART'S PORTION OF THIS PROJECT SHALL MEET OR EXCEED THE "SITE SPECIFIC SPECIFICATIONS."

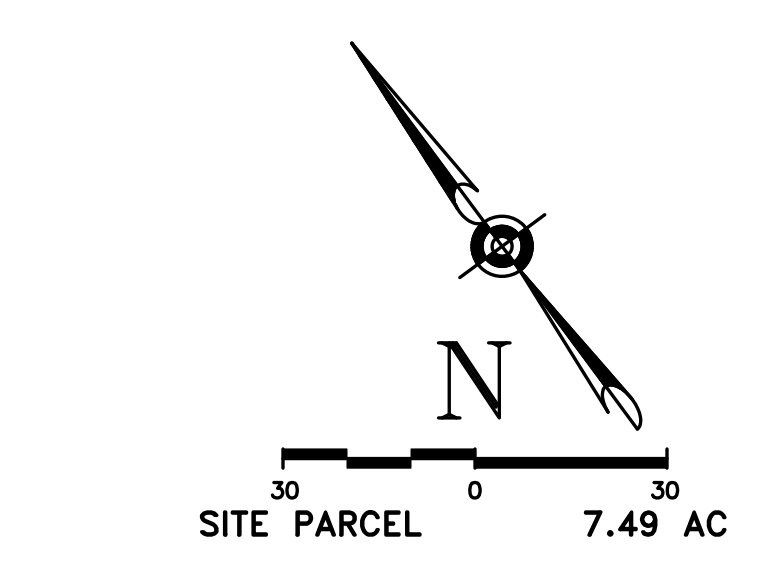
ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO CONTRACT COMPLETION AND THE FINAL CONNECTION OF SERVICES.

CONTRACTOR SHALL CONTACT 811 FOR LOCATION OF ALL UTILITIES, AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.





SITE ANALYSIS TABLE	
	PROPOSED (TOTAL)
TOTAL BUILDING AREA	45,002 S.F.
TOTAL USABLE FLOOR AREA	35,837 S.F.
REQUIRED PARKING (PER CITY OF COLUMBIA)	180 SPACES
REQUIRED PARKING RATIO (PER CITY OF COLUMBIA)	5.02/1,000 S.F. OF USABLE FLOOR AREA
CUSTOMER AND ASSOCIATE PARKING	176 SPACES
ACCESSIBLE PARKING	8 SPACES
PICKUP PARKING	6 SPACES
PICKUP PARKING (NOT INCLUDED IN PARKING COUNTS BELOW)	6 CORRALS/6 SPACES
TOTAL PARKING EXCLUDING PICKUP STALLS	184 SPACES
PARKING RATIO EXCLUDING PICKUP STALLS	4.09/1,000 S.F.
TOTAL PARKING INCLUDING PICKUP STALLS	199 SPACES
PARKING RATIO INCLUDING PICKUP STALLS	4.42/1,000 S.F.



- SITE LEGEND**
- (A) FIRE LANE STRIPING SHALL BE 6" WIDE STRIPES PAINTED TRAFFIC RED WITH "NO PARKING FIRE LANE" PAINTED WITH 4" HIGH WHITE LETTERING. SEE DETAIL SHEET FOR ADDITIONAL INFORMATION. "NO PARKING FIRE LANE" SIGNS SHALL BE PLACED AT LOCATIONS SHOWN ON THIS SHEET. CONTRACTOR SHALL BE AWARE THAT THE FIRE LANE STRIPING AND SIGNAGE SHOWN ON THIS PLAN REFLECTS THE MINIMUM REQUIRED BY WALMART. THE CONTRACTOR SHALL BE AWARE THAT THE FIRE DEPARTMENT MAY REQUIRE ADDITIONAL STRIPING AND/OR SIGNAGE AS PART OF THEIR APPROVAL DURING CONSTRUCTION. PRIOR TO THE INSTALLATION OF ANY FIRE LANE STRIPING OR SIGNAGE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SPECIFIC FIRE LANE MARKING AND SIGNAGE REQUIREMENTS WITH THE AUTHORITY HAVING JURISDICTION. BY SUBMITTING A BID ON THE PROJECT THE CONTRACTOR AFFIRMS THAT ADEQUATE FUNDS HAVE BEEN INCLUDED TO ADDRESS THIS REQUIREMENT.
 - (B) AREA STRIPED AT SSYL/4" AT 45° @ 2'-0" O.C.
 - (C) VESTIBULE CROSSWALK STRIPING: 6" WHITE STRIPES 90°-2' O.C. (TYP), W/8" END STRIPES. SEE "VESTIBULE CROSSWALK STRIPING" DETAIL, THIS SET, FOR ADDITIONAL INFORMATION.
 - (D) PEDESTRIAN CROSSING SIGN TYPICAL AT PEDESTRIAN CROSSWALKS AS NOTED ON PLANS.
 - (E) "YIELD" PAINTED WHITE ON PAVEMENT TYPICAL. SEE DETAIL SHEET.
 - (F) CONCRETE JOINTING AND FILLERS TO BE COMPLETED PER DETAIL (TYPICAL OF ALL EXTERIOR CONCRETE EXCLUSIVE OF ARCHITECTURAL CONCRETE).
 - (G) EXIT PORCH. SEE ARCHITECTURAL PLANS FOR EXACT SIZE, LOCATION FOR STOPS, STAIRS AND/OR RAMPS THAT MAY BE REQUIRED. RAMP PAVEMENT FLUSH WITH THE TOP OF STAIRS. THE PAVEMENT SHALL BE FLUSH WITH THE SURFACE OF THE EXIT PORCHES AT ALL DOORS. SEE GRADING PLAN FOR ELEVATIONS.
 - (H) 6" DIA PIPE BOLLARD TYPICAL UNLESS NOTED OTHERWISE. SEE DETAIL SHEET.
 - (I) AT GRADE OVERHEAD DOOR LOCATION. SEE ARCHITECTURAL PLANS FOR EXACT SIZE AND LOCATION FOR COORDINATION WITH CIVIL PLANS.
 - (J) 4" WIDE x 130' LONG YELLOW PAINTED TRUCK ALIGNMENT STRIPES TYPICAL.
 - (K) HEAVY DUTY CONCRETE "LANDING AREA" (ORIENT FOR TRUCK LOADING). REFER TO ARCHITECTURAL PLAN FOR EXACT LOCATION AND SLOPE.
 - (L) CONCRETE TRANSFORMER PAD. CONTRACTOR TO COORDINATE WITH LOCAL POWER COMPANY FOR DETAILS.
 - (M) ACCESSIBLE PARKING SPACE. SEE DETAIL SHEET FOR ACCESSIBLE PARKING SPACE SIZE, SIGN AND SYMBOL ("VAN" INDICATES VAN ACCESSIBLE SPACE).
 - (N) AREA STRIPED AT SSYL/4" AT 45° @ 5'-0" O.C.
 - (O) 7'-4" WIDE PEDESTRIAN CROSSWALK. SEE DETAIL SHEET.
 - (P) CART CORRAL TYPICAL. SEE DETAIL SHEET FOR CART CORRAL DETAIL.
 - (Q) 10' x 15' STRIPED AREA PAINTED SSYL/4" AT 45° @ 2'-0" O.C. AT JIB CRANE LOCATION. SEE ARCHITECTURAL PLANS.
 - (R) 2' BUFFER FOR CAR OVERHANG - REFERENCE LANDSCAPE BUFFER DETAIL. SEE DETAIL SHEET.
 - (S) ALL CURBS SHALL BE CONCRETE CURB AND GUTTER U.N.O. SEE DETAIL SHEET FOR ADDITIONAL INFORMATION.
 - (T) ARROW PAVEMENT MARKINGS TYPICAL. SEE DETAIL SHEET.
 - (U) BUILDING SETBACK LINE PER ZONING ORDINANCE.
 - (V) "NO PARKING FIRE LANE" SIGN. SEE PLAN FOR LOCATION.
 - (W) 3' HEAVY DUTY CONCRETE BUFFER FOR LANDSCAPE PROTECTION. SEE DETAIL SHEET.
 - (X) RESERVED.
 - (Y) "NO TRUCKS" SIGN. SEE DETAIL SHEET.
 - (Z) "TRUCK ROUTE" SIGN. SEE PLAN FOR LOCATION.
 - (1) "STOP" SIGN. SEE DETAIL SHEET.
 - (2) SPECIAL "FUEL TRUCK ROUTE" SIGN. SEE DETAIL SHEET.
 - (3) USED COOKING OIL ON TANK PIPE STUB.
 - (4) RESERVED.
 - (5) RESERVED.
 - (6) 6"x6" PAINTED STRIPED AREA CENTERED ON SIPHONIC BREAK STORM MANHOLE. 4" PAINTED SOLID TRAFFIC YELLOW STRIPES 18" O.C. @ 45°. SEE DETAIL SHEET, THIS SET, FOR ADDITIONAL INFORMATION.
 - (7) ISOLATION JOINT TYPICAL AT FIXED STRUCTURES (BUILDINGS, RETAINING WALLS/DOCK WALLS, DROP INLETS, MANHOLES, LIGHT POLE BASES AND BOLLARDS). SEE DETAIL SHEET.
 - (8) "DELIVERY TRAFFIC ONLY" SIGN. SEE DETAIL SHEET.
 - (9) ACCESSIBLE "SITE ARRIVAL POINT". SEE PLAN FOR LOCATION AND LIMITS.
 - (10) 4" WIDE PAINTED YELLOW STRIPES - 6" LONG WITH 18" GAPS.
 - (11) PICKUP WAYFINDING SIGN. SEE DETAIL SHEET, THIS SET, FOR ADDITIONAL INFORMATION.
 - (12) BASED PLANTER BOX. REFERENCE PLANTING PLAN & ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

- LEGEND**
- PROPERTY LINE
 - PROPERTY CORNER
 - SAWCUT LIMITS
 - STANDARD DUTY ASPHALT
 - HEAVY DUTY ASPHALT
 - HEAVY DUTY CONCRETE
 - ARCHITECTURAL CONCRETE
 - 2' WIDE BUFFER FOR CAR OVERHANG
 - 18" VEGETATION FREE ZONE
 - ROAD WIDENING
 - PIPE BOLLARD
 - HANDICAP PARKING SYMBOL
 - 6" RAISED CONCRETE CURB
 - CURBED TRAFFIC ISLAND
 - CUSTOMER PARKING COUNT (STRIPED YELLOW)
 - PICKUP PARKING COUNT
 - ASSOCIATE PARKING COUNT (STRIPED WHITE)
 - CART CORRAL
 - DOUBLE SOLID YELLOW LINE
 - SINGLE SOLID WHITE LINE
 - SINGLE SOLID YELLOW LINE
 - SINGLE BROKEN YELLOW LINE
 - EDGE OF PAVEMENT
 - SIGN
 - LIGHT POLE
 - TRAFFIC FLOW ARROW
 - SIPHONIC MANHOLE

- NOTES:**
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
 - CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
 - ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
 - ALL RADI TO BE 5' U.N.O.
 - DIMENSIONS SHOWN ALONG THE PARKING ROW FOR THE 90 DEGREE PARKING SPACE LAYOUT ARE TO THE CENTER OF THE 4" STRIPES. ALL OTHER DIMENSIONS ARE TO THE EDGE OF THE CUTTER U.N.O.
 - EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS AND POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
 - SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY A LAND SURVEYOR.
 - ALL PAINTED PAVEMENT MARKINGS SUCH AS DIRECTIONAL ARROWS AND LETTERING SHALL BE PAINTED USING TEMPLATES.
 - THE STRIPING SHOWN FOR THE ASSOCIATE PARKING SHALL BE STRIPED WHITE. THE REMAINDER OF THE LOT SHALL BE YELLOW.
 - THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED "THE SITE SPECIFIC SPECIFICATIONS".
 - PLYON SIGN TO BE CONSTRUCTED BY OTHERS. CONTRACTOR SHALL STUB CONDUIT AND WIRING TO THE PLYON AS A PART OF THIS CONTRACT.
 - SEE THE UTILITY PLAN FOR ADDITIONAL INFORMATION ON PARKING LOT LIGHTING.
 - BUILDING TIES SHOWN FROM THE CORNER OF BUILDING TO A POINT PERPENDICULAR TO THE PROPERTY LINE.
 - ALL NECESSARY INSPECTIONS, APPROVALS, AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR AUTHORITIES SHALL BE COMPLETED PRIOR TO THE ANNOUNCED BUILDING POSSESSION AND THE FINAL CERTIFICATION OF SERVICES.
 - ALL DELTA ANGLES ARE 90° U.N.O.
 - REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND DETAILS OF PIPE BOLLARDS LOCATED AT THE FRONT OF THE BUILDING AND AT THE ENDS OF THE TRUCKWELL.
 - SEE ARCHITECTURAL PLANS FOR CONCRETE APRON, BUILDING SIDEWALK, SLAB AND PAD DETAILS.
 - CROSS SLOPE ON ALL ADA ACCESSIBLE ROUTES (SIDEWALKS AND CROSSWALKS) SHALL NOT EXCEED 2% LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.

NOTICE TO CONTRACTOR

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE DAMAGE TO EXISTING ITEMS TO REMAIN DOES NOT OCCUR. THESE PRECAUTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO, USE OF LIGHTLY LOADED EQUIPMENT IN ORDER TO PREVENT DAMAGE TO EXISTING ROADWAYS AND INFRASTRUCTURE. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY EXISTING ON-SITE OR OFF-SITE ITEMS INCLUDING RELATED APPURTENANCES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, PUBLIC ROADWAYS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS, AND SHALL BE TO THE SATISFACTION OF THE OWNER OF THE REPAIRED ITEM. PRIOR TO MAKING ANY REPAIRS, THE CONTRACTOR SHALL SUBMIT DETAILED REPAIR METHODOLOGY TO THE CEC AND WALMART CM. REPAIRS SHALL NOT BEGIN UNTIL WRITTEN APPROVAL FROM THE CEC AND WALMART CM HAS BEEN ISSUED. CONTRACTOR SHALL DOCUMENT ANY EXISTING DAMAGE WITH PHOTOS, VIDEOS, ETC., AND NOTIFY THE WALMART CONSTRUCTION MANAGER PRIOR TO COMMENCING CONSTRUCTION IN THE AREA OF THE EXISTING DAMAGED ITEM.

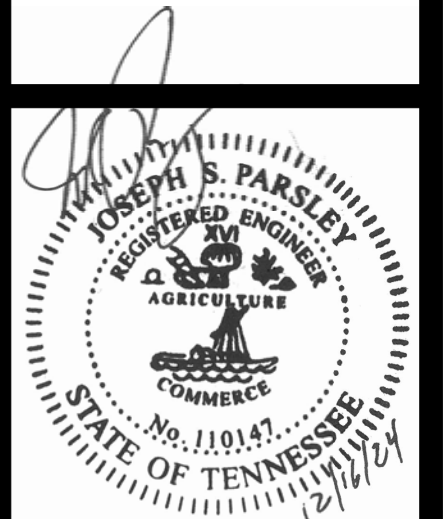


SITE PLAN

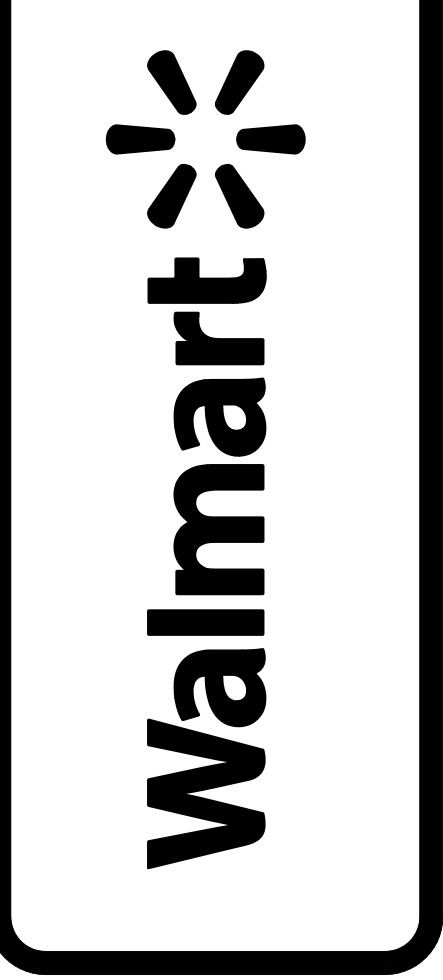
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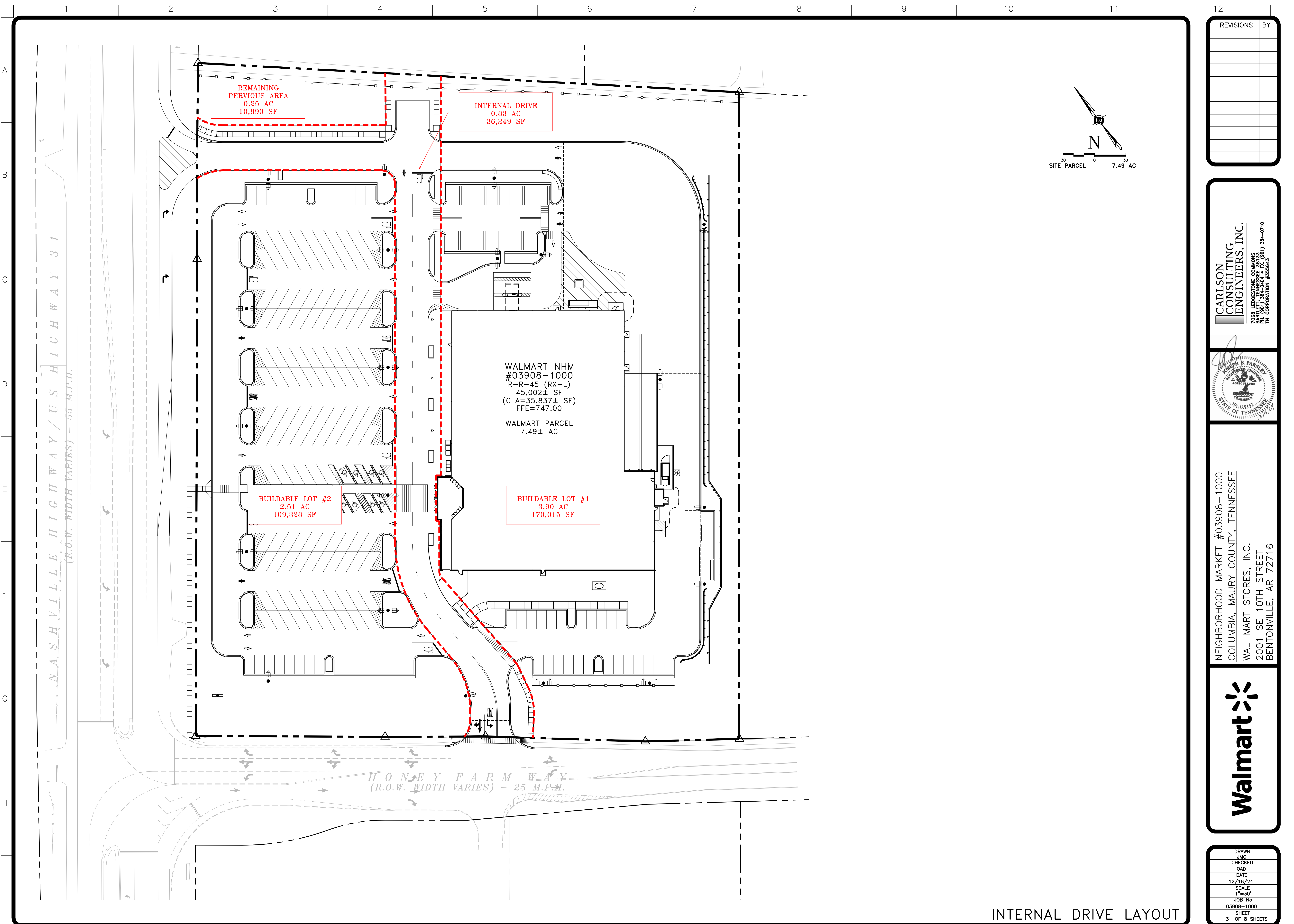
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NEIGHBORHOOD MARKET #03908-1000
COLUMBIA, MAURY COUNTY, TENNESSEE
WAL-MART STORES, INC.
2001 SE 10TH STREET
BENTONVILLE, AR 72716



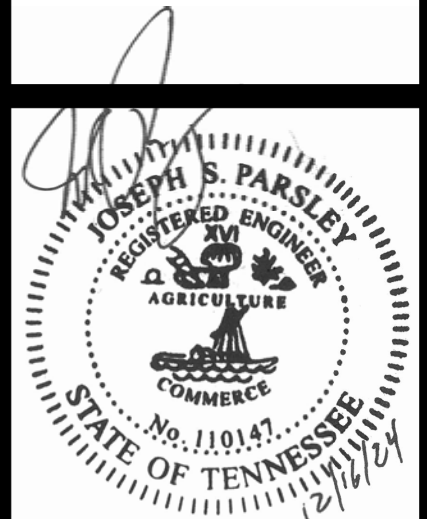
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SHEET	2 OF 8 SHEETS



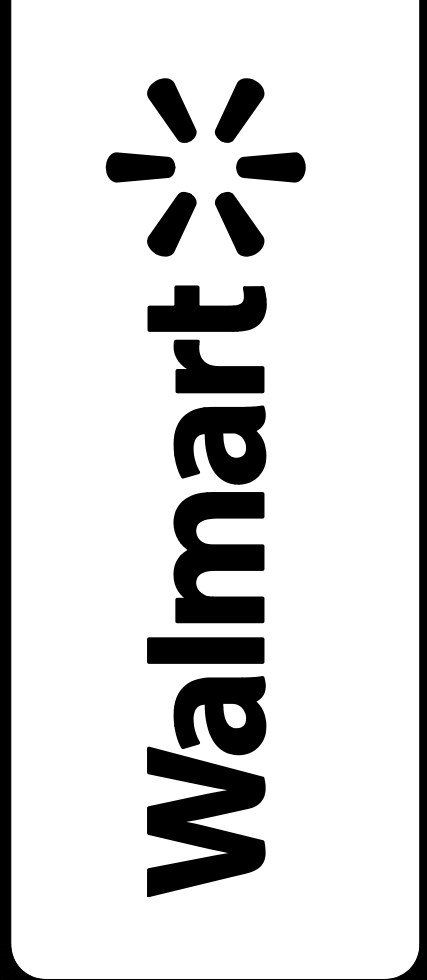
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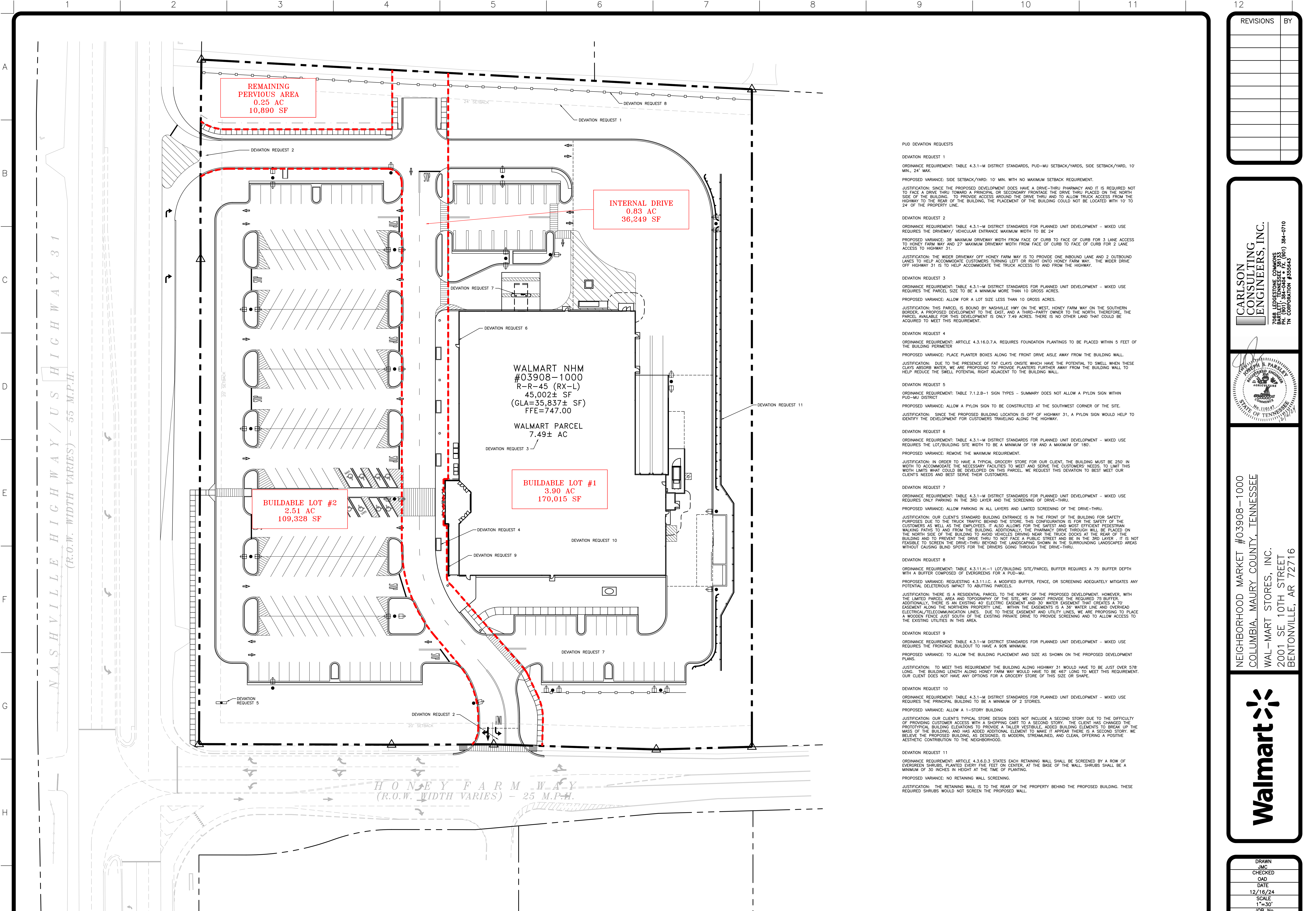


NEIGHBORHOOD MARKET #03908-1000
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INTERNAL DRIVE LAYOUT



PUD DEVIATION REQUESTS

DEVIATION REQUEST 1
ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS, PUD-MU SETBACK/YARDS, SIDE SETBACK/YARD, 10 MIN., 24' MAX.
PROPOSED VARIANCE: SIDE SETBACK/YARD: 10' MIN. WITH NO MAXIMUM SETBACK REQUIREMENT.
JUSTIFICATION: SINCE THE PROPOSED DEVELOPMENT DOES HAVE A DRIVE-THRU PHARMACY AND IT IS REQUIRED NOT TO FACE A DRIVE THRU TOWARD A PRINCIPAL OR SECONDARY FRONTAGE THE DRIVE THRU PLACED ON THE NORTH SIDE OF THE BUILDING. TO PROVIDE ACCESS AROUND THE DRIVE THRU AND TO ALLOW TRUCK ACCESS FROM THE HIGHWAY TO THE REAR OF THE BUILDING, THE PLACEMENT OF THE BUILDING COULD NOT BE LOCATED WITH 10' TO 24' OF THE PROPERTY LINE.

DEVIATION REQUEST 2
ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT - MIXED USE REQUIRES THE DRIVEWAY/ VEHICULAR ENTRANCE MAXIMUM WIDTH TO BE 24'
PROPOSED VARIANCE: 38' MAXIMUM DRIVEWAY WIDTH FROM FACE OF CURB TO FACE OF CURB FOR 3 LANE ACCESS TO HONEY FARM WAY AND 27' MAXIMUM DRIVEWAY WIDTH FROM FACE OF CURB TO FACE OF CURB FOR 2 LANE ACCESS TO HIGHWAY 31.
JUSTIFICATION: THE WIDER DRIVEWAY OFF HONEY FARM WAY IS TO PROVIDE ONE INBOUND LANE AND 2 OUTBOUND LANES TO HELP ACCOMMODATE CUSTOMERS TURNING LEFT OR RIGHT ONTO HONEY FARM WAY. THE WIDER DRIVE OFF HIGHWAY 31 IS TO HELP ACCOMMODATE THE TRUCK ACCESS TO AND FROM THE HIGHWAY.

DEVIATION REQUEST 3
ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT - MIXED USE REQUIRES THE PARCEL SIZE TO BE A MINIMUM MORE THAN 10 GROSS ACRES.
PROPOSED VARIANCE: ALLOW FOR A LOT SIZE LESS THAN 10 GROSS ACRES.
JUSTIFICATION: THIS PARCEL IS BOUND BY NASHVILLE HWY ON THE WEST, HONEY FARM WAY ON THE SOUTHERN BORDER, A PROPOSED DEVELOPMENT TO THE EAST, AND A THIRD-PARTY OWNER TO THE NORTH. THEREFORE, THE PARCEL AVAILABLE FOR THIS DEVELOPMENT IS ONLY 7.49 ACRES. THERE IS NO OTHER LAND THAT COULD BE ACQUIRED TO MEET THIS REQUIREMENT.

DEVIATION REQUEST 4
ORDINANCE REQUIREMENT: ARTICLE 4.3.16.D.7.A. REQUIRES FOUNDATION PLANTINGS TO BE PLACED WITHIN 5 FEET OF THE BUILDING PERIMETER
PROPOSED VARIANCE: PLACE PLANTER BOXES ALONG THE FRONT DRIVE AISLE AWAY FROM THE BUILDING WALL.
JUSTIFICATION: DUE TO THE PRESENCE OF FAT CLAYS ONSITE WHICH HAVE THE POTENTIAL TO SWELL WHEN THESE CLAYS ABSORB WATER, WE ARE PROPOSING TO PROVIDE PLANTERS FURTHER AWAY FROM THE BUILDING WALL TO HELP REDUCE THE SWELL POTENTIAL RIGHT ADJACENT TO THE BUILDING WALL.

DEVIATION REQUEST 5
ORDINANCE REQUIREMENT: TABLE 7.1.2.B-1 SIGN TYPES - SUMMARY DOES NOT ALLOW A PYLON SIGN WITHIN PUD-MU DISTRICT
PROPOSED VARIANCE: ALLOW A PYLON SIGN TO BE CONSTRUCTED AT THE SOUTHWEST CORNER OF THE SITE.
JUSTIFICATION: SINCE THE PROPOSED BUILDING LOCATION IS OFF OF HIGHWAY 31, A PYLON SIGN WOULD HELP TO IDENTIFY THE DEVELOPMENT FOR CUSTOMERS TRAVELING ALONG THE HIGHWAY.

DEVIATION REQUEST 6
ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT - MIXED USE REQUIRES THE LOT/BUILDING SITE WITH TO BE A MINIMUM OF 18' AND A MAXIMUM OF 180'.
PROPOSED VARIANCE: REMOVE THE MAXIMUM REQUIREMENT.
JUSTIFICATION: IN ORDER TO HAVE A TYPICAL GROCERY STORE FOR OUR CLIENT, THE BUILDING MUST BE 250' IN WIDTH TO ACCOMMODATE THE NECESSARY FACILITIES TO MEET AND SERVE THE CUSTOMERS NEEDS. TO LIMIT THIS WIDTH LIMITS WHAT COULD BE DEVELOPED ON THIS PARCEL. WE REQUEST THIS DEVIATION TO BEST MEET OUR CLIENTS NEEDS AND BEST SERVE THEIR CUSTOMERS.

DEVIATION REQUEST 7
ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT - MIXED USE REQUIRES ONLY PARKING IN THE 3RD LAYER AND THE SCREENING OF DRIVE-THRU.
PROPOSED VARIANCE: ALLOW PARKING IN ALL LAYERS AND LIMITED SCREENING OF THE DRIVE-THRU.
JUSTIFICATION: OUR CLIENTS STANDARD BUILDING ENTRANCE IS IN THE FRONT OF THE BUILDING FOR SAFETY PURPOSES DUE TO THE TRUCK TRAFFIC BEHIND THE STORE. THIS CONFIGURATION IS FOR THE SAFETY OF THE CUSTOMERS AS WELL AS THE EMPLOYEES. IT ALSO ALLOWS FOR THE SAFEST AND MOST EFFICIENT PEDESTRIAN WALKING PATHS TO AND FROM THE BUILDING. ADDITIONALLY, THE PHARMACY DRIVE THROUGH WILL BE PLACED ON THE NORTH SIDE OF THE BUILDING TO AVOID VEHICLES DRIVING NEAR THE TRUCK DOCKS AT THE REAR OF THE BUILDING AND TO PREVENT THE DRIVE THRU TO NOT FACE A PUBLIC STREET AND BE IN THE 3RD LAYER. IT IS NOT FEASIBLE TO SCREEN THE DRIVE-THRU BEYOND THE LANDSCAPING SHOWN IN THE SURROUNDING LANDSCAPED AREAS WITHOUT CAUSING BLIND SPOTS FOR THE DRIVERS GOING THROUGH THE DRIVE-THRU.

DEVIATION REQUEST 8
ORDINANCE REQUIREMENT: TABLE 4.3.11.H-1 LOT/BUILDING SITE/PARCEL BUFFER REQUIRES A 75' BUFFER DEPTH WITH A BUFFER COMPOSED OF EVERGREENS FOR A PUD-MU.
PROPOSED VARIANCE: REQUESTING 4.3.11.I.C. A MODIFIED BUFFER, FENCE, OR SCREENING ADEQUATELY MITIGATES ANY POTENTIAL DELETERIOUS IMPACT TO ABUTTING PARCELS.
JUSTIFICATION: THERE IS A RESIDENTIAL PARCEL TO THE NORTH OF THE PROPOSED DEVELOPMENT. HOWEVER, WITH THE LIMITED PARCEL AREA AND TOPOGRAPHY OF THE SITE, WE CANNOT PROVIDE THE REQUIRED 75' BUFFER. ADDITIONALLY, THERE IS AN EXISTING 40' ELECTRIC EASEMENT AND 30' WATER EASEMENT THAT CREATES A 70' EASEMENT ALONG THE NORTHERN PROPERTY LINE. WITHIN THE EASEMENTS IS A 36" WATER LINE AND OVERHEAD ELECTRICAL/TELECOMMUNICATION LINES. DUE TO THESE EASEMENT AND UTILITY LINES, WE ARE PROPOSING TO PLACE A WOODEN FENCE JUST SOUTH OF THE EXISTING PRIVATE DRIVE TO PROVIDE SCREENING AND TO ALLOW ACCESS TO THE EXISTING UTILITIES IN THIS AREA.

DEVIATION REQUEST 9
ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT - MIXED USE REQUIRES THE FRONTAGE BUILDOUT TO HAVE A 90% MINIMUM.
PROPOSED VARIANCE: TO ALLOW THE BUILDING PLACEMENT AND SIZE AS SHOWN ON THE PROPOSED DEVELOPMENT PLANS.
JUSTIFICATION: TO MEET THIS REQUIREMENT THE BUILDING ALONG HIGHWAY 31 WOULD HAVE TO BE JUST OVER 578' LONG. THE BUILDING LENGTH ALONG HONEY FARM WAY WOULD HAVE TO BE 467' LONG TO MEET THIS REQUIREMENT. OUR CLIENT DOES NOT HAVE ANY OPTIONS FOR A GROCERY STORE OF THIS SIZE OR SHAPE.

DEVIATION REQUEST 10
ORDINANCE REQUIREMENT: TABLE 4.3.1-M DISTRICT STANDARDS FOR PLANNED UNIT DEVELOPMENT - MIXED USE REQUIRES THE PRINCIPAL BUILDING TO BE A MINIMUM OF 2 STORIES.
PROPOSED VARIANCE: ALLOW A 1-STORY BUILDING
JUSTIFICATION: OUR CLIENTS TYPICAL STORE DESIGN DOES NOT INCLUDE A SECOND STORY DUE TO THE DIFFICULTY OF PROVIDING CUSTOMER ACCESS WITH A SHOPPING CART TO A SECOND STORY. THE CLIENT HAS CHANGED THE PROTOTYPICAL BUILDING ELEVATIONS TO PROVIDE A TALLER VESTIBULE ADDED BUILDING ELEMENTS TO BREAK UP THE MASS OF THE BUILDING, AND HAS ADDED ADDITIONAL ELEMENT TO MAKE IT APPEAR THERE IS A SECOND STORY. WE BELIEVE THE PROPOSED BUILDING, AS DESIGNED, IS MODERN, STREAMLINED, AND CLEAN, OFFERING A POSITIVE AESTHETIC CONTRIBUTION TO THE NEIGHBORHOOD.

DEVIATION REQUEST 11
ORDINANCE REQUIREMENT: ARTICLE 4.3.6.D.3 STATES EACH RETAINING WALL SHALL BE SCREENED BY A ROW OF EVERGREEN SHRUBS, PLANTED EVERY FIVE FEET ON CENTER, AT THE BASE OF THE WALL. SHRUBS SHALL BE A MINIMUM OF 30 INCHES IN HEIGHT AT THE TIME OF PLANTING.
PROPOSED VARIANCE: NO RETAINING WALL SCREENING.
JUSTIFICATION: THE RETAINING WALL IS TO THE REAR OF THE PROPERTY BEHIND THE PROPOSED BUILDING. THESE REQUIRED SHRUBS WOULD NOT SCREEN THE PROPOSED WALL.

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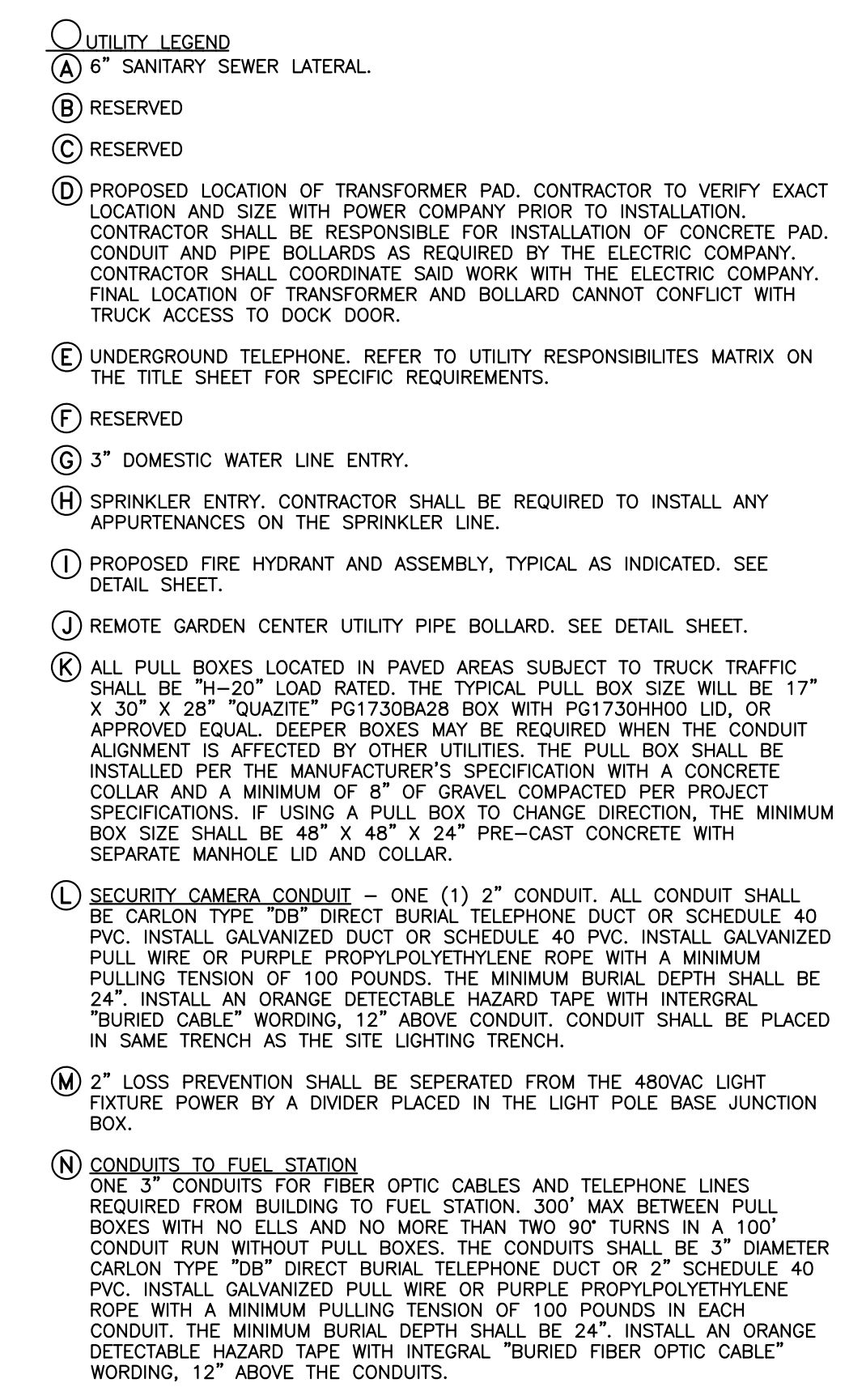
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JOSEPH R. PARSONS
REGISTERED PROFESSIONAL ENGINEER
No. 119147
STATE OF TENNESSEE
2/1/2024

NEIGHBORHOOD MARKET #03908-1000
COLUMBIA, MAURY COUNTY, TENNESSEE
WAL-MART STORES, INC.
2001 SE 10TH STREET
BENTONVILLE, AR 72716

Walmart

DRAWN	JMC
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SHEET	4 OF 8 SHEETS



Current Luminaire Schedule								
Symbol	Qty	Label	Arrangement	ILF	Description	Arr. Watts	Arr. Lum. Lumens	BUG Rating
	3	D1H4_28	D180	0.837	2-EALS035H4AF750ND01BLCKF 25ft pole on 3ft base	280	40000	B3-U0-G2
	8	D1H5_28	D180	0.837	2-EALS035H5M750ND01BLCKF 25ft pole on 3ft base	280	40000	B4-U0-G2
	3	D2F4_28	ROTATED OPTICS	0.837	1-EALS035F4AF750ND01BLCKF51 & 1-EALS035F4AF750ND01BLCKFS2 25ft pole on 3ft	232	30000	B2-U0-G2
	2	SD4_28	SINGLE	0.837	1-EALS035D4AF750ND01BLCKF 25ft pole on 3ft base	70	10000	B2-U0-G2
	2	SF4_28	SINGLE	0.837	1-EALS035F4AF750ND01BLCKF 25ft pole on 3ft base	116	15000	B2-U0-G2
	2	SH4_28	SINGLE	0.837	1-EALS035H4AF750ND01BLCKF 25ft pole on 3ft base	140	20000	B3-U0-G2
	5	ALN440-Y5-32LED-	SINGLE	0.837	ALN440-Y5-32LED-5K-700-BLT 12ft pole	74.9	5700	B3-U3-G3

NOTICE TO CONTRACTOR

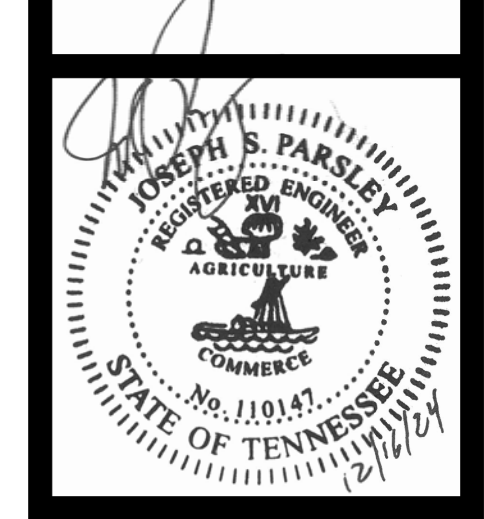
THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE DAMAGE TO EXISTING ITEMS TO REMAIN DOES NOT OCCUR. THESE PRECAUTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO USE OF LIGHTLY LOADED EQUIPMENT IN ORDER TO PREVENT DAMAGE TO EXISTING ROADWAYS AND INFRASTRUCTURE, UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO EXISTING ITEMS. EXISTING INCLUDES ON-SITE OR OFF-SITE ITEMS INCLUDING RELATED APPURTENANCES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THOSE ITEMS INCLUDE, BUT ARE NOT LIMITED TO DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, PUBLIC ROADWAYS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN ORIGINAL CONDITIONS AND SHALL BE TO THE SATISFACTION OF THE OWNER OF THE REPAIRED ITEM. PRIOR TO MAKING ANY REPAIRS, THE CONTRACTOR SHALL OBTAIN DETAILED REPAIR METHODOLOGY FROM THE DEC AND WALMART. NO REPAIRS SHALL NOT BE MADE WITHOUT PERMISSION FROM THE DEC AND WALMART. AS HAS BEEN ISSUED, CONTRACTOR SHALL IDENTIFY AND EXISTING ITEMS, TAKE PHOTOS, VIDEO AND MEASURE ALL ITEMS TO BE REPAIRED PRIOR TO COMMENCING CONSTRUCTION IN THE AREA OF THE EXISTING DAMAGE ITEM.

UTILITY PLAN

[illegible]

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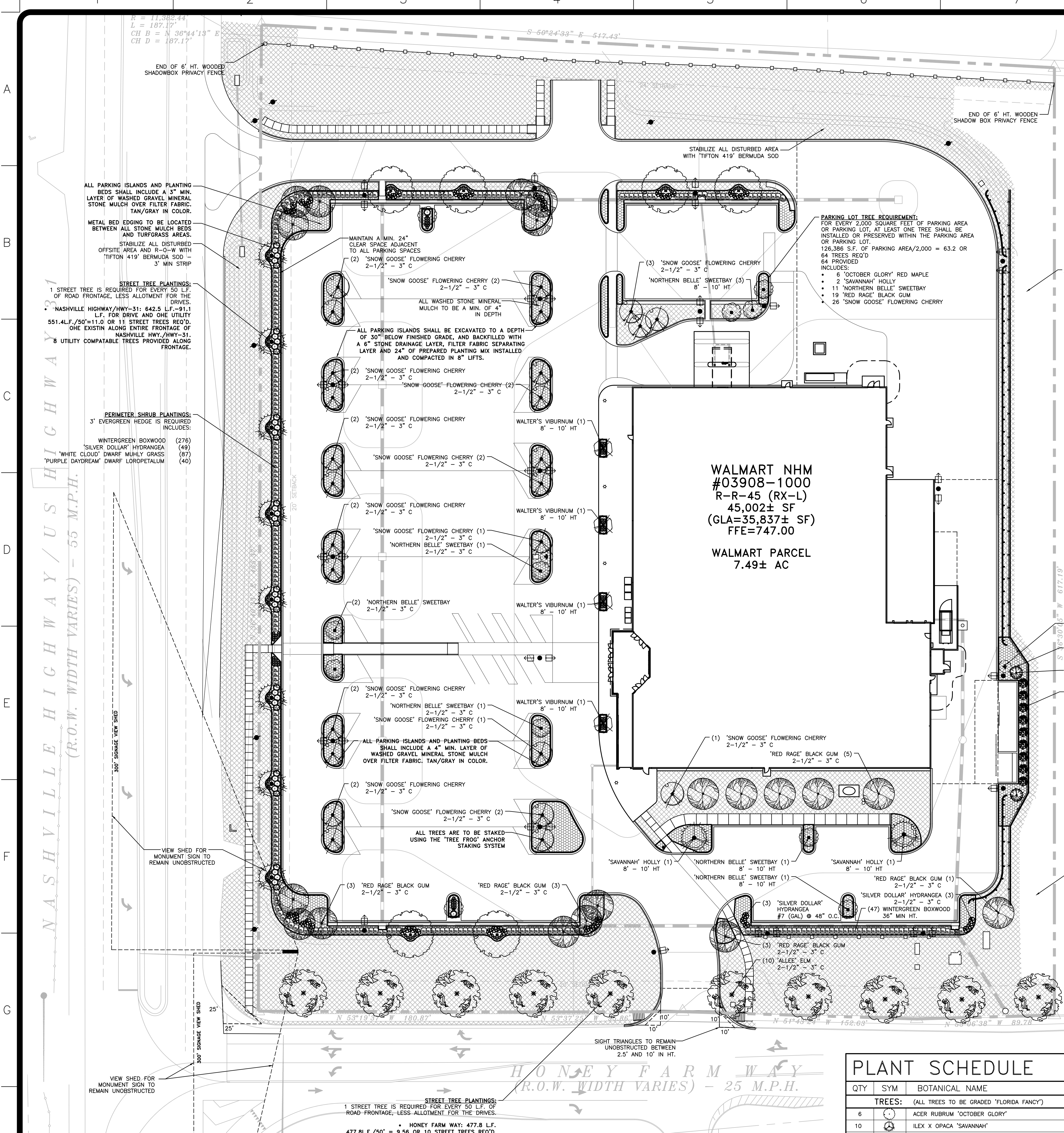
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Walmart*

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CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL MAINTENANCE AND A WARRANTY ON ALL PLANT MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.

SOD SHALL BE PEGGED ON ALL 3:1 SLOPES OR STEEPER IN ORDER TO HOLD SOD IN PLACE. SEE SITEWORK SPECIFICATIONS FOR OTHER REQUIREMENTS.

UNLESS SHOWN OTHERWISE, ALL LARGE CANOPY TREES SHALL MAINTAIN 25' HORIZONTAL CLEARANCE FROM ALL OVERHEAD UTILITY LINES AND 10' HORIZONTAL CLEARANCE FROM ALL UNDERGROUND UTILITY LINES.

TREE PROTECTION FENCING TO BE REMOVED JUST PRIOR TO THE INSTALLATION OF ALL LANDSCAPE PLANTING.

ALL DISTURBED AREAS SHALL RECEIVE A 4" LAYER OF SUITABLE TOPSOIL AND HYDRO-SEED, MULCH, OR SOD (WHERE SHOWN) AREA SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. SOD MAY BE SUBSTITUTED FOR HYDRO-SEED IN TURF GRASS AREAS AT GENERAL CONTRACTOR'S DISCRETION WITH NO ADDITIONAL COST TO SOW'S. SOD TYPE SHALL MATCH PERMANENT SOD TYPE SPECIFIED ON CONSTRUCTION PLANS.

CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT FOR ALL MEETINGS AND INSPECTIONS AS REQUIRED IN THE SPECIFICATIONS.

WATER AVAILABILITY

ALL REQUIRED LANDSCAPING SHALL BE PROVIDED WITH A READILY AVAILABLE AND ACCEPTABLE WATER SUPPLY. UNDERGROUND SPRINKLER SYSTEMS ARE ENCOURAGED FOR ALL REQUIRED STREET YARD LANDSCAPING, PARKING LOT LANDSCAPING, LANDSCAPE BUFFER YARDS, AND LANDSCAPE SCREENING. IF UNDERGROUND SPRINKLERS ARE NOT PROVIDED, AN OUTSIDE HOSE ATTACHMENT WITHIN TWO HUNDRED (200) FEET OF ALL LANDSCAPING REQUIRED BY THIS ORDINANCE SHALL BE REQUIRED.

WARRANTY PERIOD

DURING THE WARRANTY PERIOD, DEFECTIVE MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE REPAIRED, CORRECTED, OR REPLACED WITHOUT CHARGE OR COST TO THE CITY. THE CITY MAY AT ANY TIME, DURING THE WARRANTY PERIOD, INSPECT, PHOTOGRAPH, OR TELETYPE SUCH LANDSCAPING AND SHALL NOTIFY THE DEVELOPER OF ANY NECESSARY REPAIR, CORRECTION, OR REPLACEMENT.

PLANT SCHEDULE

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE (BOTH MINS TO BE MET)	SPACING	CONDITION	REMARKS
TREES: (ALL TREES TO BE GRADED "FLORIDA FANCY")							
6		ACER RUBRUM 'OCTOBER GLORY'	'OCTOBER GLORY' RED MAPLE	2-1/2" - 3" C / 12' - 14' HT	AS SHOWN	B&B/CONT.	FULL HEAD w/UNIFORM GROWTH
10		ILEX X OPACA 'SAVANNAH'	'SAVANNAH' HOLLY	8' - 10' HT	AS SHOWN	B&B/CONT.	FULL HEAD w/UNIFORM GROWTH
31		JUNIPERUS VIRGINIANA 'BRODIE'	'BRODIE' JUNIPER	8' - 10' HT	AS SHOWN	B&B/CONT.	FULL TO GROUND, w/UNIFORM GROWTH
11		MAGNOLIA VIRGINIANA 'NORTHERN BELLE'	'NORTHERN BELLE' SWEETBAY (MT)	8' - 10' HT	AS SHOWN	B&B/CONT.	3-5 TRUNKS, FULL ROUND HEAD
19		NYSSA SYLVATICA 'HAYMANRED'	'RED RAGE' BLACK GUM	2-1/2" - 3" C / 8' - 10' HT	AS SHOWN	B&B/CONT.	FULL HEAD w/UNIFORM GROWTH
26		PRUNUS SERRULATA 'SNOW GOOSE'	'SNOW GOOSE' FLOWERING CHERRY	2-1/2" - 3" C / 8' - 10' HT	AS SHOWN	B&B/CONT.	FULL HEAD w/UNIFORM GROWTH
10		ULMUS PARVIFOLIA 'EMER LL'	'ALLEE' ELM	2-1/2" - 3" C / 12' - 14' HT	AS SHOWN	B&B/CONT.	FULL HEAD w/UNIFORM GROWTH
4		VIBURNUM OBOVATUM	WALTER'S VIBURNUM (TREE FORM-MT)	8' - 10' HT	AS SHOWN	B&B/CONT.	3-5 TRUNKS, FULL ROUND HEAD
SHRUBS:							
276		BUXUS SINICA VAR. INSULARIS 'WINTERGREEN'	WINTERGREEN BOXWOOD	36" MIN HT	36" O.C.	B&B/CONT.	ROUND, FULL HEAD
49		HYDRANGEA PANCULATA 'SILVER DOLLAR'	'SILVER DOLLAR' HYDRANGEA	#7 (GAL)/24" - 36" HT	48" O.C.	CONT.	ROUND, FULL HEAD
24		ILEX X KOENIGIANA 'WIRT L. WINN'	'WIRT L. WINN' HOLLY	8' - 10' HT	AS SHOWN	B&B/CONT.	FULL TO GROUND, w/UNIFORM GROWTH
42		LOROPETALUM CHINENSE 'PILIC-III' PP25471	'PURPLE DAYDREAM' DWARF LOROPETALUM	#7 (GAL)/24" - 36" SPD	40" O.C.	CONT.	ROUND, FULL HEAD
137		MUHLBERGIA CAPILLARIS 'WHITE CLOUD'	'WHITE CLOUD' DWARF MUHLY GRASS	#3 (GAL)/15" - 18" HT	24" O.C.	CONT.	ROUND, FULL HEAD
GROUNDCOVERS:							
FILL AREA		CYNODON DACTYLON 'TIFTON 419'	'TIFTON 419' BERMUDA SOD	SLAB / ROLL		SOD	WEED FREE & ACTIVELY GROWING
FILL AREA		MINERAL STONE MULCH	WASHED GRAVEL	3/4" - 1-1/2" DIAMETER	4" DEPTH	BULK	GRAY/TAN IN COLOR WASHED FREE OF ALL FINES AND SOIL MATERIAL

NOTE: SYMBOLS SHOWN IN TABLE ABOVE ARE FOR SPECIES IDENTIFICATION ONLY. PLANT SIZE SHOWN IN THE TABLE IS NOT INTENDED TO BE REPRESENTATIVE OF THE PLANT AT EITHER INSTALLATION OR MATURITY. SIZE OF SYMBOL SHOWN IN TABLE ABOVE MAY VARY FROM THOSE SHOWN ON PLANS.

NOTE: SPECIES SUBSTITUTIONS OR UNDERSIZING ANY PLANT MATERIAL IS A BREACH OF CONTRACT OR BID. NO SUBSTITUTIONS OF PLANT MATERIALS ARE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.

MUNICIPAL CODE REQUIREMENTS:

LANDSCAPING

REQUIRED IF 1ST LAYER ≥ 3FT, 30% OF 1ST LAYER MUST BE LANDSCAPED, WITH CONTINUOUS SHRUBS ALONG FOUNDATION AT FAÇADE AND ADDITIONALLY IF 1ST LAYER ≥ 15 FT, SOD, AND 1 TREE PER 50 FT. OF FRONTAGE, WIDTH, PLANTED IN 1ST LAYER. LANDSCAPING MUST COMPLY WITH SECTION 4.3.16.

NA IN FRONT IF ≤ 3 FT FRONT SETBACK.

ADDITIONALLY, ANY YARD ADJACENT TO A STREET MUST BE LANDSCAPED AND MAINTAINED FOR A DISTANCE OF 10 FT. FROM LOT LINE OR BUILDING SITE LINE ADJACENT TO THE STREET, EXCEPT FOR PORTIONS THAT ADJOIN LOTS OR BUILDING SITES IN RESIDENTIAL USE, WHICH SHALL BE SO LANDSCAPED AND MAINTAINED FOR THE FULL WIDTH OR DEPTH OF THE REQUIRED YARDS WITHIN 25 FEET OF ADJOINING LOT LINES OR BUILDING SITE LINES.

SIDE YARDS ADJACENT TO LOTS OR BUILDING SITES IN RESIDENTIAL USE SHALL BE SIMILARLY LANDSCAPED AND MAINTAINED FOR THEIR FULL REQUIRED MINIMUM WIDTH. NO SUCH REQUIRED LANDSCAPED AREA SHALL BE USED FOR PARKING OR LOADING.

H. LOT/BUILDING SITE/PARCEL BUFFER REQUIREMENTS

1. FOR PROJECT BUFFERS APPLICABLE TO DEVELOPMENT PARCELS, SEE SECTION 5.8.

2. IF A PROJECT BUFFER EXISTS OR IS REQUIRED PURSUANT TO SECTION 5.7, A LOT/BUILDING SITE/PARCEL BUFFER IS NOT REQUIRED UNDER THIS SECTION 4.3.11.H.

3. EXCEPT AS PROVIDED IN PARAGRAPH 4.3.11.H.2 OR AS OTHERWISE SPECIFICALLY PROVIDED IN THIS ORDINANCE, A LOT/BUILDING SITE/ PARCEL BUFFER MUST BE PROVIDED FOR ANY NEW DEVELOPMENT OR STRUCTURE WITHIN DISTRICTS CD-46, CD-5C, PUD-R, PUD-MU OR ANY SPECIAL DISTRICT, ALONG THE COMMON LOT, BUILDING SITE, OR PARCEL BOUNDARY OF SUCH DEVELOPMENT OR STRUCTURE AND THAT OF ANY LOT, BUILDING SITE, OR PARCEL ON WHICH A SINGLE-FAMILY DWELLING OR TWO-FAMILY DETACHED RESIDENTIAL DWELLING IS LOCATED, EXCEPT AS OTHERWISE SPECIFICALLY PROVIDED IN THIS ORDINANCE. ALL LOT/BUILDING SITE/ PARCEL BUFFERS REQUIRED UNDER THIS ARTICLE 4 MUST MEET THE FOLLOWING REQUIREMENTS:

HEDGE SCREEN/ STREET-SCREEN HEIGHT:

AT FRONTAGE OR ADJACENT TO CIVIC SPACE: 3 FT. TO 5 FT. AT INSTALLATION

NOT AT FRONTAGE OR ADJACENT TO CIVIC SPACE: 5 FT. TO 6 FT. AT INSTALLATION

HEDGE SCREEN OR STREET-SCREEN: EVERGREEN PLANTS WITH MIN. 80% OPACITY

ADDITIONAL STANDARDS

SCREENING OF PARKING, LOADING AREAS, SERVICE AREAS, OUTDOOR STORAGE, DRIVE-THROUGHS, TRASH RECEPTACLE/DUMPSTERS, HVAC AND OTHER EQUIPMENT SCREENED FROM FRONTAGE, CIVIC SPACE AND ADJACENT PROPERTY.

REQUIRED, EXCEPT AT DRIVEWAYS:

PARKING LOTS AND PARKING AREAS MUST BE SCREENED FROM FRONTAGE AND CIVIC SPACE BY BUILDING OR STREET-SCREEN; PARKING STRUCTURES MUST BE SCREENED FROM FRONTS BY LINER BUILDINGS; OTHERWISE, SCREENING MUST BE BY BUILDING, WALL, HEDGE OR FENCE AT FRONTAGE OR BUILDING WALL, HEDGE OR FENCE NOT AT FRONTAGE OR ADJACENT TO CIVIC SPACE.

14. ANY PARKING AREA OR PARKING LOT HAVING TEN (10) OR MORE PARKING SPACES SHALL CONFORM TO THE FOLLOWING:

a. PARKING AREAS AND PARKING LOTS SHALL CONTAIN AT LEAST ONE LANDSCAPE ISLAND FOR EVERY TEN (10) PARKING SPACES. PARKING LOTS WITH MORE THAN ONE LANDSCAPE ISLAND SHALL HAVE SUCH ISLANDS DISTRIBUTED THROUGHOUT THE PARKING LOT.

PARKING ISLANDS INCLUDED AS DIRECTED.

b. INTERIOR PARKING ROWS SHALL BE TERMINATED AT BOTH ENDS WITH LANDSCAPE ISLANDS. PARKING ISLANDS INCLUDED AS DIRECTED.

c. EACH PARKING ISLAND SHALL BE OF A MINIMUM SIZE EQUAL TO A STANDARD PARKING SPACE; PROVIDED THAT EACH PARKING ISLAND ABUTTING TWO ROWS OF HEAD-TO-HEAD PARKING SPACES SHALL BE OF A MINIMUM SIZE AND LENGTH EQUAL TO TWO (2) PARKING SPACES. PARKING ISLANDS INCLUDED AS DIRECTED.

d. PARKING ISLANDS SHALL CONTAIN A MINIMUM OF ONE (1) SHADE TREE FOR EVERY SINGLE ISLAND. IF A PARKING ISLAND IS DOUBLE LENGTH OR WIDTH, THEN TWO (2) SHADE TREES SHALL BE REQUIRED.

PARKING ISLAND TREES ARE INCLUDED. TREE TYPES SELECTED FOR ADEQUATE HEALTH FOR GROWING AREA ALLOTTED.

e. ROWS OF PARKING FRONTING ON DRIVE AISLES INCLUDING ALLEYS SHALL BE PROVIDED WITH A MINIMUM FIVE FEET (5 FT.)

f. (EXCLUDING CURBS) LANDSCAPED BUFFER.

g. ROOT ZONES FOR EXISTING TREES TO REMAIN SHALL BE A MINIMUM OF 48 SQUARE FEET. THERE ARE NO EXISTING TREES ON SITE TO REMAIN.

h. FOR EVERY 2,000 SQUARE FEET OF PARKING AREA OR PARKING LOT, AT LEAST ONE TREE SHALL BE INSTALLED OR PRESERVED WITHIN THE PARKING AREA OR PARKING LOT EXCEPT TO THE EXTENT THAT TREES OUTSIDE OF THE LOT CONTAINING THE PARKING AREA OR PARKING LOT ARE ALLOWED TO SATISFY THIS REQUIREMENT AS SET FORTH BELOW.

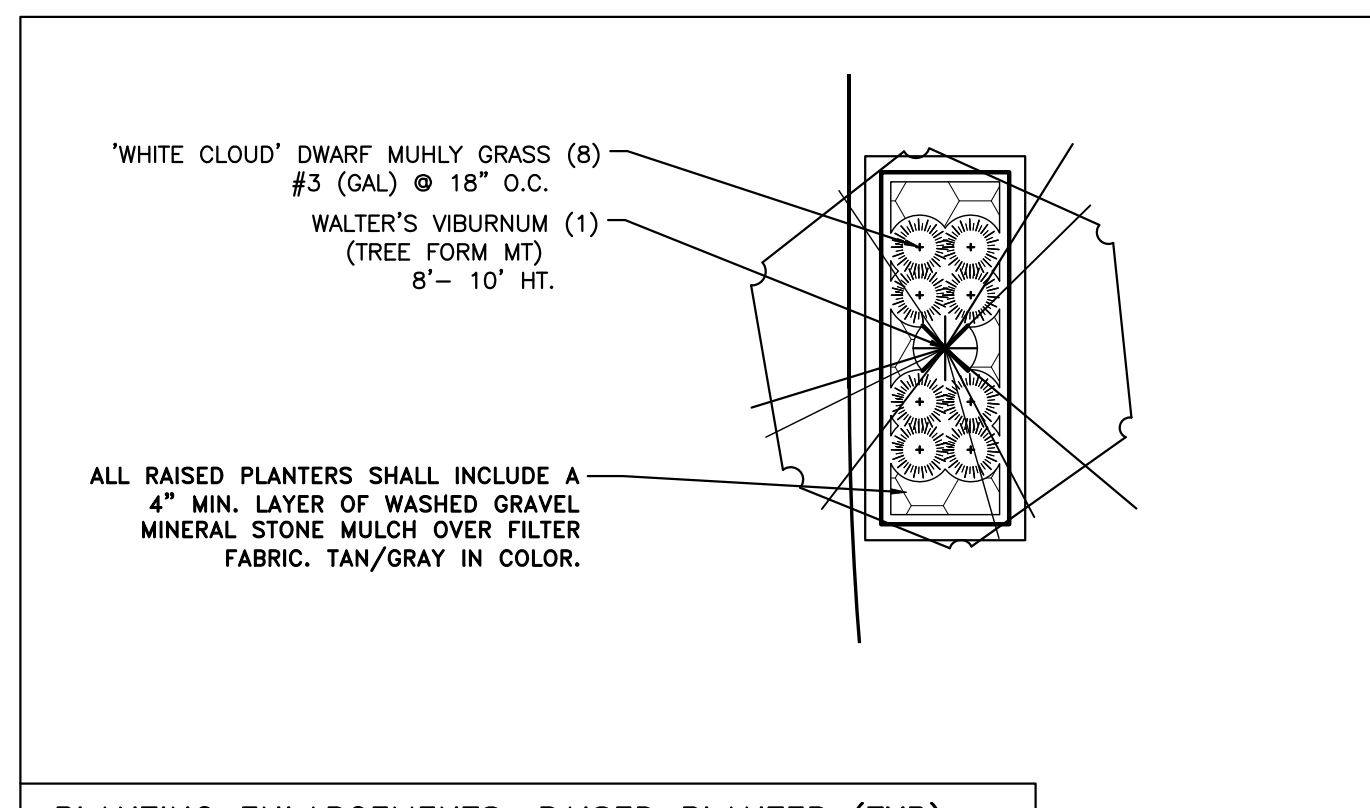
TOTAL PARKING LOT AREA IS: 126,386 S.F. OF PARKING AREA/2,000 = 63.2 OR 64 TREES REQ'D. 64 PROVIDED

i. NO PARKING SPACE SHALL BE MORE THAN SEVENTY-TWO FEET (72 FT.) FROM A TREE WITHIN THE LOT, AS MEASURED FROM THE CENTER OF THE TREE TO THE NEAREST LINE DEMARCATING THE SPACE.

ALL PARKING SPACES ARE WITHIN 72' OF A PARKING LOT TREE.

j. EXCEPT FOR TREES ALLOWED TO BE COUNTED OUTSIDE THE PARKING AREA OR PARKING LOT, NEW TREES SHALL BE INSTALLED AND/OR EXISTING TREES PRESERVED IN TREE ISLANDS PROVIDED PURSUANT TO THIS SECTION AND/OR AT THE PERIMETER OF THE PARKING AREA OR PARKING LOT, PROVIDED THAT THE PERIMETER OF THE PARKING AREA OR PARKING LOT WHERE TREES ARE INSTALLED OR PRESERVED TO MEET THIS REQUIREMENT LIES WITHIN THE LOT ON WHICH THE PARKING AREA OR PARKING LOT IS LOCATED.

k. TREES OUTSIDE OF THE PARKING AREA OR PARKING LOT LOCATED WITHIN TWENTY FEET (20 FT.) OF THE CLOSEST PORTION OF SUCH PARKING AREA OR PARKING LOT, INCLUDING BUT NOT LIMITED TO TREES WITHIN THOROUGHFARE RIGHT-OF-WAY, WATERWAYS, DRIVE EASEMENTS, AND CIVIC SPACES, MAY BE COUNTED TOWARD SATISFYING THE REQUIREMENTS.



PLANTING ENLARGEMENTS: RAISED PLANTER (TYP)

ALL LANDSCAPE PLANTINGS SHALL BE FULLY IRRIGATED

THE CONTRACTOR'S INITIAL PRICING SHALL INCLUDE THE COSTS FOR ALL LANDSCAPE AREAS TO BE FULLY IRRIGATED BY A PERMANENTLY INSTALLED IN-GROUND IRRIGATION SYSTEM. CONTRACTOR SHALL PROVIDE AN AUTOMATICALLY CONTROLLED SYSTEM THAT PROVIDES FULL COVERAGE OF ALL INSTALLED PLANTINGS AND UTILIZES A COMBINATION OF LOW-VOLUME AND RUNOFF IRRIGATION COMPONENTS.

THE MINIMUM COMPONENT STANDARDS SHALL BE MET:

- MASTER VALVE: NORMALLY CLOSED ELECTRONICALLY OPERATED BY SYSTEM CONTROLLER.
- BACK-FLOW PREVENTER: LINE SIZED REDUCED PRESSURE OR DOUBLE-CHECK, AS REQUIRED BY LOCAL CODE, ZURN, WATTS, WILKINS, OR EQUAL. ALL ABOVE GRADE PIPING SHALL BE COPPER.
- CONTROLLER: PEDESTAL MOUNTED WEATHERTRAK LC4 CENTRAL AUTOMATIC ET-BASED "SMART" IRRIGATION CONTROLLER IN A LOCKING STAINLESS STEEL CABINET.
- FLOW-METER: LINE SIZED, KITS TO INCLUDE FILTER CARTRIDGES AND PRESSURE REGULATION.
- PRESSURIZED MAIN LINE: SCHED. 40 PVC.
- LATERAL LINES: CLASS 200 PVC FOR ALL PIPING LESS THAN 2.5" IN DIAMETER.
- DRAIN VALVES: A BRASS MANUAL GATE VALVE SHALL BE INCLUDED TO DRAIN THE MAIN LINE. AUTOMATIC DRAIN VALVES SHALL BE INCLUDED IN ALL LATERAL ZONES.
- SPRAY HEADS/ROTORS: ALL TURF IRRIGATION SHALL PROVIDED HEAD-TO-HEAD COVERAGE. TURF IRRIGATION SHALL BE LIMITED TO THE SOD INSTALLED ON SITE.



PLANTING PLAN

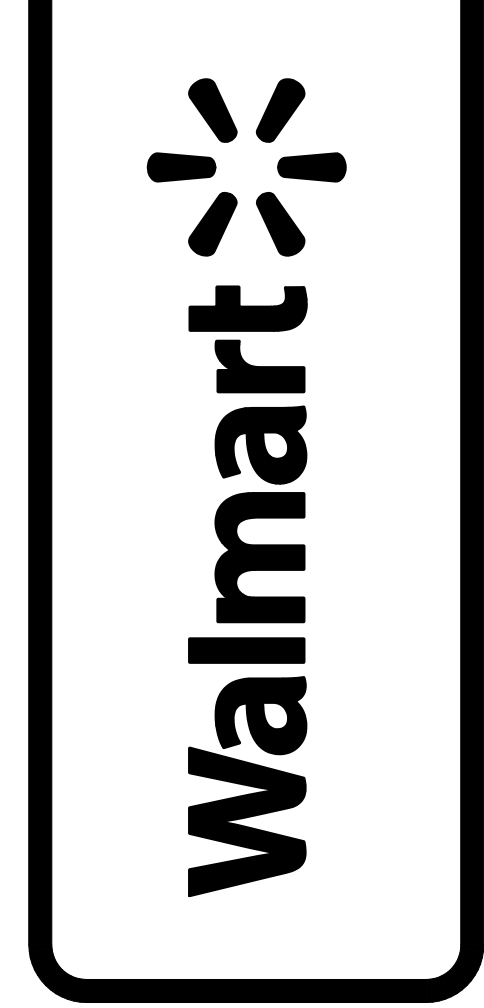
REVISIONS	BY

CARLSON CONSULTING ENGINEERS, INC.

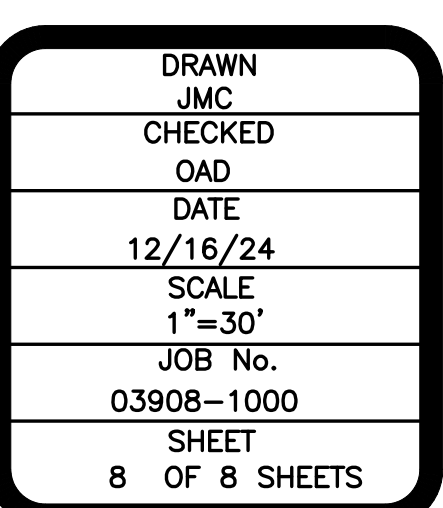
7068 LEDGESTONE COMMONS
PH. (615) 384-4400 • FX (800) 384-0710
TN CORPORATION #355643



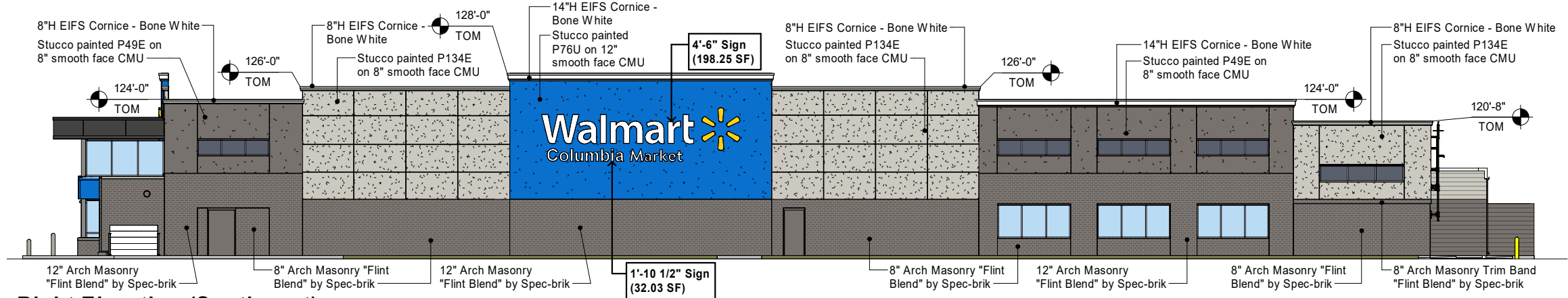
NEIGHBORHOOD MARKET #03908-1000
COLUMBIA, MAURY COUNTY, TENNESSEE
WAL-MART STORES, INC.
2001 SE 10TH STREET
BENTONVILLE, AR 72716



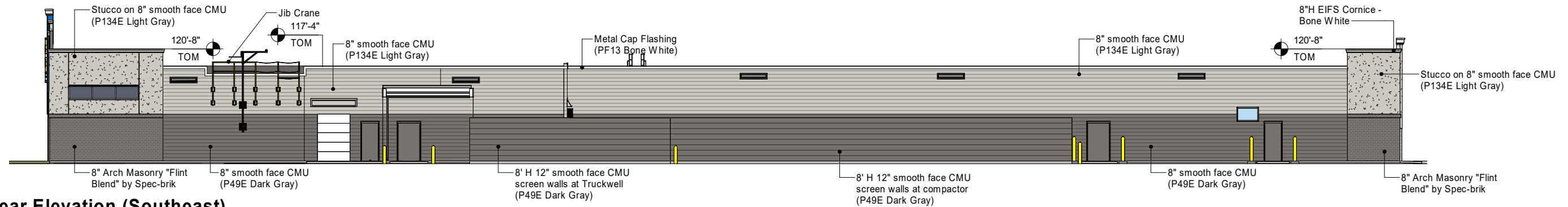
DRAWN	LMC
CHECKED	OAD
DATE	12/16/24
SCALE	1"=30'
JOB NO.	03908-1000
SHEET	7 OF 8 SHEETS



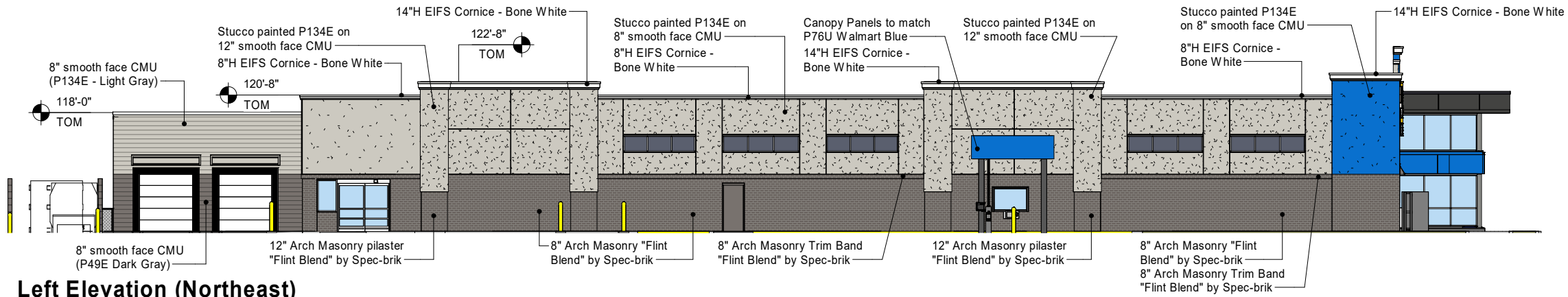
Calculation Summary Illuminance Foot-candles						
	Avg	Min	Avg/Min	Min/1.0	#	Plat
Chase	2.38	4.5	1.92	0.81	20	
DSD Pollat Area	1.48	2.1	1.35	0.91	120	
Entry Drive North	1.91	4.8	0.58	3.60	120	
Entry Drive South	1.31	3.6	0.34	4.00	120	
Front Area	2.85	5.7	0.6	1.78	536	
Front Porch	2.85	5.7	0.6	1.78	36	
Parking South	2.85	5.9	0.37	6.56	80	
Parking South	2.85	5.9	0.37	6.56	80	
Parking Parking	4.01	5.8	1.8	2.23	322	59
Rear Porch	1.06	1.9	0.55	1.82	120	
Rear Drive	1.62	0.5	0.2	8.10	2750	326
Verit Parking West	0.86	1.5	0.3	2.20	500	11
Verit Parking West	0.86	2.1	0.4	2.50	500	11
Verit Spill Prop Line East	0.30	0.6	0.0	N.A.	N.A.	62
Verit Spill Prop Line West	0.18	0.3	0.0	N.A.	N.A.	52
Verit Spill Prop Line South	0.18	0.3	0.0	N.A.	N.A.	52
Verit Spill Prop Line West	0.84	1.7	0.0	N.A.	N.A.	65



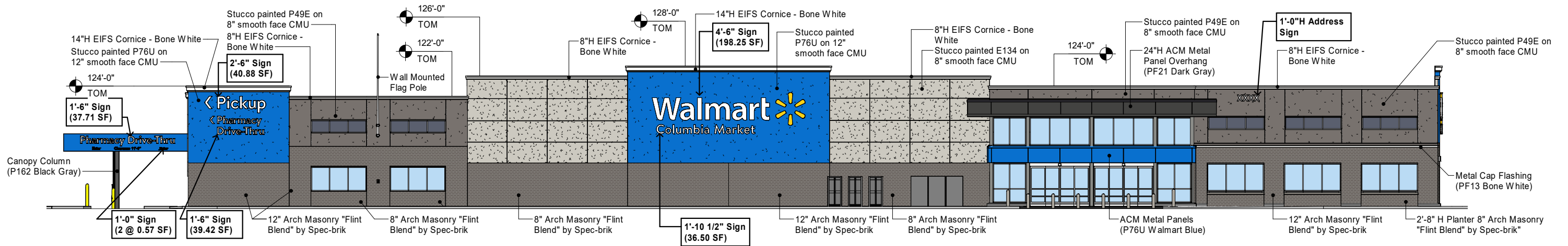
Right Elevation (Southwest)



Rear Elevation (Southeast)



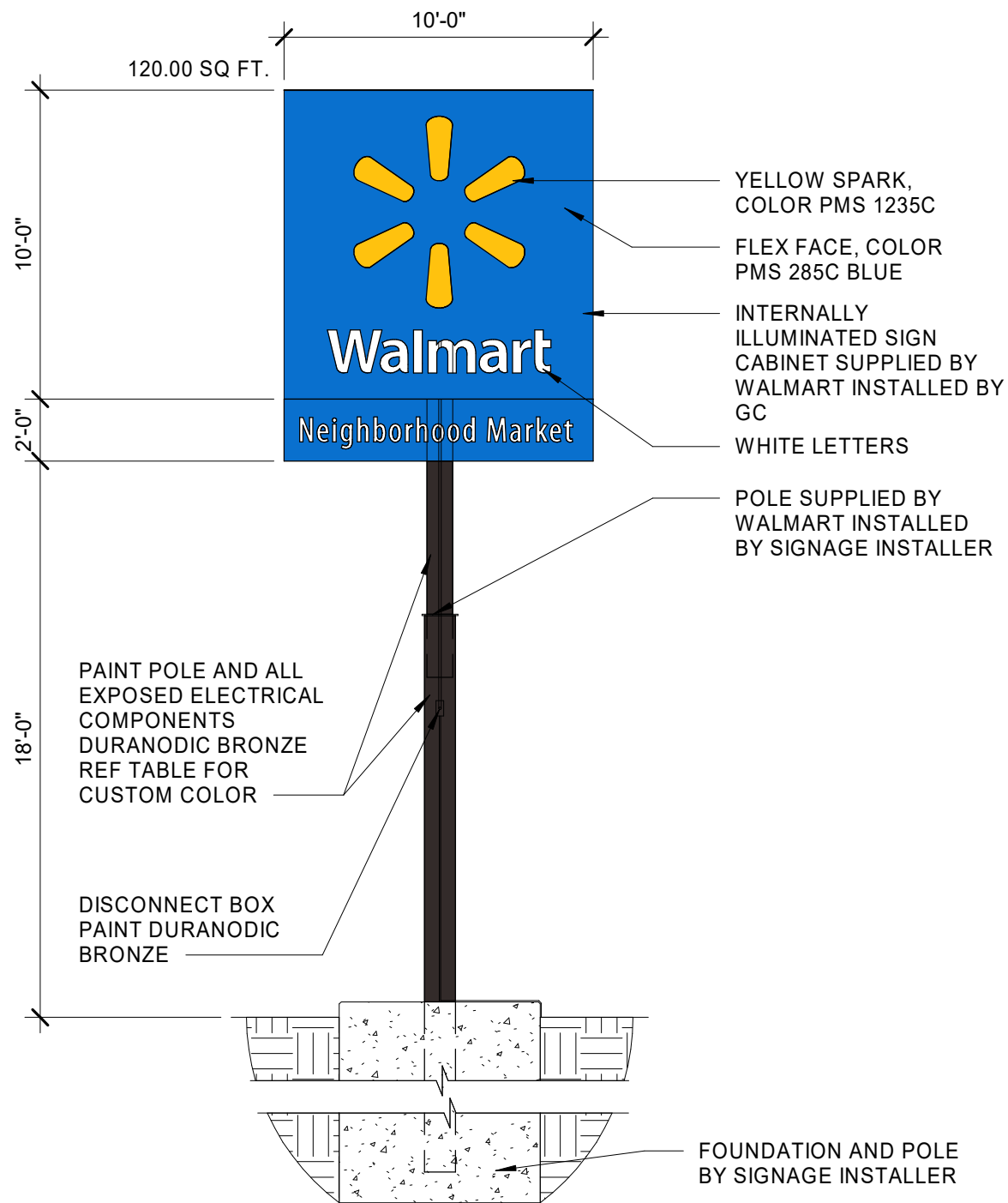
Left Elevation (Northeast)



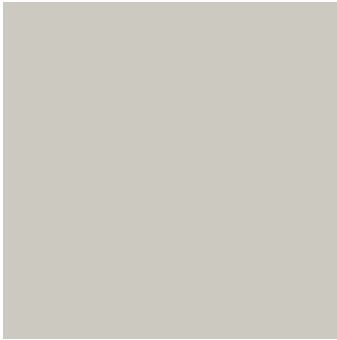
Front Elevation (Northwest)

SITE SIGNAGE SCHEDULE

SIGNAGE	QTY	ILLUMINATED	COLOR	SIZE	AREA (SF)	TOTAL AREA (SF)
SITE						
WM NEIGHBORHOOD MARKET PYLON	1	ILLUMINATED	WHITE/YELLOW	EXTERIOR SIGN - WM Spark_7-0		120
SITE						120



PYLON SIGN



Paint
P134E Light Gray



Paint
P135E Medium Gray



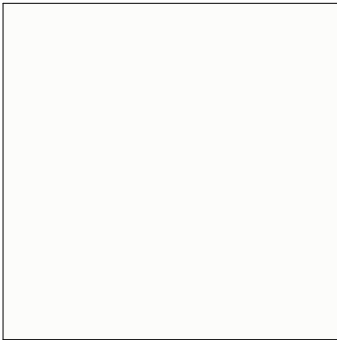
Paint
P49E Dark Gray



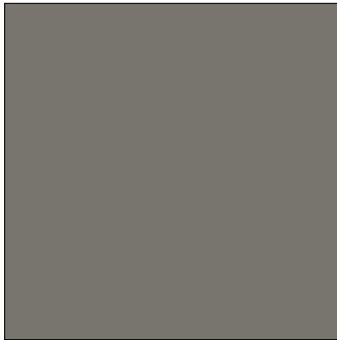
Paint
P76U Walmart Blue



Paint
P162E Black Gray



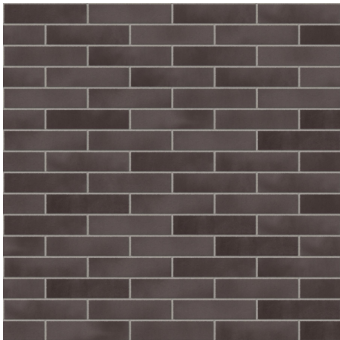
Pre-finished Metal
PF13 Bone White



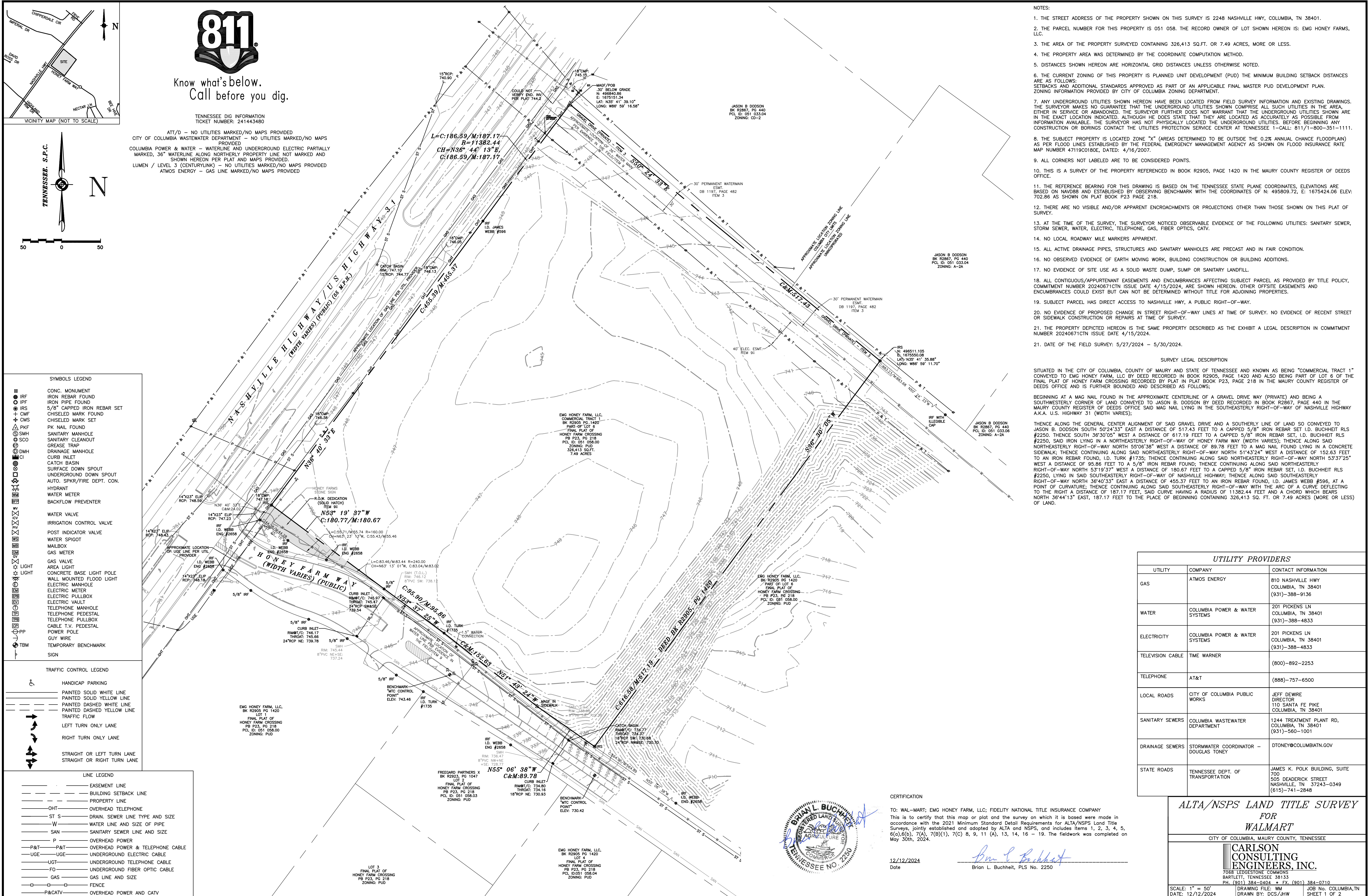
Pre-finished Metal
PF21 Dark Gray

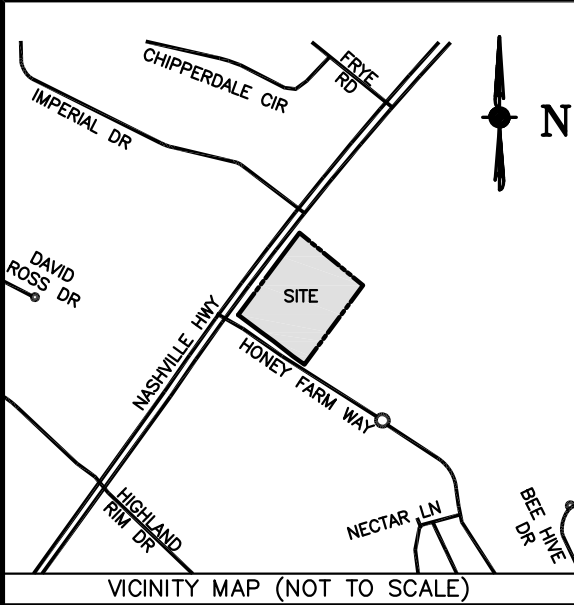


Aluminum Brake Cladding
and Automatic Doors
Clear Anodized finish



Architectural Masonry
"Flint Blend" by Spec-brik





FIDELITY NATIONAL TITLE INSURANCE COMPANY
SCHEDULE B
EXCEPTIONS

COMMITMENT NO.: 20240671CTN
COMMITMENT DATE: APRIL 15, 2024 AT 8:00 AM

1. ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED BETWEEN THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I-REQUIREMENTS ARE MET. **NOT A SURVEY RELATED ITEM.**
2. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS. **NOT A SURVEY RELATED ITEM.**
3. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND. **NORTHERLY PROPERTY LINE OF SUBJECT PARCEL GENERALLY FOLLOWS THE CENTERLINE OF A GRAVEL DRIVE AND ENCROACHES ONTO SUBJECT PARCEL. DRIVE WAY BEING USED AS THE ONLY INGRESS/EGRESS TO SOME ADJOINING PROPERTIES; 30' PERMANENT WATERMAIN EASEMENT SHOWN HEREON PER PLAT BOOK P23, PAGE 218. PLAT CALLS EASEMENT TO BE RECORDED IN DEED BOOK 1197, PAGE 482. DEED NOT PROVIDED IN TITLE COMMITMENT.**
4. EASEMENTS, OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS. **NONE APPARENT**
5. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS. **NOT A SURVEY RELATED ITEM.**
6. TAXES OR SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS. **NOT A SURVEY RELATED ITEM.**
7. IF IMPROVEMENTS ARE COMPLETED AFTER JANUARY 1 OF ANY YEAR, AND THE LAW, PURSUANT TO TCA 67-5-509 AND TCA 67-5-603, REQUIRES SUPPLEMENTAL ASSESSMENT FOR THE YEAR IN WHICH IMPROVEMENTS ARE COMPLETED, THE COMPANY ASSUMES NO LIABILITY FOR TAXES ASSESSED BY CORRECTION OR SUPPLEMENTAL ASSESSMENT. **NOT A SURVEY RELATED ITEM.**
8. TAXES FOR THE YEAR 2024, A LIEN NOT YET DUE AND PAYABLE. **NOT A SURVEY RELATED ITEM.**
9. SUBJECT TO ALL MATTERS SHOWN ON THE PLAN OF RECORD IN PLAT BOOK P16, PAGE 251 AND PLAT BOOK P23, PAGE 218, REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. **AFFECTS SUBJECT PARCEL, SHOWN HEREON.**
10. DRAINAGE EASEMENT OF RECORD IN BOOK R2923, PAGE 1024, IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. **AFFECTS SUBJECT PARCEL. GRANTS NON EXCLUSIVE DRAINAGE EASEMENT TO BENEFIT SUBJECT PARCEL.**
11. STORMWATER DETENTION AGREEMENT OF RECORD IN BOOK R2913, PAGE 916 AND BOOK R2001, PAGE 247, IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. **DOES NOT AFFECT SUBJECT PARCEL.**
12. INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES OF RECORD IN BOOK R2033, PAGE 1413, IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. **AFFECTS SUBJECT PARCEL BUT IS NOT A SURVEY RELATED ITEM.**
13. DEED RESTRICTIONS, EASEMENTS AND RIGHTS SET FORTH IN THE DEED OF RECORD IN BOOK 747, IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. **AFFECTS SUBJECT PARCEL, NO EASEMENTS OR ENCUMBRANCES TO BE SHOWN.**
14. UTILITY EASEMENT IN FAVOR OF CITY OF COLUMBIA OF RECORD IN BOOK 219, PAGE 536 **AFFECTS SUBJECT PARCEL, GRANTS A BLANKET EASEMENT OVER PARENT PARCEL. ALL ELECTRIC LINES COVERED BY EASEMENTS RECORDED IN ITEM 9.** AND BOOK R2026, PAGE 1182 **DOES NOT AFFECT SUBJECT PARCEL,** IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
15. ENCROACHMENTS REFERENCED AND DESCRIBED IN DEED OF RECORD IN BOOK R2905, PAGE 1420, IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. **AFFECTS SUBJECT PARCEL, SUBJECT PARCEL IS COMMERCIAL TRACT 1. GRAVEL DRIVE ENCROACHMENT SHOWN HEREON, SEE ITEM 3.**
16. EASEMENTS SET FORTH IN THE DEED OF RECORD IN BOOK 1161, PAGE 434, IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. **AFFECTS SUBJECT PARCEL. SUBJECT PARCEL IS PART OF WARRANTY DEED. NO EASEMENTS OR ENCUMBRANCES TO BE SHOWN.**
17. CHARTER FOR HONEY FARM HOMEOWNERS ASSOCIATION, INC. OF RECORD IN BOOK T, PAGE 366, AND QUITCLAIM OF COMMON AREAS OF RECORD IN BOOK R2083, PAGE 11, IN THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE. **NOT A SURVEY RELATED ITEM.**
18. ACREAGE CONTENT OF THE SUBJECT PROPERTY IS NOT HEREBY INSURED. REFERENCE TO ACREAGE IS LEFT IN THE DESCRIPTION MERELY FOR CONVENIENCE IN IDENTIFYING THE TRACT. **ACREAGE SHOWN HEREON AS SURVEYED.**
19. SUBJECT TO THE FLOW OF ANY CREEKS, STREAMS, OR BRANCHES ACROSS SUBJECT PROPERTY. **DOES NOT AFFECT SUBJECT PARCEL.**
20. NO INSURANCE IS OFFERED TO TITLE TO THAT PORTION OF THE PREMISES EMBRACED WITHIN THE BOUNDS OF ANY ROADS, STREETS, OF HIGHWAYS. **NOT A SURVEY RELATED ITEM.**

FIDELITY NATIONAL TITLE COMPANY
SCHEDULE A
LEGAL DESCRIPTION

COMMITMENT NO.: 20240671CTN
COMMITMENT DATE: APRIL 15, 2024 AT 8:00 AM

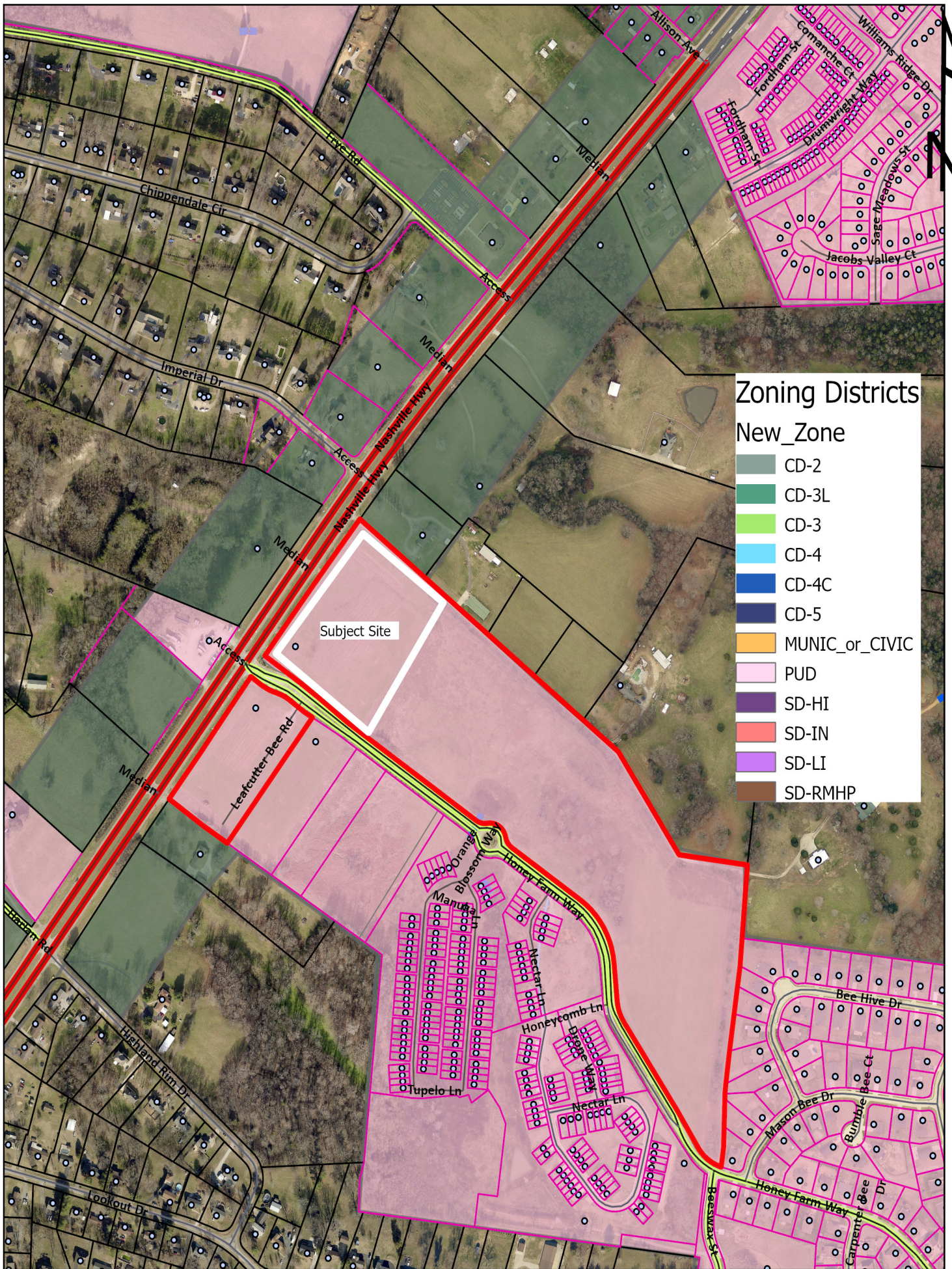
BEGINNING AT A 1/2-INCH REBAR FOUND AT THE INTERSECTION OF THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF NASHVILLE HIGHWAY (VARIABLE RIGHT-OF-WAY) WITH THE NORTHEASTERLY RIGHT-OF-WAY LINE OF HONEY FARM WAY (VARIABLE RIGHT-OF-WAY); THENCE ALONG SAID SOUTHEASTERLY RIGHT-OF-WAY LINE OF NASHVILLE HIGHWAY NORTH 36°41'00" EAST FOR A DISTANCE OF 479.41 FEET TO A CONCRETE MONUMENT FOUND; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT AN ARC LENGTH OF 186.59 FEET, SAID CURVE HAVING A RADIUS OF 11382.44 FEET AND BEING SUBTENDED BY A CHORD OF 186.59 FEET BEARING NORTH 36°54'16" EAST TO A NAIL SET IN THE CENTERLINE OF A GRAVEL AND ASPHALT LINE; THENCE WITH SAID CENTERLINE SOUTH 50°28'06" EAST FOR A DISTANCE OF 517.43 FEET TO A NAIL SET; THENCE DEPARTING SAID LANE SOUTH 36°32'46" WEST FOR A DISTANCE OF 616.84 FEET TO A 5/8-INCH REBAR SET ON THE NORTHEASTERLY RIGHT-OF-WAY LINE OF HONEY FARM WAY; THENCE ALONG SAID RIGHT-OF-WAY LINE NORTH 55°07'01" WEST FOR A DISTANCE OF 89.78 FEET TO A NAIL SET; THENCE NORTH 51°43'09" WEST FOR A DISTANCE OF 152.63 FEET TO A 5/8-INCH REBAR SET; THENCE NORTH 53°39'04" WEST FOR A DISTANCE OF 95.90 FEET TO A 1/2-INCH REBAR FOUND; THENCE ALONG THE ARC OF A CURVE TO THE LEFT AN ARC LENGTH OF 83.46 FEET, SAID CURVE HAVING A RADIUS OF 240.00 FEET AND BEING SUBTENDED BY A CHORD OF 83.04 FEET BEARING NORTH 63°11'32" WEST TO A 1/2-INCH REBAR FOUND; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT AN ARC LENGTH OF 55.71 FEET, SAID CURVE HAVING A RADIUS OF 160.00 FEET AND BEING SUBTENDED BY A CHORD OF 55.43 FEET BEARING NORTH 63°22'30" WEST TO 1/2-INCH REBAR FOUND; THENCE NORTH 53°26'48" WEST FOR A DISTANCE OF 44.38 FEET TO A 1/2-INCH REBAR FOUND, SAID POINT BEING THE TRUE POINT OF BEGINNING.

ALTA/NSPS LAND TITLE SURVEY
FOR
WALMART

CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

CARLSON
CONSULTING
ENGINEERS, INC.
7068 LEDGESTONE COMMONS
BARTLETT, TENNESSEE 38133
PH. (901) 384-0404 • FX. (901) 384-0710

SCALE: 1" = 50'
DATE: 12/12/2024
DRAWING FILE: WM
DRAWN BY: DCS/JHW
JOB No. COLUMBIA,TN
SHEET 2 OF 2



24-0535
 Honey Farm PUD
 Nashville Hwy. & Honey Farm Way

Development Services
 700 N. Garden Street
 Columbia, TN 38401
www.columbiatn.gov



TRAFFIC IMPACT STUDY

HONEY FARM
WALMART NEIGHBORHOOD MARKET
COLUMBIA, TENNESSEE

PREPARED ON BEHALF OF:



PREPARED BY:



NOVEMBER 2024

TRAFFIC IMPACT STUDY

PROPOSED HONEY FARM WALMART NEIGHBORHOOD MARKET COLUMBIA, TENNESSEE



PREPARED BY:
RG Phillips Consulting, LLC
Richard G. Phillips, P.E.
106 Mission Court, Suite 301
Franklin, TN 37067



Traffic Impact Study

Honey Farm Walmart Neighborhood Market Columbia, Tennessee

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Introduction and Scope

The purpose of this traffic study is to assess the traffic impacts associated with the proposed Honey Farm Walmart Neighborhood Market development in Columbia, Tennessee. The development is proposed to include a 45,000-S.F. Walmart Neighborhood Market (LUC 850), as well as a 6,600-S.F. fast-food restaurant with a drive-through (LUC 934), a 5,500-S.F. fast casual restaurant (LUC 930), 6,000 S.F. of future retail (LUC 822), 174 apartment units (LUC 220), 180 townhomes (LUC 215), a 98,275-S.F. storage facility (LUC 151), and a 17,000-S.F. health department (LUC 720). Notably, a previous traffic study was prepared for this site by KCI Technologies, Inc. in June 2023. This November 2024 traffic study serves as an update to the prior analyses to reflect changes in proposed land uses, expected trip generation, and project access. Specifically, this updated study addresses the addition of the proposed Walmart Neighborhood Market to the Honey Farm development.

Based on the scope set by City of Columbia staff, this study includes the following intersections:

- #1 – Nashville Highway (US 31 / SR 6) & Honey Farm Way
- #2 – Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access
- #3 – Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access
- #4 – Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive

This report identifies potential traffic impacts to the surrounding roadway network based on the proposed development. Three scenarios were considered for analysis, as follows:

- Existing Traffic Conditions (2024)
- Background Traffic Conditions (2026)
- Projected Traffic Conditions at Horizon Year (2026)

2024 Existing Traffic Conditions

Traffic counts were conducted at locations #1 and #4 from 7:00 AM to 9:00 AM and from 2:00 PM to 6:00 PM. A traffic incident occurred on Nashville Highway during initial traffic collection that affected the AM peak hour traffic; AM traffic data were recollected on a different day as a result.

2026 Background Traffic Conditions

The 2024 existing traffic volumes were increased by 2.5% per year for the two-year buildout period, and one offsite development was identified and included.

2026 Projected Traffic Conditions

Trips expected to be generated by the proposed development were determined from ITE's *Trip Generation, 11th Edition*. These generated volumes were added to the background traffic volumes to determine the 2026 projected traffic conditions. Internal and pass-by reduction factors were included in the trip generation calculations.

Consideration of Offsite Improvements

Right turn lane evaluations were performed for the intersection of Nashville Highway and the proposed Walmart right-only access based on the 2026 projected traffic conditions. The projected conditions at this intersection were found to meet the thresholds for the installation of a northbound right turn lane on Nashville Highway.

Conclusions and Recommendations

Based on the analyses presented in this study, the traffic generated by the proposed Walmart Neighborhood Market can be accommodated by the surrounding roadway infrastructure with the following offsite improvements:

Nashville Highway and Proposed Walmart Right-Only Access

To provide adequate access for the Walmart Neighborhood Market, a right-only driveway on Nashville Highway is shown on the north end of the development. With the inclusion of this driveway, it is recommended that a northbound right turn lane with 150' of storage length be constructed on Nashville Highway.

In addition, recommendations provided in KCI's previous traffic study are now included in the updated Honey Farm site development plan and are summarized as follows:

Nashville Highway and Honey Farm Way

- When warranted, provide traffic signal control. Provide optimized signal timings and evaluate need for coordinated operation.
- Extend the southbound left-turn storage on Nashville Highway to 300'.
- Realign the existing westbound approach of Honey Farm Way to remove the existing curvature of the roadway.
- Provide one entering lane and three exiting lanes for the westbound approach of Honey Farm Way. The exiting approach should include one left turn lane, one shared through/left turn lane, and one right turn lane.

Honey Farm Way and Proposed Walmart Access / Proposed Commercial Access

- Provide an eastbound left turn lane on Honey Farm Way with 75' of storage.
- Provide an eastbound right turn lane on Honey Farm Way with 75' of storage.
- Provide a westbound left turn lane on Honey Farm Way with 50' of storage.
- Provide an eastbound right turn lane on Honey Farm Way with 75' of storage.
- Provide a westbound left turn lane on Honey Farm Way with 50' of storage.

1. INTRODUCTION

The purpose of this traffic impact study is to assess the traffic impacts associated with the proposed Honey Farm Walmart Neighborhood Market in Columbia, Tennessee and to identify if any offsite access or traffic control improvements will be required to address those impacts.

As mentioned above, the project site is located in Columbia, Tennessee, east of Nashville Highway (US 31 / SR 6) and north of Honey Farm Way. Figure 1 shows the proposed project site, along with the intersections that will be included as part of this study.

It should be noted that a traffic impact study was completed previously for this development, by KCI Technologies, Inc. in June 2023. This November 2024 traffic study serves as an update to the prior report in order to reflect changes in the proposed land uses, expected trip generation, and project access. Specifically, the updated traffic study addresses the addition of the proposed Walmart Neighborhood Market to the Honey Farm development.

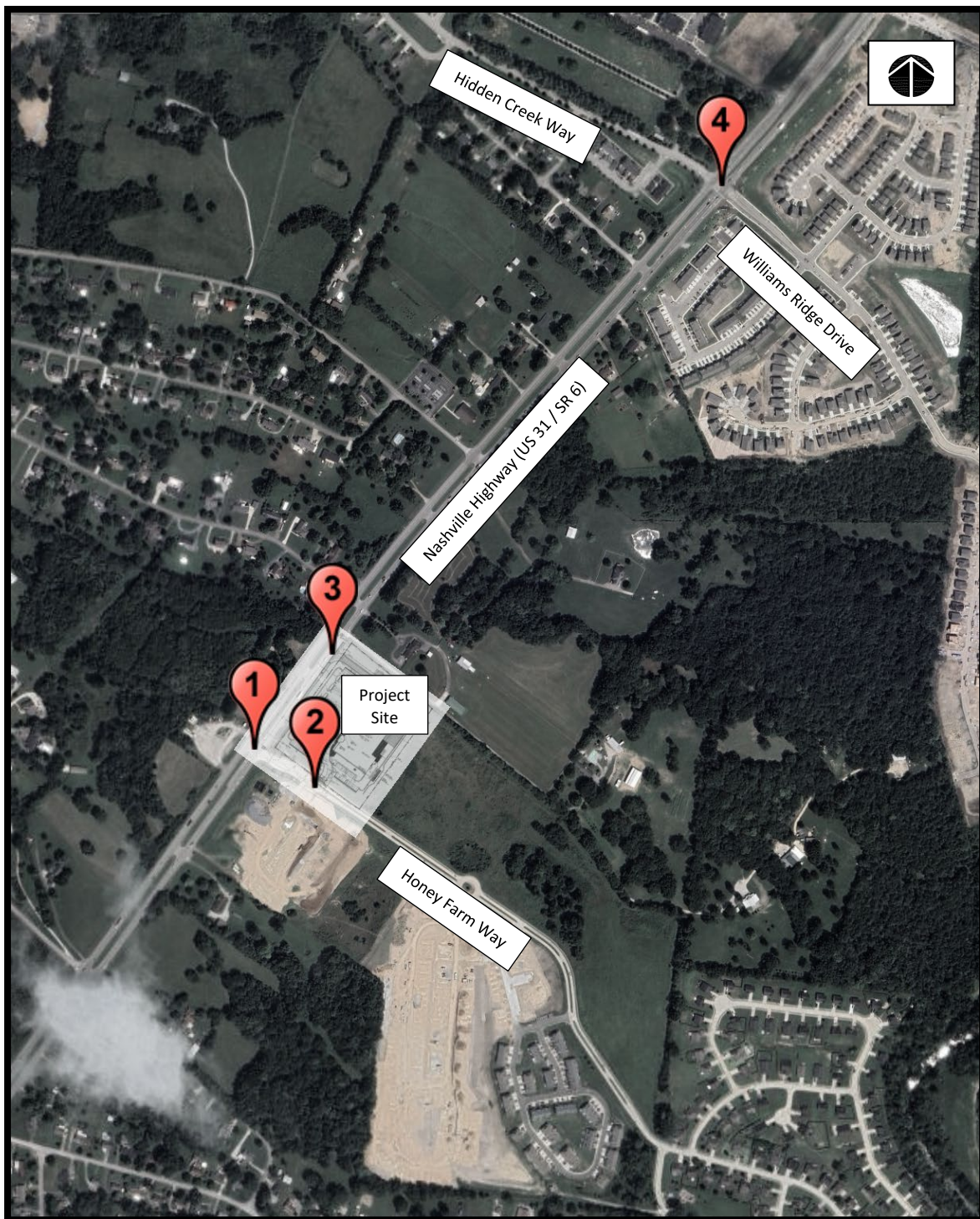


Figure 1.
Project Location and
Study Intersections

2. PROJECT DESCRIPTION

The current site development plan, provided by Carlson Consulting Engineers, Inc., is illustrated in Figure 2. As detailed in Figure 2, the site plan currently proposes the development of a Walmart Neighborhood Market alongside multiple other land uses. The planned Walmart Neighborhood Market will measure approximately 45,000 S.F. and have a proposed access on Honey Farm Way, as well as a proposed right-only access on Nashville Highway.

In addition to the Walmart Neighborhood Market, the overall Honey Farm development is proposed to include the following:

- Fast-Food Restaurant with Drive-Through (6,600 S.F.)
- Fast Casual Restaurant (5,500 S.F.)
- Future Retail (6,000 S.F.)
- Multifamily Apartment Housing (174 Dwelling Units)
- Townhomes (180 Dwelling Units)
- Mini-Warehouse (98,275 S.F.)
- Health Department (17,000 S.F.)

Based on scoping discussions with City of Columbia staff, it was assumed that the development would be completed by 2026.



Figure 2.
Walmart Neighborhood Market
Site Development Plan

Project Scope

This report identifies potential traffic impacts to the surrounding roadway network based on the proposed development. Three scenarios were considered for analysis, as follows:

- Existing Traffic Conditions (2024)
- Background Traffic Conditions (2026)
- Future Traffic Conditions at Project Buildout (2026)

Based on scoping discussions with City of Columbia staff, the following intersections were included for analysis in this traffic study:

- #1 – Nashville Highway (US 31 / SR 6) & Honey Farm Way
- #2 – Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access
- #3 – Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access
- #4 – Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive

To simplify review of the traffic study, each intersection was assigned a reference number, as shown above. The traffic assignment and capacity analyses worksheets contained in this report refer to each intersection by both name and assigned intersection number.

It should be noted that at intersection #1, Nashville Highway and Honey Farm Way, there is a business driveway that comprises the west and fourth leg of the intersection. However, based on traffic data collection for both KCI's previous traffic study and this study, there were zero entering and exiting traffic volumes during each peak hour at this driveway. Therefore, for the purposes of this study, this intersection was analyzed as a T-intersection, excluding the business driveway from analysis and future traffic signal phasing.

3. 2024 EXISTING TRAFFIC CONDITIONS

Methodology

The traffic analyses performed in this report were conducted using *Synchro* software, which emulates the methodologies set forth in the *Highway Capacity Manual, 6th Edition*, for evaluation of signalized and unsignalized intersections.

The intersections considered in this study were evaluated in terms of level of service (LOS), which is a rating of traffic conditions for a given roadway or intersection. The descriptions for the various levels of service at both signalized and unsignalized intersections are shown in Table 1 and Table 2, respectively.

Table 1
Level of Service Criteria for Signalized Intersections

Level of Service	Description	Control Delay (Seconds)
A	Very low delay with minimal stops.	<10
B	Stable traffic flow, low delay, few traffic stops.	>10 to ≤20
C	Operations with stable flow, moderate delay.	>20 to ≤ 35
D	Noticeable delays, many stopped vehicles.	>35 and ≤ 55
E	Unstable flow, high delays and congestion.	>55 and ≤ 80
F	Unacceptable delay, excessive congestion.	>80

Table 2
Level of Service Criteria for Unsignalized Intersections

Level of Service	Description	Control Delay (Seconds)
A	Minimal or no delay	≤ 10
B	Minor traffic delay	>10 and ≤ 15
C	Average traffic delay	>15 and ≤ 25
D	Long traffic delay	>25 and ≤ 35
E	Very long traffic delay	>35 and ≤ 50
F	Extreme traffic delay	> 50

Roadway Network

The roadways in the vicinity of the site that will provide access to the Walmart Neighborhood Market development are described as follows:

- *Nashville Highway (US 31 / SR 6)* is a four-lane, median-divided highway that is designated in TDOT's functional classification system as a principal arterial roadway. For the purposes of this study, Nashville Highway was designated as running north-south. At its intersection with Honey Farm Way, Nashville Highway has a southbound left-turn lane and a northbound right-turn lane into the Honey Farms development. The speed limit on Nashville Highway is posted at 55 mph.
- *Honey Farm Way* is a two-lane local roadway with a posted speed limit of 25 mph. At its intersection with Nashville Highway, Honey Farm Way has two exiting westbound lanes.
- *Hidden Creek Way* is a two-lane local roadway that provides access to the Homestead at Carter's Station residential development. Hidden Creek Way has a posted speed limit of 25 mph.
- *Williams Ridge Drive* is a two-lane local roadway that provides access to the Drumwright residential development. The speed limit is not posted on Williams Ridge Drive.

Existing Traffic Operations

To provide data for the analysis, manual turning movement traffic counts were performed at the following locations:

- #1 – Nashville Highway (US 31 / SR 6) & Honey Farm Way
- #4 – Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive

The traffic counts were conducted on a weekday from 7:00 AM to 9:00 AM and from 2:00 PM to 6:00 PM. It should be noted that traffic video data were recorded initially on October 22nd, 2024, but there was a traffic incident on Nashville Highway during this collection that affected the AM peak hour traffic. AM video was therefore recollected on November 7th, 2024.

From the traffic counts collected, it was determined that the AM peak hours of traffic differed by intersection. At intersection #1, Nashville Highway and Honey Farm Way, the AM peak hour occurred from 7:00 AM to 8:00 AM, while at intersection #4, Nashville Highway and Hidden Creek Way / Williams Ridge Drive, the AM peak hour occurred from 7:15 AM to 8:15 AM. At each of the two intersections, the PM peak hour occurred between 2:30 PM and 3:30 PM.

The existing 2024 peak hour traffic volumes for the intersections studied are illustrated in Figure 3. The traffic count data utilized for this study are included in summary form in Appendix A.

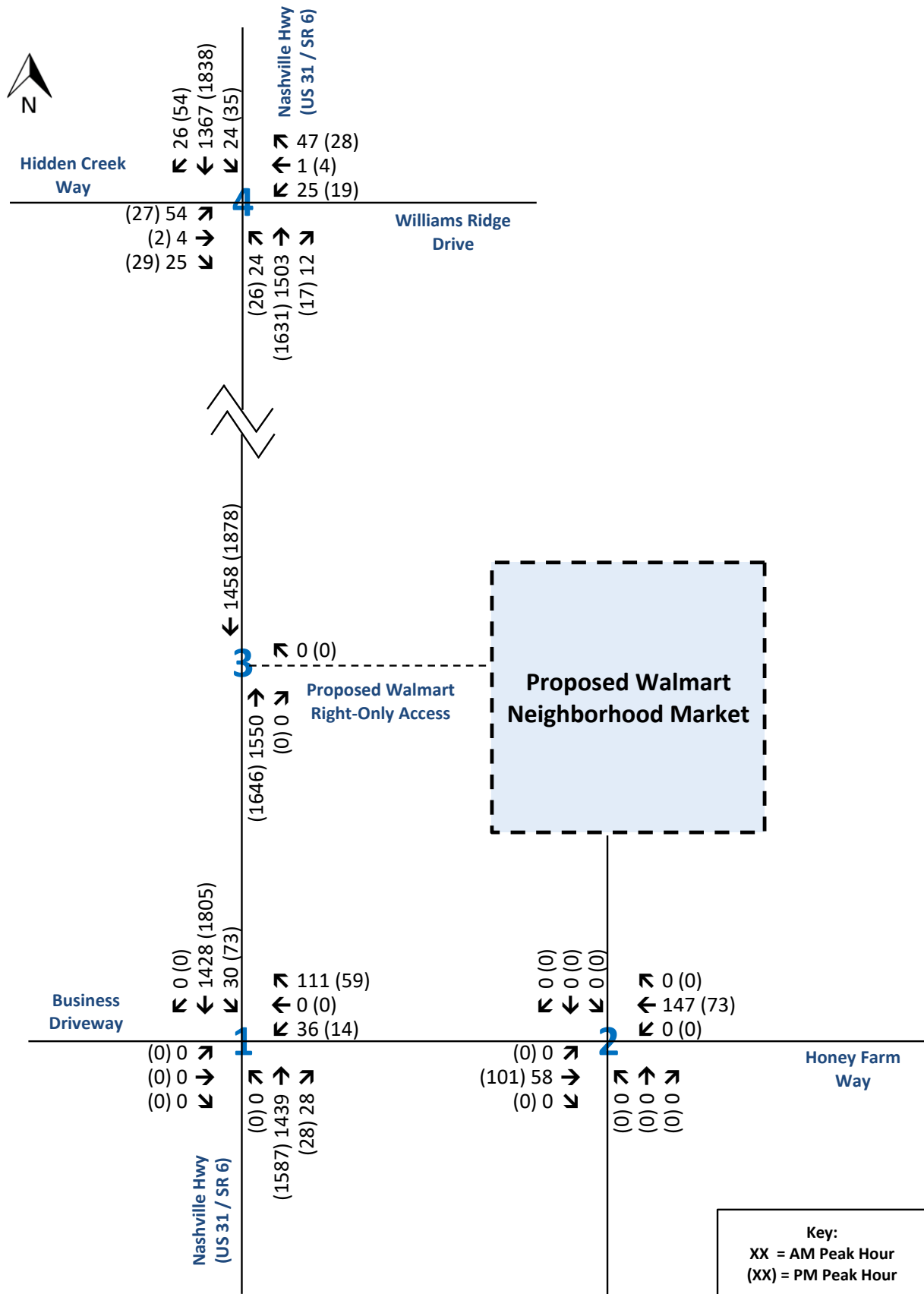


Figure 3.
Existing Traffic Volumes (2024)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



2024 Existing Capacity Analyses

As previously described, the capacity analyses result in the determination of a Level of Service (LOS) for an intersection. The LOS is a concept used to describe how well an intersection or roadway operates. LOS A is the best, while LOS F is the worst.

The results of the capacity analyses for the 2024 existing conditions at the intersections studied are presented in Table 3. As shown, the intersections contained in the study area presently operate at acceptable levels of service (LOS D or better) during both the AM and PM peak traffic hours.

Appendix B contains the capacity analysis worksheets for the 2024 existing traffic conditions.

Table 3
2024 Existing Traffic Conditions Analyses
Peak Hour Levels of Service

Intersection			Level of Service / Delay (Seconds)	
#	Description	Movement ⁽¹⁾	AM Peak Hour	PM Peak Hour
1	Nashville Highway (US 31 / SR 6) & Honey Farm Way	Southbound Left	B (14.4)	C (17.8)
		Westbound	D (29.0)	D (27.9)
2	Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access	Northbound	---	---
		Southbound	---	---
		Eastbound Left	---	---
		Westbound Left	---	---
3	Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access	Westbound Right	---	---
4	Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive	Overall (Signalized)	B (16.3)	B (19.8)

⁽¹⁾ For signalized locations and all-way stop control, the overall LOS and delay are listed for the intersection. For intersections with stop control on the minor approaches only, the LOS and delay are listed for movements that are required to stop or yield the right-of-way.

4. 2026 BACKGROUND TRAFFIC CONDITIONS

The 2026 background conditions analyses are presented to evaluate the traffic levels expected at the project buildout year due to growth. To determine the background traffic volumes, data from a nearby count station, #91, were obtained from TDOT. Based on historical ADT traffic counts at this count station, an average annual rate of 1.3% traffic growth was indicated in the vicinity of the project site over the last five-year period. To be conservative, the 2024 existing traffic volumes were increased by 2.5% per year for the two-year buildout to obtain the 2026 background traffic volumes. The historical TDOT data from this count station are included in Appendix A.

In addition to historical traffic growth, one offsite development was identified for inclusion in the 2026 background traffic conditions. This project is a proposed multifamily and self-storage development located at 2558 Nashville Highway, north of the Honey Farm development.

The 2026 background traffic volumes, which represent the traffic that could be expected to travel through the study area even if the proposed Walmart Neighborhood Market is not completed, are illustrated in Figure 4.

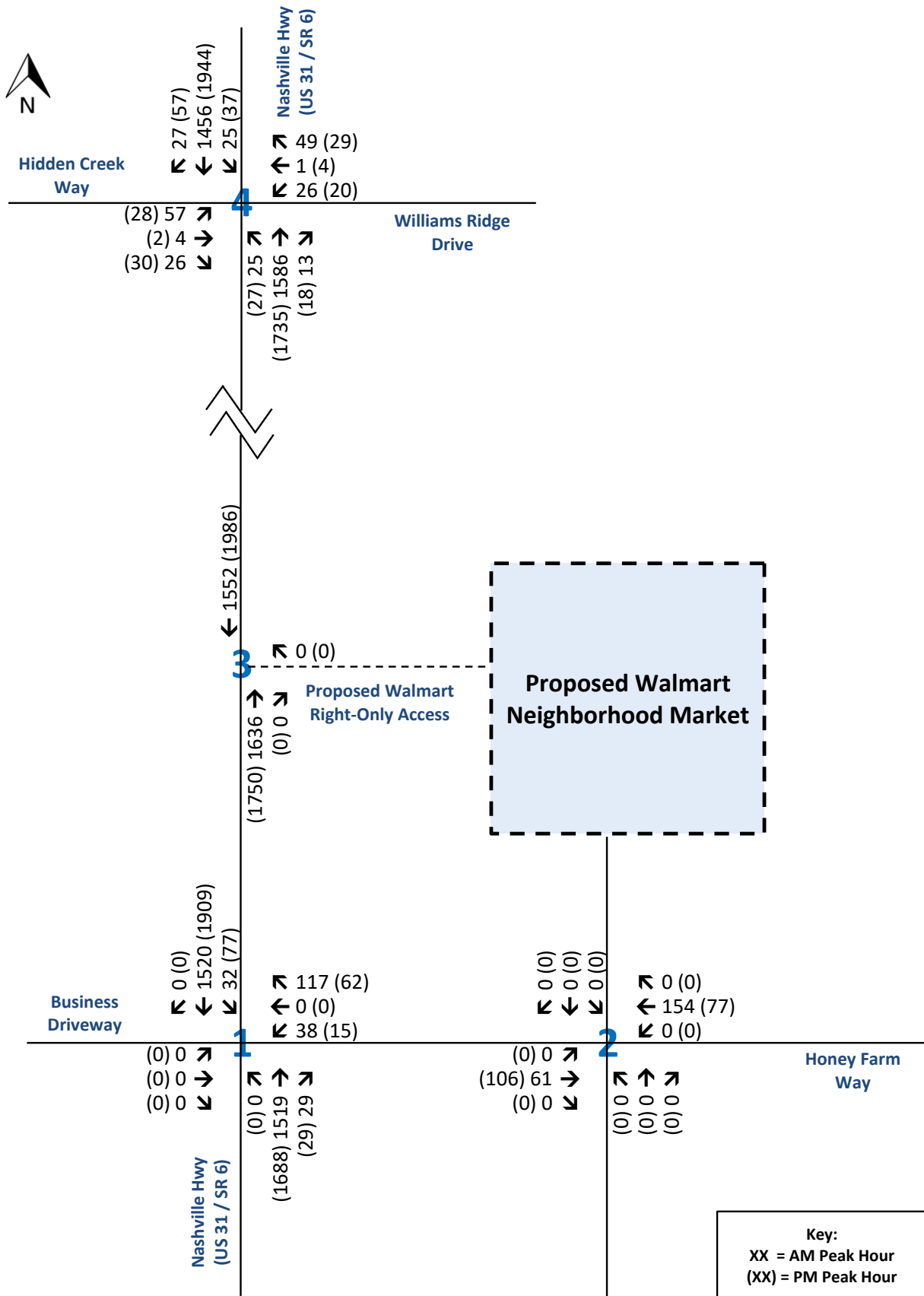


Figure 4.
Background Traffic Volumes (2026)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



2026 Background Intersection Capacity Analyses

To determine the LOS of the intersections studied, capacity analyses were performed for the AM and PM peak hours of traffic for the 2026 background traffic conditions. The capacity calculations were performed in accordance with the methods outlined in the *Highway Capacity Manual*. As previously described, the capacity analyses result in the determination of a Level of Service (LOS) for an intersection. The LOS is a concept used to describe how well an intersection or roadway operates. LOS A is the best, while LOS F is the worst.

As shown in Table 4, the intersections contained in the study area are expected to operate at acceptable levels of service (LOS D or better) during both the AM and PM peak traffic hours.

Appendix B contains the capacity analysis worksheets for the 2026 background traffic conditions.

Table 4
2026 Background Traffic Conditions Analyses
Peak Hour Levels of Service

Intersection			Level of Service / Delay (Seconds)	
#	Description	Movement ⁽¹⁾	AM Peak Hour	PM Peak Hour
1	Nashville Highway (US 31 / SR 6) & Honey Farm Way	Southbound Left	C (15.3)	C (19.8)
		Westbound	D (33.3)	D (32.1)
2	Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access	Northbound	---	---
		Southbound	---	---
		Eastbound Left	---	---
		Westbound Left	---	---
3	Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access	Westbound Right	---	---
4	Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive	Overall (Signalized)	B (17.3)	C (22.7)

⁽¹⁾ For signalized locations and all-way stop control, the overall LOS and delay are listed for the intersection. For intersections with stop control on the minor approaches only, the LOS and delay are listed for movements that are required to stop or yield the right-of-way.

5. 2026 PROJECTED TRAFFIC CONDITIONS

To develop the 2026 projected traffic conditions, the trips expected to be generated by the proposed development were determined. These trips were then assigned to the roadway network using directional traffic distributions.

Trip Generation

As mentioned in the project description, the proposed project will include a Walmart Neighborhood Market measuring approximately 45,000 S.F., as well as a 6,600-S.F. fast-food restaurant with a drive-through window; a 5,500-S.F. fast casual restaurant; 6,000 S.F. of future retail space; 174 apartment units; 180 townhomes; 98,275 S.F. of mini-warehouse space, and a 17,000-S.F. health department. Trips expected to be generated by the proposed development were calculated using data from *Trip Generation, 11th Edition*, which is a publication of the Institute of Transportation Engineers (ITE). The results of the trip generation calculations are presented in Table 5. The results of the trip generation calculations are presented in Table 5. This table also includes the number of internal and pass-by trips assumed for the development.

- Internal Trip Reduction – Information contained in the *Trip Generation Handbook* indicates that multi-use sites with retail-to-retail attraction can result in as much as a 30% reduction in external trips. However, based on scoping discussions with City of Columbia staff, a 20% internal reduction rate was applied for the grocery store, fast-food restaurant with a drive-through, fast casual restaurant, and future retail portions of the development.
- Pass-By Trips – Information contained in the *Trip Generation Handbook* indicates the pass-by capture rates are significant for retail land uses. The specific pass-by rates utilized for each land use are detailed in the footnotes of Table 5.

Additional information regarding the trip generation calculations for the site development included in this study is contained in Appendix C.

Table 5
Trip Generation for the Proposed
Honey Farm Walmart Neighborhood Market

Description	ITE Land Use Code (LUC)	SIZE	Daily Trips	AM Peak Hour Trips		PM Peak Hour Trips	
				Enter	Exit	Enter	Exit
Grocery Store	850	45,000 S.F.	4,292	76	53	202	202
Fast-Food Restaurant with Drive-Through	934	6,600 S.F.	3,086	150	144	113	105
Fast Casual Restaurant	930	5,500 S.F.	534	4	4	46	37
Future Retail	822	6,000 S.F.	326	12	8	27	27
Multifamily Housing (Low-Rise)	220	174 Units	1,190	18	58	60	35
Townhomes	215	180 Units	1,322	22	66	61	43
Mini-Warehouse	151	98,275 S.F.	142	5	4	7	8
Health Department	720	17,000 S.F.	622	39	10	20	46
Total Generated Trips			11,514	326	347	536	503
Internal Trip Reduction ⁽¹⁾			(2,301)	(65)	(71)	(106)	(100)
Total Primary Trips			9,213	261	276	430	403
Pass-By Trip Reduction ⁽²⁾			(2,093)	(71)	(64)	(114)	(109)
Net New Trips Generated			7,120	190	212	316	294

⁽¹⁾ For LUCs 850, 934, 930, and 822, an internal trip reduction of 20% was taken for the weekday, AM, and PM trip generations.

⁽²⁾ For LUC 850, the weekday, AM, and PM pass-by reduction rates used were 20%, 20%, and 33%, respectively. For LUC 934, the weekday, AM, and PM pass-by reduction rates used were 50%, 49%, and 50%. For LUC 930, the weekday, AM, and PM pass-by reduction rates used were 25%, 0%, and 25%. For LUC 822, the weekday, AM, and PM pass-by reduction rates used were 25%, 0%, and 34%.

Trip Distribution

The trips that will be generated by the proposed project were assigned to the roadway network using trip distributions that are detailed in Appendix D. These directional distributions were based on the existing directional split of traffic, the access proposed for the site, and the population and employment centers in the area. Given the multiple land uses proposed for the Honey Farm development, various trip distributions were determined. As an example, Figure 5 illustrates the primary trip distribution for the Walmart Neighborhood Market, which is described as follows:

- 50% to / from the south on Nashville Highway
- 50% to / from the north on Nashville Highway
 - 45% via Nashville Highway
 - 3% via Williams Ridge Drive
 - 2% via Hidden Creek Way

Appendix D contains the following trip distribution sheets:

- Primary Trip Distributions
 - Grocery Store (Walmart Neighborhood Market)
 - Fast-Food Restaurant with Drive-Through
 - Fast Casual Restaurant
 - Future Retail
 - Multifamily Housing (Low-Rise)
 - Townhomes
 - Mini-Warehouse
 - Health Department
- Pass-By Trip Distributions
 - Grocery Store (Walmart Neighborhood Market)
 - Fast-Food Restaurant with Drive-Through
 - Fast Casual Restaurant
 - Future Retail
- Offsite Trip Distribution
 - 2558 Nashville Highway

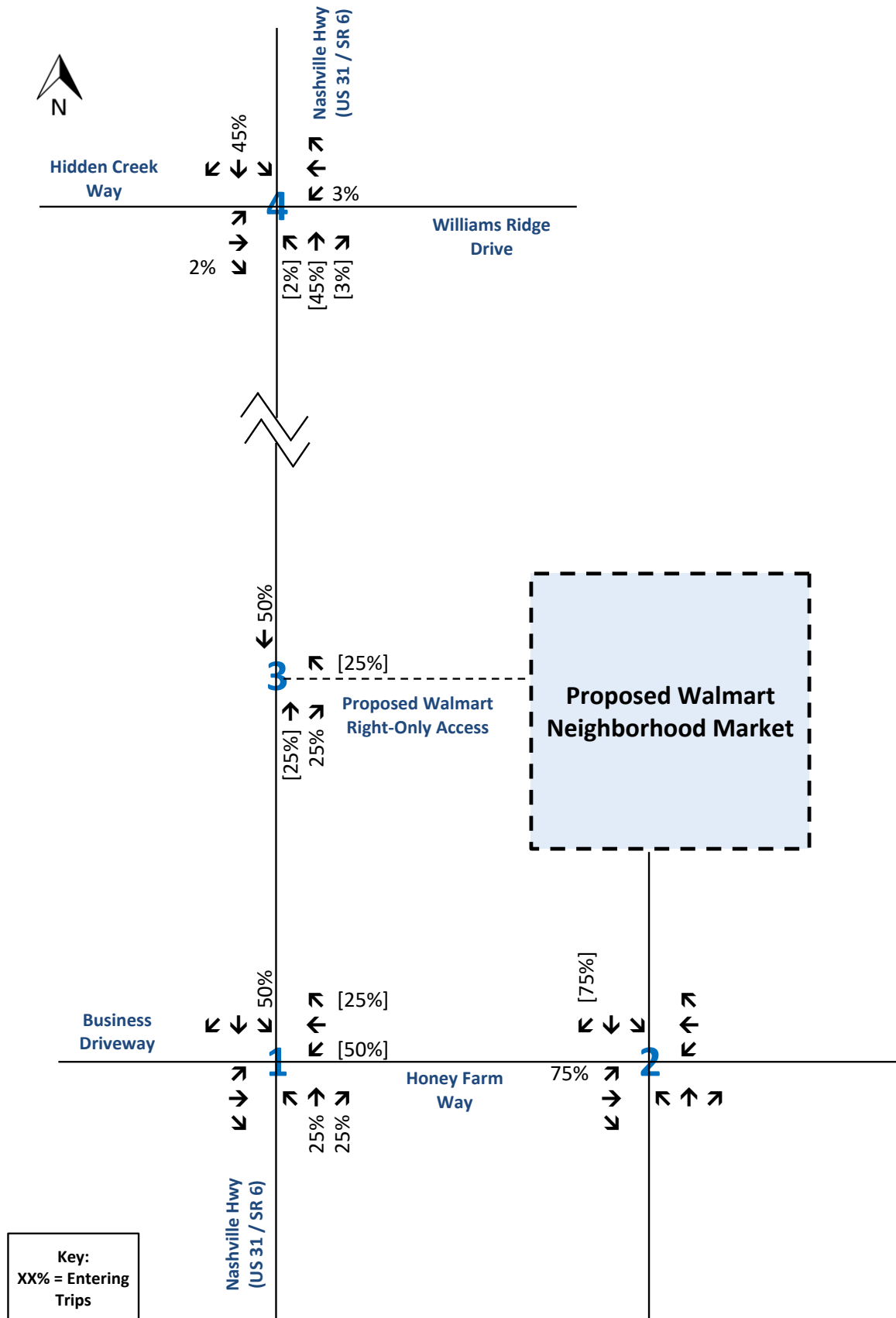


Figure 5.
Primary Trip Distribution - Grocery Store (Walmart Neighborhood Market)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



Traffic Assignment

The assignments of the total trips that will be generated by the proposed development are presented in Figure 6. Appendix E contains the traffic assignment figures utilized in developing the projected traffic volumes at buildout conditions. Traffic assignment information included in Appendix E is listed as follows:

- Existing Traffic Volumes (2024)
- Background Traffic Volumes (2026)
 - Historical Growth (2.5% per year for 2 years)
 - Offsite Traffic – 2558 Nashville Highway
 - Total Background Traffic (Historical Growth + Offsite)
- Site-Generated Traffic
 - Primary Traffic Volumes
 - Grocery Store (Walmart Neighborhood Market)
 - Fast-Food Restaurant with Drive-Through
 - Fast Casual Restaurant
 - Future Retail
 - Multifamily Housing (Low-Rise)
 - Townhomes
 - Mini-Warehouse
 - Health Department
 - Total Primary Traffic Volumes
 - Pass-By Traffic Volumes
 - Grocery Store (Walmart Neighborhood Market)
 - Fast-Food Restaurant with Drive-Through
 - Fast Casual Restaurant
 - Future Retail
 - Total Pass-By Traffic Volumes
- Total Site-Generated Traffic Volumes
- Total Projected Traffic Volumes at Project Buildout (2026)

The site-generated traffic volumes, shown in Figure 6, were added to the total background peak hour traffic volumes in order to obtain the total projected traffic volumes for the intersections within the study area. Figure 7 presents the total projected AM and PM peak hour traffic volumes expected at project buildout in 2026.

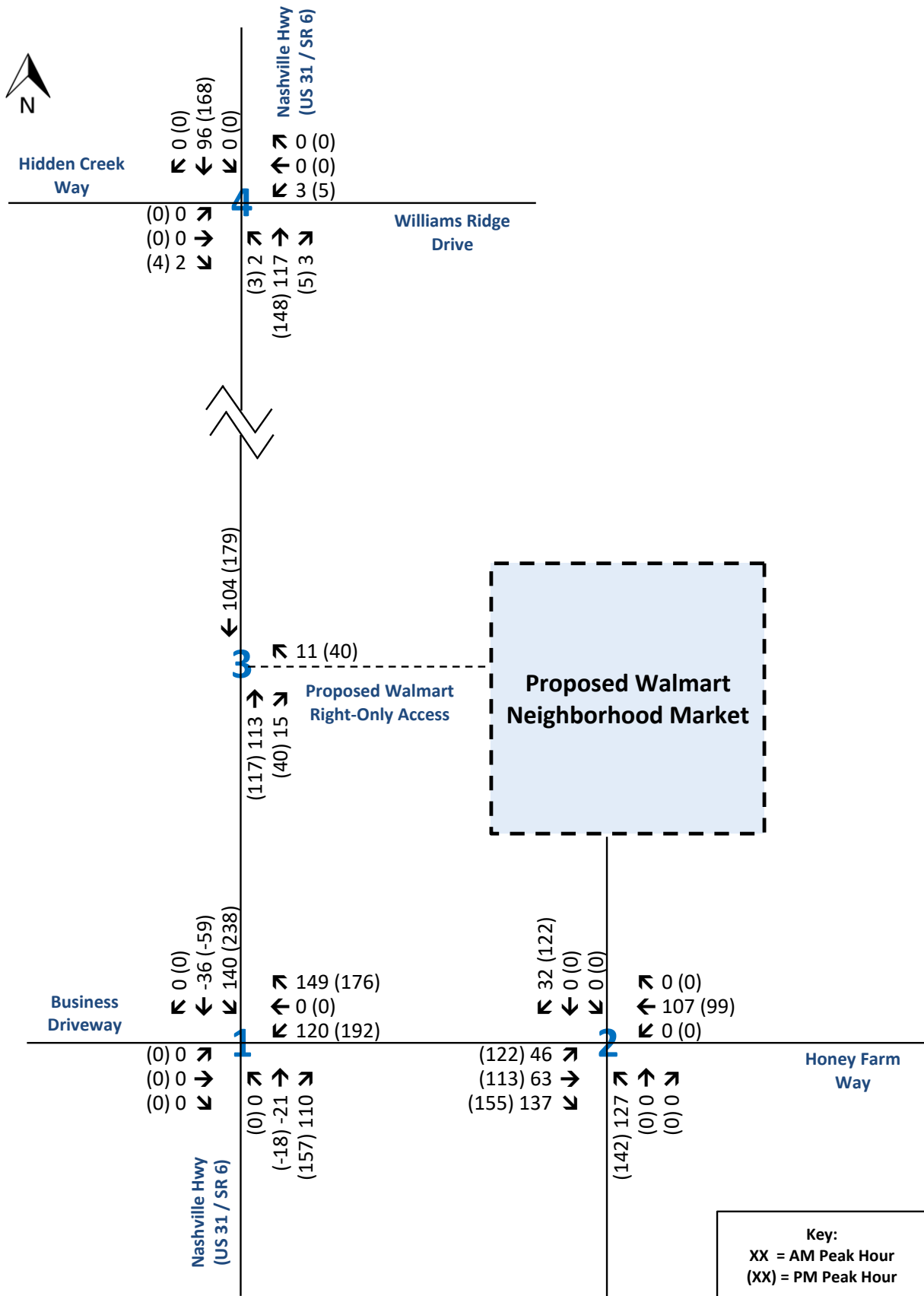


Figure 6.
Site Generated Traffic
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



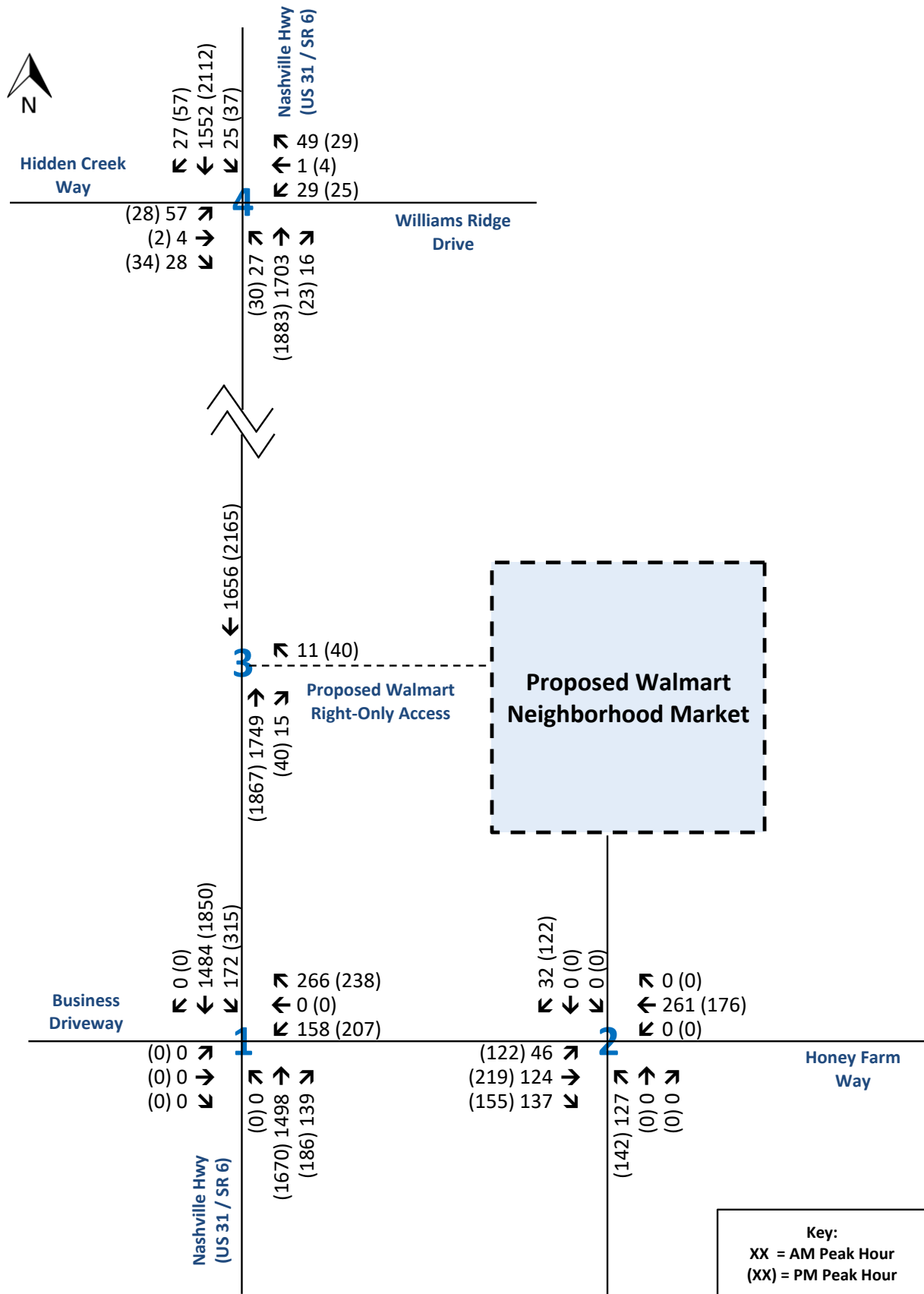


Figure 7.
Total Projected Traffic at Buildout (2026)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



2026 Projected Intersection Capacity Analyses

Capacity analyses were performed in order to determine the impact of the project on the intersections included in the scope of the study. These capacity analyses were used to evaluate the need for roadway and traffic control improvements at the intersections studied.

The results of the capacity analyses for the 2026 projected traffic conditions at the intersections studied are presented in Table 6. As shown, the intersections included in this study are expected to operate at acceptable levels of service (LOS D or better) during the AM and PM peak hours of traffic. Of note, intersection #1, Nashville Highway (US 31 / SR 6) and Honey Farm Way, was analyzed in the 2026 projected traffic conditions as a signalized location. In KCI's previous traffic study for the Honey Farm development, traffic signal warrants were conducted, and the thresholds for a signal were met, at this intersection. Based on KCI's traffic signal warrant analyses and discussions with the City of Columbia, the intersection of Nashville Highway and Honey Farm Way is planned to be signalized as part of the overall Honey Farm buildout.

Appendix B contains the capacity analysis worksheets for the 2026 projected traffic conditions.

Table 6
2026 Projected Traffic Conditions Analyses
Peak Hour Levels of Service

Intersection			Level of Service / Delay (Seconds)	
#	Description	Movement ⁽¹⁾	AM Peak Hour	PM Peak Hour
1	Nashville Highway (US 31 / SR 6) & Honey Farm Way	Overall (Signalized)	C (20.2)	C (30.1)
2	Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access	Northbound	C (15.4)	D (25.2)
		Southbound	B (10.8)	B (10.6)
		Eastbound Left	A (7.9)	A (7.9)
		Westbound Left	A (7.8)	A (8.1)
3	Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access	Westbound Right	C (19.5)	C (23.7)
4	Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive	Overall (Signalized)	B (18.5)	C (31.2)

⁽¹⁾ For signalized locations and all-way stop control, the overall LOS and delay are listed for the intersection. For intersections with stop control on the minor approaches only, the LOS and delay are listed for movements that are required to stop or yield the right-of-way.

2026 Projected Traffic Conditions – Queueing Analyses

As part of the analyses for the 2026 projected traffic conditions in the vicinity of the project site, 95th percentile queues were evaluated for the intersections included in this study. The queue lengths are summarized below in Table 7.

Table 7
95th Percentile Queues for 2026 Projected Traffic Conditions

Intersection			AM Peak Hour	PM Peak Hour
#	Description	Approach / Movement ⁽¹⁾	95 th % Queue ^{(1) (2)}	95 th % Queue ^{(1) (2)}
1	Nashville Highway (US 31 / SR 6) & Honey Farm Way	Northbound Through	#833'	#1006'
		Northbound Right	23'	49'
		Southbound Left	102'	m259'
		Southbound Through	720'	1075'
		Westbound Left	107'	141'
		Westbound Right	320'	#350'
2	Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access	Northbound	50'	75'
		Southbound Left	<25'	<25'
		Southbound Through-Right	<25'	<25'
		Eastbound Left	<25'	<25'
		Eastbound Through	---	---
		Eastbound Right	---	---
		Westbound Left	0'	0'
		Westbound Through-Right	---	---
3	Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access	Northbound Through	---	---
		Southbound Through	---	---
		Westbound Right	<25'	<25'
4	Nashville Highway (US 31 / SR 6) & Hidden Creek Way / Williams Ridge Drive	Northbound Left	m1'	m2'
		Northbound Through	119'	1130'
		Northbound Right	m0'	m0'
		Southbound Left	15'	26'
		Southbound Through	603'	#1331'
		Southbound Right	0'	7'
		Eastbound Left	86'	55'
		Eastbound Through-Right	38'	39'
		Westbound Left	51'	51'
		Westbound Through	7'	19'
		Westbound Right	14'	0'

⁽¹⁾ #: 95th percentile volume exceeds capacity; queue may be longer.

⁽²⁾ m: Volume for 95th percentile queue is metered by upstream signal.

Consideration of Offsite Improvements

Based on the results of the 2026 projected intersection capacity analyses, the need for offsite improvements was evaluated.

Left Turn Lane Warrants

For left turn lane warrants, traffic volumes are compared to the standards set forth in *NCHRP 457*. However, these analyses are typically performed only for unsignalized intersections; therefore, intersections #1, Nashville Highway and Honey Farm Way, and #4, Nashville Highway and Hidden Creek Way / Williams Ridge Drive, were not considered for analysis because #4 is already signalized and #1 is planned to be signalized in the 2026 projected conditions. Additionally, intersection #3, Nashville Highway and the proposed Walmart right-only access, was not considered for analysis because this access is proposed at a location on Nashville Highway that is median-divided and cannot allow left-turning movements into the site. Finally, an eastbound left turn lane into the site at intersection #2, Honey Farm Way and the proposed Walmart access, is already included on the revised site development plan for future construction.

Right Turn Lane Evaluations

To evaluate the need for right turn lane improvements, the criteria contained in *NCHRP 457* were compared to the 2026 projected traffic volumes at the following locations:

- #2 – Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access
- #3 – Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access

Right turn lane analyses were not conducted at intersection #1, Nashville Highway and Honey Farm Way, as there is an existing northbound right turn lane on Nashville Highway, or at intersection #4, Nashville Highway and Hidden Creek Way / Williams Ridge Drive, as there are existing northbound and southbound right turn lanes at this signalized location.

For location #2, the AM and PM peak hour volumes were compared to the data for a two-lane, 30-mph roadway; for location #3, the volumes were compared to the data for a four-lane, 55-mph roadway.

#2 – Honey Farm Way & Proposed Walmart Access / Proposed Commercial Access

The results of the analyses show that the projected volumes do not meet the thresholds indicated for the installation of a westbound right turn lane at this location during either the AM or PM peak hours.

#3 – Nashville Highway (US 31 / SR 6) & Proposed Walmart Right-Only Access

The results of the analyses show that the projected volumes meet the thresholds indicated for the installation of a northbound right turn lane at this location.

Copies of the right turn analyses sheets for the 2026 projected traffic conditions are included in Appendix F.

6. CONCLUSIONS AND RECOMMENDATIONS

Based on the analyses presented in this study, the traffic generated by the proposed Walmart Neighborhood Market can be accommodated by the surrounding roadway infrastructure with the following offsite improvements, which are detailed in Figure 8:

Nashville Highway and Proposed Walmart Right-Only Access

To provide adequate access for the Walmart Neighborhood Market, a right-only driveway on Nashville Highway is shown on the north end of the development. With the inclusion of this driveway, it is recommended that a northbound right turn lane with 150' of storage length be constructed on Nashville Highway.

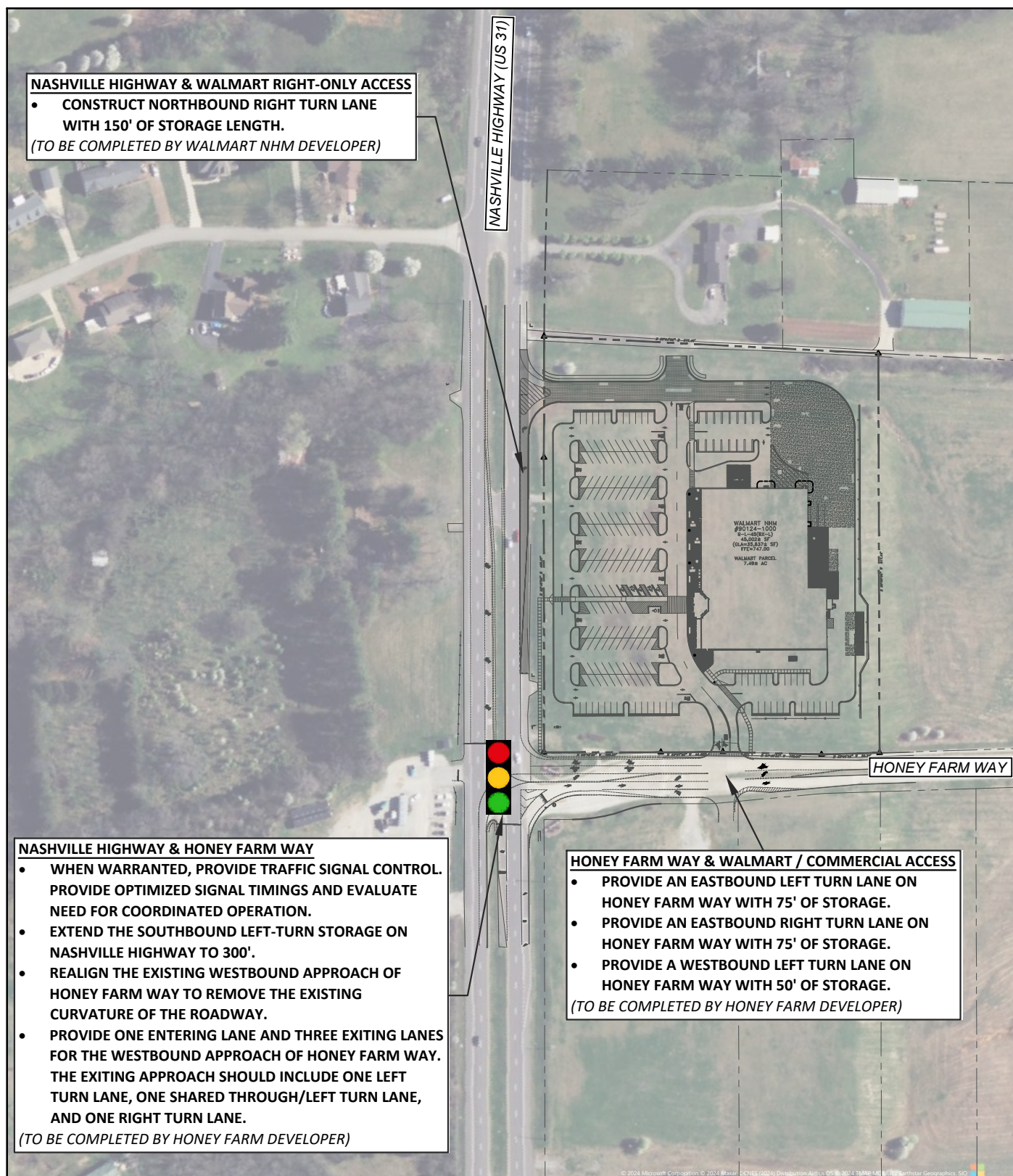
In addition, recommendations provided in KCI's previous traffic study are now included in the updated Honey Farm site development plan and are summarized as follows:

Nashville Highway and Honey Farm Way

- When warranted, provide traffic signal control. Provide optimized signal timings and evaluate need for coordinated operation.
- Extend the southbound left-turn storage on Nashville Highway to 300'.
- Realign the existing westbound approach of Honey Farm Way to remove the existing curvature of the roadway.
- Provide one entering lane and three exiting lanes for the westbound approach of Honey Farm Way. The exiting approach should include one left turn lane, one shared through/left turn lane, and one right turn lane.

Honey Farm Way and Proposed Walmart Access / Proposed Commercial Access

- Provide an eastbound left turn lane on Honey Farm Way with 75' of storage.
- Provide an eastbound right turn lane on Honey Farm Way with 75' of storage.
- Provide a westbound left turn lane on Honey Farm Way with 50' of storage.



Honey Farm Walmart Neighborhood Market - Traffic Impact Study (Columbia, TN)



Figure 8.
Recommended Improvements

APPENDIX A
TRAFFIC COUNT DATA

INTERSECTION TURNING

MOVEMENT COUNTS

INTERSECTION VEHICULAR TURNING MOVEMENT COUNTS

LOCATION: #1 - Nashville Highway (US Highway 31 / State Route 6) & Honey Farm Way / Business Driveway

PROJECT: Proposed Honey Farm Walmart Neighborhood Market

DATE: Tuesday, October 22, 2024

NOTES: Due to a traffic incident, AM peak data was recollected on 11/7/2024

LOCATION	Northbound			Southbound			Eastbound			Westbound		
	Nashville Highway (US Highway 31 / State Route 6)			Nashville Highway (US Highway 31 / State Route 6)			Business Driveway			Honey Farm Way		
TIME	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM - 7:15 AM	0	334	9	8	289	0	0	0	0	11	0	26
7:15 AM - 7:30 AM	0	345	6	6	362	0	0	0	0	13	0	33
7:30 AM - 7:45 AM	0	364	6	6	419	0	0	0	0	6	0	25
7:45 AM - 8:00 AM	0	396	7	10	358	0	0	0	0	6	0	27
8:00 AM - 8:15 AM	0	318	8	15	281	0	0	0	0	7	0	18
8:15 AM - 8:30 AM	0	302	4	14	274	0	0	0	0	7	0	17
8:30 AM - 8:45 AM	0	327	2	10	278	0	0	0	0	7	0	14
8:45 AM - 9:00 AM	0	340	8	7	308	0	0	0	0	10	0	12
2:00 PM - 2:15 PM	0	346	2	13	404	0	0	0	0	4	0	20
2:15 PM - 2:30 PM	0	320	6	10	422	0	0	0	0	9	0	12
2:30 PM - 2:45 PM	0	375	4	10	552	0	0	0	0	4	0	14
2:45 PM - 3:00 PM	0	396	10	25	449	0	0	0	0	0	0	20
3:00 PM - 3:15 PM	0	383	5	20	395	0	0	0	0	6	0	11
3:15 PM - 3:30 PM	0	433	9	18	409	0	0	0	0	4	0	14
3:30 PM - 3:45 PM	0	432	9	21	370	0	0	0	0	3	0	23
3:45 PM - 4:00 PM	0	374	10	23	360	0	0	0	0	4	0	6
4:00 PM - 4:15 PM	0	353	5	24	366	0	0	0	0	8	0	13
4:15 PM - 4:30 PM	0	399	10	16	363	0	0	0	0	5	0	11
4:30 PM - 4:45 PM	0	388	11	23	368	0	0	0	0	6	0	13
4:45 PM - 5:00 PM	0	290	4	18	393	0	0	0	0	5	0	20
5:00 PM - 5:15 PM	0	338	7	18	382	0	0	0	0	4	0	16
5:15 PM - 5:30 PM	0	424	6	25	346	0	0	0	0	5	0	14
5:30 PM - 5:45 PM	0	382	9	18	350	0	0	0	0	3	0	16
5:45 PM - 6:00 PM	0	323	7	18	345	0	0	0	0	5	0	9
AM Peak Hour (7:00 AM - 8:00 AM)	0	1,439	28	30	1,428	0	0	0	0	36	0	111
PM Peak Hour (2:30 PM - 3:30 PM)	0	1,587	28	73	1,805	0	0	0	0	14	0	59

PHF

0.93

0.93

INTERSECTION VEHICULAR TURNING MOVEMENT COUNTS

LOCATION: #2 - Honey Farm Way & Commercial Access / Proposed Walmart Access

PROJECT: Proposed Honey Farm Walmart Neighborhood Market

DATE: Tuesday, October 22, 2024

NOTES: Due to a traffic incident, AM peak data was recollected on 11/7/2024

LOCATION	Northbound			Southbound			Eastbound			Westbound		
	Commercial Access			Proposed Walmart Access			Honey Farm Way			Honey Farm Way		
TIME	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM - 7:15 AM								17			37	
7:15 AM - 7:30 AM								12			46	
7:30 AM - 7:45 AM								12			31	
7:45 AM - 8:00 AM								17			33	
8:00 AM - 8:15 AM								23			25	
8:15 AM - 8:30 AM								18			24	
8:30 AM - 8:45 AM								12			21	
8:45 AM - 9:00 AM								15			22	
2:00 PM - 2:15 PM								15			24	
2:15 PM - 2:30 PM								16			21	
2:30 PM - 2:45 PM								14			18	
2:45 PM - 3:00 PM								35			20	
3:00 PM - 3:15 PM								25			17	
3:15 PM - 3:30 PM								27			18	
3:30 PM - 3:45 PM								30			26	
3:45 PM - 4:00 PM								33			10	
4:00 PM - 4:15 PM								29			21	
4:15 PM - 4:30 PM								26			16	
4:30 PM - 4:45 PM								34			19	
4:45 PM - 5:00 PM								22			25	
5:00 PM - 5:15 PM								25			20	
5:15 PM - 5:30 PM								31			19	
5:30 PM - 5:45 PM								27			19	
5:45 PM - 6:00 PM								25			14	
AM Peak Hour (7:00 AM - 8:00 AM)	0	0	0	0	0	0	0	58	0	0	147	0
PM Peak Hour (2:30 PM - 3:30 PM)	0	0	0	0	0	0	0	101	0	0	73	0

INTERSECTION VEHICULAR TURNING MOVEMENT COUNTS

LOCATION: #3 - Nashville Highway (US Highway 31 / State Route 6) & Proposed Walmart Right-Only Access

PROJECT: Proposed Honey Farm Walmart Neighborhood Market

DATE: Tuesday, October 22, 2024

NOTES: Due to a traffic incident, AM peak data was recollected on 11/7/2024

LOCATION	Northbound			Southbound			Eastbound			Westbound		
	Nashville Highway (US Highway 31 / State Route 6)			Nashville Highway (US Highway 31 / State Route 6)						Proposed Walmart Right-Only Access		
TIME	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM - 7:15 AM		360			297							
7:15 AM - 7:30 AM		378			368							
7:30 AM - 7:45 AM		389			425							
7:45 AM - 8:00 AM		423			368							
8:00 AM - 8:15 AM		336			296							
8:15 AM - 8:30 AM		319			288							
8:30 AM - 8:45 AM		341			288							
8:45 AM - 9:00 AM		352			315							
2:00 PM - 2:15 PM		366			417							
2:15 PM - 2:30 PM		332			432							
2:30 PM - 2:45 PM		389			562							
2:45 PM - 3:00 PM		416			474							
3:00 PM - 3:15 PM		394			415							
3:15 PM - 3:30 PM		447			427							
3:30 PM - 3:45 PM		455			391							
3:45 PM - 4:00 PM		380			383							
4:00 PM - 4:15 PM		366			390							
4:15 PM - 4:30 PM		410			379							
4:30 PM - 4:45 PM		401			391							
4:45 PM - 5:00 PM		310			411							
5:00 PM - 5:15 PM		354			400							
5:15 PM - 5:30 PM		438			371							
5:30 PM - 5:45 PM		398			368							
5:45 PM - 6:00 PM		332			363							
AM Peak Hour (7:00 AM - 8:00 AM)	0	1,550	0	0	1,458	0	0	0	0	0	0	0
PM Peak Hour (2:30 PM - 3:30 PM)	0	1,646	0	0	1,878	0	0	0	0	0	0	0

INTERSECTION VEHICULAR TURNING MOVEMENT COUNTS

LOCATION: #4 - Nashville Highway (US Highway 31 / State Route 6) & Williams Ridge Drive / Hidden Creek Way

PROJECT: Proposed Honey Farm Walmart Neighborhood Market

DATE: Tuesday, October 22, 2024

NOTES: Due to a traffic incident, AM peak data was recollected on 11/7/2024

LOCATION	Northbound			Southbound			Eastbound			Westbound		
	Nashville Highway (US Highway 31 / State Route 6)			Nashville Highway (US Highway 31 / State Route 6)			Hidden Creek Way			Williams Ridge Drive		
TIME	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM - 7:15 AM	1	349	3	1	266	2	12	0	19	7	0	7
7:15 AM - 7:30 AM	4	379	5	3	353	5	16	1	9	5	0	16
7:30 AM - 7:45 AM	4	392	2	5	394	2	9	0	11	6	0	5
7:45 AM - 8:00 AM	5	394	3	10	342	7	15	3	3	8	0	8
8:00 AM - 8:15 AM	11	338	2	6	278	12	14	0	2	6	1	18
8:15 AM - 8:30 AM	5	324	6	12	288	10	8	0	6	3	0	10
8:30 AM - 8:45 AM	5	338	5	7	272	7	9	0	11	6	2	8
8:45 AM - 9:00 AM	0	360	4	2	302	5	11	0	8	5	0	15
2:00 PM - 2:15 PM	2	339	6	0	409	6	6	1	7	2	0	8
2:15 PM - 2:30 PM	25	248	3	11	391	11	2	0	6	2	0	13
2:30 PM - 2:45 PM	5	427	7	9	577	11	5	0	8	6	0	8
2:45 PM - 3:00 PM	7	409	4	9	447	13	5	1	5	2	2	6
3:00 PM - 3:15 PM	9	384	4	10	397	16	12	0	11	7	2	5
3:15 PM - 3:30 PM	5	411	2	7	417	14	5	1	5	4	0	9
3:30 PM - 3:45 PM	3	449	5	5	378	16	5	1	5	10	0	10
3:45 PM - 4:00 PM	6	365	4	10	385	15	3	0	3	6	2	5
4:00 PM - 4:15 PM	9	347	3	10	342	9	7	0	9	2	1	5
4:15 PM - 4:30 PM	12	373	8	9	372	9	13	0	1	3	0	8
4:30 PM - 4:45 PM	9	360	5	10	359	10	7	0	6	2	0	5
4:45 PM - 5:00 PM	9	314	4	14	387	14	6	0	2	0	0	6
5:00 PM - 5:15 PM	13	315	5	8	326	12	10	0	9	2	0	7
5:15 PM - 5:30 PM	14	427	7	16	319	13	8	0	2	3	0	14
5:30 PM - 5:45 PM	13	382	4	8	370	14	5	0	3	2	0	10
5:45 PM - 6:00 PM	5	325	10	15	359	14	7	1	3	1	0	9
AM Peak Hour (7:15 AM - 8:15 AM)	24	1,503	12	24	1,367	26	54	4	25	25	1	47
PM Peak Hour (2:30 PM - 3:30 PM)	26	1,631	17	35	1,838	54	27	2	29	19	4	28

PHF

0.94

PHF

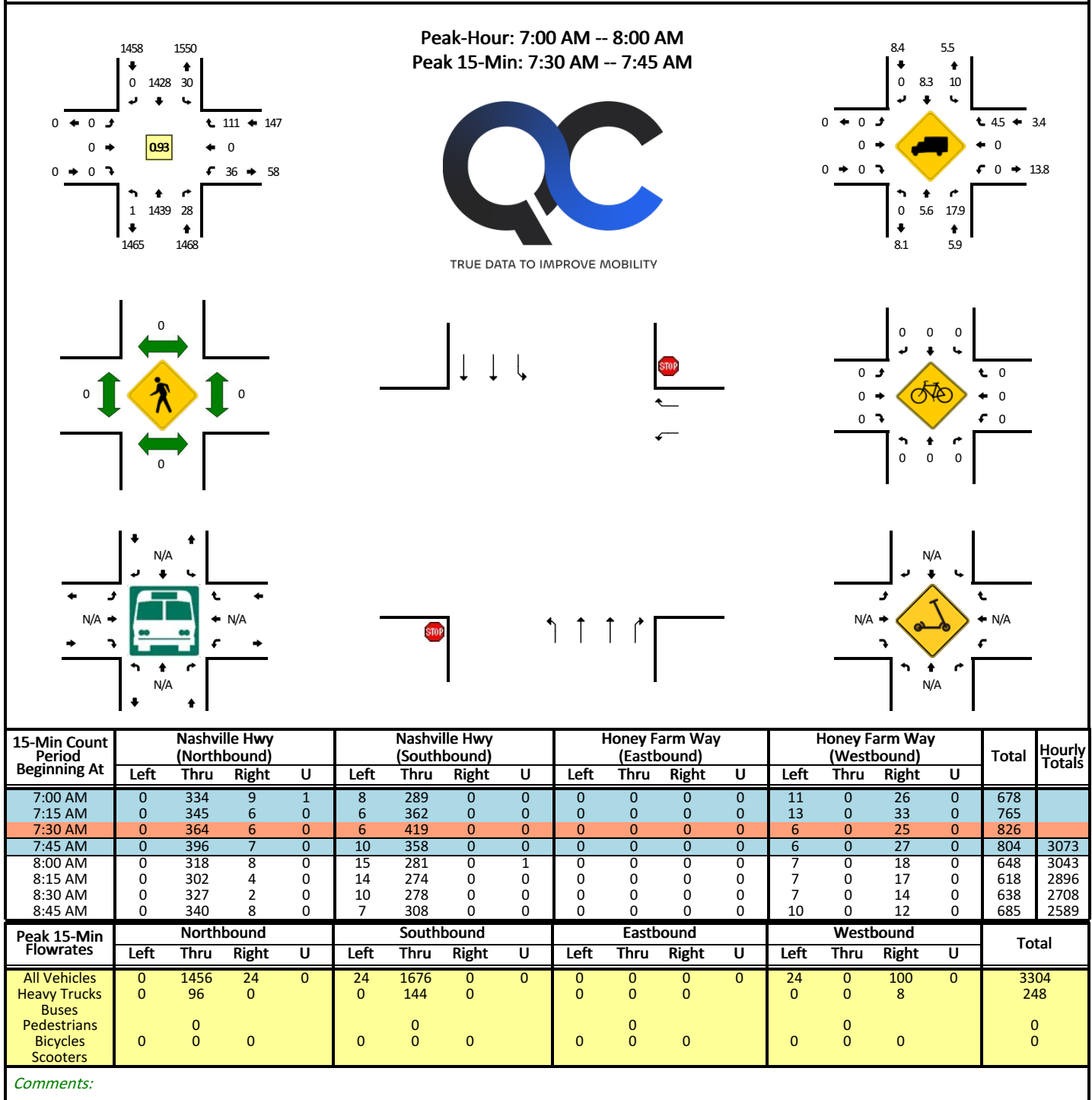
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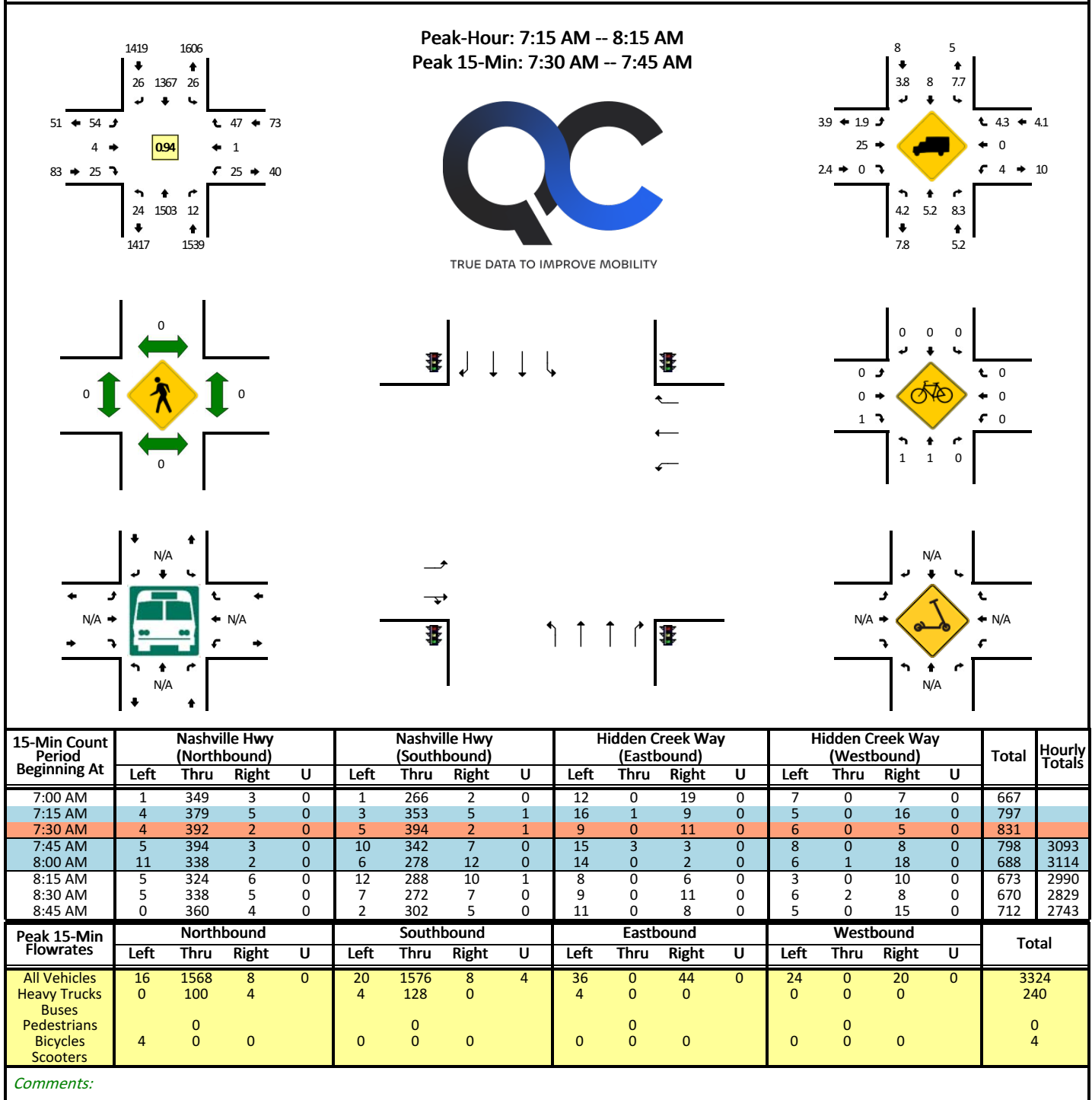
QUALITY COUNTS

TMC REPORTS

LOCATION: Nashville Hwy -- Honey Farm Way
CITY/STATE: Columbia, TN

QC JOB #: 16795307
DATE: Thu, Nov 7 2024



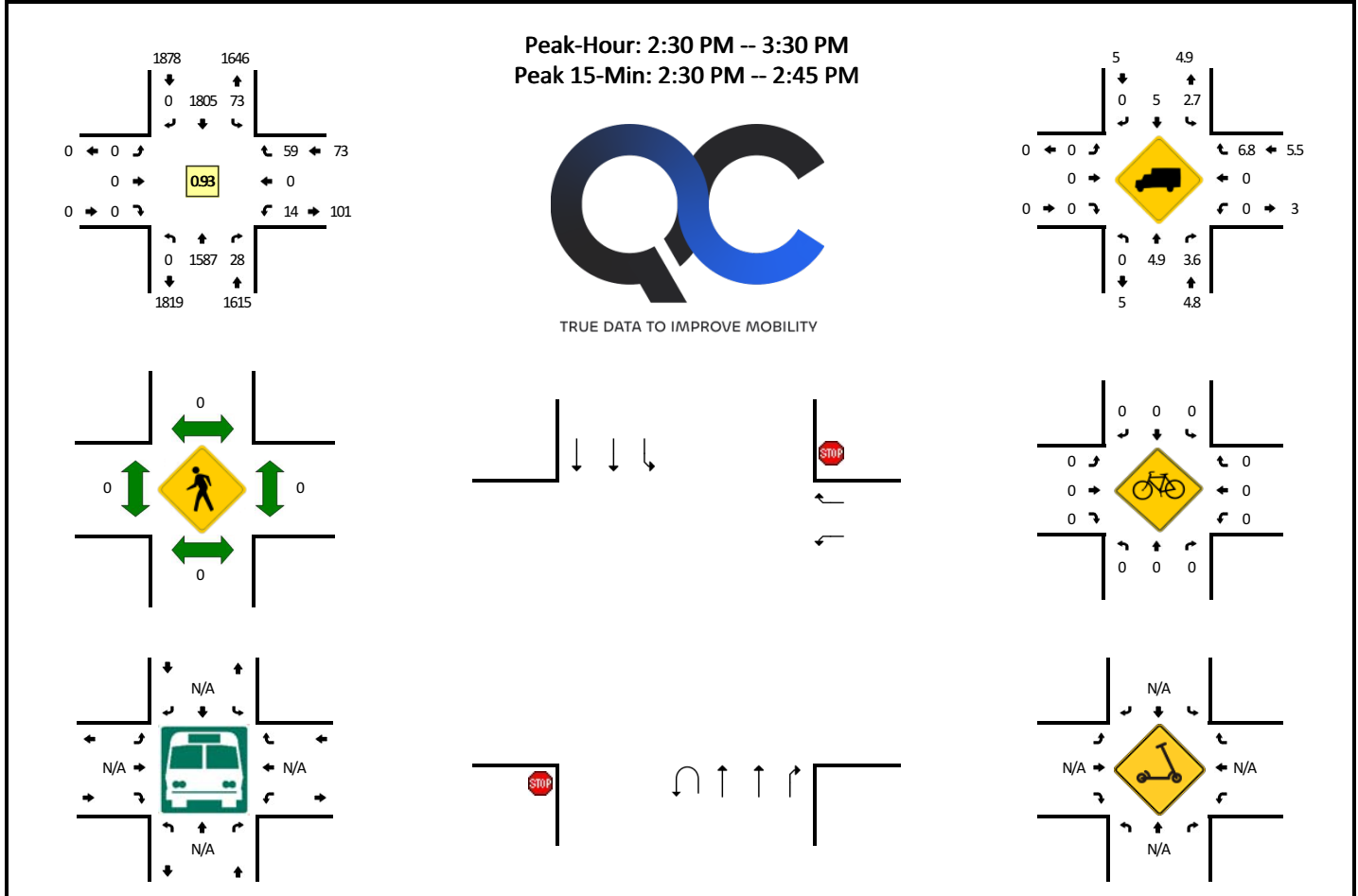
LOCATION: Nashville Hwy -- Hidden Creek Way**CITY/STATE:** Columbia, TN**QC JOB #:** 16795309**DATE:** Thu, Nov 7 2024

Report generated on 11/13/2024 6:36 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

LOCATION: Nashville Highway -- Honey Farm Way
CITY/STATE: Columbia, TN

QC JOB #: 16795302
DATE: Tue, Oct 22 2024



15-Min Count Period Beginning At	Nashville Highway (Northbound)				Nashville Highway (Southbound)				Honey Farm Way (Eastbound)				Honey Farm Way (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	346	2	0	13	404	0	0	0	0	0	0	4	0	20	0	789	
2:15 PM	0	320	6	0	10	422	0	1	0	0	0	0	9	0	12	0	780	
2:30 PM	0	375	4	0	10	552	0	0	0	0	0	0	4	0	14	0	959	
2:45 PM	0	396	10	0	25	449	0	0	0	0	0	0	0	0	20	0	900	3428
3:00 PM	0	383	5	0	20	395	0	0	0	0	0	0	6	0	11	0	820	3459
3:15 PM	0	433	9	0	18	409	0	0	0	0	0	0	4	0	14	0	887	3566
3:30 PM	0	432	9	0	21	370	0	1	0	0	0	0	3	0	23	0	859	3466
3:45 PM	0	374	10	0	23	360	0	0	0	0	0	0	4	0	6	0	777	3343
4:00 PM	0	353	5	0	24	366	0	0	0	0	0	0	8	0	13	0	769	3292
4:15 PM	0	399	10	0	16	363	0	0	0	0	0	0	5	0	11	0	804	3209
4:30 PM	0	388	11	0	23	368	0	0	0	0	0	0	6	0	13	0	809	3159
4:45 PM	0	290	4	0	18	393	0	0	0	0	0	0	5	0	20	0	730	3112
5:00 PM	0	338	7	0	18	382	0	0	0	0	0	0	4	0	16	0	765	3108
5:15 PM	0	424	6	0	25	346	0	0	0	0	0	0	5	0	14	0	820	3124
5:30 PM	0	382	9	0	18	350	0	0	0	0	0	0	3	0	16	0	778	3093
5:45 PM	0	323	7	0	18	345	0	0	0	0	0	0	5	0	9	0	707	3070
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	1500	16	0	40	2208	0	0	0	0	0	0	16	0	56	0	3836	
Heavy Trucks	0	112	0	0	0	100	0	0	0	0	0	0	0	0	0	0	212	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scooters																		

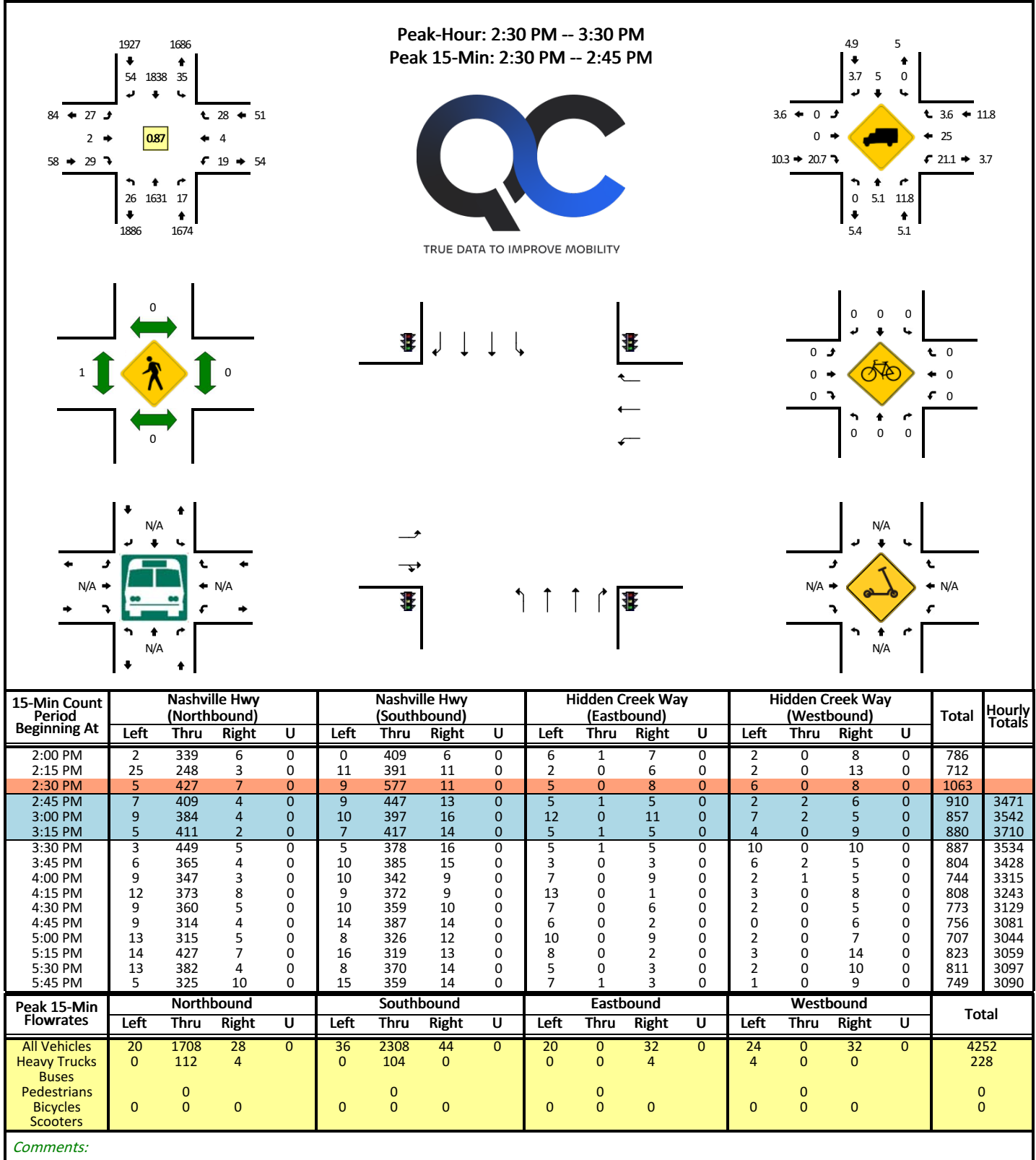
Comments:

Report generated on 10/28/2024 1:21 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

LOCATION: Nashville Hwy -- Hidden Creek Way
CITY/STATE: Columbia, TN

QC JOB #: 16795304
DATE: Tue, Oct 22 2024



TDOT TRAFFIC DATA

TDOT Traffic Count Historical Data Maury County Station #91 (Nashville Highway, South of Neapolis)		
Average Annual Growth, 2018-2023: 1.3% Per Year		
	ADT	Average Per Year
2023	39,227	
		8.3%
2022	36,227	
		0.9%
2021	35,920	
		2.5%
2020	35,050	
		-16.5%
2019	41,975	
		14.0%
2018	36,823	



APPENDIX B
TRAFFIC ANALYSES

EXISTING TRAFFIC CONDITIONS (2024)

AM PEAK

HCM 6th TWSC
1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	111	1439	28	30	1428
Future Vol, veh/h	36	111	1439	28	30	1428
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	250	300	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	119	1547	30	32	1535

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2379	774	0	0	1577
Stage 1	1547	-	-	-	-
Stage 2	832	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	~ 29	341	-	-	414
Stage 1	161	-	-	-	-
Stage 2	388	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 27	341	-	-	414
Mov Cap-2 Maneuver	112	-	-	-	-
Stage 1	161	-	-	-	-
Stage 2	358	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	112	341	414
HCM Lane V/C Ratio	-	-	0.346	0.35	0.078
HCM Control Delay (s)	-	-	53.2	21.1	14.4
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	1.4	1.5	0.3

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	4	25	25	1	47	24	1503	12	24	1367	26
Future Volume (vph)	54	4	25	25	1	47	24	1503	12	24	1367	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.869				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1619	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.482						0.128			0.092		
Satd. Flow (perm)	898	1619	0	1863	1863	1583	238	3539	1583	171	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				84			88			88
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3600			2010	
Travel Time (s)		38.4			39.1			44.6			24.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	57	4	27	27	1	50	26	1599	13	26	1454	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	31	0	27	1	50	26	1599	13	26	1454	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (%)	11.5%	15.4%		11.5%	15.4%	11.5%	11.5%	61.5%	11.5%	11.5%	61.5%	11.5%
Maximum Green (s)	8.5	13.5		8.5	13.5	8.0	8.0	73.5	8.5	8.0	73.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2024 Existing Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	15.0	7.6		9.4	7.4	10.1	97.3	93.5	104.9	98.7	96.3	114.6
Actuated g/C Ratio	0.12	0.06		0.07	0.06	0.08	0.75	0.72	0.81	0.76	0.74	0.88
v/c Ratio	0.30	0.26		0.21	0.01	0.25	0.10	0.63	0.01	0.12	0.55	0.02
Control Delay	52.4	28.7		56.3	57.0	5.5	5.9	14.6	0.0	6.2	12.4	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.4	28.7		56.3	57.0	5.5	5.9	14.6	0.0	6.2	12.4	0.0
LOS	D	C		E	E	A	A	B	A	A	B	A
Approach Delay		44.0			23.7			14.4			12.1	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 14.3

Intersection LOS: B

Intersection Capacity Utilization 69.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	80 s	15 s	20 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
15 s	80 s	15 s	20 s

HCM 6th Signalized Intersection Summary

Synchro 11 Report

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

RG Phillips Consulting, LLC

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	4	25	25	1	47	24	1503	12	24	1367	26
Future Volume (veh/h)	54	4	25	25	1	47	24	1503	12	24	1367	26
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	4	27	27	1	50	26	1599	13	26	1454	28
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	14	93	181	99	136	267	2358	1105	236	2358	1126
Arrive On Green	0.05	0.07	0.07	0.03	0.05	0.05	0.03	0.66	0.66	0.03	0.66	0.66
Sat Flow, veh/h	1781	209	1408	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	57	0	31	27	1	50	26	1599	13	26	1454	28
Grp Sat Flow(s),veh/h/ln	1781	0	1617	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.9	0.0	2.4	1.8	0.1	3.9	0.6	35.8	0.3	0.6	30.3	0.7
Cycle Q Clear(g_c), s	3.9	0.0	2.4	1.8	0.1	3.9	0.6	35.8	0.3	0.6	30.3	0.7
Prop In Lane	1.00		0.87	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	0	107	181	99	136	267	2358	1105	236	2358	1126
V/C Ratio(X)	0.27	0.00	0.29	0.15	0.01	0.37	0.10	0.68	0.01	0.11	0.62	0.02
Avail Cap(c_a), veh/h	243	0	168	238	194	217	318	2358	1105	287	2358	1126
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	57.8	55.1	58.3	56.1	9.9	13.4	6.0	11.4	12.4	5.5
Incr Delay (d2), s/veh	0.7	0.0	1.5	0.4	0.0	1.7	0.2	1.6	0.0	0.2	1.2	0.0
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	1.8	0.0	1.0	0.8	0.0	1.6	0.2	12.4	0.1	0.2	10.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	0.0	59.3	55.5	58.4	57.8	10.0	15.0	6.0	11.7	13.7	5.6
LnGrp LOS	E	A	E	E	E	E	B	B	A	B	B	A
Approach Vol, veh/h	88			78			1638			1508		
Approach Delay, s/veh	56.6			57.0			14.8			13.5		
Approach LOS	E			E			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	92.8	10.9	15.1	11.3	92.8	12.6	13.4				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	73.5	8.5	13.5	8.0	73.5	8.5	13.5				
Max Q Clear Time (g_c+I1), s	2.6	32.3	3.8	4.4	2.6	37.8	5.9	5.9				
Green Ext Time (p_c), s	0.0	8.9	0.0	0.0	0.0	10.1	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

2024 Existing Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

EXISTING TRAFFIC CONDITIONS (2024)

PM PEAK

HCM 6th TWSC
1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	59	1587	28	73	1805
Future Vol, veh/h	14	59	1587	28	73	1805
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	250	300	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	63	1706	30	78	1941

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	2833	853	0	0	1736	0
Stage 1	1706	-	-	-	-	-
Stage 2	1127	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 14	302	-	-	359	-
Stage 1	132	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 11	302	-	-	359	-
Mov Cap-2 Maneuver	79	-	-	-	-	-
Stage 1	132	-	-	-	-	-
Stage 2	212	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.9	0	0.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	79	302	359
HCM Lane V/C Ratio	-	-	0.191	0.21	0.219
HCM Control Delay (s)	-	-	61	20.1	17.8
HCM Lane LOS	-	-	F	C	C
HCM 95th %tile Q(veh)	-	-	0.7	0.8	0.8

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	2	29	19	4	28	26	1631	17	35	1838	54
Future Volume (vph)	27	2	29	19	4	28	26	1631	17	35	1838	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.859				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1600	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.488						0.042			0.056		
Satd. Flow (perm)	909	1600	0	1863	1863	1583	78	3539	1583	104	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33				78			82			82
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3600			2010	
Travel Time (s)		38.4			39.1			44.6			24.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	31	2	33	22	5	32	30	1875	20	40	2113	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	31	35	0	22	5	32	30	1875	20	40	2113	62
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (%)	10.7%	10.7%		10.7%	10.7%	10.7%	10.7%	67.9%	10.7%	10.7%	67.9%	10.7%
Maximum Green (s)	8.5	8.5		8.5	8.5	8.0	8.0	88.5	8.5	8.0	88.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2024 Existing Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	14.7	7.3		9.3	7.3	10.1	107.5	103.7	115.1	109.1	106.6	124.7
Actuated g/C Ratio	0.10	0.05		0.07	0.05	0.07	0.77	0.74	0.82	0.78	0.76	0.89
v/c Ratio	0.18	0.31		0.19	0.05	0.17	0.21	0.72	0.02	0.24	0.78	0.04
Control Delay	54.5	28.2		61.1	64.0	2.0	8.4	16.3	0.0	8.3	18.1	0.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.5	28.2		61.1	64.0	2.0	8.4	16.3	0.0	8.3	18.1	0.5
LOS	D	C		E	E	A	A	B	A	A	B	A
Approach Delay		40.6			29.3			16.0			17.4	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 49 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 17.3

Intersection LOS: B

Intersection Capacity Utilization 73.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	95 s	15 s	15 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
15 s	95 s	15 s	15 s

HCM 6th Signalized Intersection Summary

Synchro 11 Report

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

RG Phillips Consulting, LLC

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	2	29	19	4	28	26	1631	17	35	1838	54
Future Volume (veh/h)	27	2	29	19	4	28	26	1631	17	35	1838	54
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	2	33	22	5	32	30	1875	20	40	2113	62
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	5	83	149	91	140	157	2443	1135	202	2461	1153
Arrive On Green	0.04	0.05	0.05	0.03	0.05	0.05	0.03	0.69	0.69	0.04	0.69	0.69
Sat Flow, veh/h	1781	91	1508	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	31	0	35	22	5	32	30	1875	20	40	2113	62
Grp Sat Flow(s),veh/h/ln	1781	0	1599	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	0.0	3.0	1.6	0.4	2.6	0.7	48.9	0.5	0.9	63.1	1.6
Cycle Q Clear(g_c), s	2.3	0.0	3.0	1.6	0.4	2.6	0.7	48.9	0.5	0.9	63.1	1.6
Prop In Lane	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	0	88	149	91	140	157	2443	1135	202	2461	1153
V/C Ratio(X)	0.18	0.00	0.40	0.15	0.05	0.23	0.19	0.77	0.02	0.20	0.86	0.05
Avail Cap(c_a), veh/h	223	0	97	206	114	159	197	2443	1135	234	2461	1153
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.8	0.0	63.9	60.3	63.5	59.4	22.2	14.5	5.7	15.6	16.3	5.4
Incr Delay (d2), s/veh	0.5	0.0	2.9	0.5	0.2	0.8	0.6	2.4	0.0	0.5	4.2	0.1
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	1.1	0.0	1.3	0.8	0.2	1.1	0.5	17.0	0.2	0.5	22.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.3	0.0	66.8	60.8	63.8	60.2	22.8	16.8	5.7	16.1	20.5	5.5
LnGrp LOS	E	A	E	E	E	E	C	B	A	B	C	A
Approach Vol, veh/h	66			59			1925			2215		
Approach Delay, s/veh	63.7			60.7			16.8			20.0		
Approach LOS	E			E			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.8	103.5	10.5	14.2	12.5	102.8	11.4	13.3				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	88.5	8.5	8.5	8.0	88.5	8.5	8.5				
Max Q Clear Time (g_c+I1), s	2.7	65.1	3.6	5.0	2.9	50.9	4.3	4.6				
Green Ext Time (p_c), s	0.0	13.5	0.0	0.0	0.0	13.6	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

2024 Existing Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

BACKGROUND TRAFFIC CONDITIONS (2026)

AM PEAK

HCM 6th TWSC
1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	117	1519	29	32	1520
Future Vol, veh/h	38	117	1519	29	32	1520
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	250	300	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	126	1633	31	34	1634

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2518	817	0	0	1664
Stage 1	1633	-	-	-	-
Stage 2	885	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	~ 23	320	-	-	383
Stage 1	145	-	-	-	-
Stage 2	364	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 21	320	-	-	383
Mov Cap-2 Maneuver	100	-	-	-	-
Stage 1	145	-	-	-	-
Stage 2	332	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.3	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	100	320	383
HCM Lane V/C Ratio	-	-	0.409	0.393	0.09
HCM Control Delay (s)	-	-	63.9	23.4	15.3
HCM Lane LOS	-	-	F	C	C
HCM 95th %tile Q(veh)	-	-	1.7	1.8	0.3

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	4	26	26	1	49	25	1586	13	25	1456	27
Future Volume (vph)	57	4	26	26	1	49	25	1586	13	25	1456	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.869				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1619	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.482						0.108			0.077		
Satd. Flow (perm)	898	1619	0	1863	1863	1583	201	3539	1583	143	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28				84			88			88
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3600			2010	
Travel Time (s)		38.4			39.1			44.6			24.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	61	4	28	28	1	52	27	1687	14	27	1549	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	32	0	28	1	52	27	1687	14	27	1549	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (%)	11.5%	15.4%		11.5%	15.4%	11.5%	11.5%	61.5%	11.5%	11.5%	61.5%	11.5%
Maximum Green (s)	8.5	13.5		8.5	13.5	8.0	8.0	73.5	8.5	8.0	73.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2026 Background Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	15.1	7.6		9.5	7.4	10.1	97.2	93.4	104.9	98.6	96.2	114.6
Actuated g/C Ratio	0.12	0.06		0.07	0.06	0.08	0.75	0.72	0.81	0.76	0.74	0.88
v/c Ratio	0.31	0.26		0.22	0.01	0.26	0.12	0.66	0.01	0.14	0.59	0.02
Control Delay	52.9	28.5		56.5	57.0	6.1	6.1	15.6	0.0	6.6	13.2	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	28.5		56.5	57.0	6.1	6.1	15.6	0.0	6.6	13.2	0.0
LOS	D	C		E	E	A	A	B	A	A	B	A
Approach Delay		44.5			24.1			15.3			12.8	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 15.1

Intersection LOS: B

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	80 s	15 s	20 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
15 s	80 s	15 s	20 s

HCM 6th Signalized Intersection Summary

Synchro 11 Report

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

RG Phillips Consulting, LLC

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	4	26	26	1	49	25	1586	13	25	1456	27
Future Volume (veh/h)	57	4	26	26	1	49	25	1586	13	25	1456	27
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	4	28	28	1	52	27	1687	14	27	1549	29
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	13	94	182	99	137	245	2352	1103	218	2352	1125
Arrive On Green	0.05	0.07	0.07	0.03	0.05	0.05	0.03	0.66	0.66	0.03	0.66	0.66
Sat Flow, veh/h	1781	202	1414	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	61	0	32	28	1	52	27	1687	14	27	1549	29
Grp Sat Flow(s),veh/h/ln	1781	0	1616	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.1	0.0	2.5	1.9	0.1	4.0	0.6	39.7	0.4	0.6	34.0	0.7
Cycle Q Clear(g_c), s	4.1	0.0	2.5	1.9	0.1	4.0	0.6	39.7	0.4	0.6	34.0	0.7
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	108	182	99	137	245	2352	1103	218	2352	1125
V/C Ratio(X)	0.29	0.00	0.30	0.15	0.01	0.38	0.11	0.72	0.01	0.12	0.66	0.03
Avail Cap(c_a), veh/h	243	0	168	238	194	218	295	2352	1103	268	2352	1125
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	57.8	55.0	58.3	56.1	11.0	14.2	6.1	12.8	13.2	5.6
Incr Delay (d2), s/veh	0.7	0.0	1.5	0.4	0.0	1.7	0.2	1.9	0.0	0.3	1.5	0.0
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	1.9	0.0	1.1	0.9	0.0	1.7	0.2	13.8	0.1	0.2	11.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.2	0.0	59.3	55.4	58.4	57.8	11.2	16.1	6.1	13.1	14.6	5.6
LnGrp LOS	E	A	E	E	E	E	B	B	A	B	B	A
Approach Vol, veh/h	93				81				1728			
Approach Delay, s/veh	56.6				57.0				15.9			
Approach LOS	E				E				B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	92.5	11.0	15.2	11.4	92.5	12.7	13.4				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	73.5	8.5	13.5	8.0	73.5	8.5	13.5				
Max Q Clear Time (g_c+I1), s	2.6	36.0	3.9	4.5	2.6	41.7	6.1	6.0				
Green Ext Time (p_c), s	0.0	9.8	0.0	0.0	0.0	10.7	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

BACKGROUND TRAFFIC CONDITIONS (2026)

PM PEAK

HCM 6th TWSC
1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

Intersection

Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	62	1688	29	77	1909
Future Vol, veh/h	15	62	1688	29	77	1909
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	250	300	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	67	1815	31	83	2053

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	3008	908	0	0	1846
Stage 1	1815	-	-	-	-
Stage 2	1193	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	~ 10	278	-	-	325
Stage 1	115	-	-	-	-
Stage 2	250	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 7	278	-	-	325
Mov Cap-2 Maneuver	68	-	-	-	-
Stage 1	115	-	-	-	-
Stage 2	186	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.1	0	0.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	68	278	325
HCM Lane V/C Ratio	-	-	0.237	0.24	0.255
HCM Control Delay (s)	-	-	73.7	22	19.8
HCM Lane LOS	-	-	F	C	C
HCM 95th %tile Q(veh)	-	-	0.8	0.9	1

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	2	30	20	4	29	27	1735	18	37	1944	57
Future Volume (vph)	28	2	30	20	4	29	27	1735	18	37	1944	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.858				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1598	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.488						0.044			0.043		
Satd. Flow (perm)	909	1598	0	1863	1863	1583	82	3539	1583	80	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34				78			82			82
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3600			2010	
Travel Time (s)		38.4			39.1			44.6			24.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	32	2	34	23	5	33	31	1994	21	43	2234	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	36	0	23	5	33	31	1994	21	43	2234	66
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (%)	10.7%	10.7%		10.7%	10.7%	10.7%	10.7%	67.9%	10.7%	10.7%	67.9%	10.7%
Maximum Green (s)	8.5	8.5		8.5	8.5	8.0	8.0	88.5	8.5	8.0	88.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2026 Background Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	17.4	7.3		9.3	7.3	10.2	104.7	100.9	112.3	106.5	103.9	124.7
Actuated g/C Ratio	0.12	0.05		0.07	0.05	0.07	0.75	0.72	0.80	0.76	0.74	0.89
v/c Ratio	0.15	0.31		0.19	0.05	0.18	0.21	0.78	0.02	0.29	0.85	0.05
Control Delay	52.7	28.1		61.3	64.0	2.0	8.7	19.9	0.0	13.7	21.9	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	28.1		61.3	64.0	2.0	8.7	19.9	0.0	13.7	21.9	0.6
LOS	D	C		E	E	A	A	B	A	B	C	A
Approach Delay		39.7			29.5			19.5			21.1	
Approach LOS		D			C			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 49 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 20.8

Intersection LOS: C

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	95 s	15 s	15 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
15 s	95 s	15 s	15 s

HCM 6th Signalized Intersection Summary

Synchro 11 Report

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

RG Phillips Consulting, LLC

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	2	30	20	4	29	27	1735	18	37	1944	57
Future Volume (veh/h)	28	2	30	20	4	29	27	1735	18	37	1944	57
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	2	34	23	5	33	31	1994	21	43	2234	66
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	5	83	150	91	142	141	2437	1134	184	2456	1152
Arrive On Green	0.04	0.05	0.05	0.03	0.05	0.05	0.04	0.69	0.69	0.04	0.69	0.69
Sat Flow, veh/h	1781	89	1510	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	32	0	36	23	5	33	31	1994	21	43	2234	66
Grp Sat Flow(s),veh/h/ln	1781	0	1599	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	0.0	3.0	1.7	0.4	2.7	0.7	56.3	0.5	0.9	73.2	1.7
Cycle Q Clear(g_c), s	2.3	0.0	3.0	1.7	0.4	2.7	0.7	56.3	0.5	0.9	73.2	1.7
Prop In Lane	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	88	150	91	142	141	2437	1134	184	2456	1152
V/C Ratio(X)	0.18	0.00	0.41	0.15	0.05	0.23	0.22	0.82	0.02	0.23	0.91	0.06
Avail Cap(c_a), veh/h	223	0	97	205	114	161	180	2437	1134	213	2456	1152
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.8	0.0	64.0	60.2	63.5	59.3	28.8	15.8	5.8	19.6	18.0	5.5
Incr Delay (d2), s/veh	0.5	0.0	3.0	0.5	0.2	0.8	0.8	3.2	0.0	0.6	6.4	0.1
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	1.1	0.0	1.3	0.8	0.2	1.1	0.6	19.8	0.2	0.7	26.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	67.0	60.7	63.7	60.1	29.5	19.0	5.8	20.2	24.3	5.5
LnGrp LOS	E	A	E	E	E	E	C	B	A	C	C	A
Approach Vol, veh/h	68			61			2046			2343		
Approach Delay, s/veh	63.8			60.6			19.0			23.7		
Approach LOS	E			E			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.9	103.3	10.6	14.2	12.7	102.5	11.5	13.3				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	88.5	8.5	8.5	8.0	88.5	8.5	8.5				
Max Q Clear Time (g_c+I1), s	2.7	75.2	3.7	5.0	2.9	58.3	4.3	4.7				
Green Ext Time (p_c), s	0.0	9.8	0.0	0.0	0.0	13.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

PROJECTED TRAFFIC CONDITIONS (2026)

AM PEAK

							
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations	 		 			 	
Traffic Volume (vph)	158	266	1498	139	172	1484	
Future Volume (vph)	158	266	1498	139	172	1484	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	150	0		250	300		
Storage Lanes	2	1		1	1		
Taper Length (ft)	50				50		
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95	
Frnt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539	
Flt Permitted	0.950				0.052		
Satd. Flow (perm)	3433	1583	3539	1583	97	3539	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		11		149			
Link Speed (mph)	30		55			55	
Link Distance (ft)	450		2000			600	
Travel Time (s)	10.2		24.8			7.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	170	286	1611	149	185	1596	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	170	286	1611	149	185	1596	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	24		20			20	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (ft)	50	20	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	20	50	50	50	50	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	pm+ov	NA	pm+ov	pm+pt	NA	
Protected Phases	7	1	2	7	1	6	4
Permitted Phases		4		2	6		
Detector Phase	7	1	2	7	1	6	
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0
Total Split (s)	35.0	25.0	70.0	35.0	25.0	95.0	35.0
Total Split (%)	26.9%	19.2%	53.8%	26.9%	19.2%	73.1%	27%
Maximum Green (s)	29.0	18.0	63.0	29.0	18.0	88.0	29.0
Yellow Time (s)	3.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	2.5	2.5	2.0	2.5	2.5	2.0	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	

1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

RG Phillips Consulting, LLC

							
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Total Lost Time (s)	6.0	7.0	7.0	6.0	7.0	7.0	
Lead/Lag		Lead	Lag		Lead		
Lead-Lag Optimize?		Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	11.8	28.5	69.7	88.5	105.2	105.2	
Actuated g/C Ratio	0.09	0.22	0.54	0.68	0.81	0.81	
v/c Ratio	0.55	0.81	0.85	0.13	0.42	0.56	
Control Delay	62.9	63.3	32.4	1.5	14.2	10.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	62.9	63.3	32.4	1.5	14.2	10.0	
LOS	E	E	C	A	B	A	
Approach Delay	63.2		29.8			10.4	
Approach LOS	E		C			B	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 85 (65%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 25.0

Intersection LOS: C

Intersection Capacity Utilization 72.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

 Ø1	 Ø2 (R)	 Ø4
25 s	70 s	35 s
 Ø6 (R)		 Ø7
95 s		35 s

Queues

1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report

RG Phillips Consulting, LLC

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	170	286	1611	149	185	1596
v/c Ratio	0.55	0.81	0.85	0.13	0.42	0.56
Control Delay	62.9	63.3	32.4	1.5	14.2	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.9	63.3	32.4	1.5	14.2	10.0
Queue Length 50th (ft)	71	217	612	0	37	581
Queue Length 95th (ft)	107	320	#833	23	102	720
Internal Link Dist (ft)	370		1920			520
Turn Bay Length (ft)	150			250	300	
Base Capacity (vph)	765	355	1897	1315	445	2864
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.81	0.85	0.11	0.42	0.56

Intersection Summary

- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	158	266	1498	139	172	1484
Future Volume (veh/h)	158	266	1498	139	172	1484
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	286	1611	149	185	1596
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	652	388	2136	1252	230	2528
Arrive On Green	0.19	0.19	0.60	0.60	0.06	0.71
Sat Flow, veh/h	3456	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	170	286	1611	149	185	1596
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1781	1777
Q Serve(g_s), s	5.5	21.6	43.0	2.8	4.9	30.6
Cycle Q Clear(g_c), s	5.5	21.6	43.0	2.8	4.9	30.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	652	388	2136	1252	230	2528
V/C Ratio(X)	0.26	0.74	0.75	0.12	0.81	0.63
Avail Cap(c_a), veh/h	771	443	2136	1252	376	2528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	45.2	18.9	3.2	25.5	9.8
Incr Delay (d2), s/veh	0.2	5.5	2.5	0.2	6.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	18.7	16.1	6.6	3.8	9.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.2	50.7	21.4	3.4	32.0	11.0
LnGrp LOS	D	D	C	A	C	B
Approach Vol, veh/h	456		1760			1781
Approach Delay, s/veh	48.7		19.9			13.2
Approach LOS	D		B			B
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.3	85.1		30.5		99.5
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0
Max Green Setting (Gmax), s	18.0	63.0		29.0		88.0
Max Q Clear Time (g_c+I1), s	6.9	45.0		23.6		32.6
Green Ext Time (p_c), s	0.4	8.6		0.9		10.6
Intersection Summary						
HCM 6th Ctrl Delay			20.2			
HCM 6th LOS			C			

Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	124	137	5	261	5	127	5	5	5	5	32
Future Vol, veh/h	46	124	137	5	261	5	127	5	5	5	5	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	50	50	-	-	-	-	-	25	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	135	149	5	284	5	138	5	5	5	5	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	289	0	0	284	0	0	552	534	135	612	681	287
Stage 1	-	-	-	-	-	-	235	235	-	297	297	-
Stage 2	-	-	-	-	-	-	317	299	-	315	384	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1273	-	-	1278	-	-	444	452	914	405	373	752
Stage 1	-	-	-	-	-	-	768	710	-	712	668	-
Stage 2	-	-	-	-	-	-	694	666	-	696	611	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1273	-	-	1278	-	-	406	433	914	386	357	752
Mov Cap-2 Maneuver	-	-	-	-	-	-	484	491	-	481	445	-
Stage 1	-	-	-	-	-	-	738	682	-	684	665	-
Stage 2	-	-	-	-	-	-	654	663	-	659	587	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0.1	15.4	10.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	493	1273	-	-	1278	-	-	481	688
HCM Lane V/C Ratio	0.302	0.039	-	-	0.004	-	-	0.011	0.058
HCM Control Delay (s)	15.4	7.9	-	-	7.8	-	-	12.6	10.6
HCM Lane LOS	C	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	1.3	0.1	-	-	0	-	-	0	0.2

Intersection

Int Delay, s/veh 0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
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Lane Configurations		↗	↗↗	↗		↗↗
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Traffic Vol, veh/h	0	11	1749	15	0	1656
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Future Vol, veh/h	0	11	1749	15	0	1656
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Conflicting Peds, #/hr	0	0	0	0	0	0
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Sign Control	Stop	Stop	Free	Free	Free	Free
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	0	-	100	-	-
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Veh in Median Storage, #	0	-	0	-	-	0
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Grade, %	0	-	0	-	-	0
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Peak Hour Factor	92	92	92	92	92	92
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Heavy Vehicles, %	2	2	2	2	2	2
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Mvmt Flow	0	12	1901	16	0	1800
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Major/Minor	Minor1	Major1	Major2
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Conflicting Flow All	-	951	0
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Stage 1	-	-	-
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Stage 2	-	-	-
---------	---	---	---

Critical Hdwy	-	6.94	-
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Critical Hdwy Stg 1	-	-	-
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Critical Hdwy Stg 2	-	-	-
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Follow-up Hdwy	-	3.32	-
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Pot Cap-1 Maneuver	0	260	-
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Stage 1	0	-	-
---------	---	---	---

Stage 2	0	-	-
---------	---	---	---

Platoon blocked, %	-	-	-
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Mov Cap-1 Maneuver	-	260	-
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Mov Cap-2 Maneuver	-	-	-
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Stage 1	-	-	-
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Stage 2	-	-	-
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Approach	WB	NB	SB
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HCM Control Delay, s	19.5	0	0
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HCM LOS	C		
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Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
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Capacity (veh/h)	-	-	260
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HCM Lane V/C Ratio	-	-	0.046
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HCM Control Delay (s)	-	-	19.5
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HCM Lane LOS	-	-	C
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HCM 95th %tile Q(veh)	-	-	0.1
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	4	28	29	1	49	27	1703	16	25	1552	27
Future Volume (vph)	57	4	28	29	1	49	27	1703	16	25	1552	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.868				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1617	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.556						0.089			0.057		
Satd. Flow (perm)	1036	1617	0	1863	1863	1583	166	3539	1583	106	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30				84			88			88
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3000			2010	
Travel Time (s)		38.4			39.1			37.2			24.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	61	4	30	31	1	52	29	1812	17	27	1651	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	34	0	31	1	52	29	1812	17	27	1651	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (s)	15.0	20.0		15.0	20.0	15.0	15.0	80.0	15.0	15.0	80.0	15.0
Total Split (%)	11.5%	15.4%		11.5%	15.4%	11.5%	11.5%	61.5%	11.5%	11.5%	61.5%	11.5%
Maximum Green (s)	8.5	13.5		8.5	13.5	8.0	8.0	73.5	8.5	8.0	73.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2026 Projected Traffic Conditions
AM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	15.2	7.4		9.8	7.4	10.1	97.1	93.3	105.1	98.5	96.1	114.6
Actuated g/C Ratio	0.12	0.06		0.08	0.06	0.08	0.75	0.72	0.81	0.76	0.74	0.88
v/c Ratio	0.31	0.28		0.23	0.01	0.26	0.14	0.71	0.01	0.16	0.63	0.02
Control Delay	52.6	28.1		56.7	57.0	6.1	1.2	3.3	0.0	7.2	14.1	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.6	28.1		56.7	57.0	6.1	1.2	3.3	0.0	7.2	14.1	0.0
LOS	D	C		E	E	A	A	A	A	A	B	A
Approach Delay		43.9			25.4			3.2			13.8	
Approach LOS		D			C			A			B	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 9.6

Intersection LOS: A

Intersection Capacity Utilization 75.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	80 s	15 s	20 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
15 s	80 s	15 s	20 s

Queues

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	61	34	31	1	52	29	1812	17	27	1651	29
v/c Ratio	0.31	0.28	0.23	0.01	0.26	0.14	0.71	0.01	0.16	0.63	0.02
Control Delay	52.6	28.1	56.7	57.0	6.1	1.2	3.3	0.0	7.2	14.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.6	28.1	56.7	57.0	6.1	1.2	3.3	0.0	7.2	14.1	0.0
Queue Length 50th (ft)	45	3	26	1	0	1	127	0	5	477	0
Queue Length 95th (ft)	86	38	51	7	14	m1	119	m0	15	603	0
Internal Link Dist (ft)		1609		1642			2920			1930	
Turn Bay Length (ft)	150		125		250	400		350	400		375
Base Capacity (vph)	201	194	141	193	211	223	2540	1299	183	2616	1391
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.18	0.22	0.01	0.25	0.13	0.71	0.01	0.15	0.63	0.02

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	4	28	29	1	49	27	1703	16	25	1552	27
Future Volume (veh/h)	57	4	28	29	1	49	27	1703	16	25	1552	27
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	4	30	31	1	52	29	1812	17	27	1651	29
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	12	92	181	99	137	225	2351	1106	194	2346	1122
Arrive On Green	0.05	0.06	0.06	0.04	0.05	0.05	0.03	0.66	0.66	0.03	0.66	0.66
Sat Flow, veh/h	1781	190	1424	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	61	0	34	31	1	52	29	1812	17	27	1651	29
Grp Sat Flow(s),veh/h/ln	1781	0	1614	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.1	0.0	2.6	2.1	0.1	4.0	0.7	45.8	0.4	0.6	38.3	0.7
Cycle Q Clear(g_c), s	4.1	0.0	2.6	2.1	0.1	4.0	0.7	45.8	0.4	0.6	38.3	0.7
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	104	181	99	137	225	2351	1106	194	2346	1122
V/C Ratio(X)	0.29	0.00	0.33	0.17	0.01	0.38	0.13	0.77	0.02	0.14	0.70	0.03
Avail Cap(c_a), veh/h	243	0	168	233	194	218	272	2351	1106	244	2346	1122
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	58.1	54.9	58.3	56.1	12.4	15.2	6.0	15.1	14.0	5.6
Incr Delay (d2), s/veh	0.7	0.0	1.8	0.4	0.0	1.7	0.3	2.5	0.0	0.3	1.8	0.0
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	1.9	0.0	1.1	1.0	0.0	1.7	0.2	16.0	0.1	0.3	13.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	0.0	59.9	55.3	58.4	57.8	12.7	17.7	6.0	15.5	15.8	5.7
LnGrp LOS	E	A	E	E	E	E	B	B	A	B	B	A
Approach Vol, veh/h	95			84			1858			1707		
Approach Delay, s/veh	56.8			56.9			17.5			15.6		
Approach LOS	E			E			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	92.3	11.2	14.9	11.4	92.5	12.7	13.4				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	73.5	8.5	13.5	8.0	73.5	8.5	13.5				
Max Q Clear Time (g_c+I1), s	2.7	40.3	4.1	4.6	2.6	47.8	6.1	6.0				
Green Ext Time (p_c), s	0.0	10.6	0.0	0.0	0.0	11.2	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

PROJECTED TRAFFIC CONDITIONS (2026)

PM PEAK

Lanes, Volumes, Timings
1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	207	238	1670	186	315	1850	
Future Volume (vph)	207	238	1670	186	315	1850	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	150	0		250	300		
Storage Lanes	2	1		1	1		
Taper Length (ft)	50				50		
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95	
Frft		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539	
Flt Permitted	0.950				0.048		
Satd. Flow (perm)	3433	1583	3539	1583	89	3539	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		10		106			
Link Speed (mph)	30		55			55	
Link Distance (ft)	450		2000			600	
Travel Time (s)	10.2		24.8			7.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	223	256	1796	200	339	1989	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	223	256	1796	200	339	1989	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	24		20			20	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Right	Thru	Right	Left	Thru	
Leading Detector (ft)	50	20	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	20	50	50	50	50	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	pm+ov	NA	pm+ov	pm+pt	NA	
Protected Phases	7	1	2	7	1	6	4
Permitted Phases		4		2	6		
Detector Phase	7	1	2	7	1	6	
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0
Total Split (s)	30.0	30.0	80.0	30.0	30.0	110.0	30.0
Total Split (%)	21.4%	21.4%	57.1%	21.4%	21.4%	78.6%	21%
Maximum Green (s)	24.0	23.0	73.0	24.0	23.0	103.0	24.0
Yellow Time (s)	3.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	2.5	2.5	2.0	2.5	2.5	2.0	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	

2026 Projected Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

RG Phillips Consulting, LLC

							
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Total Lost Time (s)	6.0	7.0	7.0	6.0	7.0	7.0	
Lead/Lag		Lead	Lag		Lead		
Lead-Lag Optimize?		Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	14.6	29.0	76.4	98.0	112.4	112.4	
Actuated g/C Ratio	0.10	0.21	0.55	0.70	0.80	0.80	
v/c Ratio	0.62	0.76	0.93	0.18	0.81	0.70	
Control Delay	67.6	65.5	39.8	3.7	43.1	15.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	67.6	65.5	39.8	3.7	43.1	15.0	
LOS	E	E	D	A	D	B	
Approach Delay	66.5		36.2			19.1	
Approach LOS	E		D			B	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 135 (96%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 30.9

Intersection LOS: C

Intersection Capacity Utilization 86.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

 Ø1	 Ø2 (R)	 Ø4
30 s	80 s	30 s
 Ø6 (R)		 Ø7
110 s		30 s

Queues

1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report

RG Phillips Consulting, LLC

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	223	256	1796	200	339	1989
v/c Ratio	0.62	0.76	0.93	0.18	0.81	0.70
Control Delay	67.6	65.5	39.8	3.7	43.1	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.6	65.5	39.8	3.7	43.1	15.0
Queue Length 50th (ft)	102	209	795	27	207	1001
Queue Length 95th (ft)	141	#350	#1006	49	m259	1075
Internal Link Dist (ft)	370		1920			520
Turn Bay Length (ft)	150			250	300	
Base Capacity (vph)	588	336	1930	1238	420	2841
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.76	0.93	0.16	0.81	0.70

Intersection Summary

- # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM 6th Signalized Intersection Summary

1: Nashville Highway (US Hwy 31 / SR 6) & Honey Farm Way

Synchro 11 Report
RG Phillips Consulting, LLC

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	207	238	1670	186	315	1850
Future Volume (veh/h)	207	238	1670	186	315	1850
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	223	256	1796	200	339	1989
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	523	500	1925	1099	360	2686
Arrive On Green	0.15	0.15	0.54	0.54	0.16	0.76
Sat Flow, veh/h	3456	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	223	256	1796	200	339	1989
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1781	1777
Q Serve(g_s), s	8.2	18.5	65.5	6.2	21.0	43.4
Cycle Q Clear(g_c), s	8.2	18.5	65.5	6.2	21.0	43.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	523	500	1925	1099	360	2686
V/C Ratio(X)	0.43	0.51	0.93	0.18	0.94	0.74
Avail Cap(c_a), veh/h	592	532	1925	1099	360	2686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	39.1	29.7	7.5	47.6	9.5
Incr Delay (d2), s/veh	0.6	0.8	9.8	0.4	32.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	16.9	27.7	10.3	14.6	13.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	54.5	39.9	39.5	7.9	80.4	11.4
LnGrp LOS	D	D	D	A	F	B
Approach Vol, veh/h	479		1996			2328
Approach Delay, s/veh	46.7		36.3			21.4
Approach LOS	D		D			C
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	30.0	82.9		27.2		112.8
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0
Max Green Setting (Gmax), s	23.0	73.0		24.0		103.0
Max Q Clear Time (g_c+I1), s	23.0	67.5		20.5		45.4
Green Ext Time (p_c), s	0.0	4.1		0.7		16.7
Intersection Summary						
HCM 6th Ctrl Delay			30.1			
HCM 6th LOS			C			

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	219	155	5	176	5	142	5	5	5	5	122
Future Vol, veh/h	122	219	155	5	176	5	142	5	5	5	5	122
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	50	50	-	-	-	-	-	25	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	133	238	168	5	191	5	154	5	5	5	5	133

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	196	0	0	406	0	0	777	710	238	797	876	194
Stage 1	-	-	-	-	-	-	504	504	-	204	204	-
Stage 2	-	-	-	-	-	-	273	206	-	593	672	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1377	-	-	1153	-	-	314	359	801	305	287	847
Stage 1	-	-	-	-	-	-	550	541	-	798	733	-
Stage 2	-	-	-	-	-	-	733	731	-	492	454	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1377	-	-	1153	-	-	241	323	801	277	258	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	332	389	-	358	338	-
Stage 1	-	-	-	-	-	-	497	489	-	721	730	-
Stage 2	-	-	-	-	-	-	611	728	-	437	410	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			0.2			25.2			10.6		
HCM LOS							D			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	340	1377	-	-	1153	-	-	358	800
HCM Lane V/C Ratio	0.486	0.096	-	-	0.005	-	-	0.015	0.173
HCM Control Delay (s)	25.2	7.9	-	-	8.1	-	-	15.2	10.4
HCM Lane LOS	D	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	2.5	0.3	-	-	0	-	-	0	0.6

Intersection

Int Delay, s/veh 0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
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Lane Configurations		↗	↗↗	↗		↗↗
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Traffic Vol, veh/h	0	40	1867	40	0	2165
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Future Vol, veh/h	0	40	1867	40	0	2165
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Conflicting Peds, #/hr	0	0	0	0	0	0
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Sign Control	Stop	Stop	Free	Free	Free	Free
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	0	-	100	-	-
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Veh in Median Storage, #	0	-	0	-	-	0
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Grade, %	0	-	0	-	-	0
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Peak Hour Factor	92	92	92	92	92	92
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Heavy Vehicles, %	2	2	2	2	2	2
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Mvmt Flow	0	43	2029	43	0	2353
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Major/Minor	Minor1	Major1	Major2
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Conflicting Flow All	-	1015	0
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Stage 1	-	-	-
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Stage 2	-	-	-
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Critical Hdwy	-	6.94	-
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Critical Hdwy Stg 1	-	-	-
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Critical Hdwy Stg 2	-	-	-
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Follow-up Hdwy	-	3.32	-
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Pot Cap-1 Maneuver	0	236	-
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Stage 1	0	-	-
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Stage 2	0	-	-
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Platoon blocked, %	-	-	-
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Mov Cap-1 Maneuver	-	236	-
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Mov Cap-2 Maneuver	-	-	-
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Stage 1	-	-	-
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Stage 2	-	-	-
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Approach	WB	NB	SB
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HCM Control Delay, s	23.7	0	0
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HCM LOS	C		
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Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
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Capacity (veh/h)	-	-	236
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HCM Lane V/C Ratio	-	-	0.184
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HCM Control Delay (s)	-	-	23.7
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HCM Lane LOS	-	-	C
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HCM 95th %tile Q(veh)	-	-	0.7
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	2	34	25	4	29	30	1883	23	37	2112	57
Future Volume (vph)	28	2	34	25	4	29	30	1883	23	37	2112	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	125		250	400		350	400		375
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.857				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1596	0	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.488						0.044			0.043		
Satd. Flow (perm)	909	1596	0	1863	1863	1583	82	3539	1583	80	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39				78			82			82
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1689			1722			3000			2010	
Travel Time (s)		38.4			39.1			37.2			24.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	32	2	39	29	5	33	34	2164	26	43	2428	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	41	0	29	5	33	34	2164	26	43	2428	66
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	1	6	3	5	2	7
Permitted Phases	4			8		8	6		6	2		2
Detector Phase	7	4		3	8	5	1	6	3	5	2	7
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (s)	15.0	15.0		15.0	15.0	15.0	15.0	95.0	15.0	15.0	95.0	15.0
Total Split (%)	10.7%	10.7%		10.7%	10.7%	10.7%	10.7%	67.9%	10.7%	10.7%	67.9%	10.7%
Maximum Green (s)	8.5	8.5		8.5	8.5	8.0	8.0	88.5	8.5	8.0	88.5	8.5
Yellow Time (s)	3.5	3.5		3.5	3.5	4.5	4.5	5.0	3.5	4.5	5.0	3.5
All-Red Time (s)	3.0	3.0		3.0	3.0	2.5	2.5	1.5	3.0	2.5	1.5	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2026 Projected Traffic Conditions
PM Peak Hour

Proposed Honey Farm Walmart Neighborhood Market
Columbia, TN

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Lost Time (s)	6.5	6.5		6.5	6.5	7.0	7.0	6.5	6.5	7.0	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	17.6	7.3		9.4	7.3	10.2	104.6	100.8	112.3	106.3	103.7	124.7
Actuated g/C Ratio	0.13	0.05		0.07	0.05	0.07	0.75	0.72	0.80	0.76	0.74	0.89
v/c Ratio	0.15	0.34		0.24	0.05	0.18	0.23	0.85	0.02	0.29	0.93	0.05
Control Delay	52.5	27.7		62.6	64.0	2.0	10.6	10.9	0.0	13.8	27.4	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	27.7		62.6	64.0	2.0	10.6	10.9	0.0	13.8	27.4	0.6
LOS	D	C		E	E	A	B	B	A	B	C	A
Approach Delay		38.6			32.9			10.8			26.5	
Approach LOS		D			C			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 49 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 19.6

Intersection LOS: B

Intersection Capacity Utilization 80.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	95 s	15 s	15 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
15 s	95 s	15 s	15 s

Queues

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	32	41	29	5	33	34	2164	26	43	2428	66
v/c Ratio	0.15	0.34	0.24	0.05	0.18	0.23	0.85	0.02	0.29	0.93	0.05
Control Delay	52.5	27.7	62.6	64.0	2.0	10.6	10.9	0.0	13.8	27.4	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	27.7	62.6	64.0	2.0	10.6	10.9	0.0	13.8	27.4	0.6
Queue Length 50th (ft)	26	2	26	4	0	2	164	0	9	~1260	0
Queue Length 95th (ft)	55	39	51	19	0	m2	1130	m0	26	#1331	7
Internal Link Dist (ft)		1609		1642			2920			1930	
Turn Bay Length (ft)	150		125		250	400		350	400		375
Base Capacity (vph)	215	133	130	113	196	158	2547	1291	157	2622	1419
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.31	0.22	0.04	0.17	0.22	0.85	0.02	0.27	0.93	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 6th Signalized Intersection Summary

Synchro 11 Report

4: Nashville Highway (US Hwy 31 / SR 6) & Hidden Creek Way/Williams Ridge Drive

RG Phillips Consulting, LLC

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	2	34	25	4	29	30	1883	23	37	2112	57
Future Volume (veh/h)	28	2	34	25	4	29	30	1883	23	37	2112	57
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	2	39	29	5	33	34	2164	26	43	2428	66
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	4	78	147	92	142	119	2435	1140	159	2449	1149
Arrive On Green	0.04	0.05	0.05	0.03	0.05	0.05	0.04	0.69	0.69	0.04	0.69	0.69
Sat Flow, veh/h	1781	78	1519	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	32	0	41	29	5	33	34	2164	26	43	2428	66
Grp Sat Flow(s),veh/h/ln	1781	0	1597	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	0.0	3.5	2.1	0.4	2.7	0.8	68.6	0.7	0.9	93.9	1.7
Cycle Q Clear(g_c), s	2.3	0.0	3.5	2.1	0.4	2.7	0.8	68.6	0.7	0.9	93.9	1.7
Prop In Lane	1.00		0.95	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	0	81	147	92	142	119	2435	1140	159	2449	1149
V/C Ratio(X)	0.18	0.00	0.50	0.20	0.05	0.23	0.29	0.89	0.02	0.27	0.99	0.06
Avail Cap(c_a), veh/h	224	0	97	195	114	161	156	2435	1140	188	2449	1149
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	0.0	64.7	59.9	63.4	59.2	38.3	17.7	5.6	27.5	21.3	5.5
Incr Delay (d2), s/veh	0.5	0.0	4.7	0.6	0.2	0.8	1.3	5.3	0.0	0.9	16.3	0.1
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	1.1	0.0	1.5	1.0	0.2	1.1	0.8	24.6	0.2	0.9	36.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	69.4	60.5	63.7	60.0	39.6	23.1	5.7	28.4	37.6	5.6
LnGrp LOS	E	A	E	E	E	E	D	C	A	C	D	A
Approach Vol, veh/h	73			67			2224			2537		
Approach Delay, s/veh	65.4			60.5			23.1			36.6		
Approach LOS	E			E			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.1	103.0	11.2	13.6	12.7	102.4	11.5	13.4				
Change Period (Y+Rc), s	7.0	6.5	6.5	6.5	7.0	6.5	6.5	6.5				
Max Green Setting (Gmax), s	8.0	88.5	8.5	8.5	8.0	88.5	8.5	8.5				
Max Q Clear Time (g_c+I1), s	2.8	95.9	4.1	5.5	2.9	70.6	4.3	4.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	31.2
HCM 6th LOS	C

APPENDIX C
TRIP GENERATION

HONEY FARM - TRIP GENERATION SUMMARY

Land Use	Trip Generation				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	4292	76	53	202	202
Fast-Food Restaurant with Drive-Through Window	3086	150	144	113	105
Fast Casual Restaurant	534	4	4	46	37
Future Retail	326	12	8	27	27
Multifamily Housing (Low-Rise)	1190	18	58	60	35
Townhomes	1322	22	66	61	43
Mini-Warehouse	142	5	4	7	8
Health Department	622	39	10	20	46
Totals	11514	326	347	536	503

Land Use	Internal Trip Reduction				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	858	15	11	40	40
Fast-Food Restaurant with Drive-Through Window	617	30	29	23	21
Fast Casual Restaurant	107	1	1	9	7
Future Retail	65	2	2	5	5
Multifamily Housing (Low-Rise)	238	4	12	12	7
Townhomes	264	4	13	12	9
Mini-Warehouse	28	1	1	1	2
Health Department	124	8	2	4	9
Totals	2301	65	71	106	100

Internal Trip Reduction		
Daily %	AM %	PM %
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%
20%	20%	20%

Land Use	Total External Trips				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	3434	61	42	162	162
Fast-Food Restaurant with Drive-Through Window	2469	120	115	90	84
Fast Casual Restaurant	427	3	3	37	30
Future Retail	261	10	6	22	22
Multifamily Housing (Low-Rise)	952	14	46	48	28
Townhomes	1058	18	53	49	34
Mini-Warehouse	114	4	3	6	6
Health Department	498	31	8	16	37
Totals	9213	261	276	430	403

Land Use	Primary - External Trips				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	2747	49	34	109	109
Fast-Food Restaurant with Drive-Through Window	1235	61	59	45	42
Fast Casual Restaurant	320	3	3	28	23
Future Retail	196	10	6	15	15
Multifamily Housing (Low-Rise)	952	14	46	48	28
Townhomes	1058	18	53	49	34
Mini-Warehouse	114	4	3	6	6
Health Department	498	31	8	16	37
Total Primary Trips	7120	190	212	316	294

Primary Trip Percentage		
Daily %	AM %	PM %
80%	80%	67%
50%	51%	50%
75%	100%	75%
75%	100%	66%
100%	100%	100%
100%	100%	100%
100%	100%	100%
100%	100%	100%

Land Use	Pass-By - External Trips				
	Daily	AM		PM	
	Total	Enter	Exit	Enter	Exit
Grocery Store	687	12	8	53	53
Fast-Food Restaurant with Drive-Through Window	1234	59	56	45	42
Fast Casual Restaurant	107	0	0	9	7
Future Retail	65	0	0	7	7
Multifamily Housing (Low-Rise)	0	0	0	0	0
Townhomes	0	0	0	0	0
Mini-Warehouse	0	0	0	0	0
Health Department	0	0	0	0	0
Total Passby Trips	2093	71	64	114	109

Pass-by Trip Percentage		
Daily %	AM %	PM %
20%	20%	33%
50%	49%	50%
25%	0%	25%
25%	0%	34%
0%	0%	0%
0%	0%	0%
0%	0%	0%
0%	0%	0%

Land Use: 850 Supermarket

Description

A supermarket is a free-standing retail store that sells a complete assortment of food, beverage, food preparation materials, and household products. A supermarket may also provide additional products and services such as a bakery, dry cleaning, floral arrangements, greeting cards, a limited-service bank, and a pharmacy.

Additional Data

In prior editions of *Trip Generation Manual*, a separate land use code was assigned to a discount supermarket. With the addition of new supermarket data points, an examination of the database reveals very little difference between trip generation rates for the traditional supermarket and a reported discount supermarket. This examination looked at both the small discount supermarkets and the large discount supermarkets. As a result, all types of supermarkets are included in this land use database.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Illinois, Kentucky, Maryland, Minnesota, Nevada, New Jersey, New York, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

213, 221, 236, 251, 273, 305, 359, 365, 438, 440, 442, 447, 448, 514, 520, 537, 552, 577, 610, 715, 716, 728, 738, 746, 854, 870, 882, 893, 917, 926, 935, 946, 959, 961, 966, 975, 1004, 1009, 1025, 1058, 1063, 1064

Land Use: 934

Fast-Food Restaurant with Drive-Through Window

Description

This land use includes any fast-food restaurant with a drive-through window. This type of restaurant is characterized by a large drive-through and large carry-out clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. The restaurant does not provide table service. A patron generally orders from a menu board and pays before receiving the meal. A typical duration of stay for an eat-in patron is less than 30 minutes. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

If the restaurant has outdoor seating, its area is not included in the overall gross floor area. For a restaurant that has significant outdoor seating, the number of seats may be more reliable than GFA as an independent variable on which to establish a trip generation rate.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alaska, Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

163, 164, 168, 180, 181, 241, 245, 278, 294, 300, 301, 319, 338, 340, 342, 358, 389, 438, 502, 552, 577, 583, 584, 617, 640, 641, 704, 715, 728, 810, 866, 867, 869, 885, 886, 927, 935, 962, 977, 1050, 1053, 1054

Land Use: 930

Fast Casual Restaurant

Description

A fast casual restaurant is a sit-down restaurant with no (or very limited) wait staff or table service. A customer typically orders off a menu board, pays for food before the food is prepared, and seats themselves. The menu generally contains higher-quality, made-to-order food items with fewer frozen or processed ingredients than at a fast-food restaurant. Most patrons eat their meal within the restaurant, but a significant proportion of the restaurant sales can be carry-out orders. A fast casual restaurant typically serves lunch and dinner; some serve breakfast. A typical duration of stay for an eat-in customer is 40 minutes or less. Fine dining restaurant (Land Use 931), high-turnover (sit-down) restaurant (Land Use 932), and fast-food restaurant without drive-through window (Land Use 933) are related uses.

Additional Data

The fast casual restaurant study sites included in this land use did not have a drive-through window.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 2010s in Minnesota, South Carolina, Washington, and Wisconsin.

Source Numbers

861, 869, 939, 959, 962, 1048

Land Use: 822

Strip Retail Plaza (<40k)

Description

A strip retail plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has less than 40,000 square feet of gross leasable area (GLA). Because a strip retail plaza is open-air, the GLA is the same as the gross floor area of the building.

The 40,000 square feet GFA threshold between strip retail plaza and shopping plaza (Land Use 821) was selected based on an examination of the overall shopping center/plaza database. No shopping plaza with a supermarket as its anchor is smaller than 40,000 square feet GLA.

Shopping center (>150k) (Land use 820), shopping plaza (40-150k) (Land Use 821), and factory outlet center (Land Use 823) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Delaware, Florida, New Jersey, Ontario (CAN), South Dakota, Vermont, Washington, and Wisconsin.

Source Numbers

304, 358, 423, 428, 437, 507, 715, 728, 936, 960, 961, 974, 1009

Land Use: 220

Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.
- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.
- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.
- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Land Use: 215

Single-Family Attached Housing

Description

Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Additional Data

The database for this land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by-side in a row and each with an outside entrance).

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Utah, Virginia, and Wisconsin.

Source Numbers

168, 204, 211, 237, 305, 306, 319, 321, 357, 390, 418, 525, 571, 583, 638, 735, 868, 869, 870, 896, 912, 959, 1009, 1046, 1056, 1058, 1077

Land Use: 151

Mini-Warehouse

Description

A mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as “self-storage” facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Colorado, Massachusetts, Minnesota, Nevada, New Jersey, Texas, and Utah.

Source Numbers

212, 403, 551, 568, 642, 708, 724, 850, 868, 876, 1024, 1035

Land Use: 720

Medical-Dental Office Building

Description

A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility. General office building (Land Use 710) and clinic (Land Use 630) are related uses.

Land Use Subcategory

Analysis of medical-dental office building data found that trip generation rates are measurably different for sites located within or adjacent to a hospital campus and sites that are stand-alone. Data plots are presented for these two land use subcategories.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Connecticut, Kentucky, Maryland, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Virginia, Washington, and Wisconsin.

Source Numbers

104, 109, 120, 157, 184, 209, 211, 253, 287, 294, 295, 304, 357, 384, 404, 407, 423, 444, 509, 601, 715, 867, 879, 901, 902, 908, 959, 972

Proposed Honey Farm Walmart Neighborhood Market
Trip Generation
AM Peak Hour

VEHICLE TRIPS BEFORE REDUCTION									
Land Use & Data Source	Location	Independent Variable	Size	Time Period	Method	Entry	Exit	Total	
850 - Supermarket	General Urban/Suburban	1000 Sq. Ft. GFA	45	AM Peak Hour	Rate/Equation	76	53	P	
					Average	59%	41%		
934 - Fast-Food Restaurant with Drive-Through Window	General Urban/Suburban	1000 Sq. Ft. GFA	6.6	AM Peak Hour	Average	150	144	294	
					44.61	51%	49%		
930 - Fast Casual Restaurant	General Urban/Suburban	1000 Sq. Ft. GFA	5.5	AM Peak Hour	Average	4	4	8	
					1.43	50%	50%		
822 - Strip Retail Plaza (<40k)	General Urban/Suburban	1000 Sq. Ft. GLA	6	AM Peak Hour	Best Fit (LOG)	12	8	20	
					$\ln(T) = 0.66\ln(X) + 1.84$	60%	40%		
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	General Urban/Suburban	Dwelling Units	174	AM Peak Hour	Best Fit (LIN)	18	58	76	
					$T = 0.31(X) + 22.85$	24%	76%		
215 - Single-Family Attached Housing	General Urban/Suburban	Dwelling Units	180	AM Peak Hour	Best Fit (LIN)	22	66	88	
					$T = 0.52(X) - 5.70$	25%	75%		
151 - Mini-Warehouse	General Urban/Suburban	1000 Sq. Ft. GFA	98.28	AM Peak Hour	Average	5	4	9	
					0.09	59%	41%		
720 - Medical-Dental Office Building - Stand-Alone	General Urban/Suburban	1000 Sq. Ft. GFA	17	AM Peak Hour	Best Fit (LOG)	39	10	49	
					$\ln(T) = 0.90\ln(X) + 1.34$	79%	21%		
NEW VEHICLE TRIPS									
Land Use					New Vehicle Trips				
					Entry	Exit	Total		
850 - Supermarket					76	53	129		
934 - Fast-Food Restaurant with Drive-Through Window					150	144	294		
930 - Fast Casual Restaurant					4	4	8		
822 - Strip Retail Plaza (<40k)					12	8	20		
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit					18	58	76		
215 - Single-Family Attached Housing					22	66	88		
151 - Mini-Warehouse					5	4	9		
720 - Medical-Dental Office Building - Stand-Alone					39	10	49		
RESULTS									
Site Totals					Entry	Exit	Total		
New Vehicle Trips					326	347	673		

Data Source: Trip Generation Manual, 11th Ed

Proposed Honey Farm Walmart Neighborhood Market
Trip Generation
PM Peak Hour

VEHICLE TRIPS BEFORE REDUCTION									
Land Use & Data Source	Location	Independent Variable	Size	Time Period	Method	Entry Split%	Exit Split%	Total	
850 - Supermarket	General Urban/Suburban	1000 Sq. Ft. GFA	45	PM Peak Hour	Rate/Equation Best Fit (LOG) $\ln(T) = 0.81\ln(X) + 2.92$	202	202	P	
934 - Fast-Food Restaurant with Drive-Through Window	General Urban/Suburban	1000 Sq. Ft. GFA	6.6	PM Peak Hour	Average 33.03	113	105	218	
930 - Fast Casual Restaurant	General Urban/Suburban	1000 Sq. Ft. GFA	5.5	PM Peak Hour	Best Fit (LIN) $T = 17.96(X) - 15.94$	46	37	83	
822 - Strip Retail Plaza (<40k)	General Urban/Suburban	1000 Sq. Ft. GLA	6	PM Peak Hour	Best Fit (LOG) $\ln(T) = 0.71\ln(X) + 2.72$	27	27	54	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	General Urban/Suburban	Dwelling Units	174	PM Peak Hour	Best Fit (LIN) $T = 0.43(X) + 20.55$	60	35	95	
215 - Single-Family Attached Housing	General Urban/Suburban	Dwelling Units	180	PM Peak Hour	Best Fit (LIN) $T = 0.60(X) - 3.93$	61	43	104	
151 - Mini-Warehouse	General Urban/Suburban	1000 Sq. Ft. GFA	98.28	PM Peak Hour	Average 0.15	7	8	15	
720 - Medical-Dental Office Building - Stand-Alone	General Urban/Suburban	1000 Sq. Ft. GFA	17	PM Peak Hour	Best Fit (LIN) $T = 4.07(X) - 3.17$	20	46	66	
NEW VEHICLE TRIPS									
Land Use					New Vehicle Trips				
					Entry	Exit	Total		
850 - Supermarket					202	202	404		
934 - Fast-Food Restaurant with Drive-Through Window					113	105	218		
930 - Fast Casual Restaurant					46	37	83		
822 - Strip Retail Plaza (<40k)					27	27	54		
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit					60	35	95		
215 - Single-Family Attached Housing					61	43	104		
151 - Mini-Warehouse					7	8	15		
720 - Medical-Dental Office Building - Stand-Alone					20	46	66		
RESULTS									
Site Totals					Entry	Exit	Total		
New Vehicle Trips					536	503	1039		

Data Source: Trip Generation Manual, 11th Ed

Proposed Honey Farm Walmart Neighborhood Market Trip Generation Weekday

VEHICLE TRIPS BEFORE REDUCTION									
Land Use & Data Source	Location	Independent Variable	Size	Time Period	Method	Entry	Exit	Total	
850 - Supermarket	General Urban/Suburban	1000 Sq. Ft. GFA	45	Weekday	Rate/Equation	2146	2146	P	
					Best Fit (LIN)				
					T = 83.39(X) + 539.33	50%	50%		
934 - Fast-Food Restaurant with Drive-Through Window	General Urban/Suburban	1000 Sq. Ft. GFA	6.6	Weekday	Average	1543	1543	3086	
					467.48	50%	50%		
930 - Fast Casual Restaurant	General Urban/Suburban	1000 Sq. Ft. GFA	5.5	Weekday	Average	267	267	534	
					97.14	50%	50%		
822 - Strip Retail Plaza (<40k)	General Urban/Suburban	1000 Sq. Ft. GLA	6	Weekday	Average	163	163	326	
					54.45	50%	50%		
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	General Urban/Suburban	Dwelling Units	174	Weekday	Best Fit (LIN)	595	595	1190	
					T = 6.41(X) + 75.31	50%	50%		
215 - Single-Family Attached Housing	General Urban/Suburban	Dwelling Units	180	Weekday	Best Fit (LIN)	661	661	1322	
					T = 7.62(X) - 50.48	50%	50%		
151 - Mini-Warehouse	General Urban/Suburban	1000 Sq. Ft. GFA	98.28	Weekday	Average	71	71	142	
					1.45	50%	50%		
720 - Medical-Dental Office Building - Stand-Alone	General Urban/Suburban	1000 Sq. Ft. GFA	17	Weekday	Best Fit (LIN)	311	311	622	
					T = 42.97(X) - 108.01	50%	50%		
NEW VEHICLE TRIPS									
Land Use					New Vehicle Trips				
					Entry	Exit	Total		
850 - Supermarket						2146	2146	4292	
934 - Fast-Food Restaurant with Drive-Through Window						1543	1543	3086	
930 - Fast Casual Restaurant						267	267	534	
822 - Strip Retail Plaza (<40k)						163	163	326	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit						595	595	1190	
215 - Single-Family Attached Housing						661	661	1322	
151 - Mini-Warehouse						71	71	142	
720 - Medical-Dental Office Building - Stand-Alone						311	311	622	
RESULTS									
Site Totals					Entry	Exit	Total		
New Vehicle Trips					5757	5757	11514		

Data Source: Trip Generation Manual, 11th Ed

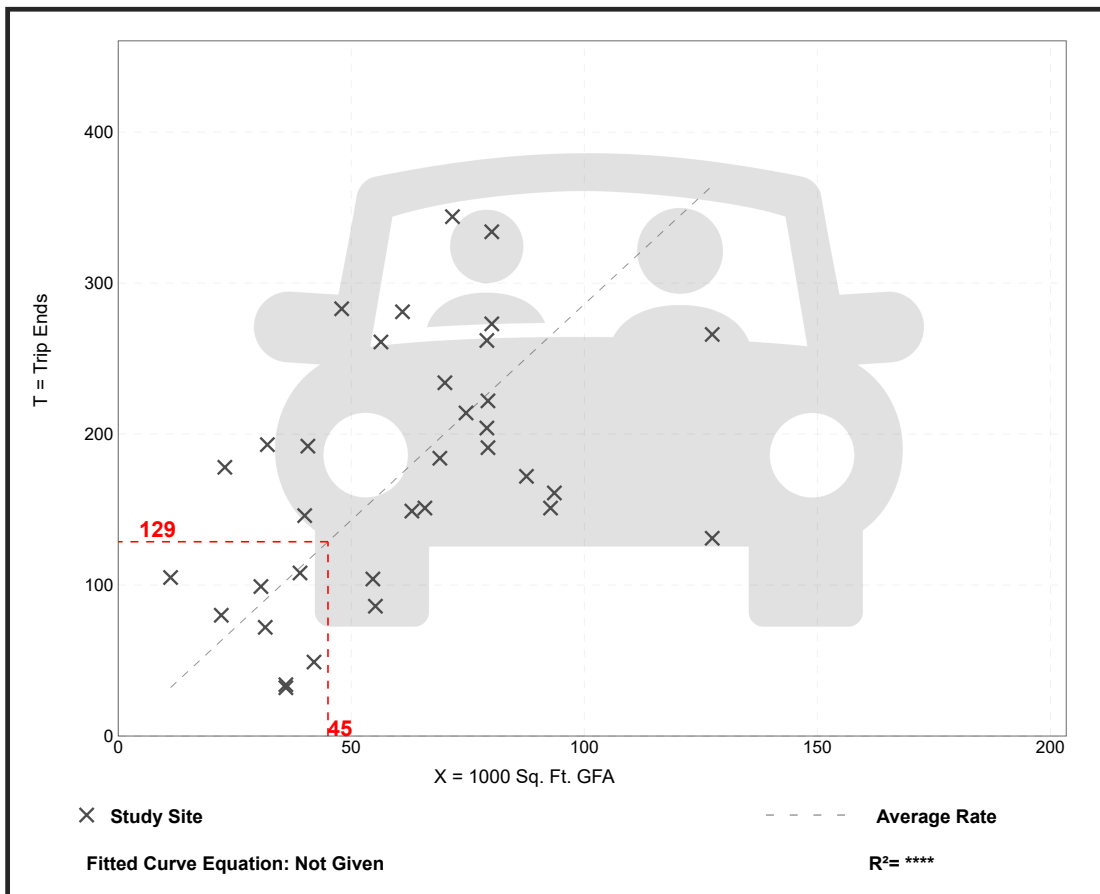
Supermarket (850)

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: 34
 Avg. 1000 Sq. Ft. GFA: 61
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.86	0.89 - 9.35	1.45

Data Plot and Equation



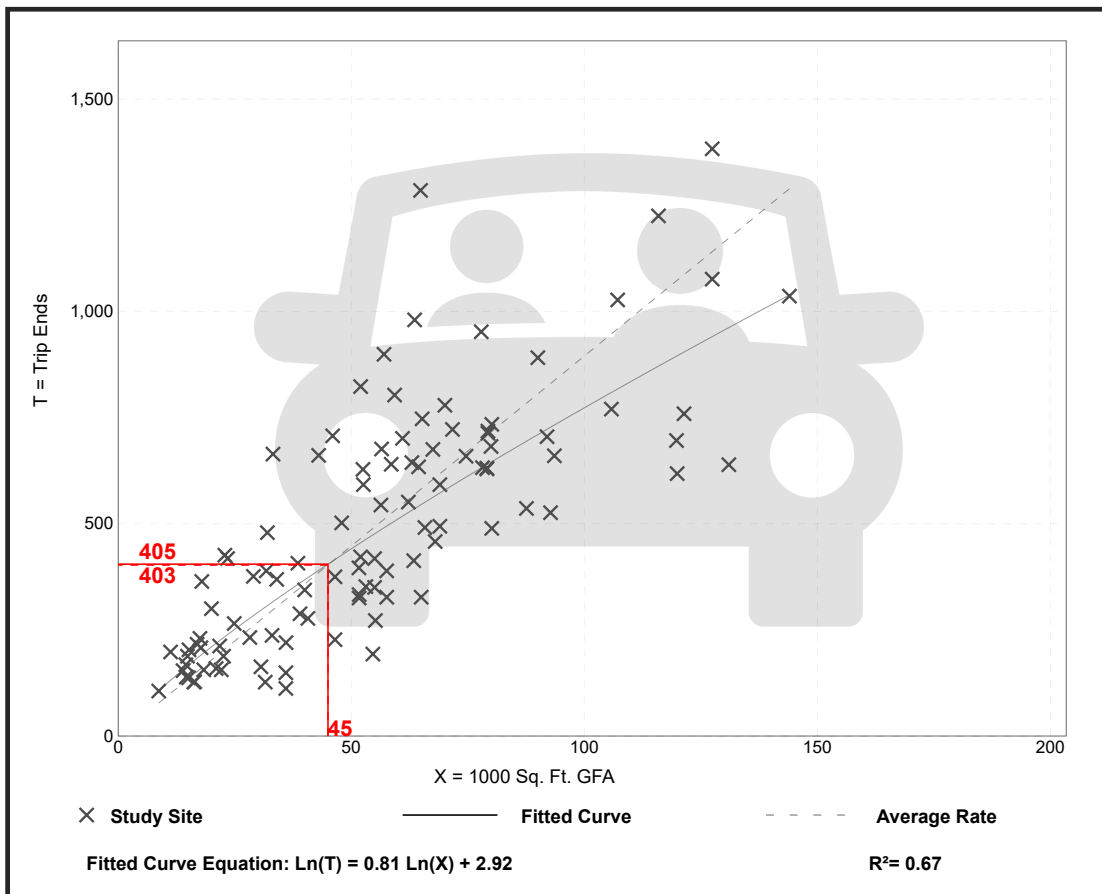
Supermarket (850)

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: 104
 Avg. 1000 Sq. Ft. GFA: 55
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
8.95	3.11 - 20.30	3.32

Data Plot and Equation



Supermarket (850)

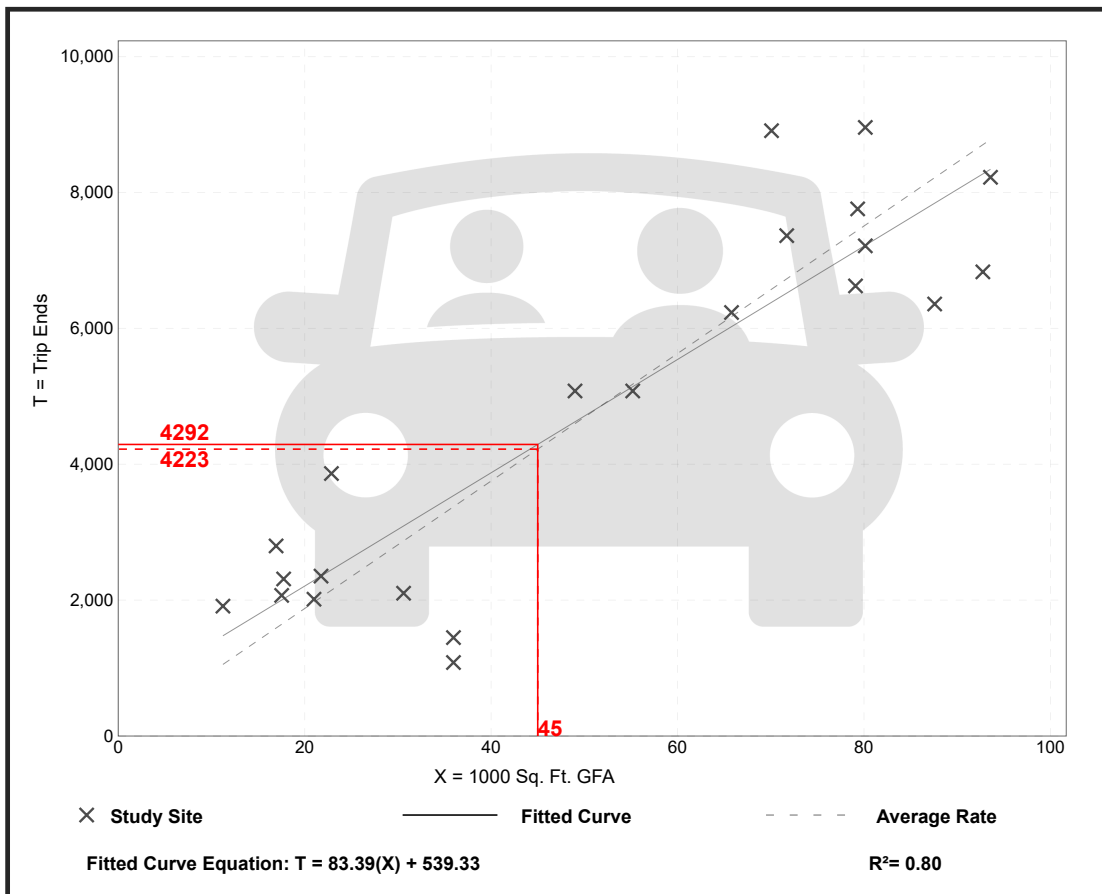
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. 1000 Sq. Ft. GFA: 52
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
93.84	30.09 - 170.24	27.05

Data Plot and Equation



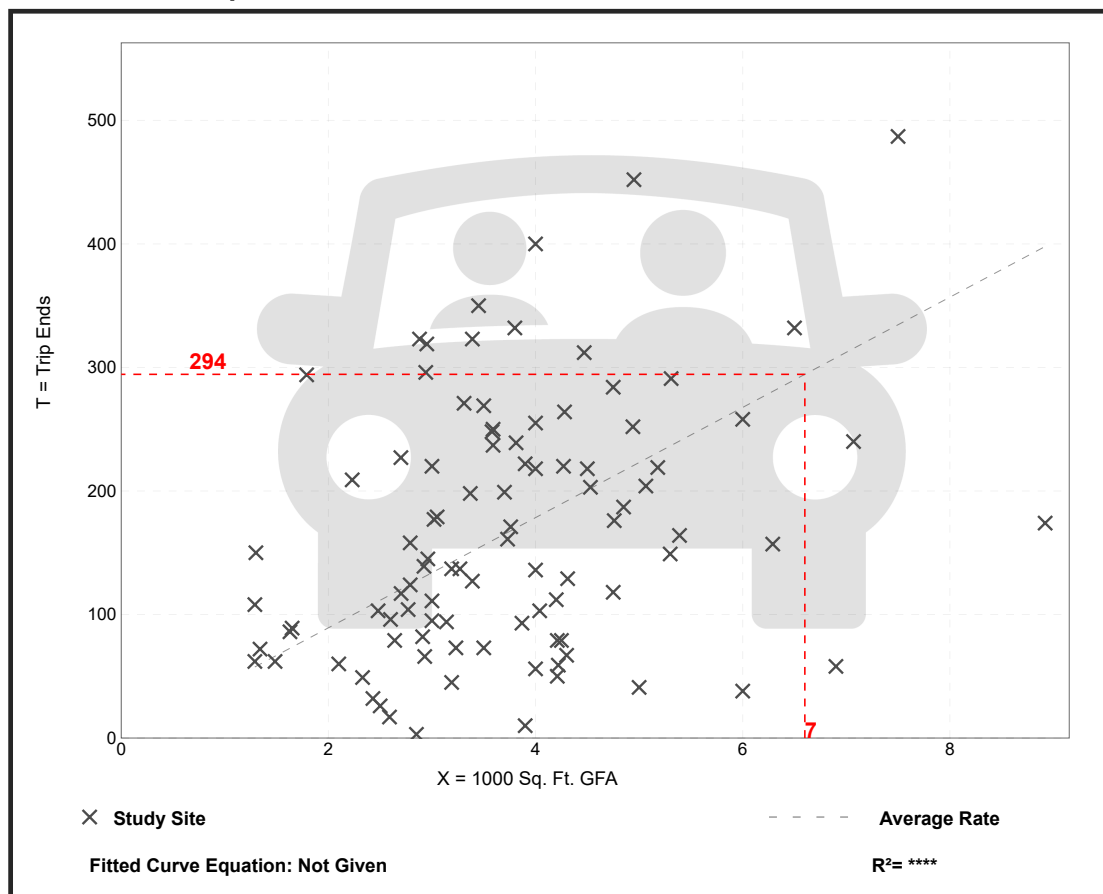
Fast-Food Restaurant with Drive-Through Window (934)

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: 96
 Avg. 1000 Sq. Ft. GFA: 4
 Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation



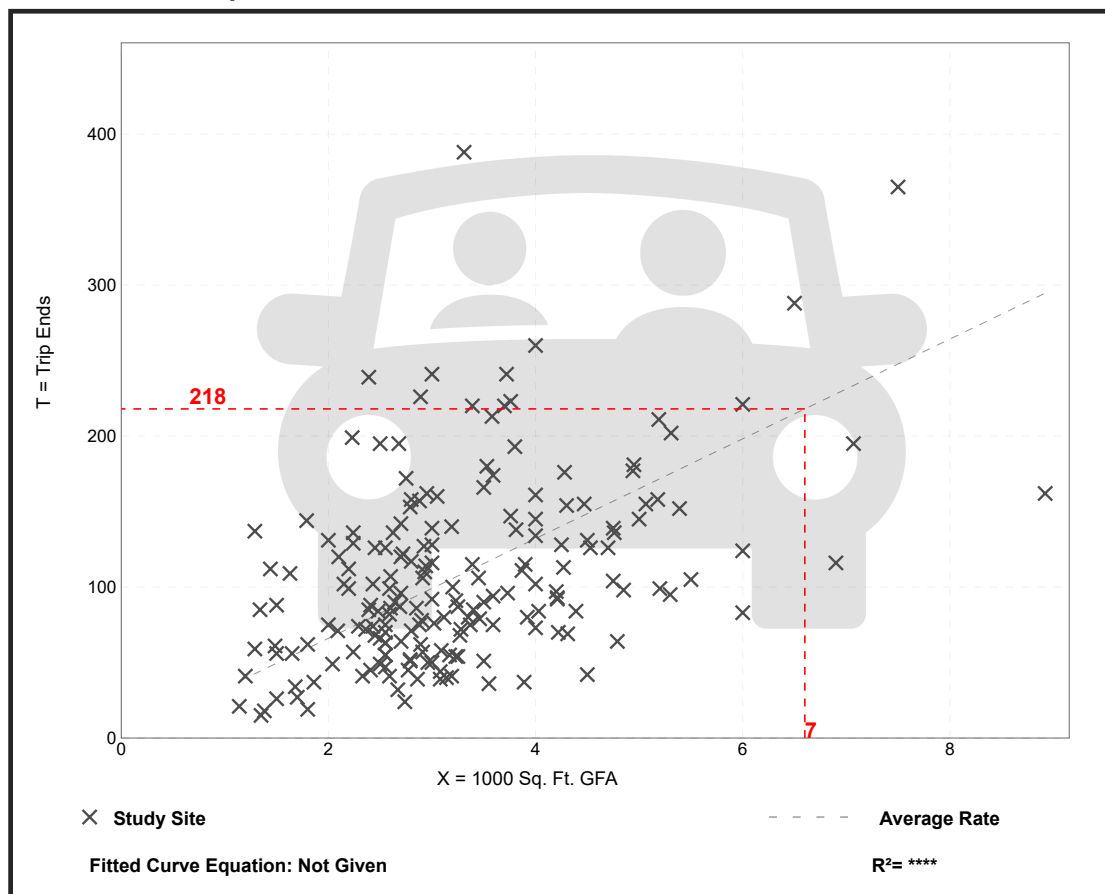
Fast-Food Restaurant with Drive-Through Window (934)

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: 190
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation



Fast-Food Restaurant with Drive-Through Window (934)

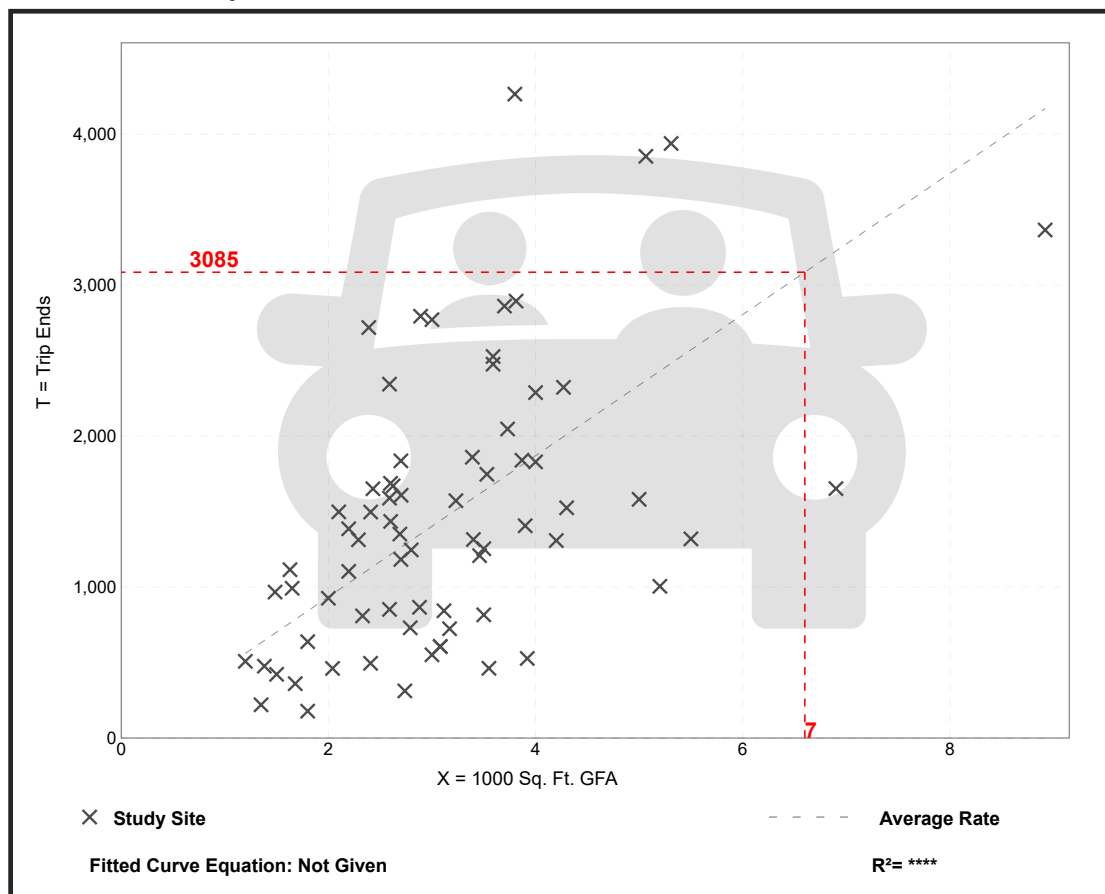
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 71
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
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



Fast Casual Restaurant (930)

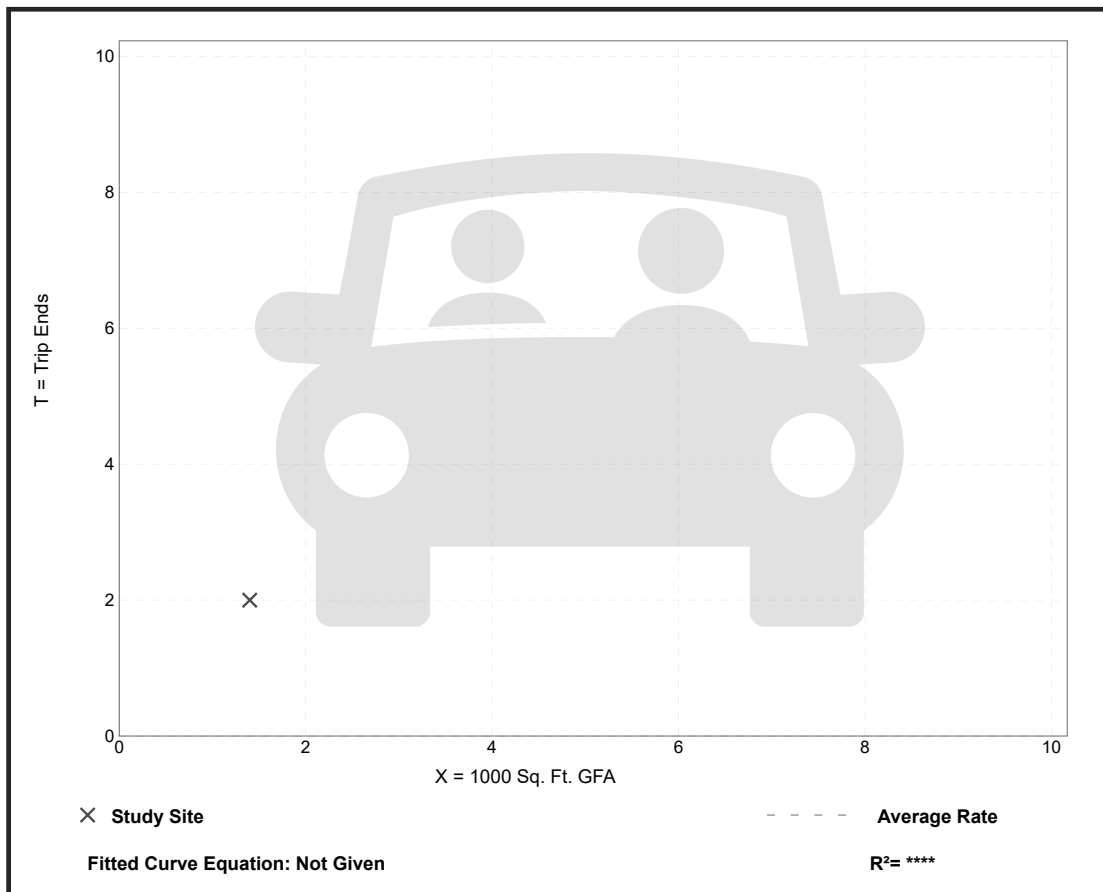
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 1
 Avg. 1000 Sq. Ft. GFA: 1
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.43	1.43 - 1.43	*

Data Plot and Equation

Caution – Small Sample Size



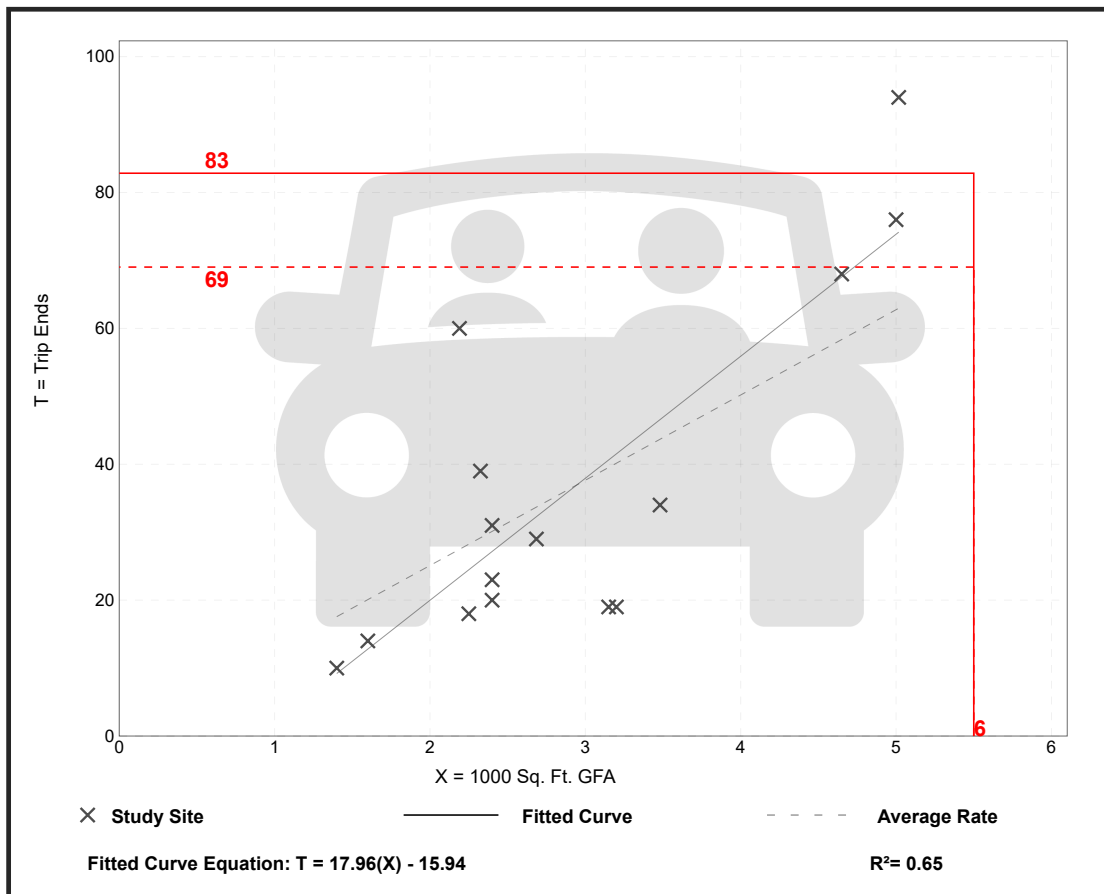
Fast Casual Restaurant (930)

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: 15
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
12.55	5.94 - 27.40	5.52

Data Plot and Equation



Fast Casual Restaurant

(930)

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

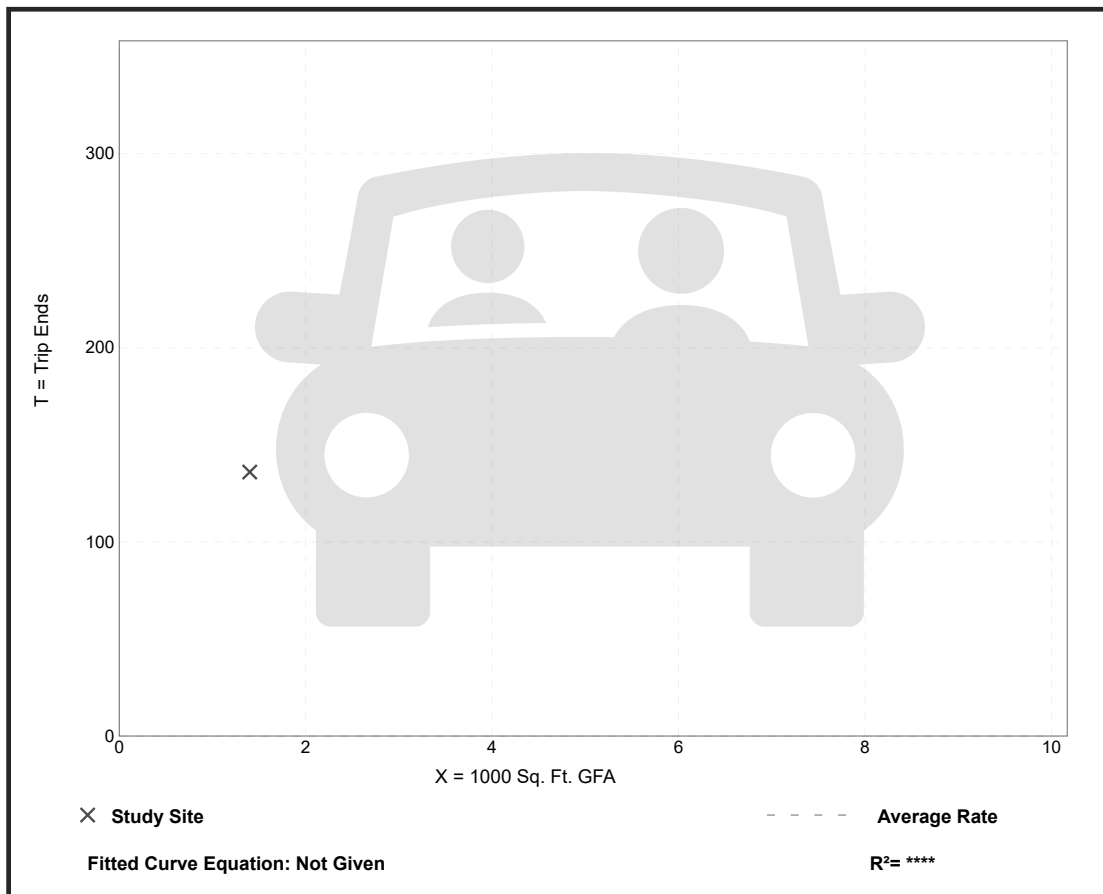
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 1
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
97.14	97.14 - 97.14	*

Data Plot and Equation

Caution – Small Sample Size



Strip Retail Plaza (<40k) (822)

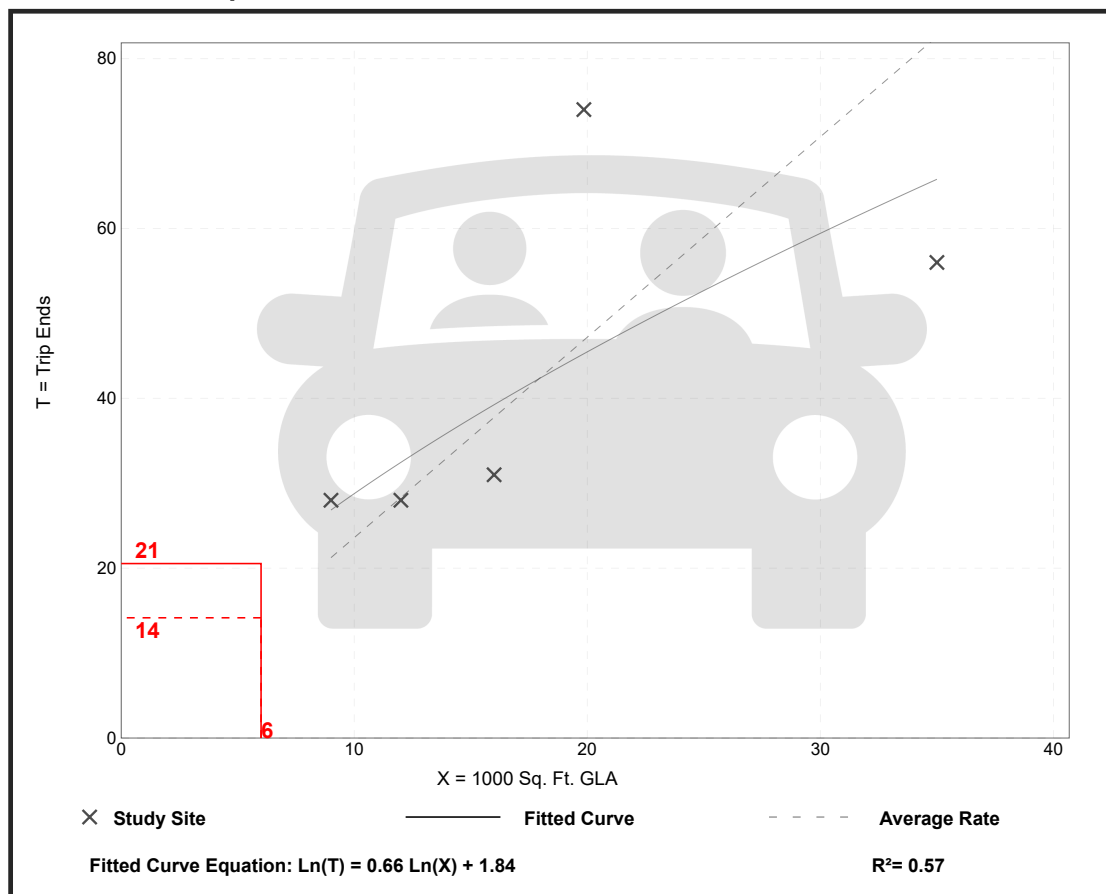
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 5
 Avg. 1000 Sq. Ft. GLA: 18
 Directional Distribution: 60% entering, 40% exiting

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



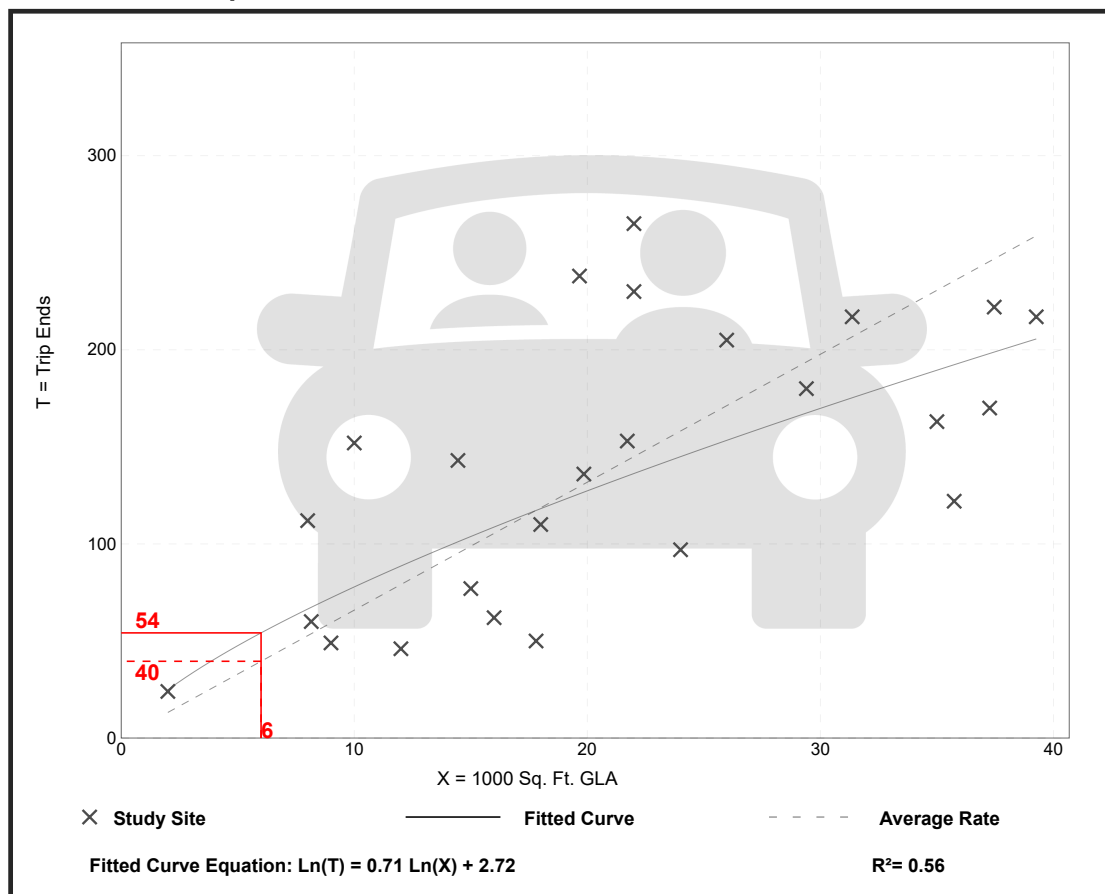
Strip Retail Plaza (<40k) (822)

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



Strip Retail Plaza (<40k) (822)

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

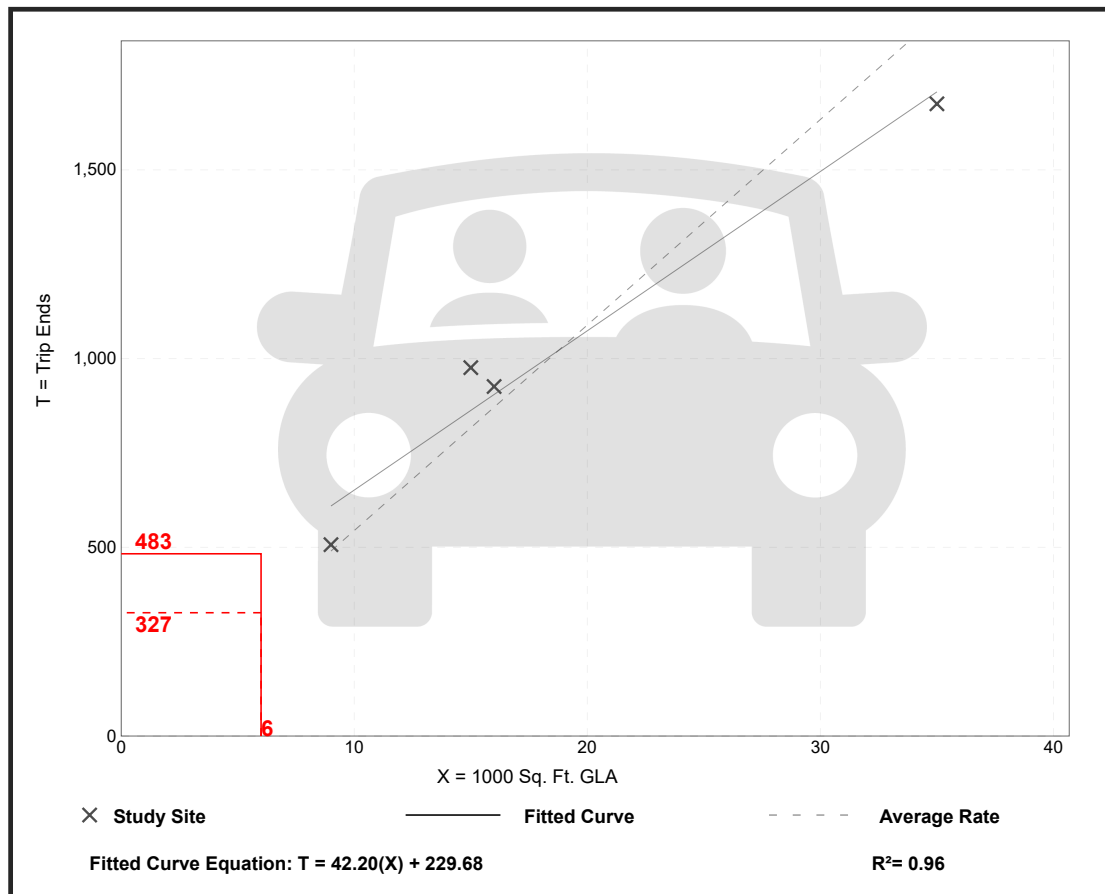
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. 1000 Sq. Ft. GLA: 19
Directional Distribution: 50% entering, 50% exiting

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



Trip Gen Manual, 11th Edition

● Institute of Transportation Engineers

Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

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: 49

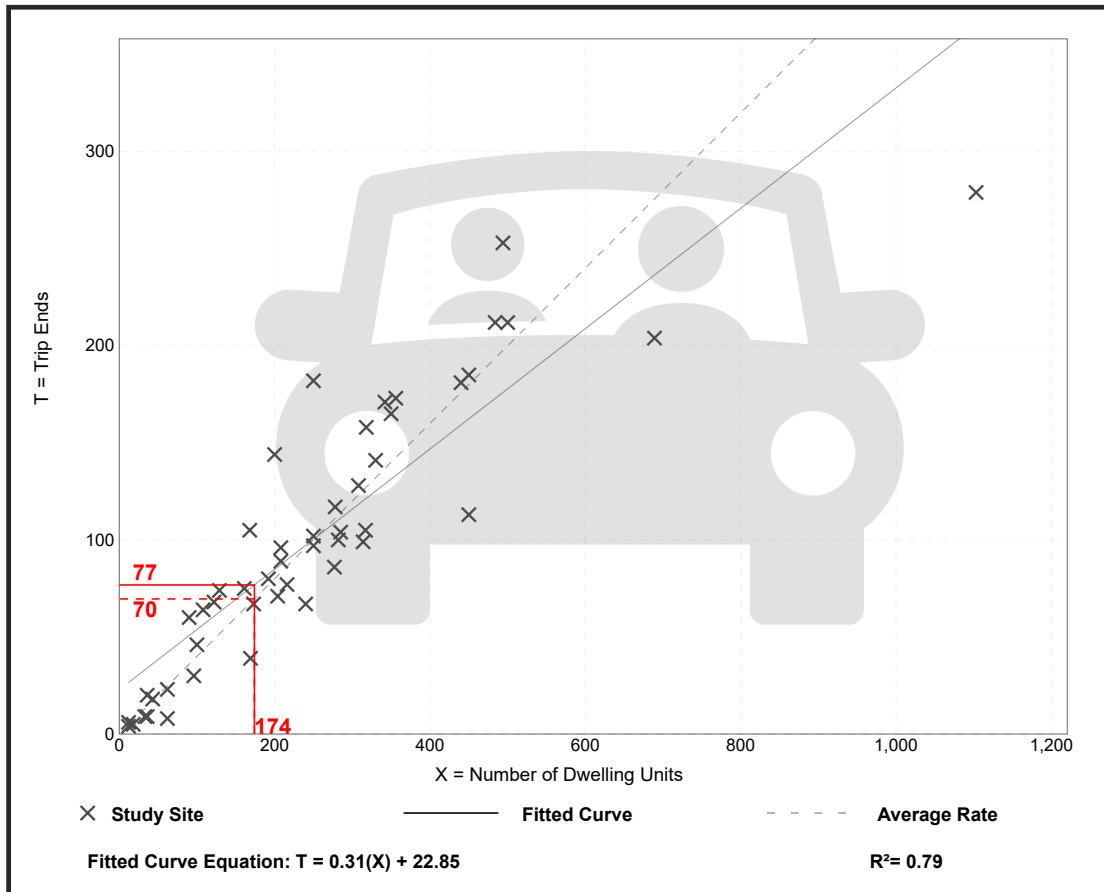
Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



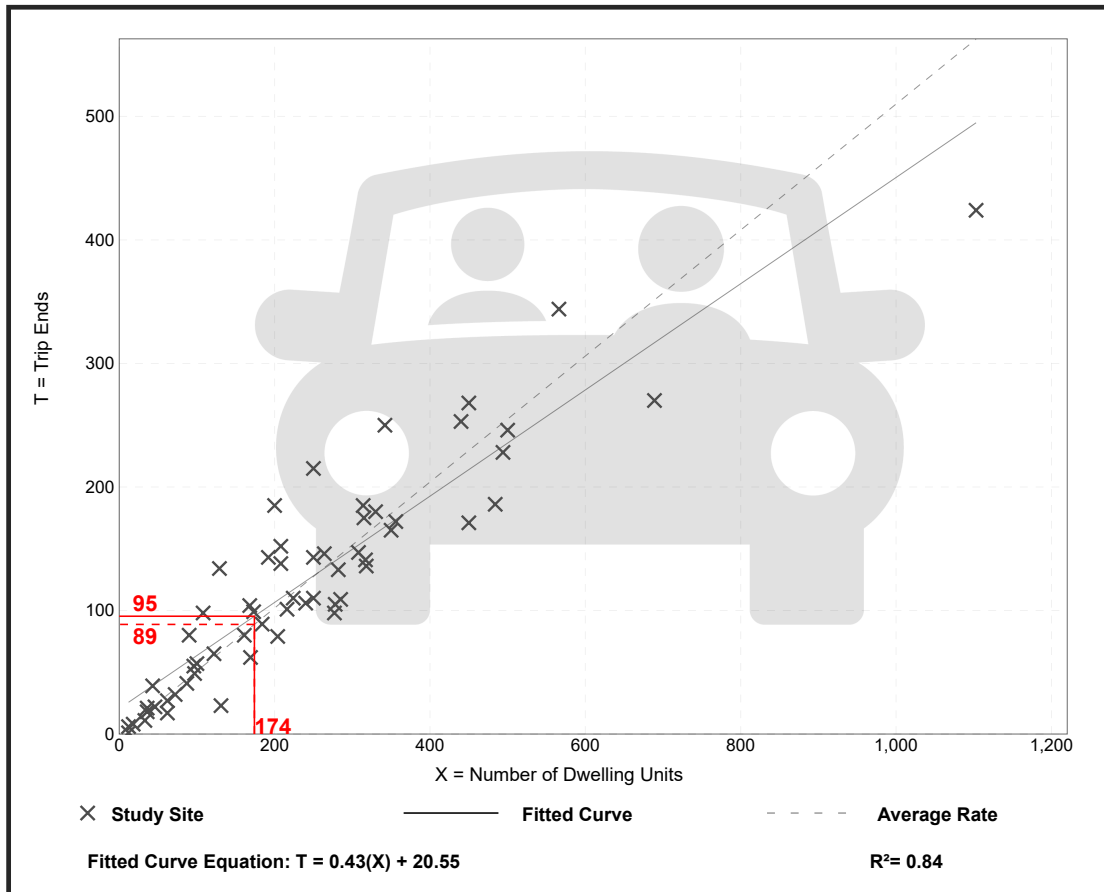
Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
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: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

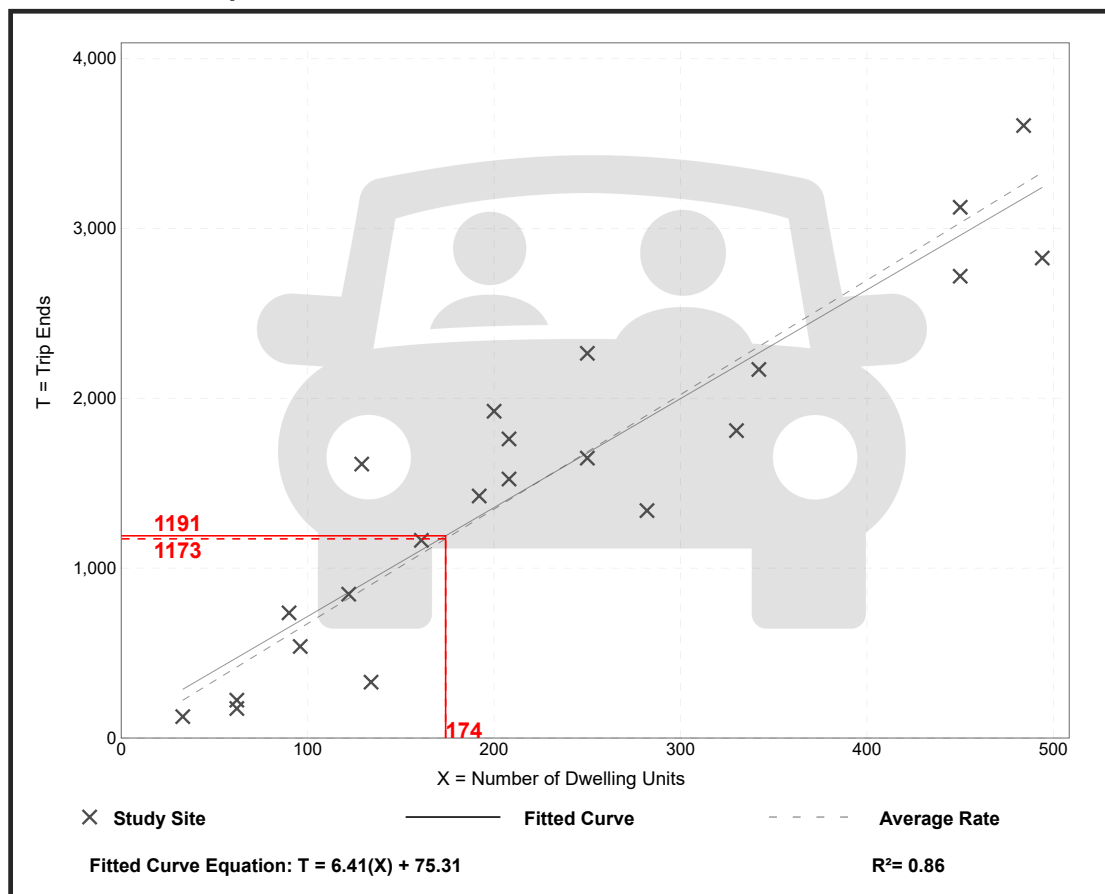
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Single-Family Attached Housing

(215)

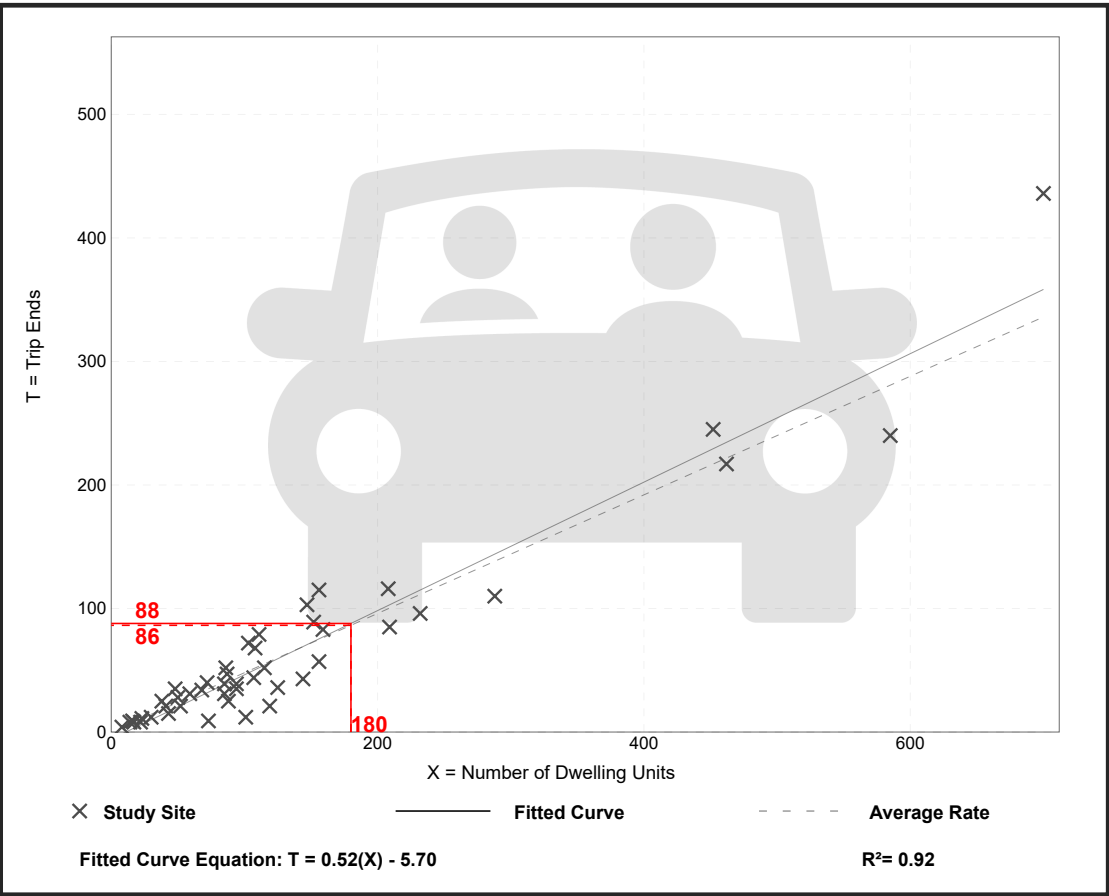
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban
Number of Studies: 46
Avg. Num. of Dwelling Units: 135
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 51

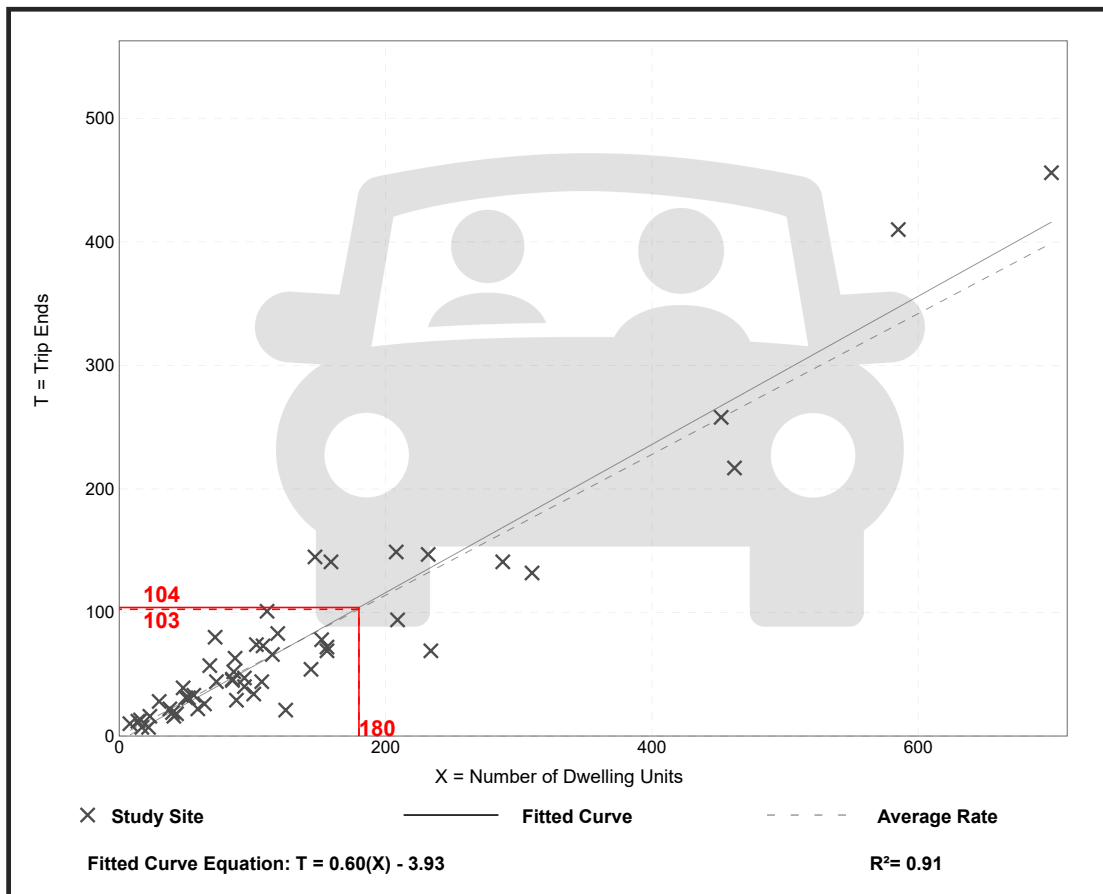
Avg. Num. of Dwelling Units: 136

Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Single-Family Attached Housing

(215)

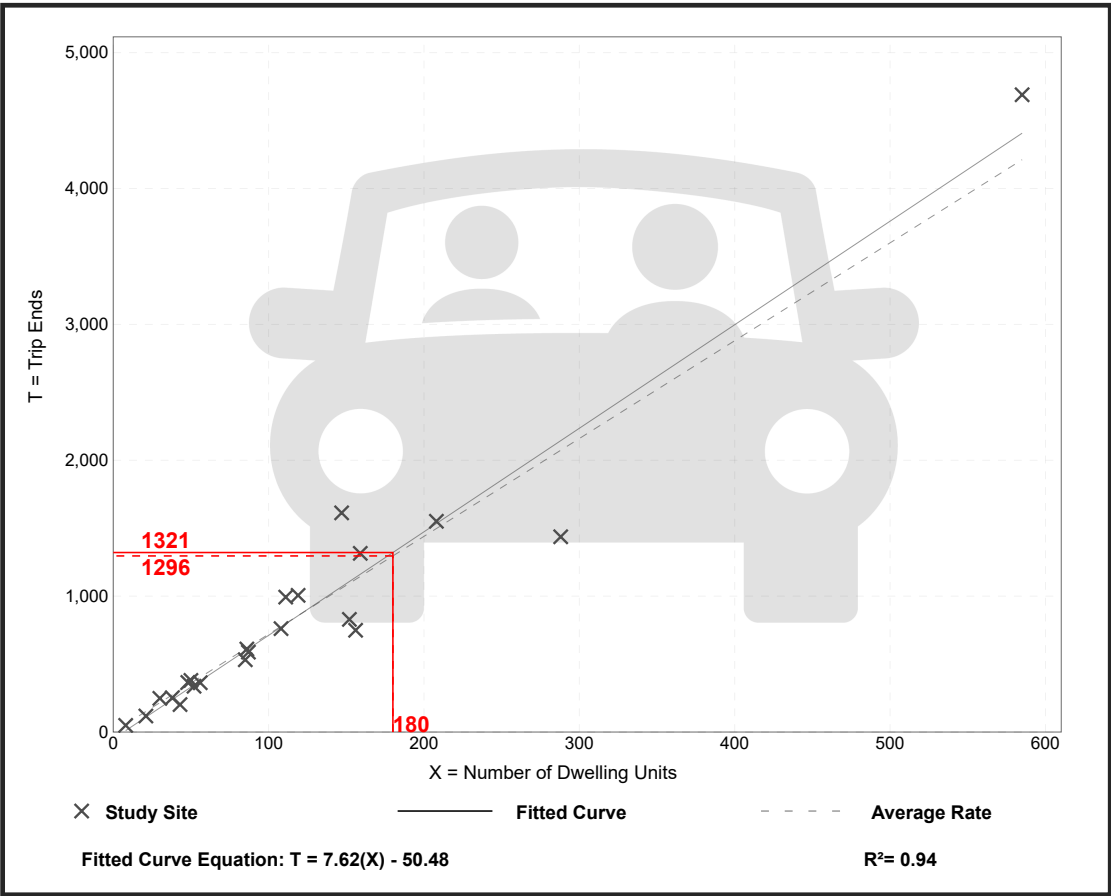
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 120
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



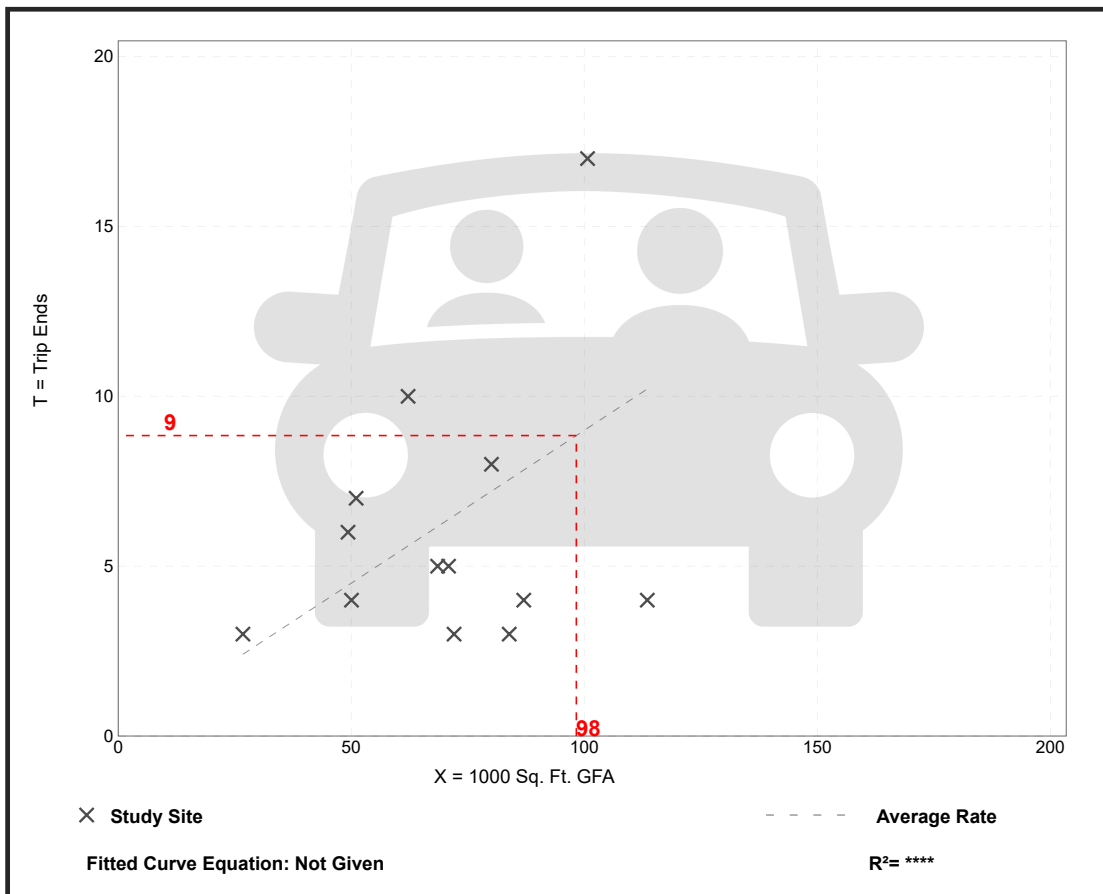
Mini-Warehouse (151)

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: 13
 Avg. 1000 Sq. Ft. GFA: 70
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.09	0.04 - 0.17	0.05

Data Plot and Equation



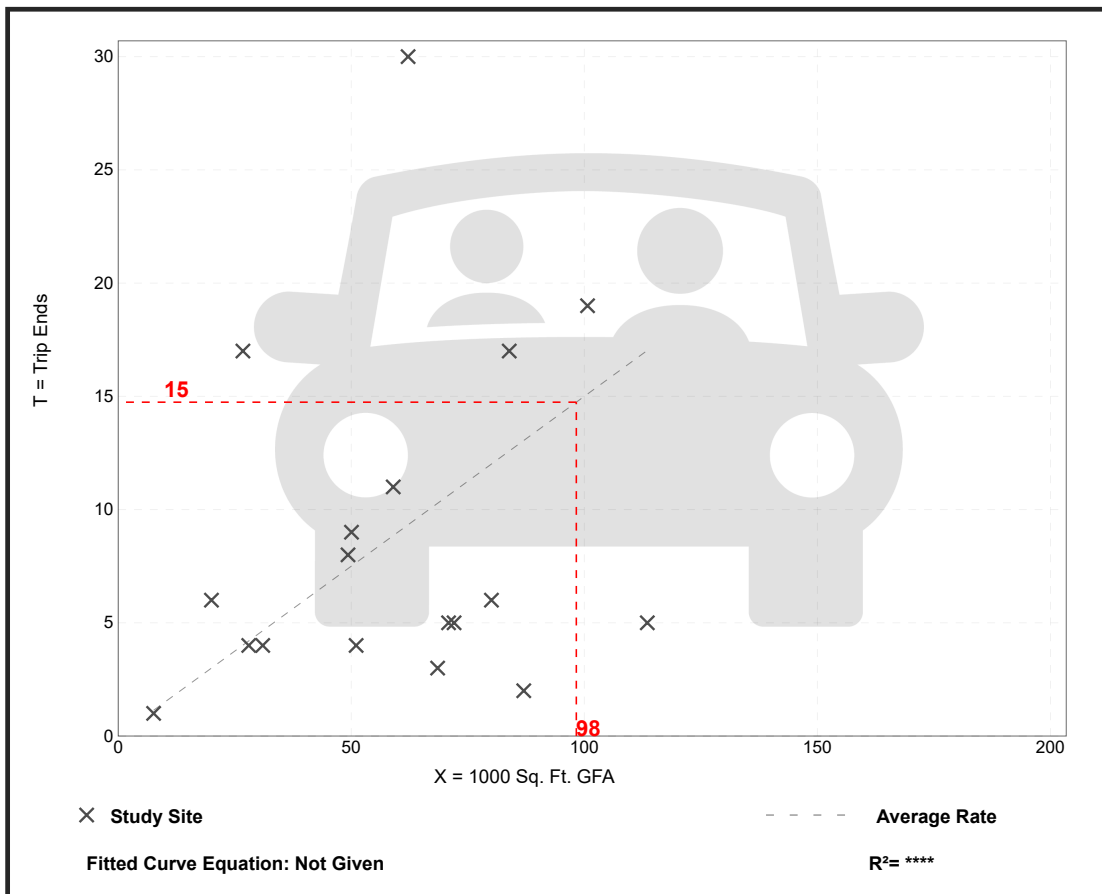
Mini-Warehouse (151)

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: 18
 Avg. 1000 Sq. Ft. GFA: 59
 Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.02 - 0.64	0.14

Data Plot and Equation



Mini-Warehouse (151)

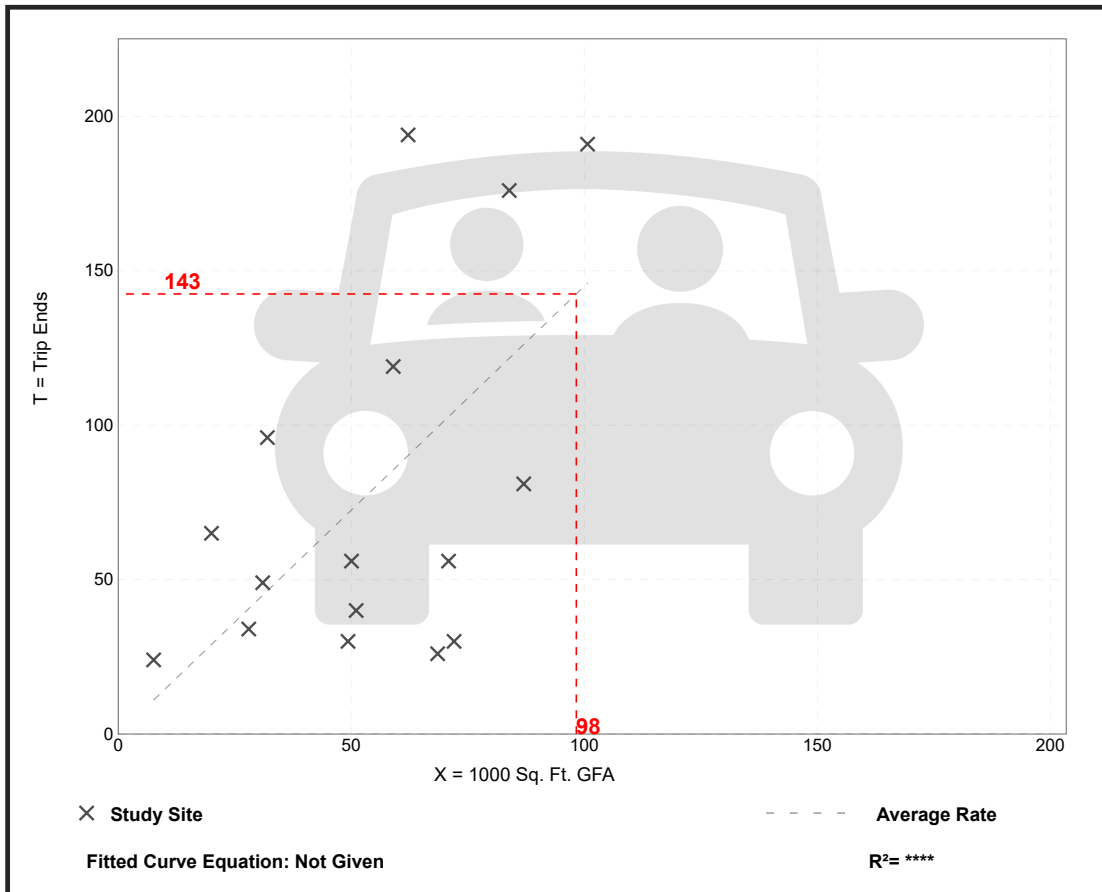
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 55
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.45	0.38 - 3.25	0.92

Data Plot and Equation



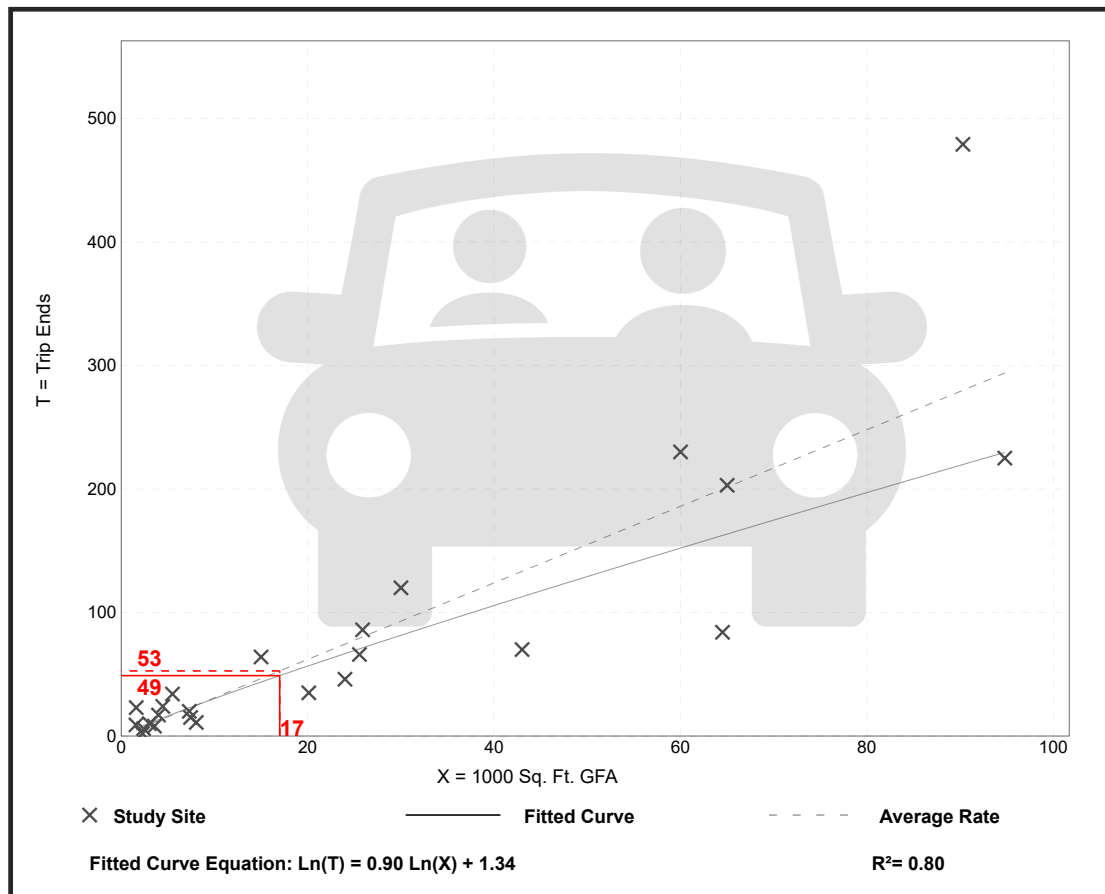
Medical-Dental Office Building - Stand-Alone (720)

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: 24
 Avg. 1000 Sq. Ft. GFA: 25
 Directional Distribution: 79% entering, 21% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.10	0.87 - 14.30	1.49

Data Plot and Equation



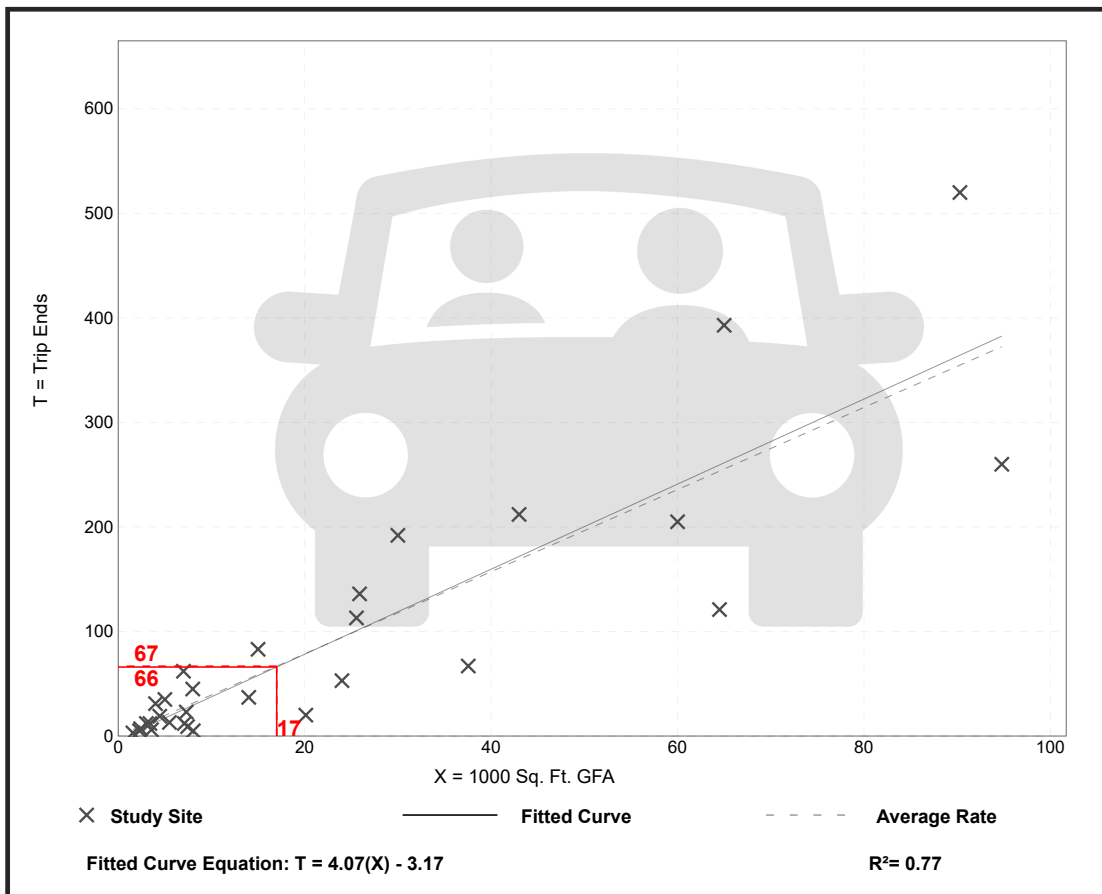
Medical-Dental Office Building - Stand-Alone (720)

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: 30
 Avg. 1000 Sq. Ft. GFA: 23
 Directional Distribution: 30% entering, 70% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.93	0.62 - 8.86	1.86

Data Plot and Equation



Trip Gen Manual, 11th Edition

● Institute of Transportation Engineers

Medical-Dental Office Building - Stand-Alone (720)

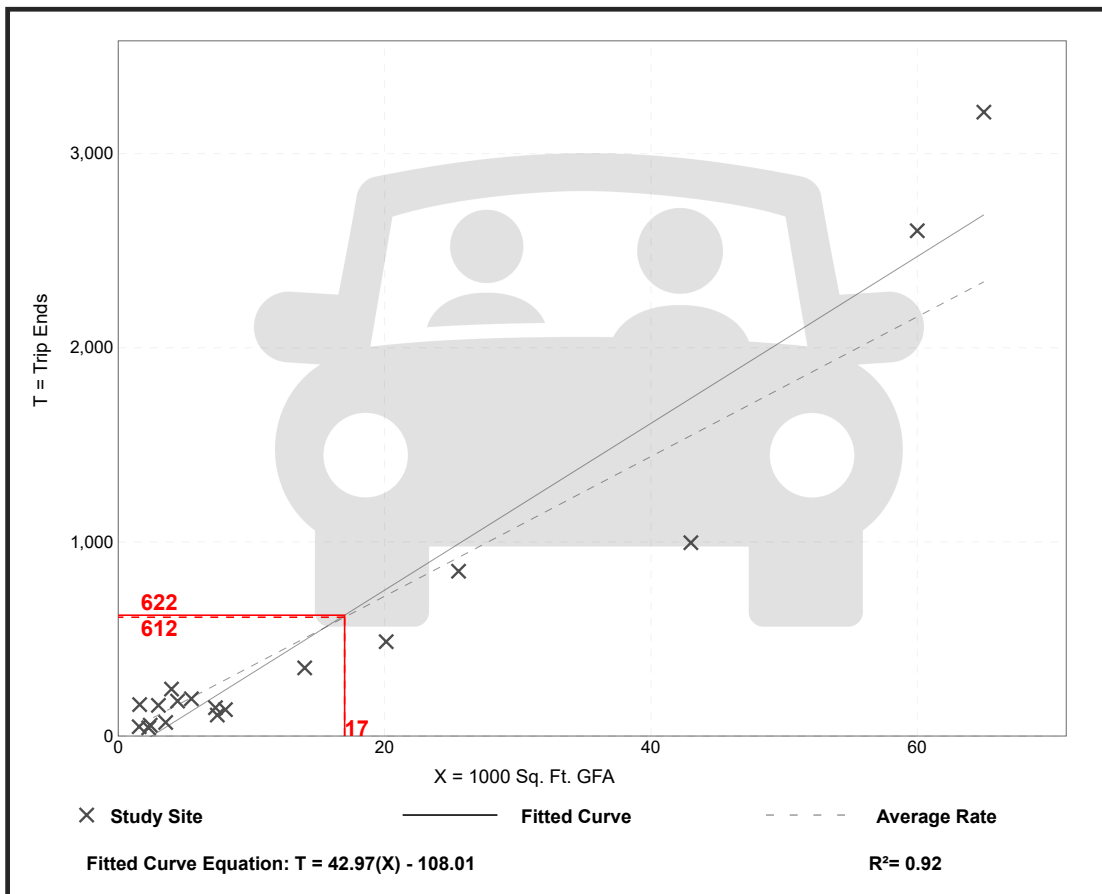
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 18
Avg. 1000 Sq. Ft. GFA: 15
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

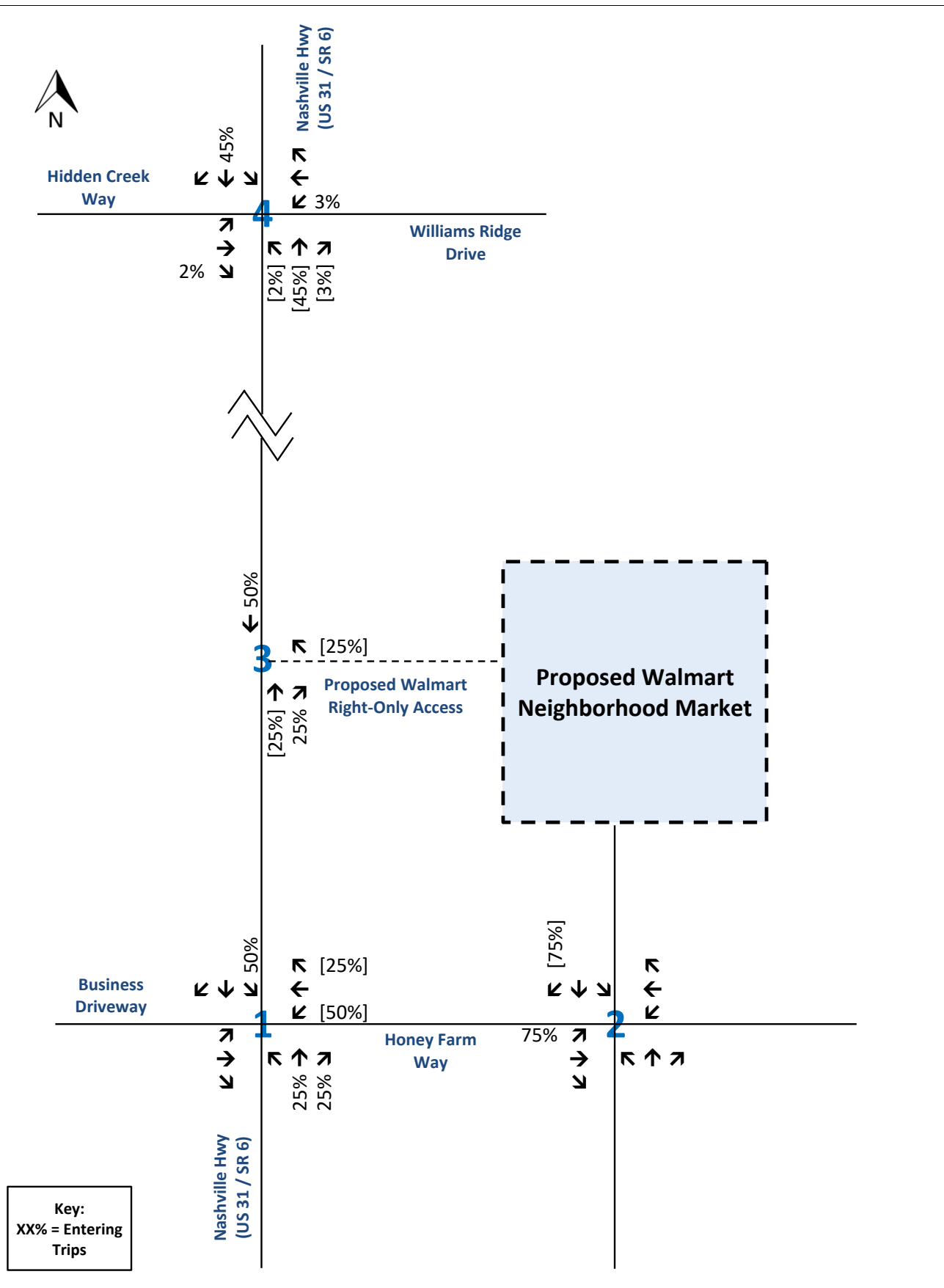
Average Rate	Range of Rates	Standard Deviation
36.00	14.52 - 100.75	13.38

Data Plot and Equation



APPENDIX D
TRIP DISTRIBUTION

PRIMARY TRIP DISTRIBUTIONS



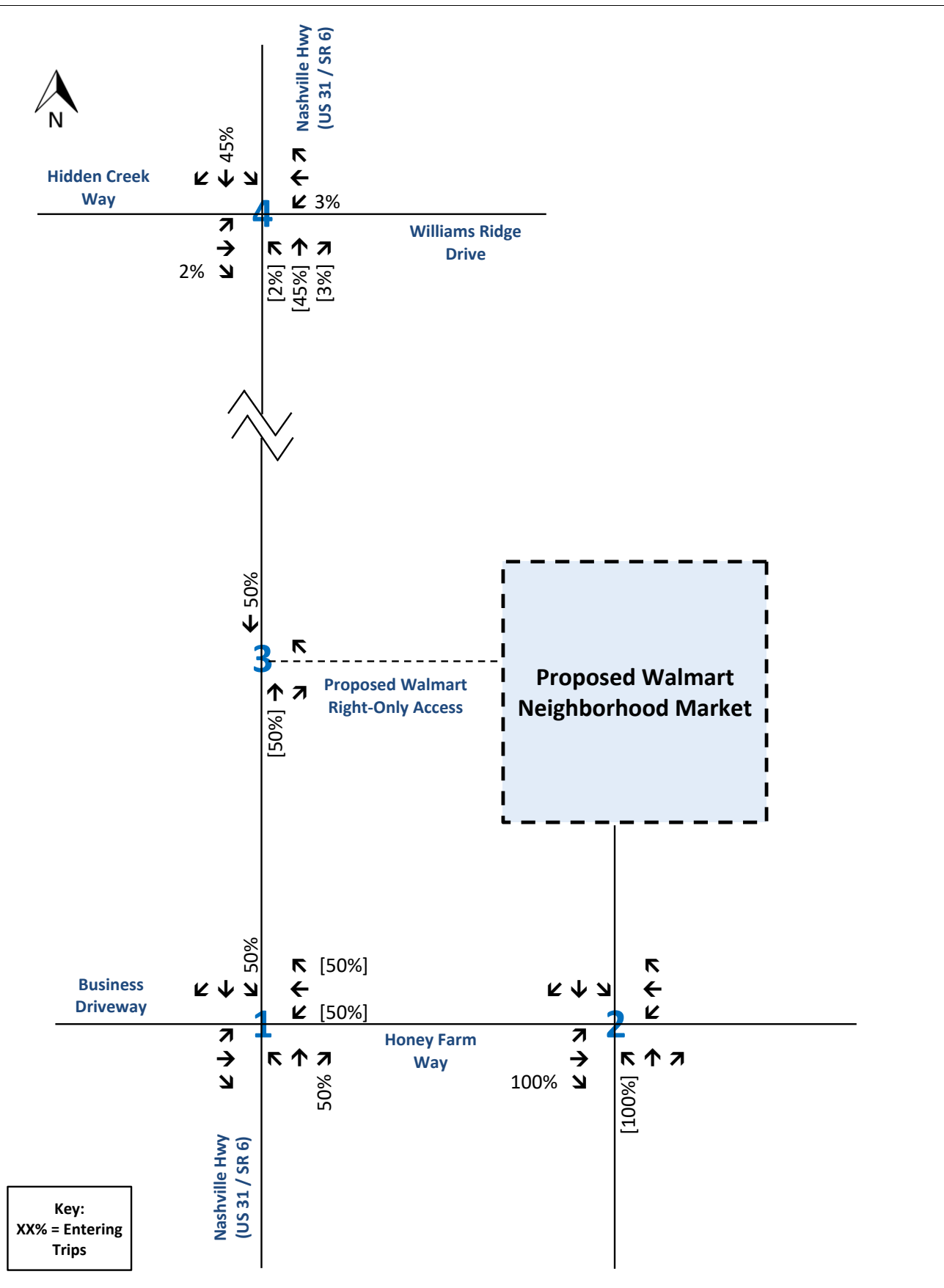
Trip Distribution Worksheet

Primary Trip Distribution - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





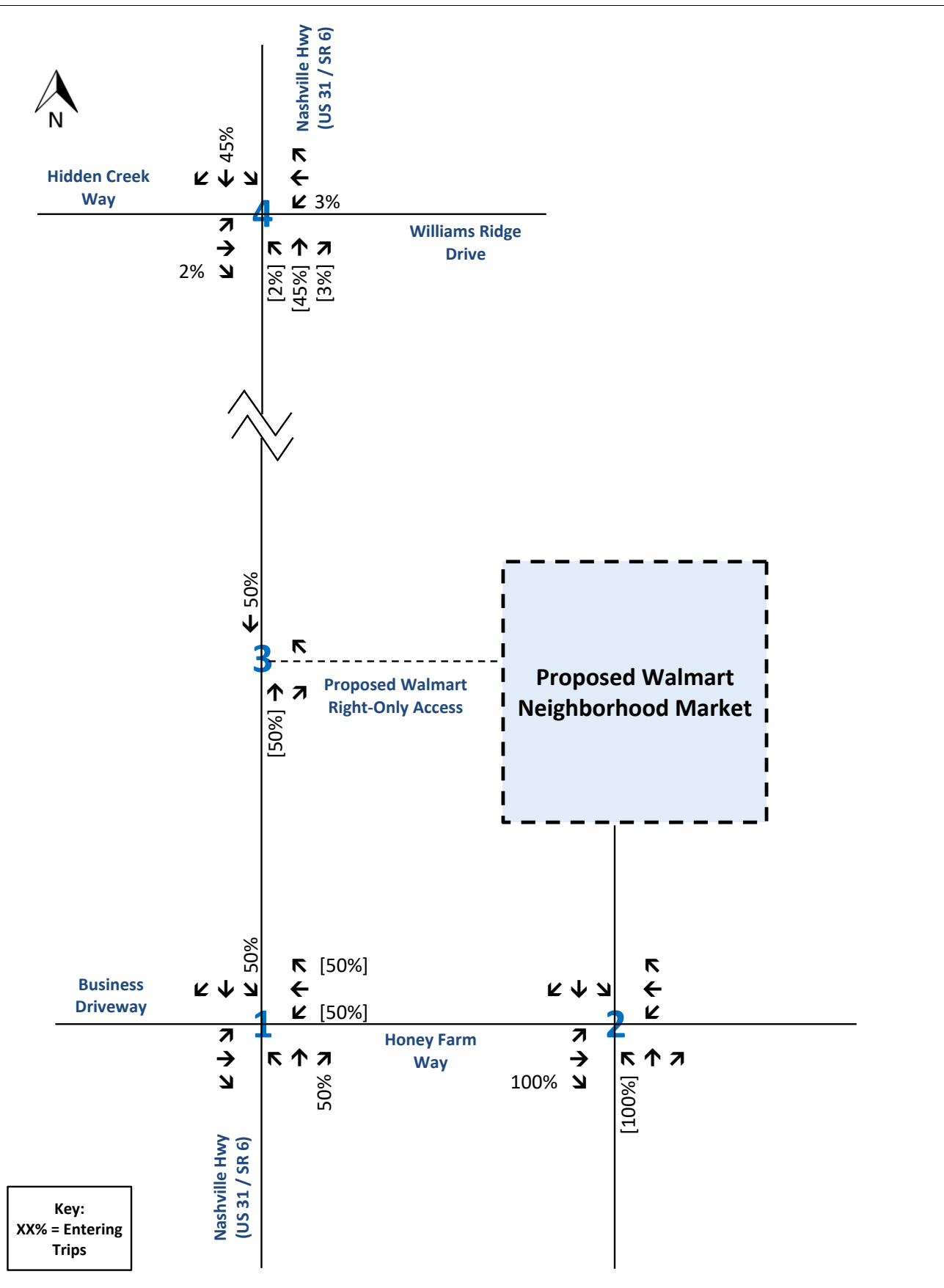
Trip Distribution Worksheet

Primary Trip Distribution - Fast-Food Restaurant with Drive-Through

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





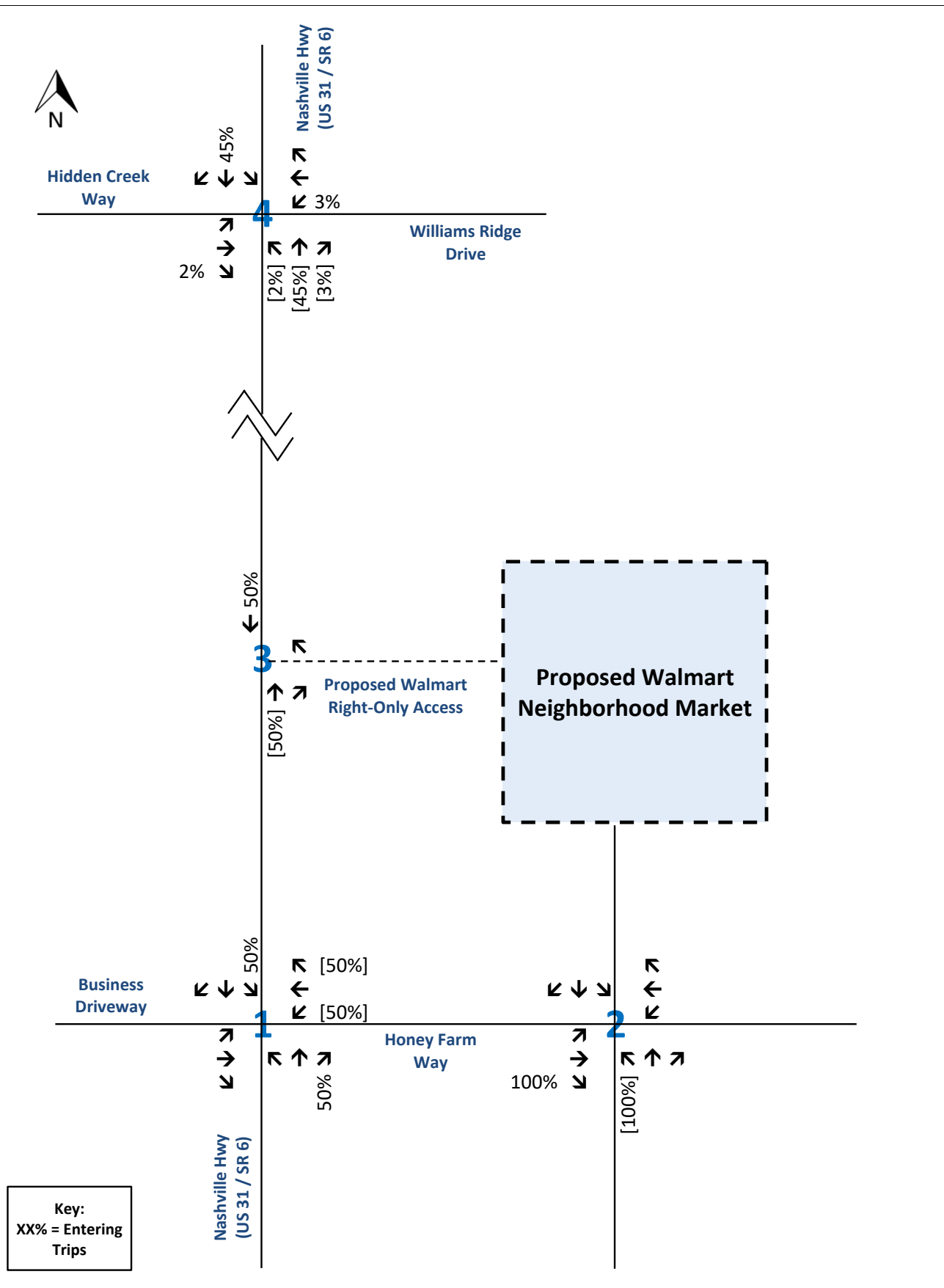
Trip Distribution Worksheet

Primary Trip Distribution - Fast Casual Restaurant

Honey Farm - Walmart Neighborhood Market

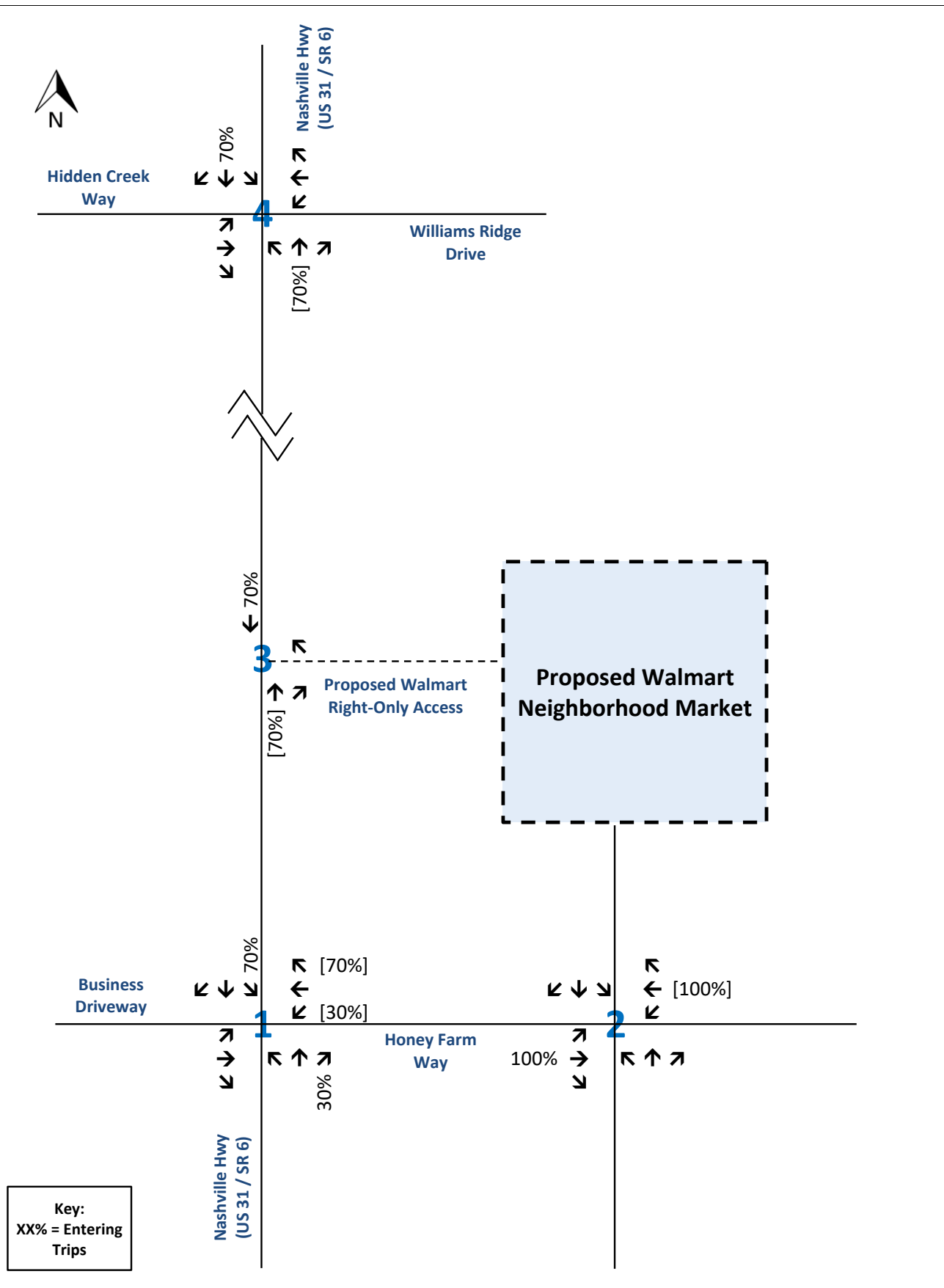
Columbia, Tennessee





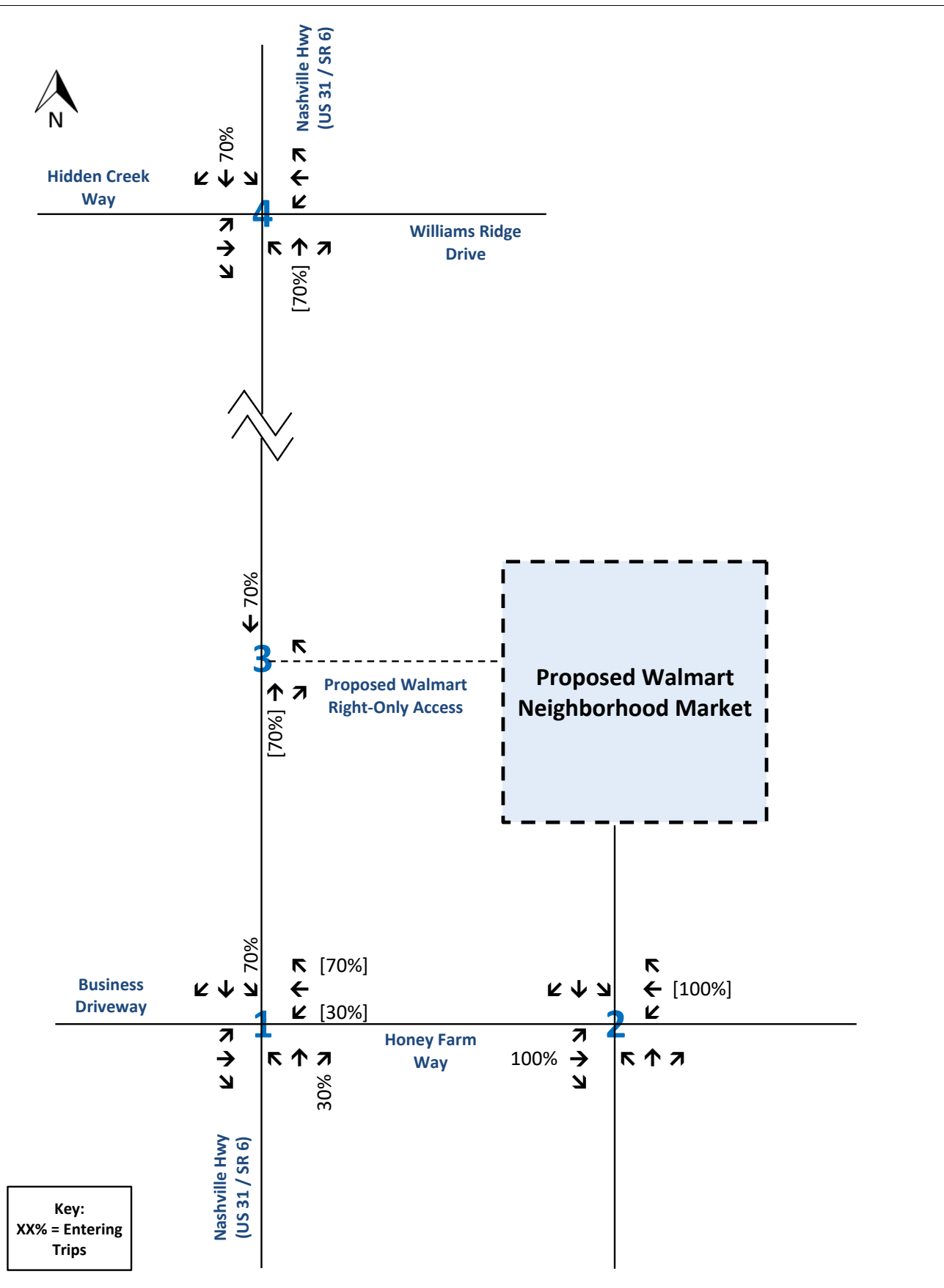
Trip Distribution Worksheet
Primary Trip Distribution - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Trip Distribution Worksheet
Primary Trip Distribution - Multifamily Housing (Low-Rise)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





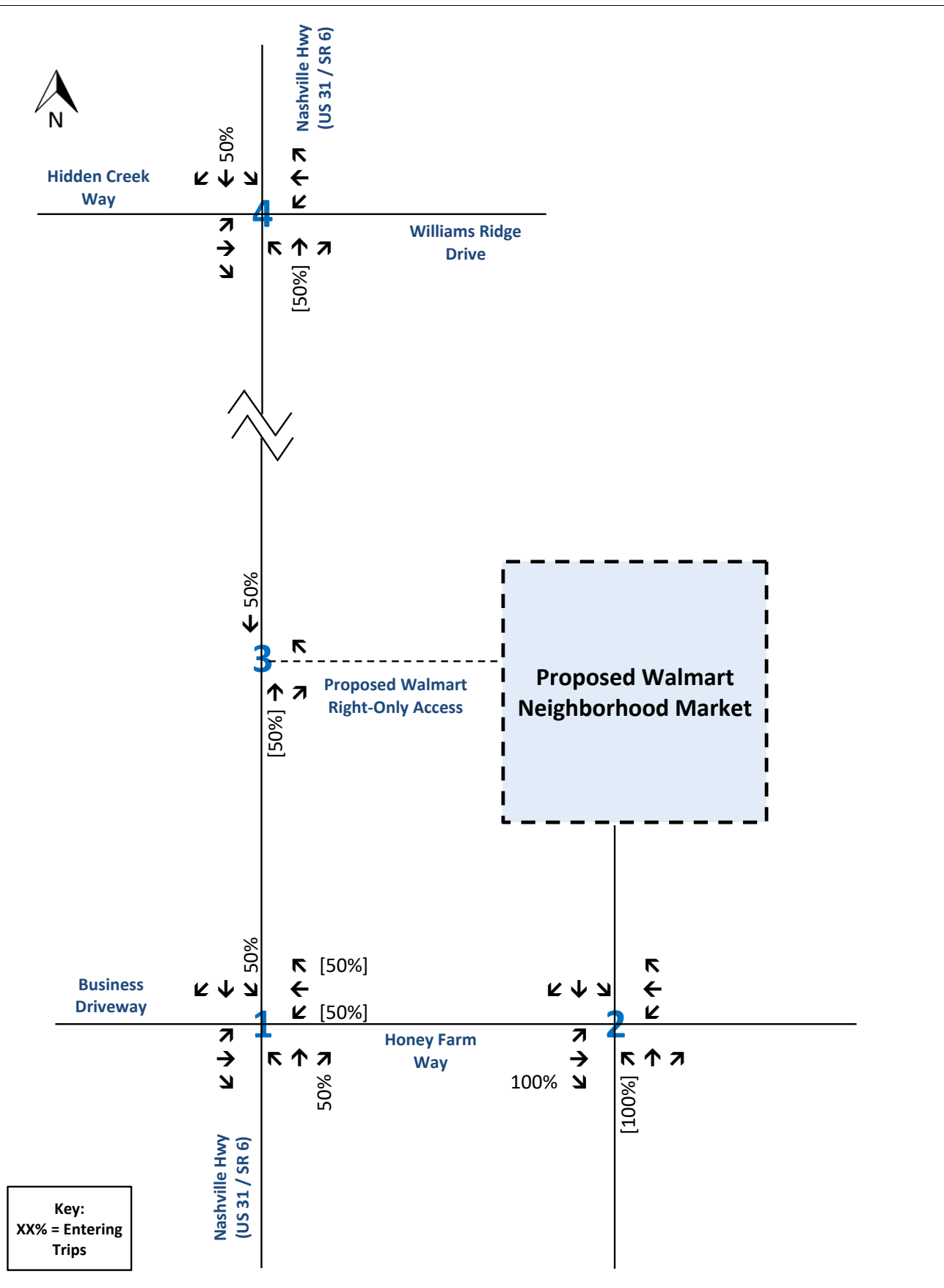
Trip Distribution Worksheet

Primary Trip Distribution - Townhomes

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee

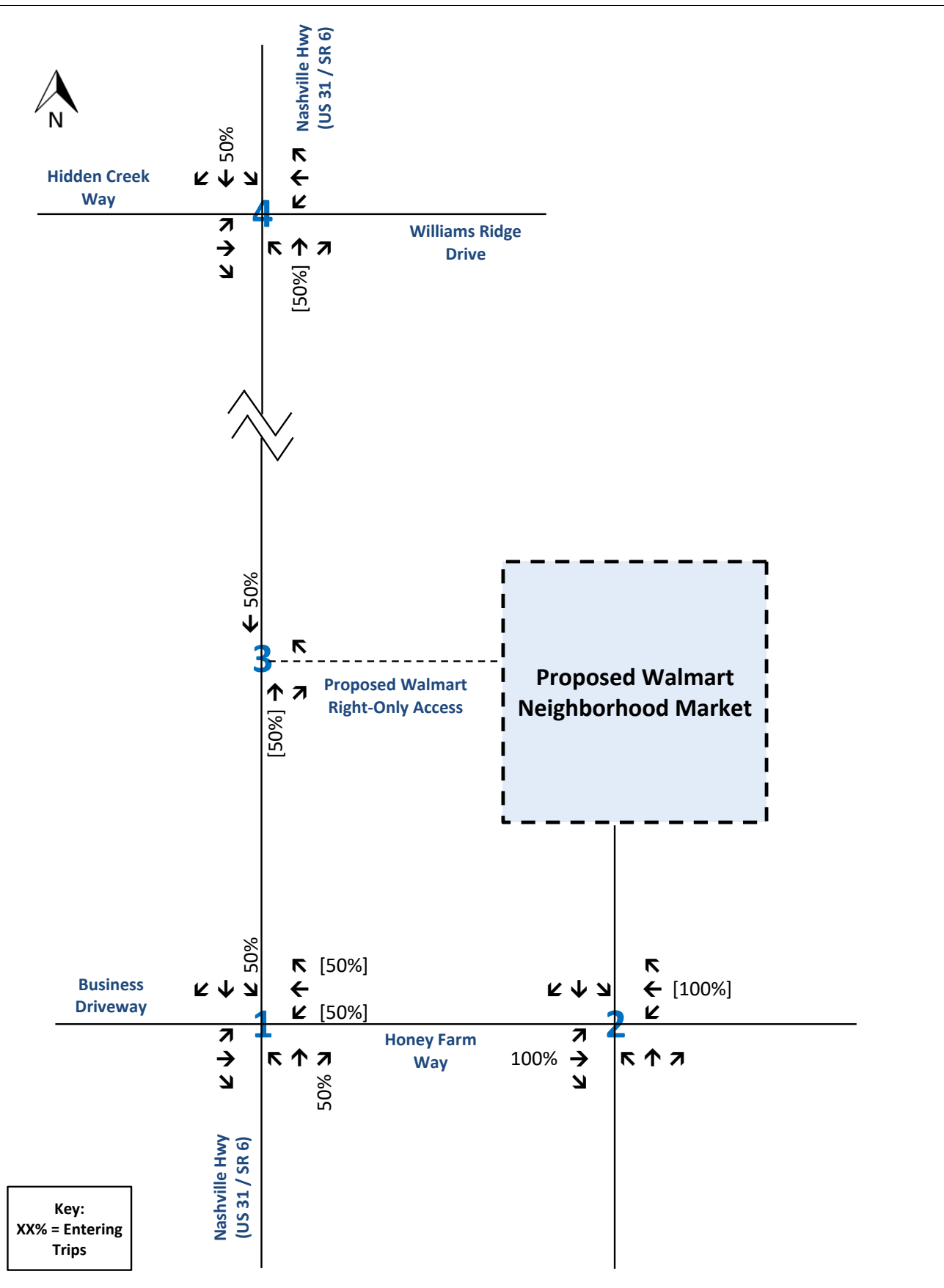




Trip Distribution Worksheet

Primary Trip Distribution - Mini-Warehouse
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Trip Distribution Worksheet
Primary Trip Distribution - Health Department
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



PASS-BY TRIP DISTRIBUTIONS



Hidden Creek
Way

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive

-50% [50%]

3

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

-50% [25%]

25%

Business
Driveway

-50%

50%

[25%]

[50%]

-25%

25%

Honey Farm
Way

[75%]

75%

Nashville Hwy
(US 31 / SR 6)

1

2

Key:
XX% = Entering
Trips

Trip Distribution Worksheet

Pass-by Trip Distribution - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Hidden Creek
Way

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive

-50% [50%]

3

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

-50% [50%]

Business
Driveway

[50%]

[50%]

Honey Farm
Way

100%

[100%]

Nashville Hwy
(US 31 / SR 6)

-50%

50%

Key:
XX% = Entering
Trips

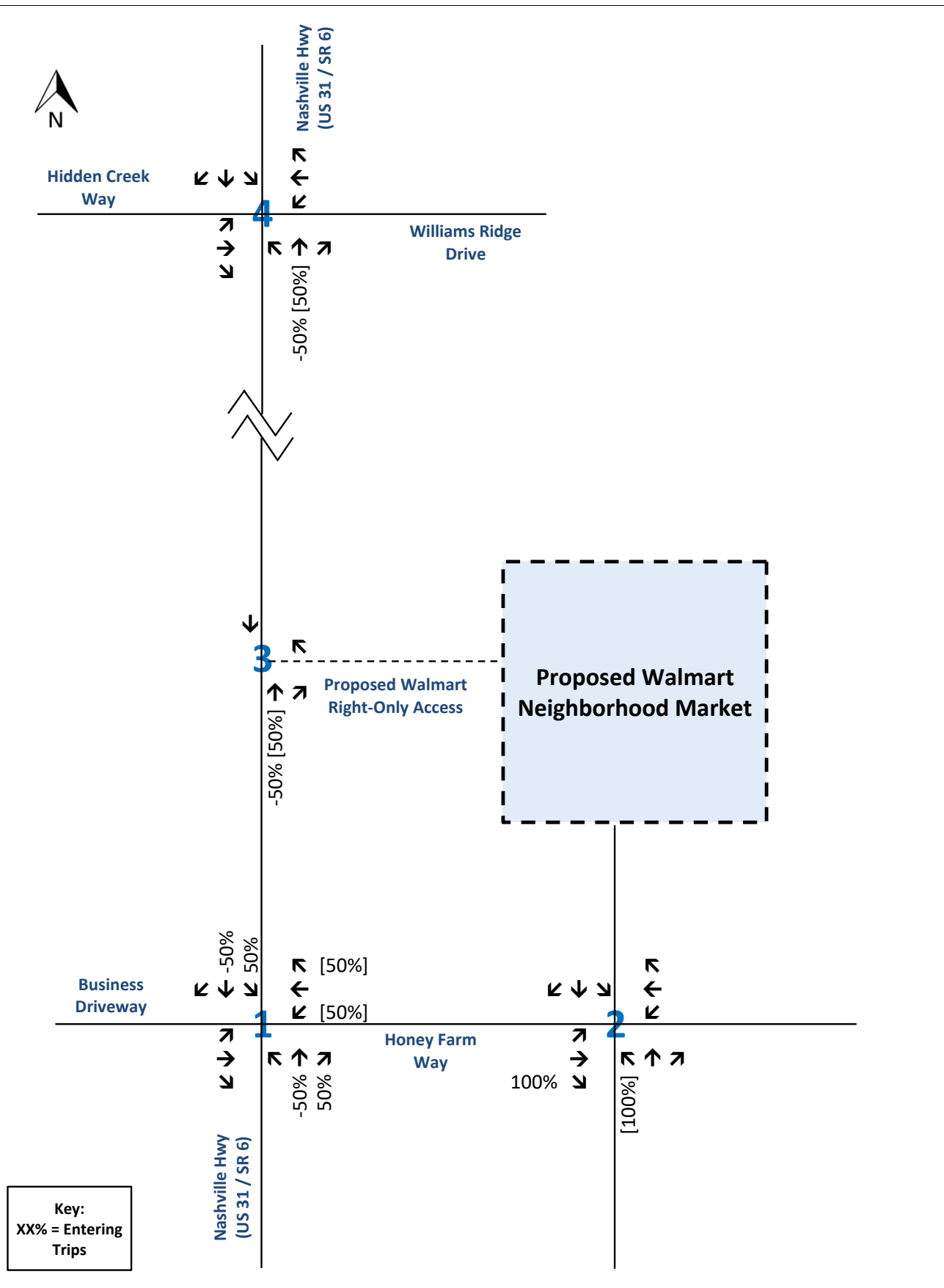
Trip Distribution Worksheet

Pass-by Trip Distribution - Fast-Food Restaurant with Drive-Through

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Trip Distribution Worksheet

Pass-by Trip Distribution - Fast Casual Restaurant

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Hidden Creek
Way

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive

-50% [50%]

3

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

-50% [50%]

Business
Driveway

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

100%

[100%]

Key:
XX% = Entering
Trips

Trip Distribution Worksheet

Pass-by Trip Distribution - Future Retail

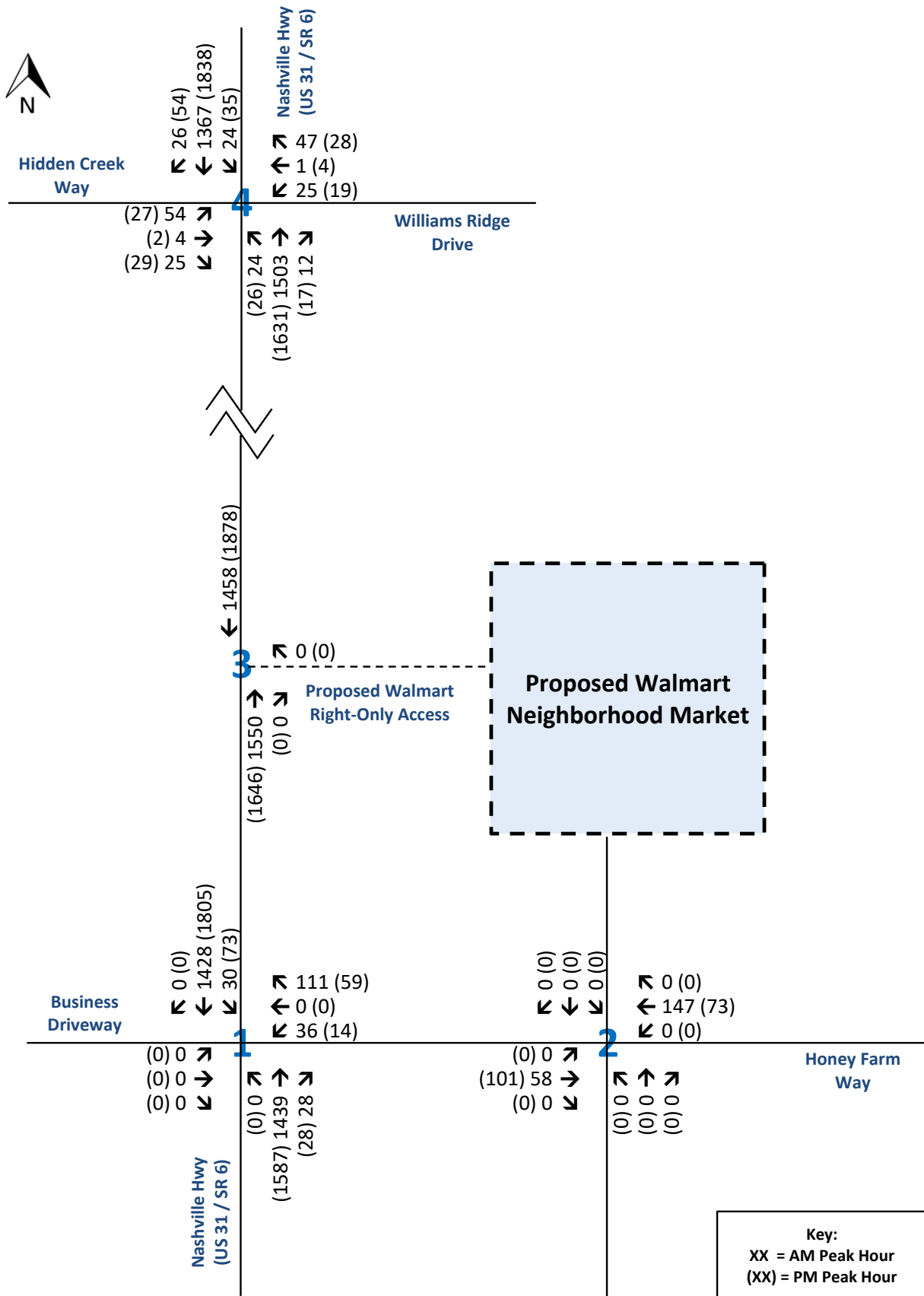
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



APPENDIX E
TRAFFIC ASSIGNMENT

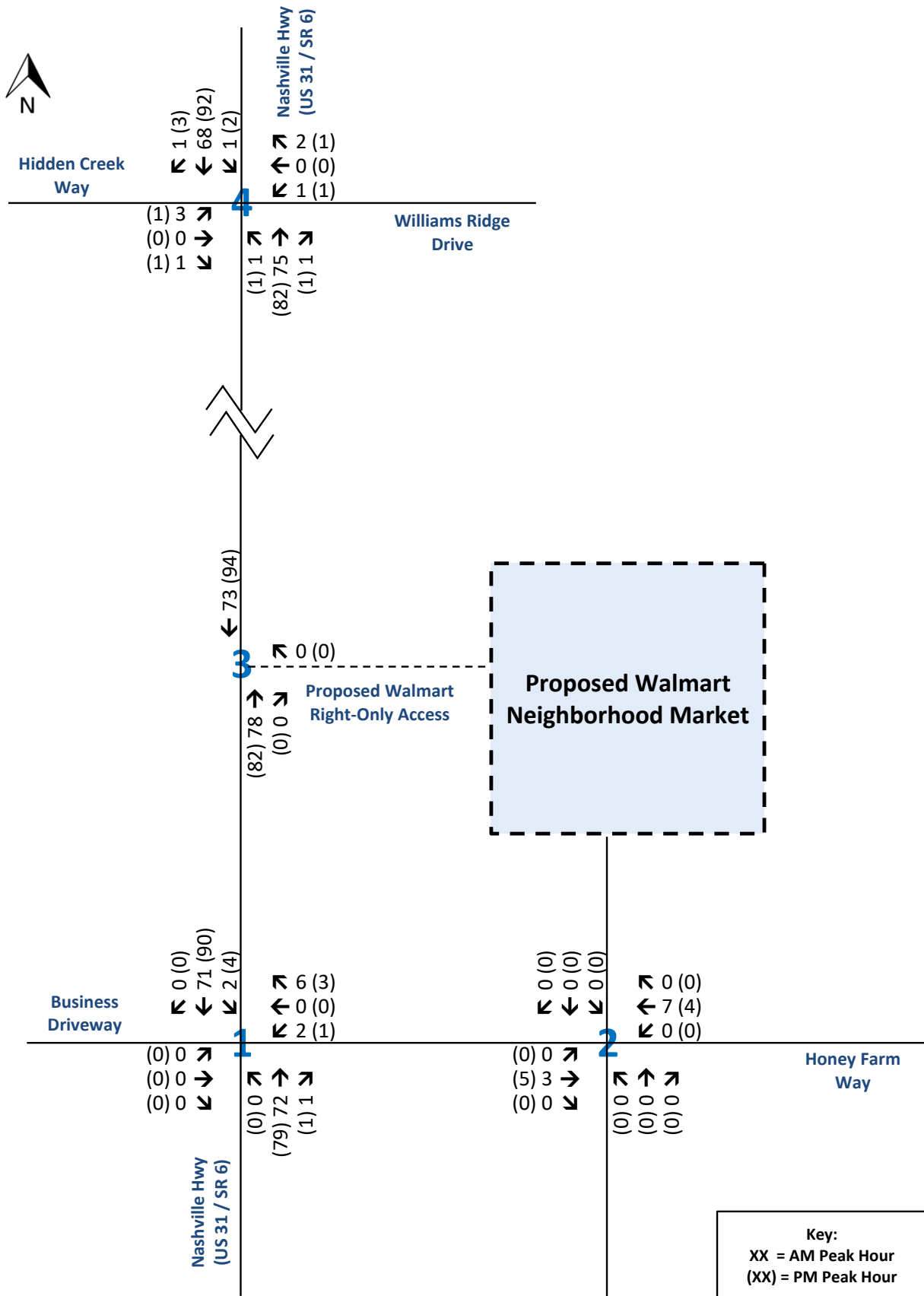
TRAFFIC ASSIGNMENT WORKSHEETS

AM & PM PEAK HOURS



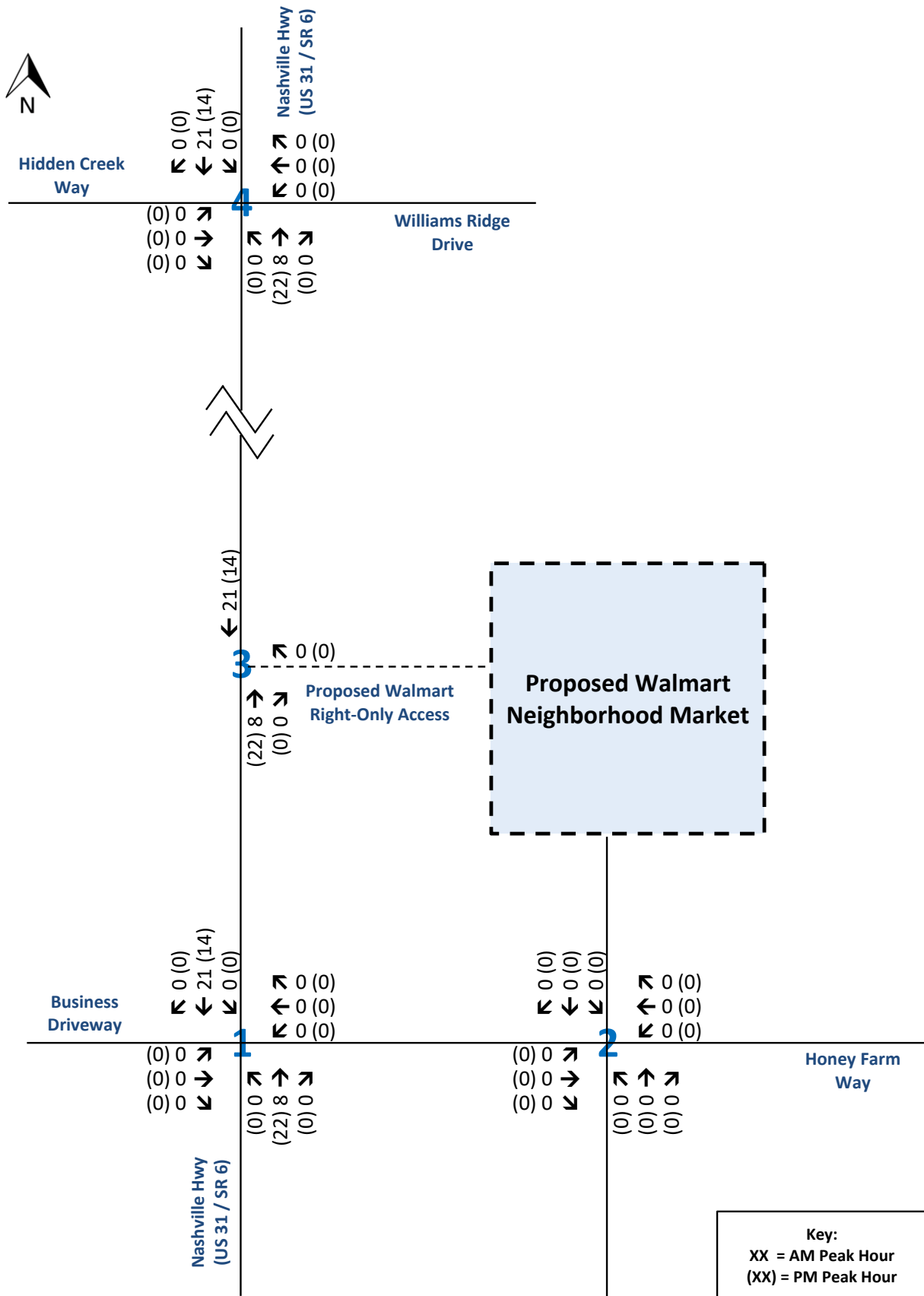
Traffic Assignment Worksheet
Existing Traffic Volumes (2024)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





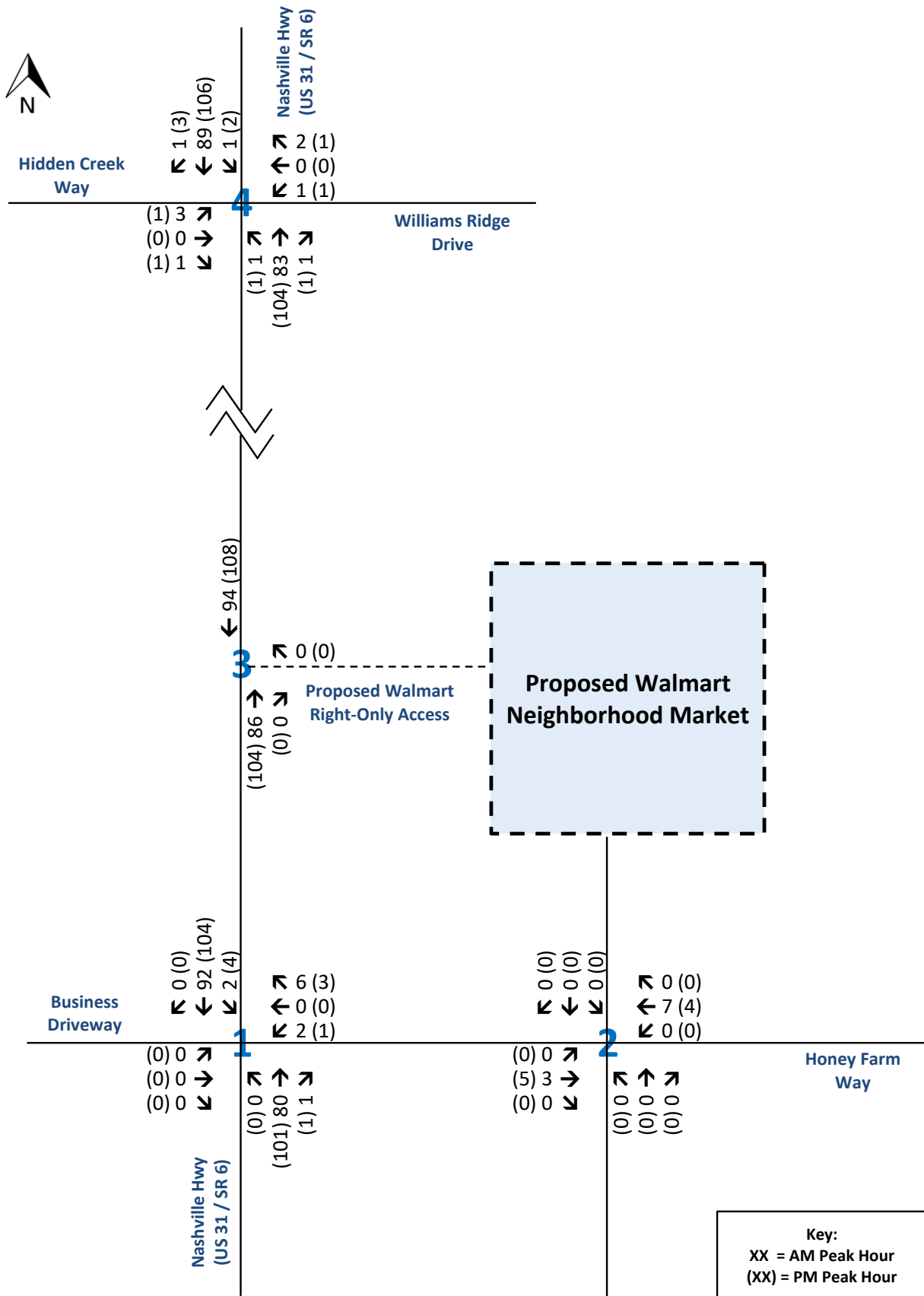
Traffic Assignment Worksheet
Background - Historical Growth Only (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





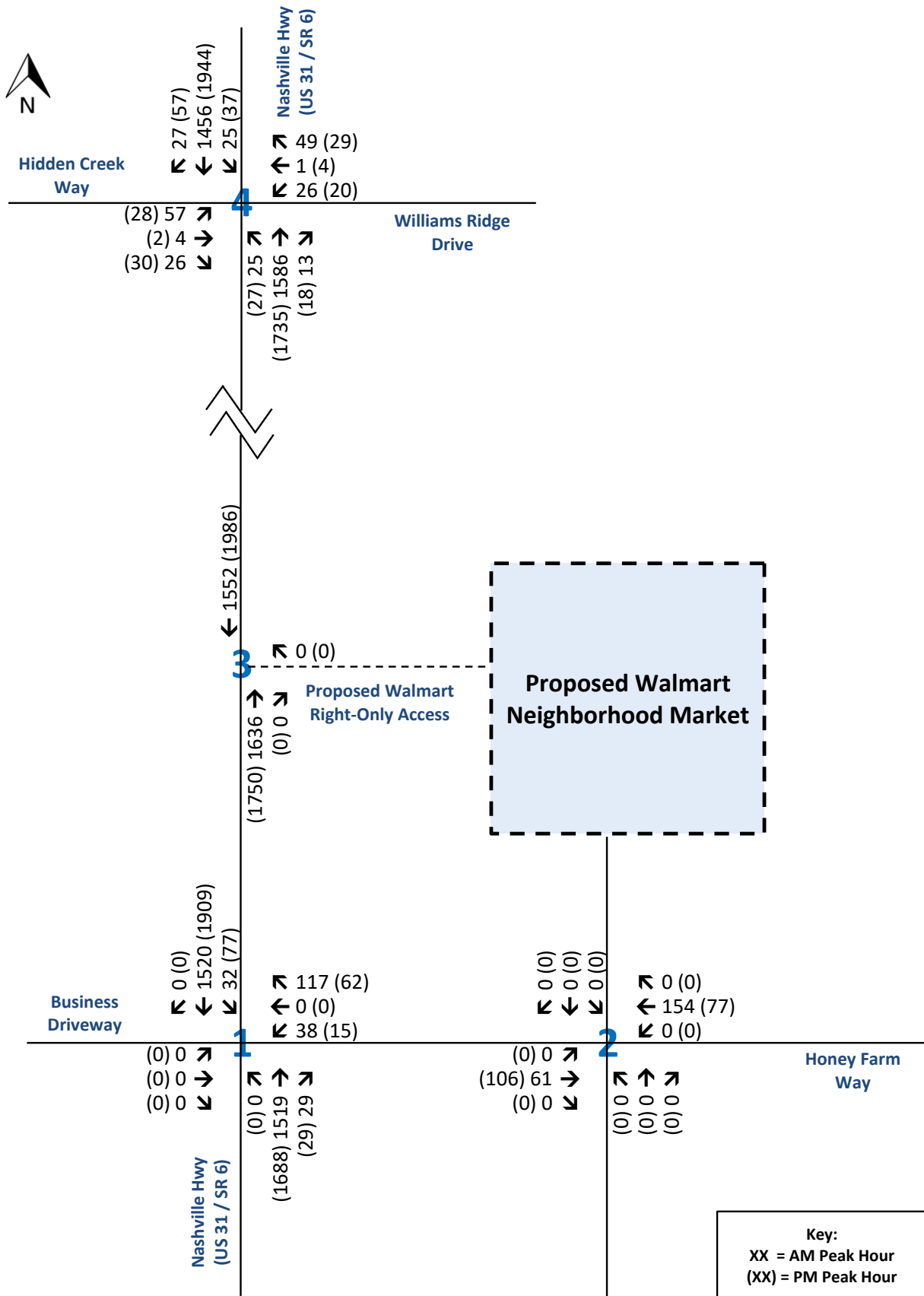
Traffic Assignment Worksheet
Off-Site Traffic Assignment - 2558 Nashville Highway
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





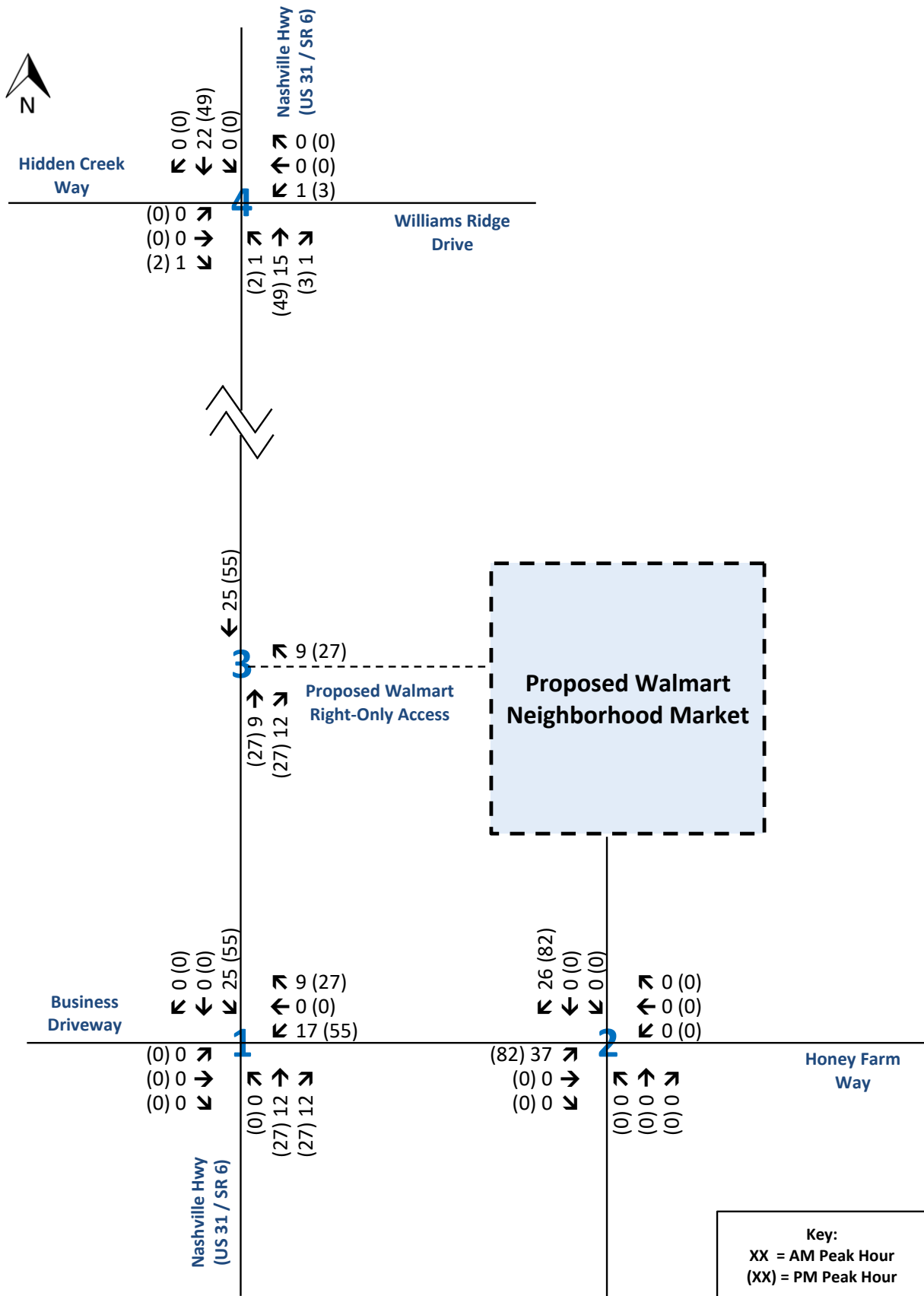
Traffic Assignment Worksheet
Background (Growth + Offsite)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Background Traffic Volumes (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





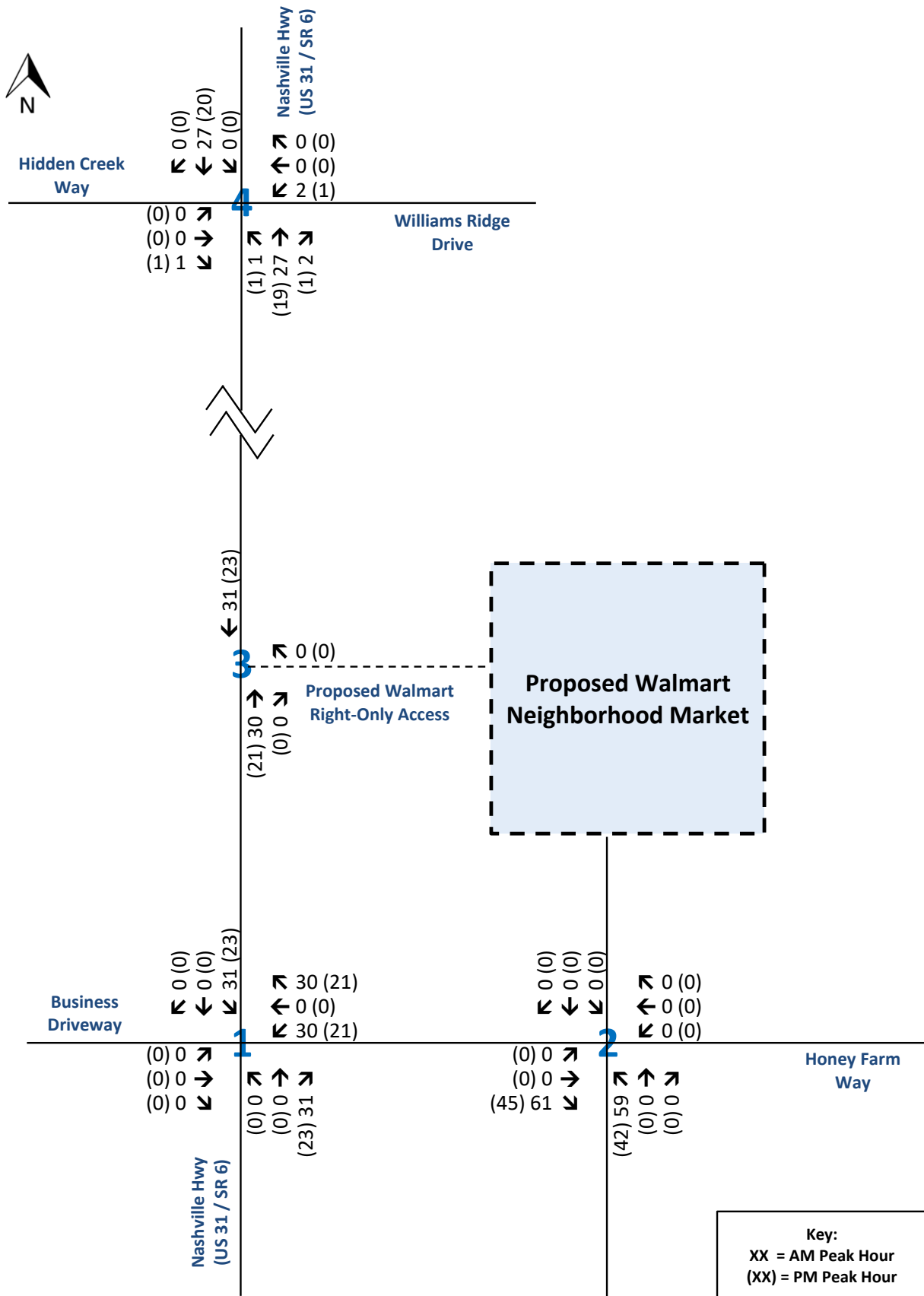
Traffic Assignment Worksheet

Primary Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





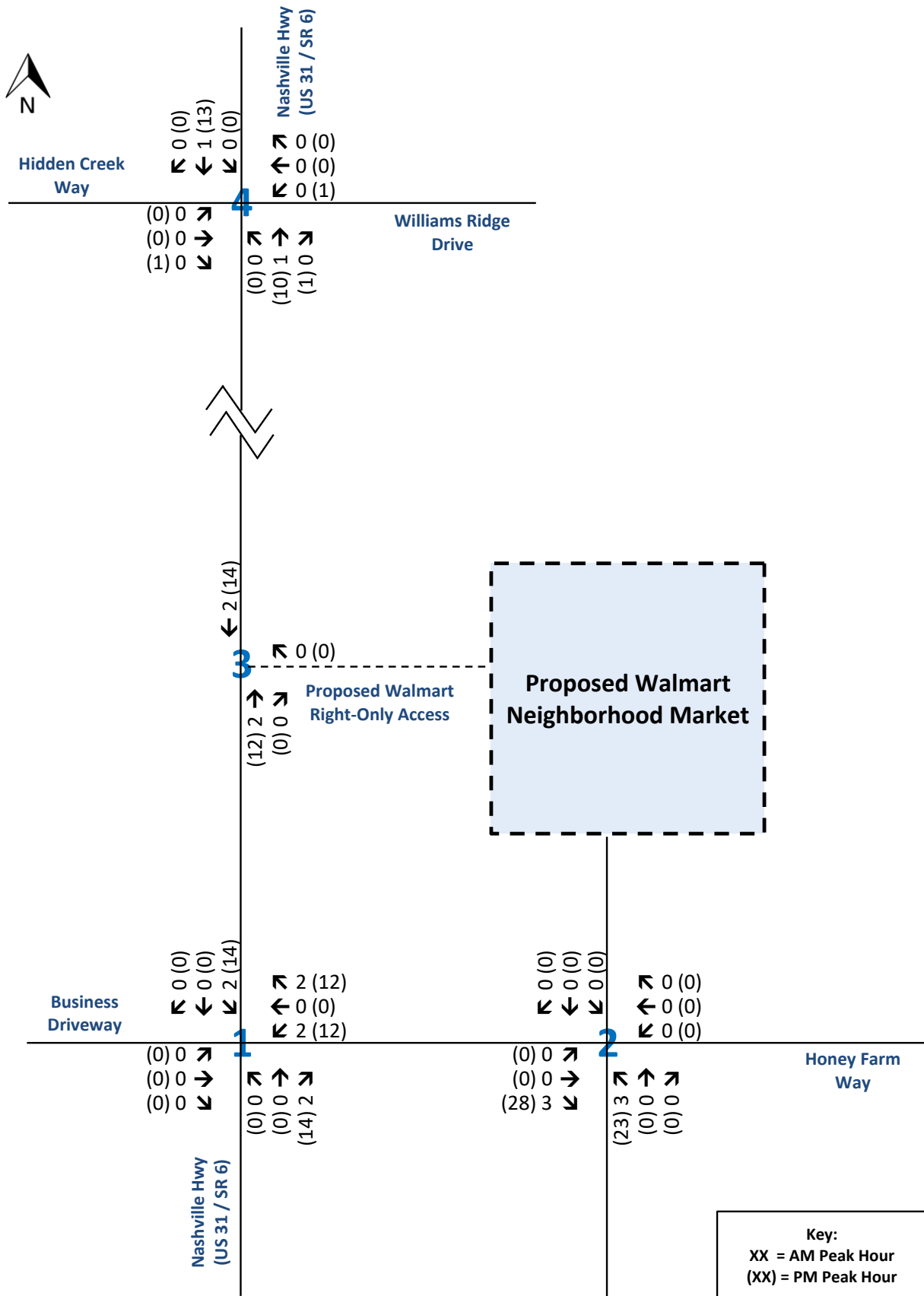
Traffic Assignment Worksheet

Primary Traffic Assignment - Fast-Food Restaurant with Drive-Through

Honey Farm - Walmart Neighborhood Market

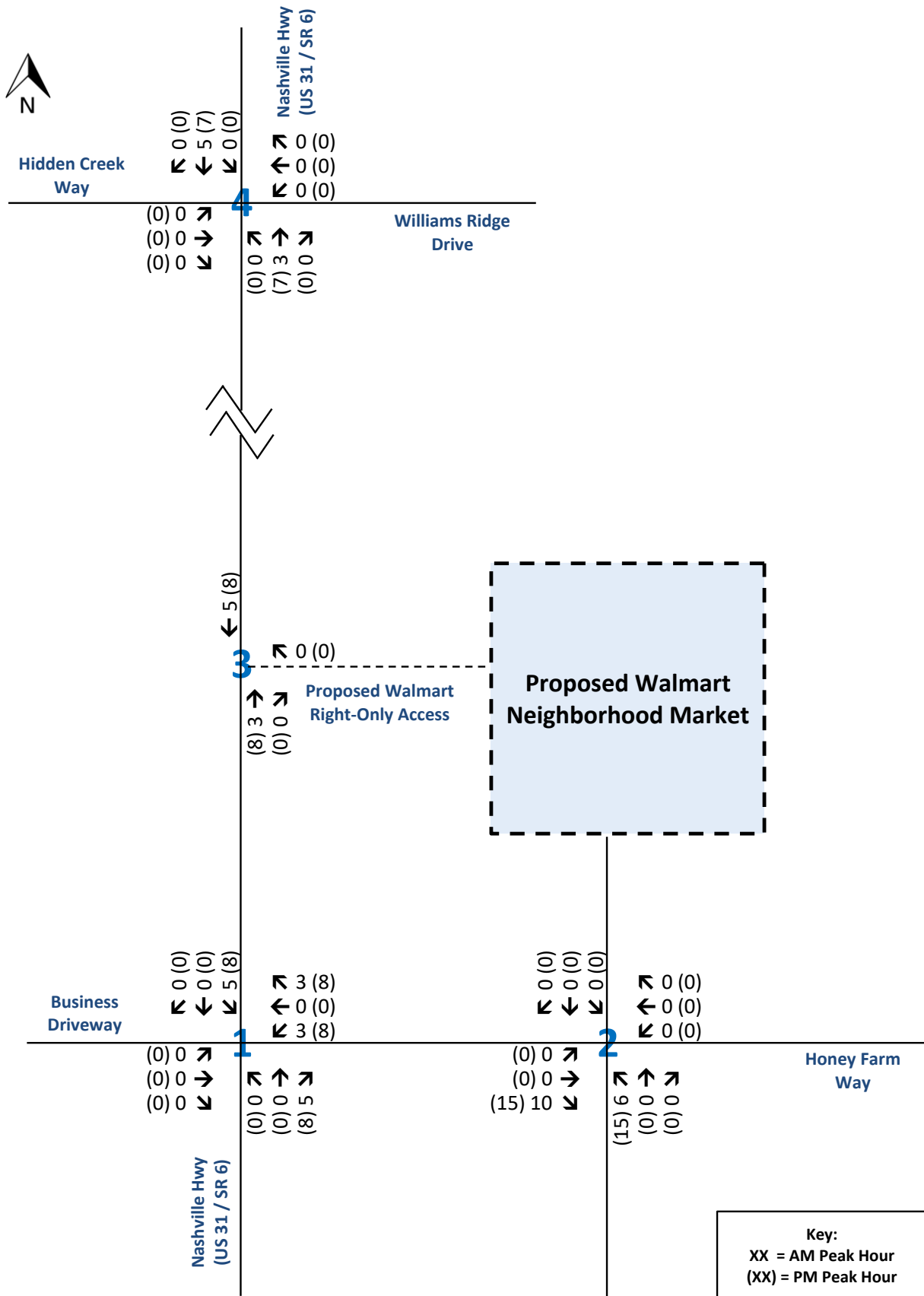
Columbia, Tennessee





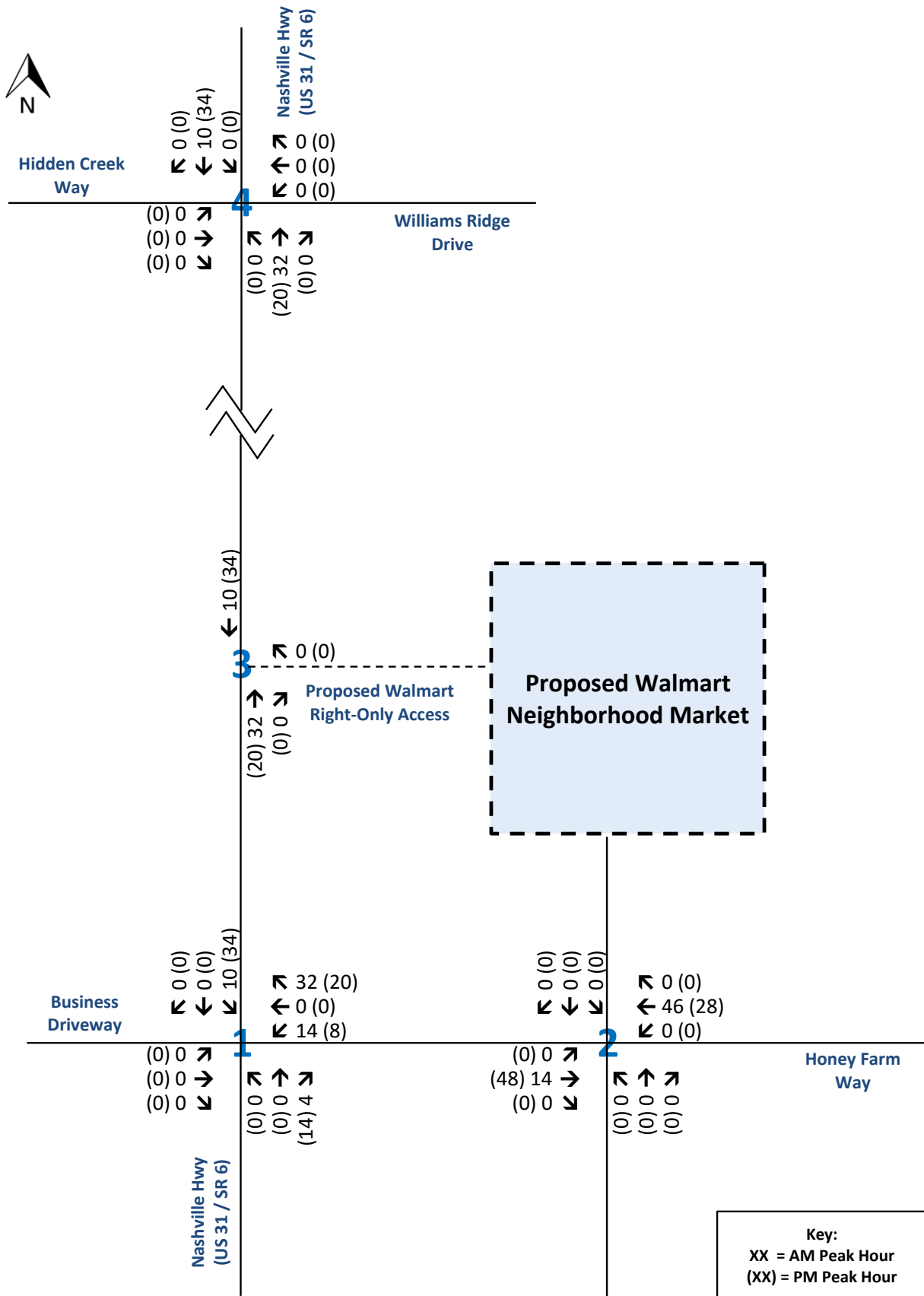
Traffic Assignment Worksheet
Primary Traffic Assignment - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





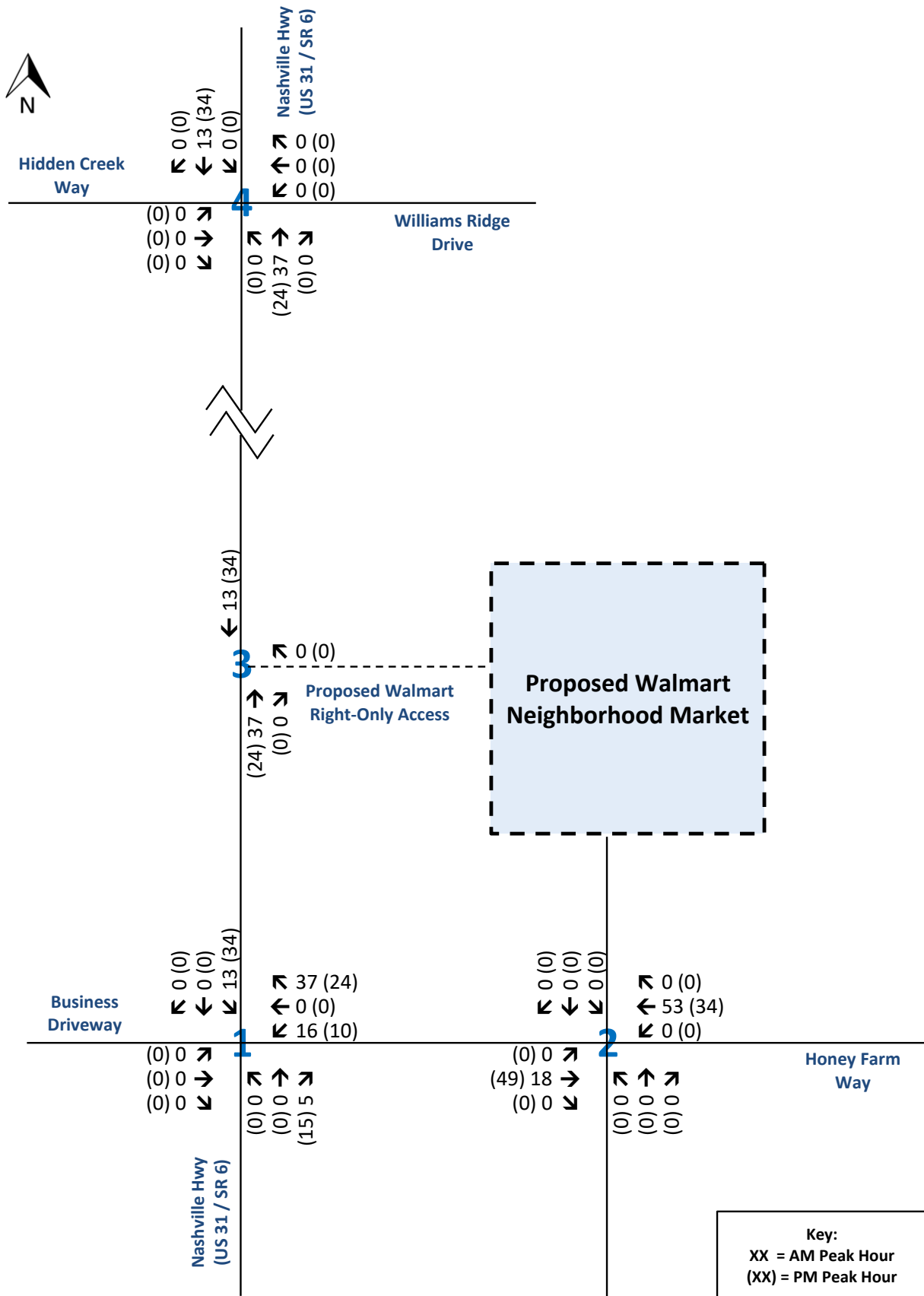
Traffic Assignment Worksheet
Primary Traffic Assignment - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





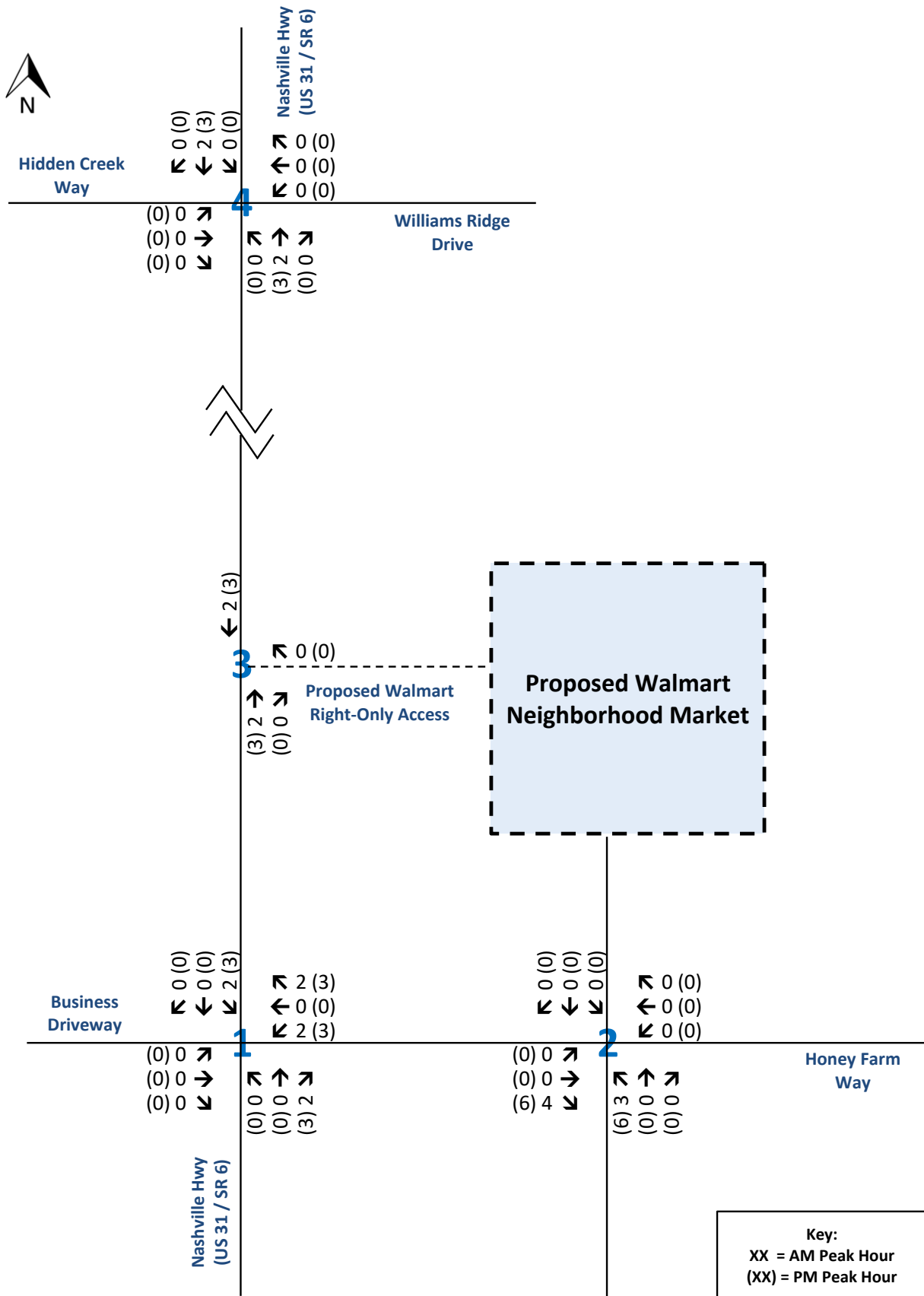
Traffic Assignment Worksheet
Primary Traffic Assignment - Multifamily Housing (Low-Rise)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





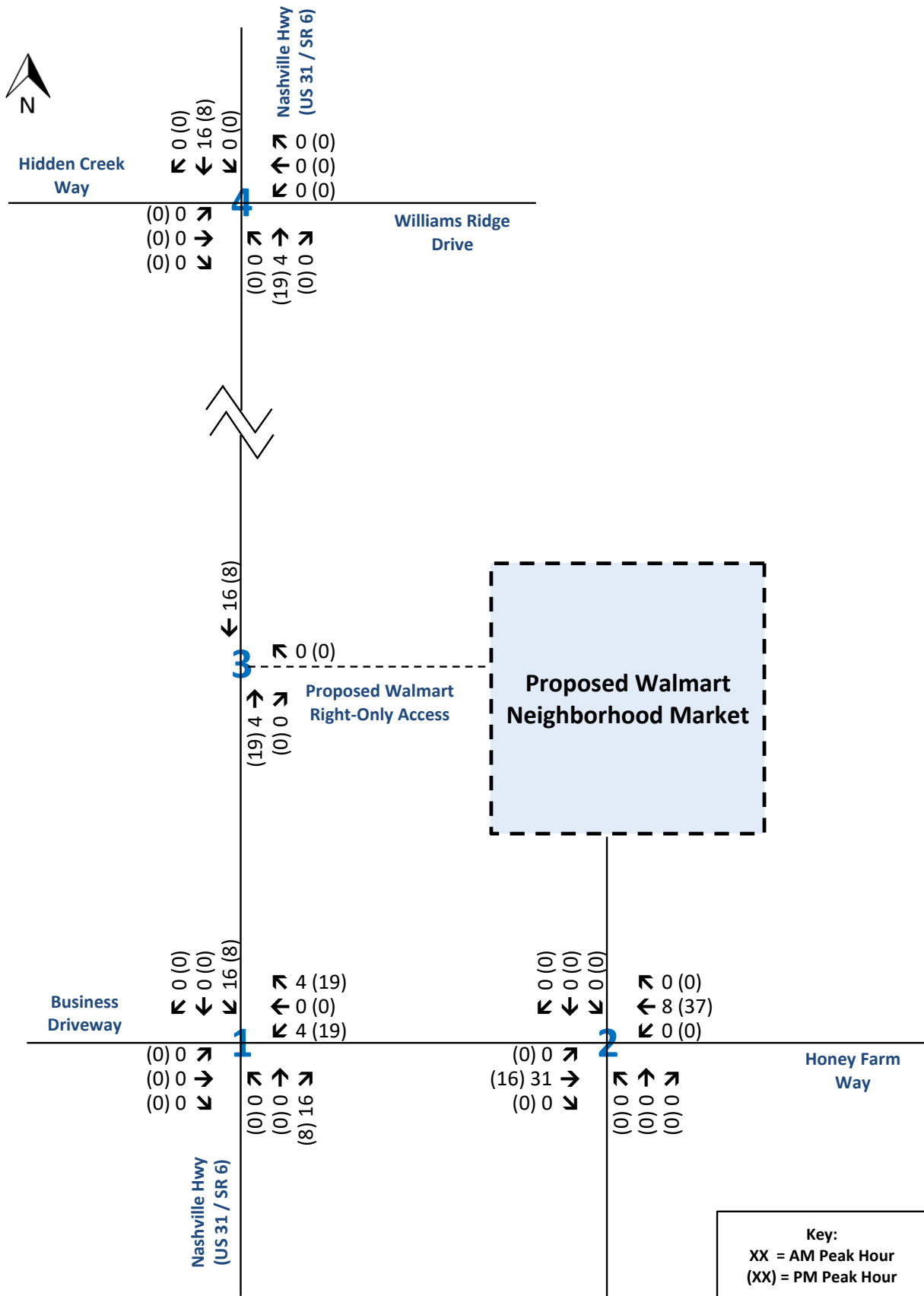
Traffic Assignment Worksheet
Primary Traffic Assignment - Townhomes
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





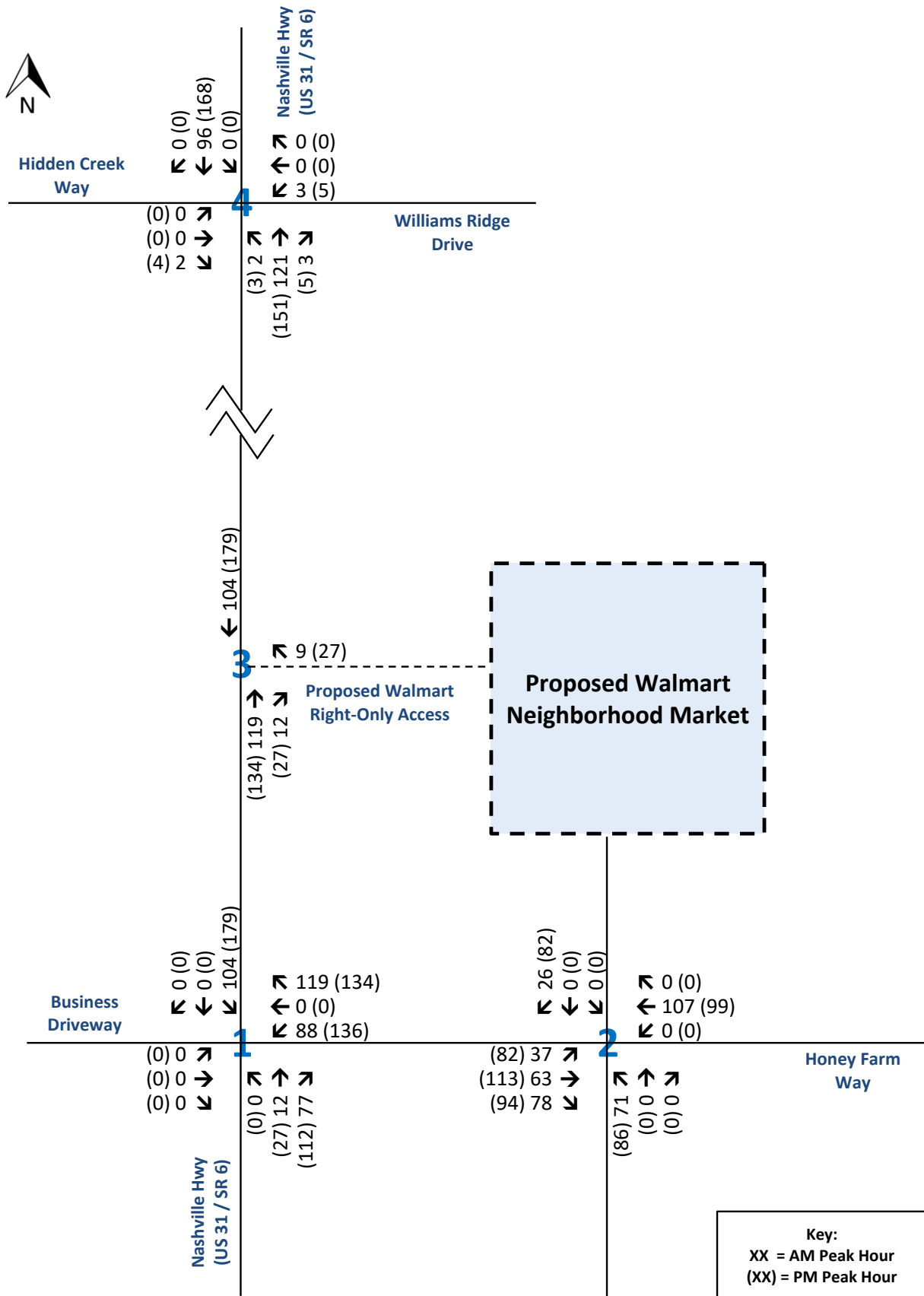
Traffic Assignment Worksheet
Primary Traffic Assignment - Mini-Warehouse
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





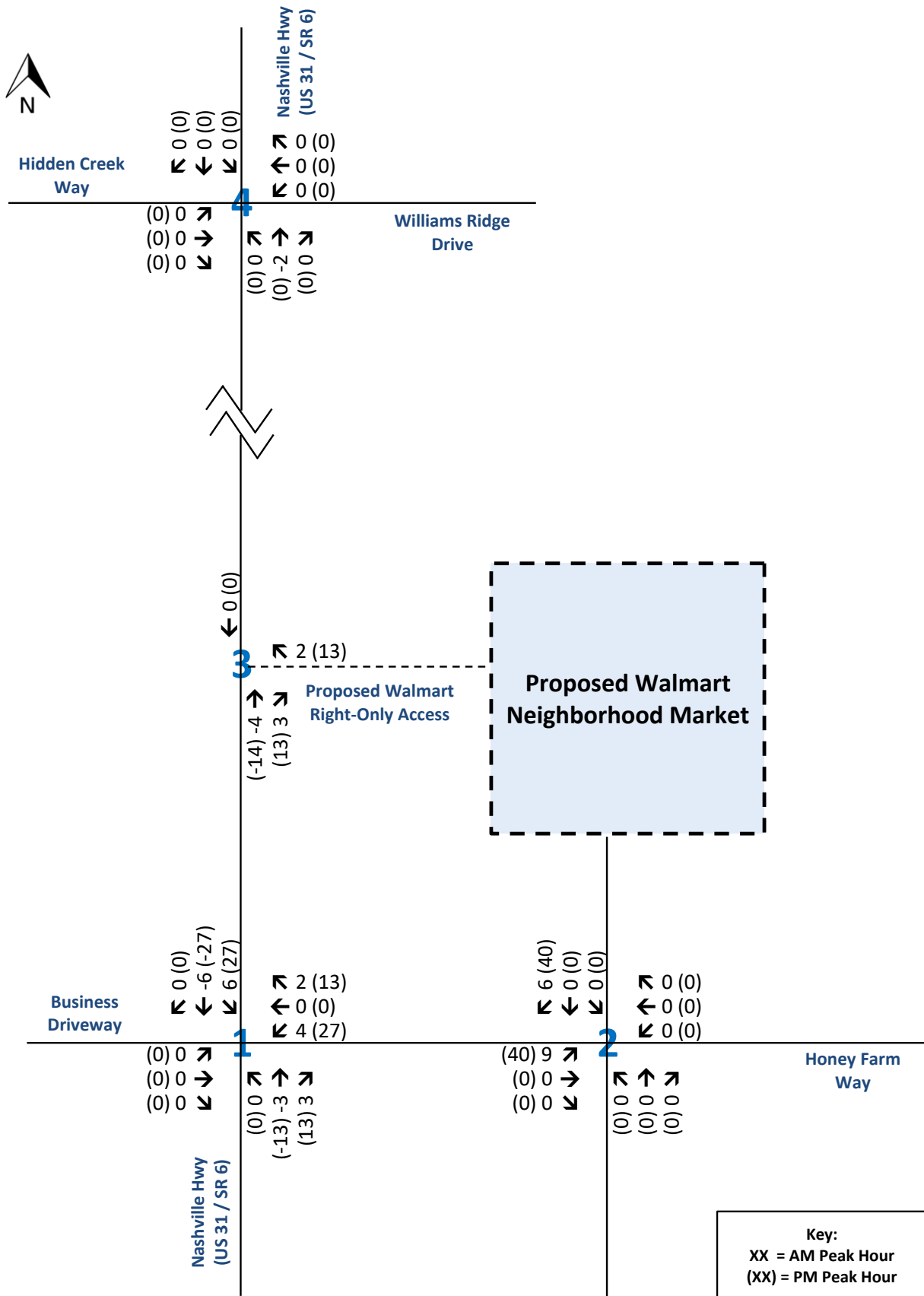
Traffic Assignment Worksheet
Primary Traffic Assignment - Health Department
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Total Primary Traffic Assignment
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





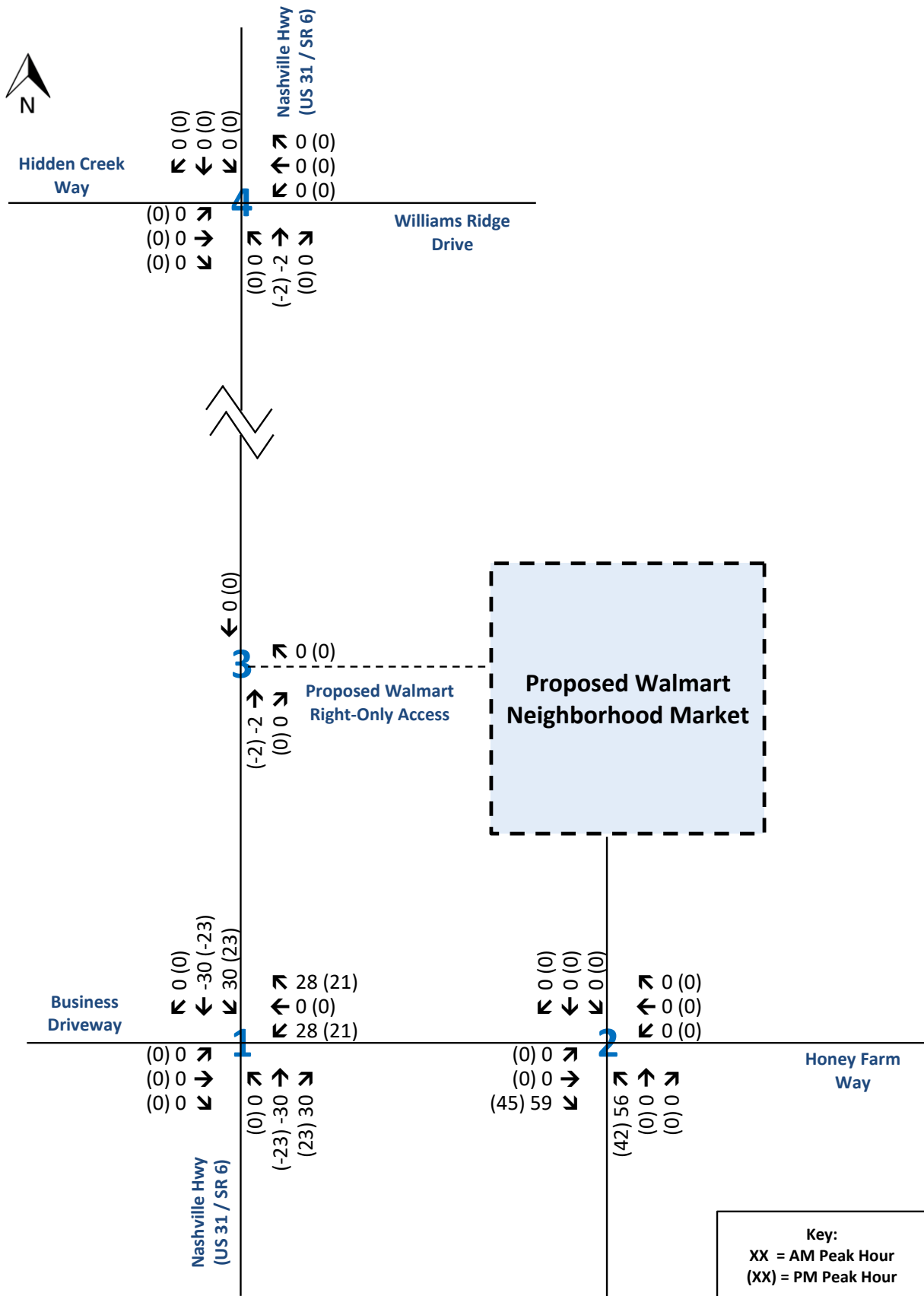
Traffic Assignment Worksheet

Pass-by Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





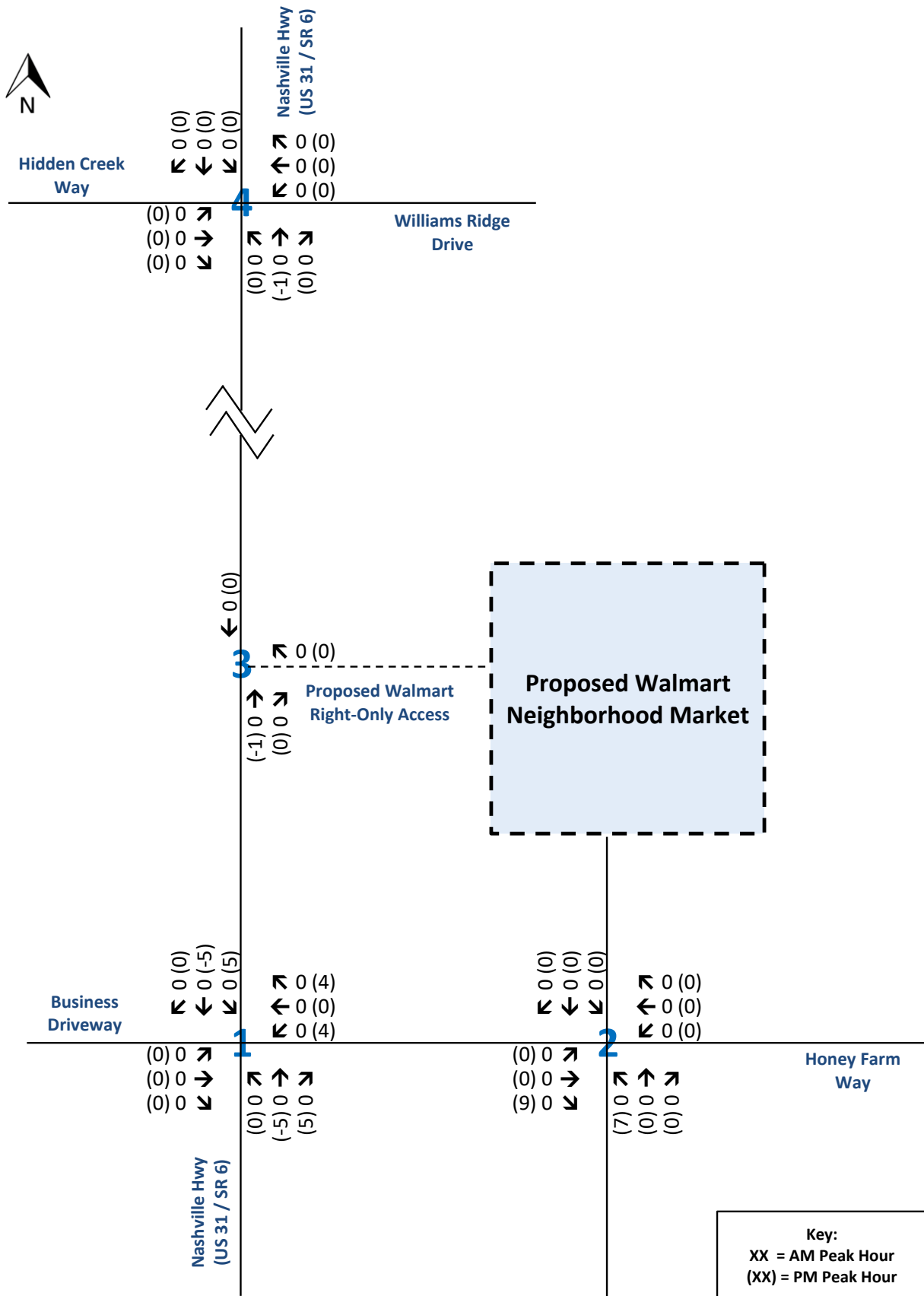
Traffic Assignment Worksheet

Pass-by Traffic Assignment - Fast-Food Restaurant with Drive-Through

Honey Farm - Walmart Neighborhood Market

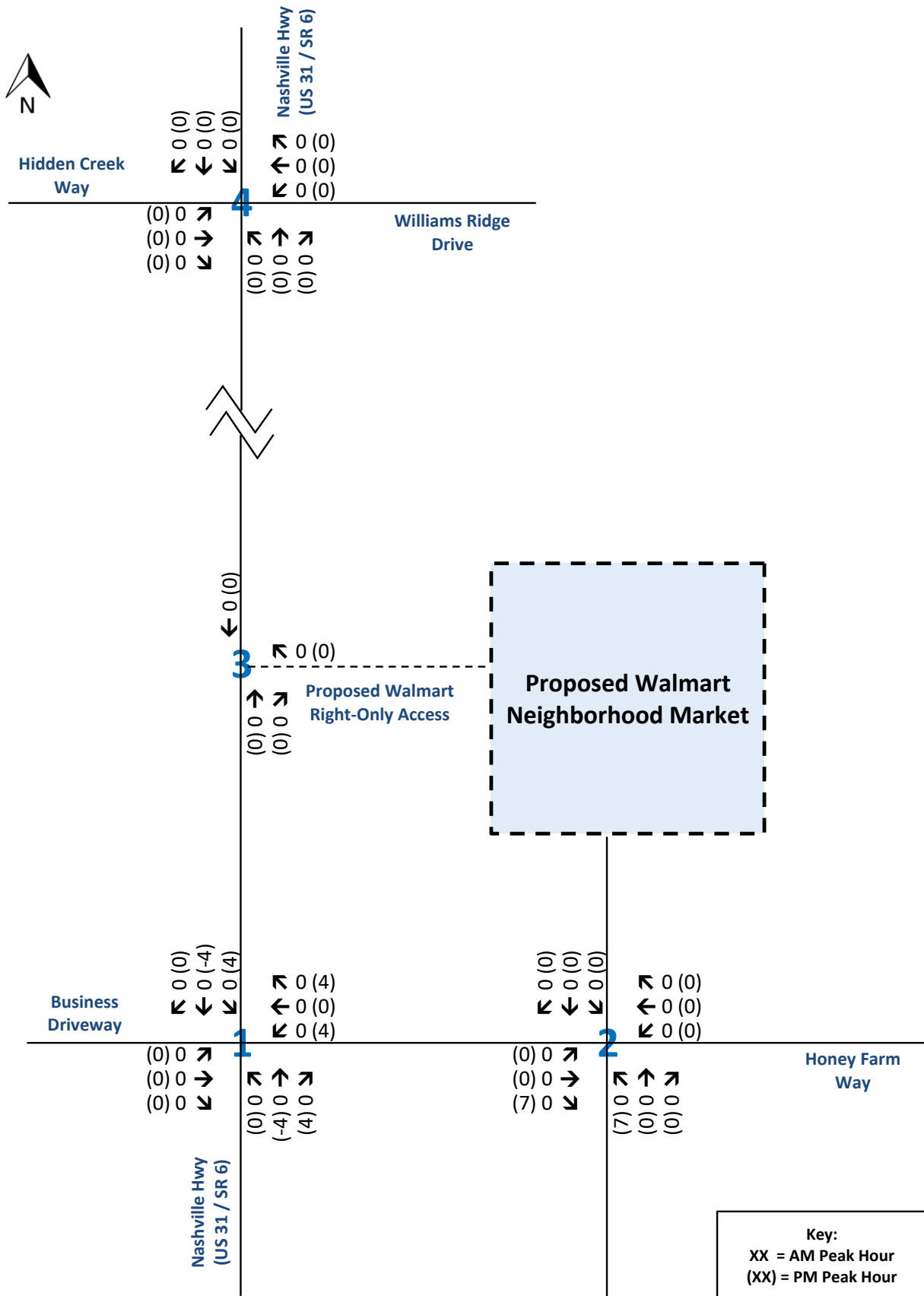
Columbia, Tennessee





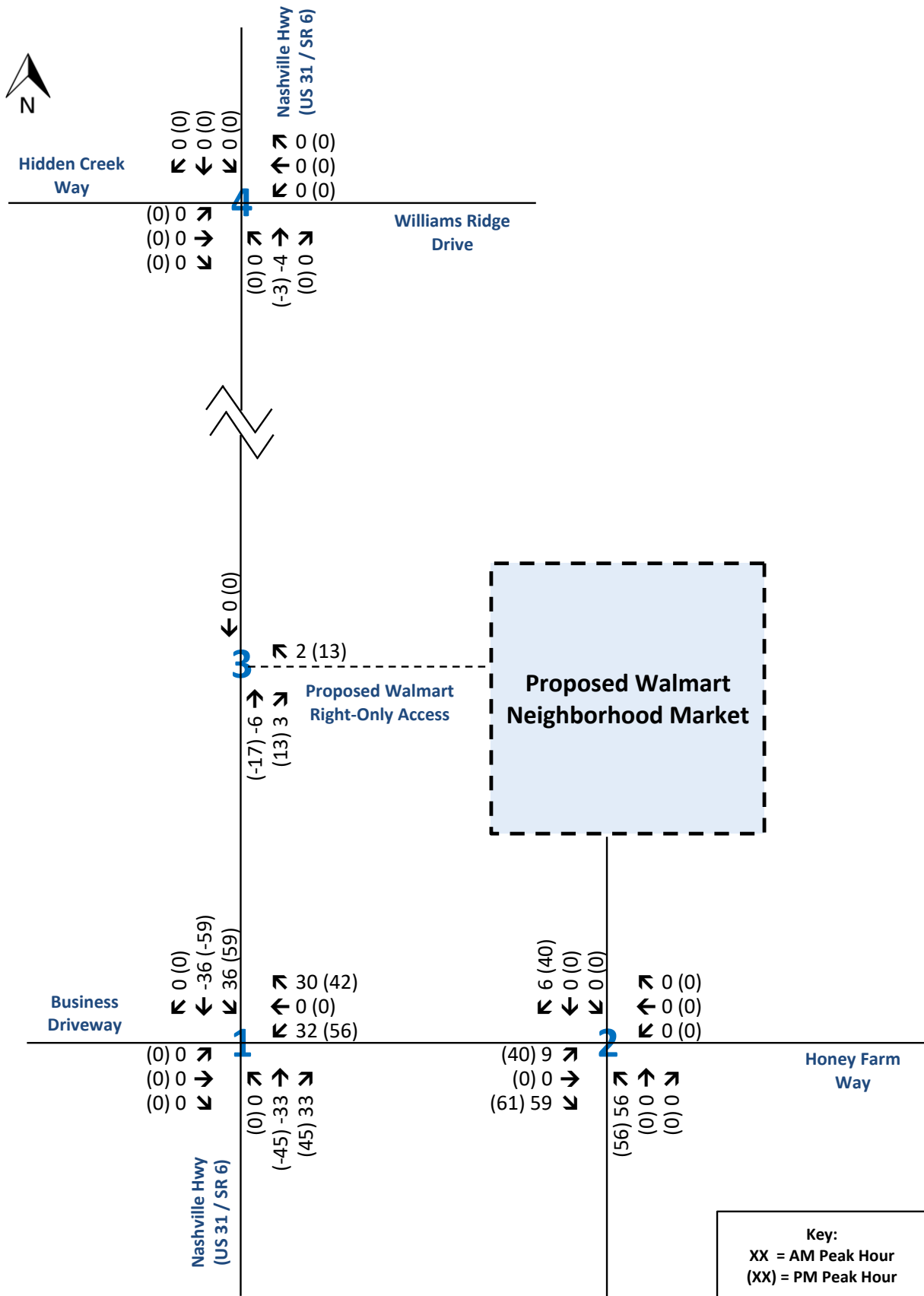
Traffic Assignment Worksheet
Pass-by Traffic Assignment - Fast Casual Restaurant
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





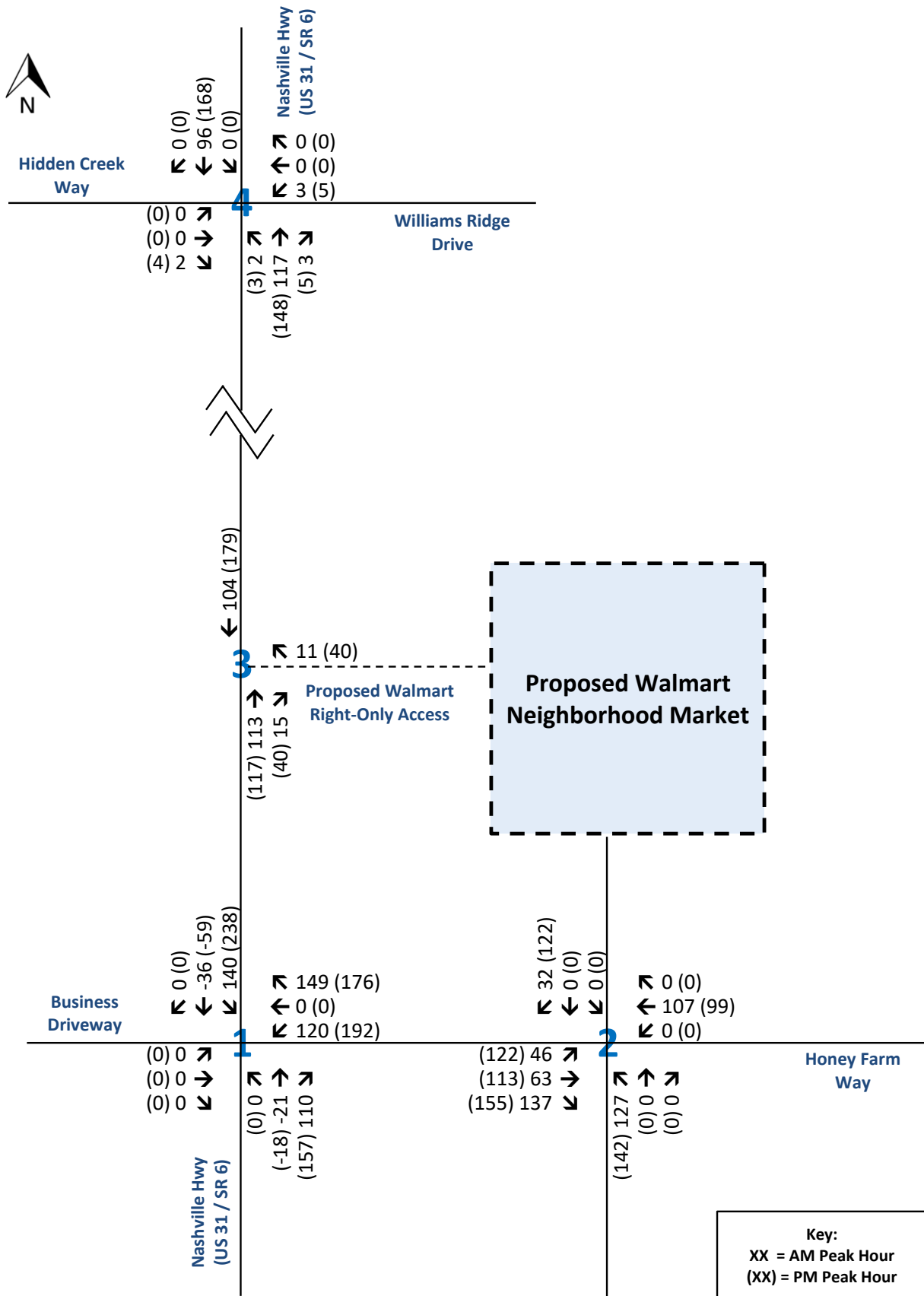
Traffic Assignment Worksheet
Pass-by Traffic Assignment - Future Retail
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Total Passby Traffic Assignment
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



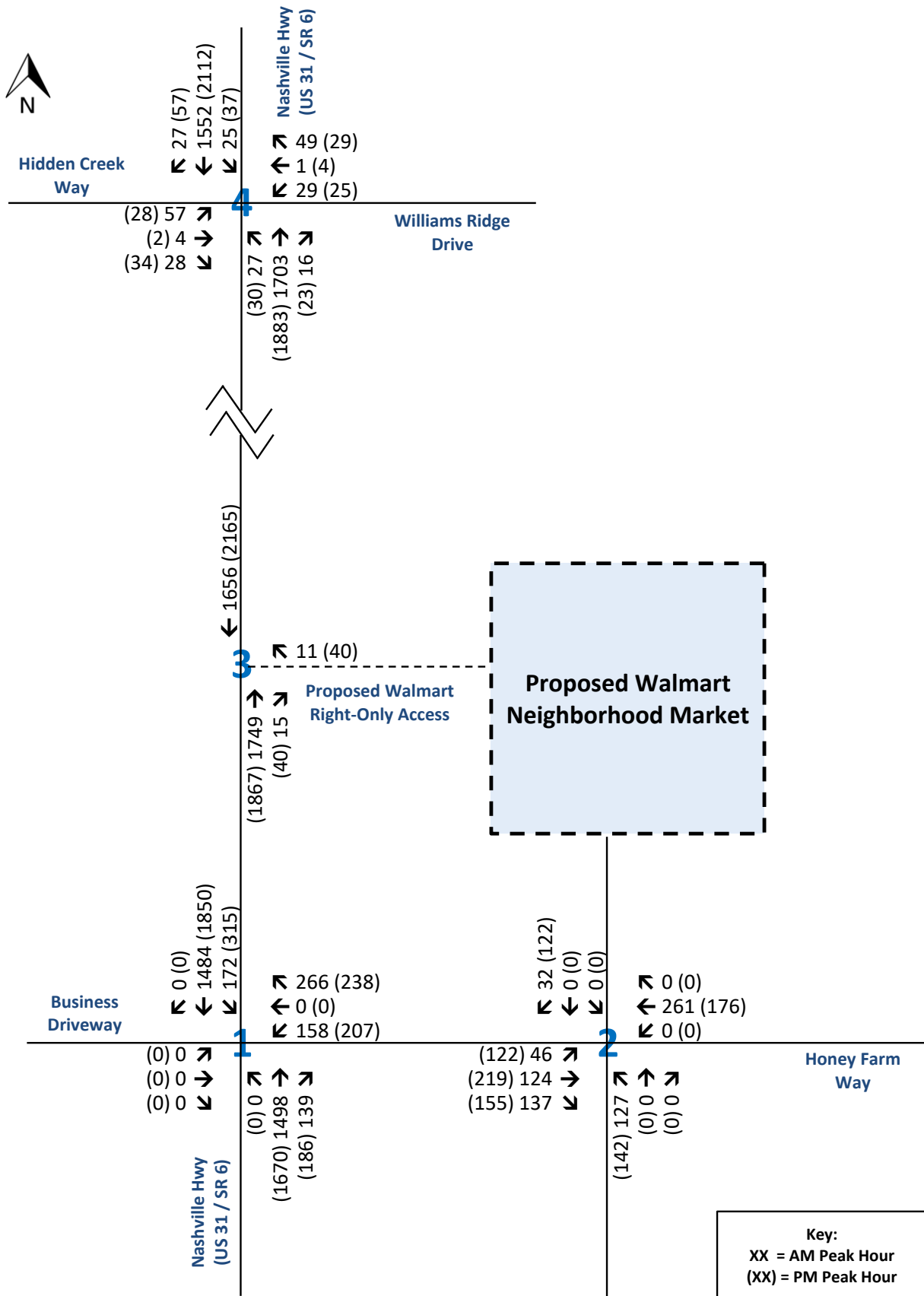


Traffic Assignment Worksheet

Site Generated Traffic

Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Total Projected Traffic at Buildout (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee



TRAFFIC ASSIGNMENT WORKSHEETS

AM PEAK HOUR



Hidden Creek
Way

26
1367
24
47
1
25
54
4
25
24
1503
12

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive

1458

3

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0
1428
30
111
0
36
0
1439
28

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

0
0
0
0
147
0
58
0
0
0
0

2

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Existing Traffic Volumes (2024)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

0 0
0 21
0 0

Nashville Hwy
(US 31 / SR 6)

0 0
0 0
0 0

Williams Ridge
Drive



0 21
0 0

3

0 0
0 0

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0 0
0 21
0 0

1

0 0
0 0
0 0

Honey Farm
Way

Nashville Hwy
(US 31 / SR 6)

0 0
0 8
0 0

0 0
0 0
0 0

2

0 0
0 0
0 0

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Off-Site Traffic Assignment - 2558 Nashville Highway
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

1
0
1

89
→
→

Nashville Hwy
(US 31 / SR 6)

2
0
1

Williams Ridge
Drive

94
←

86
→

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0
0
0

92
←
→

2
0
1

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

0
3
0

0
→
→

0
0
0

0
←
←

7
0
0

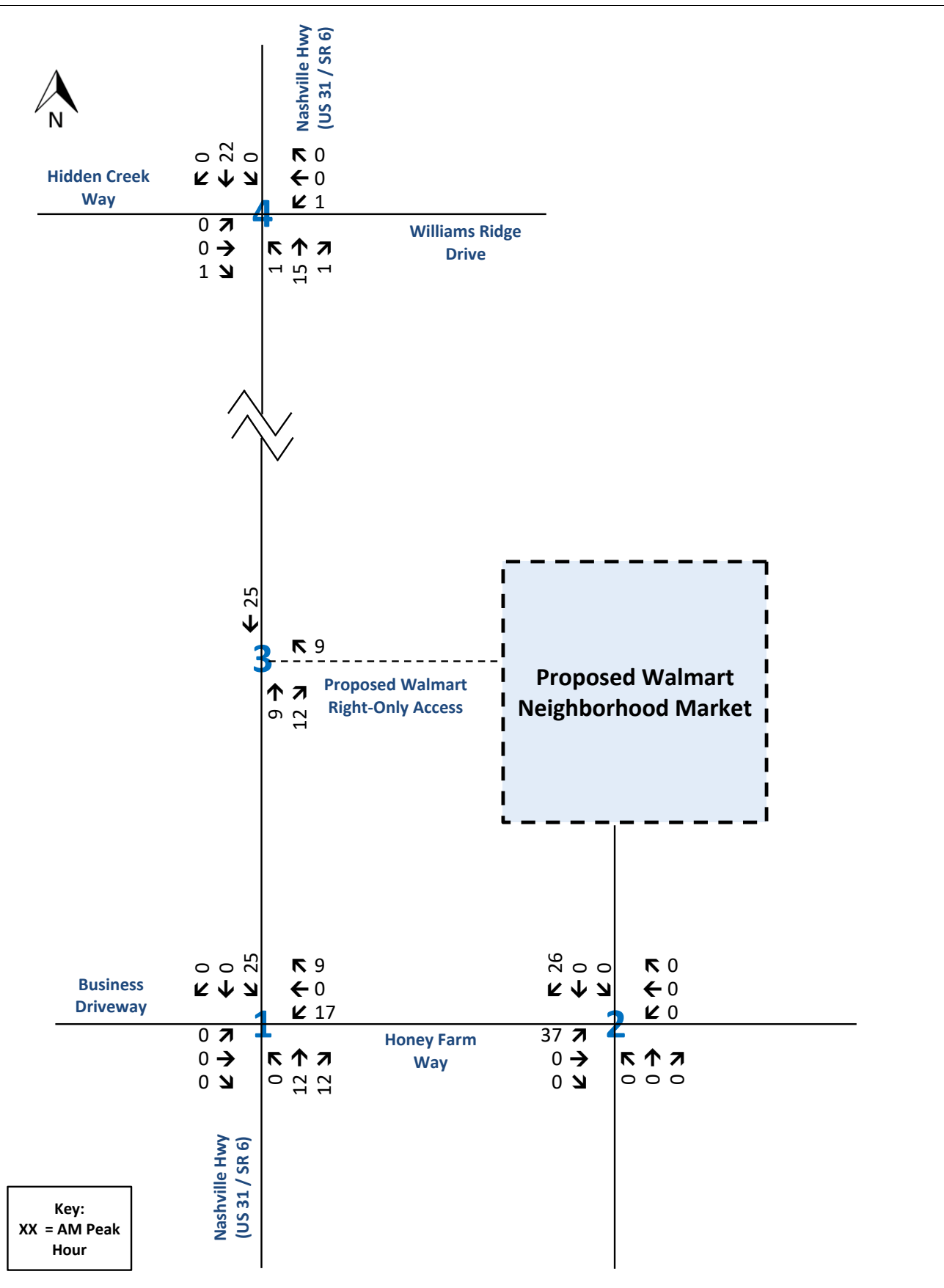
Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet

Background (Growth + Offsite)

Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





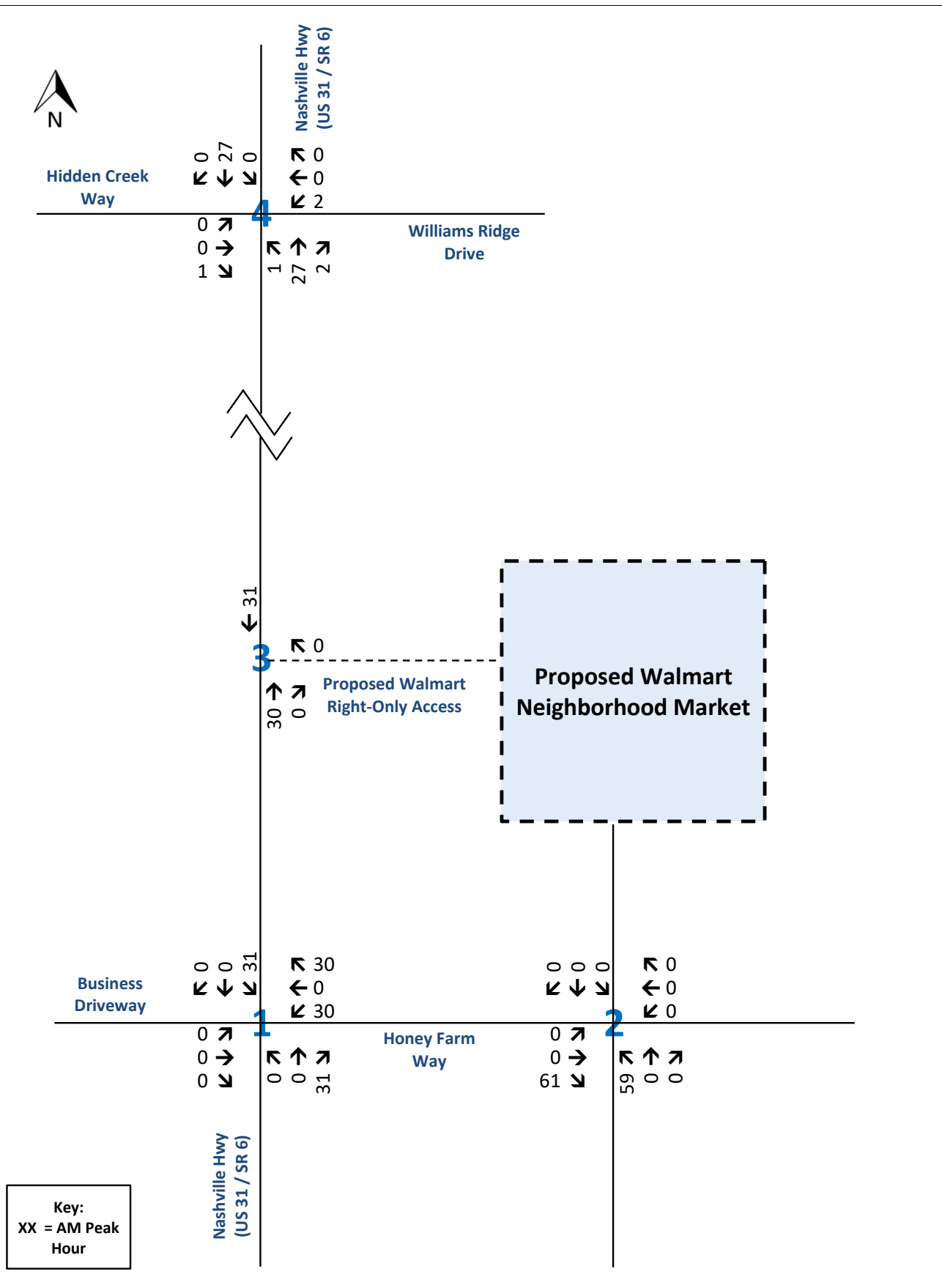
Traffic Assignment Worksheet

Primary Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Traffic Assignment Worksheet
Primary Traffic Assignment - Fast-Food Restaurant with Drive-Through
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Hidden Creek
Way

0 0
0 1
0 0

Nashville Hwy
(US 31 / SR 6)

0 0
0 0
0 0

Williams Ridge
Drive

4

0 0
0 1
0 0



2
3

0 0

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0 0
0 0
0 2

0 2
0 0
0 2

Honey Farm
Way

0 0
0 0
3 0

0 0
0 0
0 0

0 0
0 0
0 0

Nashville Hwy
(US 31 / SR 6)

1

0 0
0 0
0 2

2

0 0
0 0
0 0

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Fast Casual Restaurant
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

0 0
0 5
0 0

Nashville Hwy
(US 31 / SR 6)

0 0
0 0
0 0

Williams Ridge
Drive

0 0
0 3
0 0



0 5
3 0

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0 0
0 0
0 5

0 3
0 0
0 3

Honey Farm
Way

0 0
0 0
0 5

0 0
0 0
10 0

0 0
0 0
0 0

0 0
6 0
0 0

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Future Retail
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

0
0
0

0
0
0

0
0
0

0
0
0

Nashville Hwy
(US 31 / SR 6)

0
0
0

0
0
0

Williams Ridge
Drive



0
0
0

0
0
0

0
0
0

0
0
0

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0
0
0

0
0
0

0
0
0

0
0
0

0
0
0

0
0
0

Honey Farm
Way

0
0
0

0
0
0

0
0
0

0
0
0

0
0
0

0
0
0

Key:
XX = AM Peak
Hour

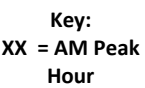
Traffic Assignment Worksheet

Primary Traffic Assignment - Multifamily Housing (Low-Rise)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

0
0
0

←
→
↘

4

Nashville Hwy
(US 31 / SR 6)

0
0
0

↗
←
←

Williams Ridge
Drive

0
2
0

↗
↗
↗



← 2

3

2
0

↗
↗

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0
0
0

←
←
↘

1

Nashville Hwy
(US 31 / SR 6)

0
0
0

↗
←
←

Honey Farm
Way

0
0
4

↗
→
↘

2

0
0
3

↗
←
↗

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Mini-Warehouse
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

0 0
0 16
0 0

Nashville Hwy
(US 31 / SR 6)

0 0
0 0
0 0

Williams Ridge
Drive



0 16
3

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0 0
0 0
0 16

Nashville Hwy
(US 31 / SR 6)

0 4
0 0
0 4
0 0
0 16

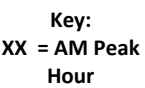
Honey Farm
Way

0 0 0
0 0 0
31 0
0 0 0

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Health Department
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



Hidden Creek
Way

0
0
0

0
0
0

Nashville Hwy
(US 31 / SR 6)

0
0
0

0
-2
0

Williams Ridge
Drive



0
0

3

-2
0
0

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0
0
0

0
0
0

Nashville Hwy
(US 31 / SR 6)

0
-30
30

0
-30
30

Honey Farm
Way

0
0
0

0
0
59

2

56
0
0

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet

Pass-by Traffic Assignment - Fast-Food Restaurant with Drive-Through

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Hidden Creek
Way

0 0 0
← ↓ →

Nashville Hwy
(US 31 / SR 6)

↗ 0
← 0
← 0

Williams Ridge
Drive

0 ↗
0 →
0 ↘

4

↖ 0
↗ 0
↘ 0



← 0

3

↖ 0

Proposed Walmart
Right-Only Access

↗ 0
↘ 0

Proposed Walmart
Neighborhood Market

Business
Driveway

0 0 0
← ↓ →

↗ 0
← 0
← 0

Honey Farm
Way

0 ↗
0 →
0 ↘

↖ 0
↗ 0
↘ 0

Nashville Hwy
(US 31 / SR 6)

1

0 0 0
← ↓ →

↗ 0
← 0
← 0

2

0 ↗
0 →
0 ↘

↖ 0
↗ 0
↘ 0

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Pass-by Traffic Assignment - Fast Casual Restaurant
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

0 0 0
← ↓ →

Nashville Hwy
(US 31 / SR 6)

↗ 0
← 0
← 0

Williams Ridge
Drive

0 ↗
0 →
0 ↘

4

↖ 0
↑ 0
↗ 0



← 0

3

↖ 0

Proposed Walmart
Right-Only Access

↑ 0
↗ 0

Proposed Walmart
Neighborhood Market

Business
Driveway

0 0 0
← ↓ →

↗ 0
← 0
← 0

Honey Farm
Way

0 ↗
0 →
0 ↘

↖ 0
↑ 0
↗ 0

Nashville Hwy
(US 31 / SR 6)

1

0 0 0
← ↓ →

↗ 0
← 0
← 0

2

0 ↗
0 →
0 ↘

↖ 0
↑ 0
↗ 0

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Pass-by Traffic Assignment - Future Retail
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

0
0
0

0
0
0

4

Nashville Hwy
(US 31 / SR 6)

0
0
0

0
-4
0

Williams Ridge
Drive



0

3

2

-6
3

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0
0
0

0
0
0

0

1

-36
36

0
0
0

-33
33

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

6
0
0

9
0
59

0
0
0

2

56
0
0

Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Total Passby Traffic Assignment
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

27
1552
25
49
1
29
57
4
28
27
1703
16

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive

1656

11

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

0
1484
172
266
0
158
0
1498
139

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

32
0
0
0
261
0
46
124
137
127
0
0

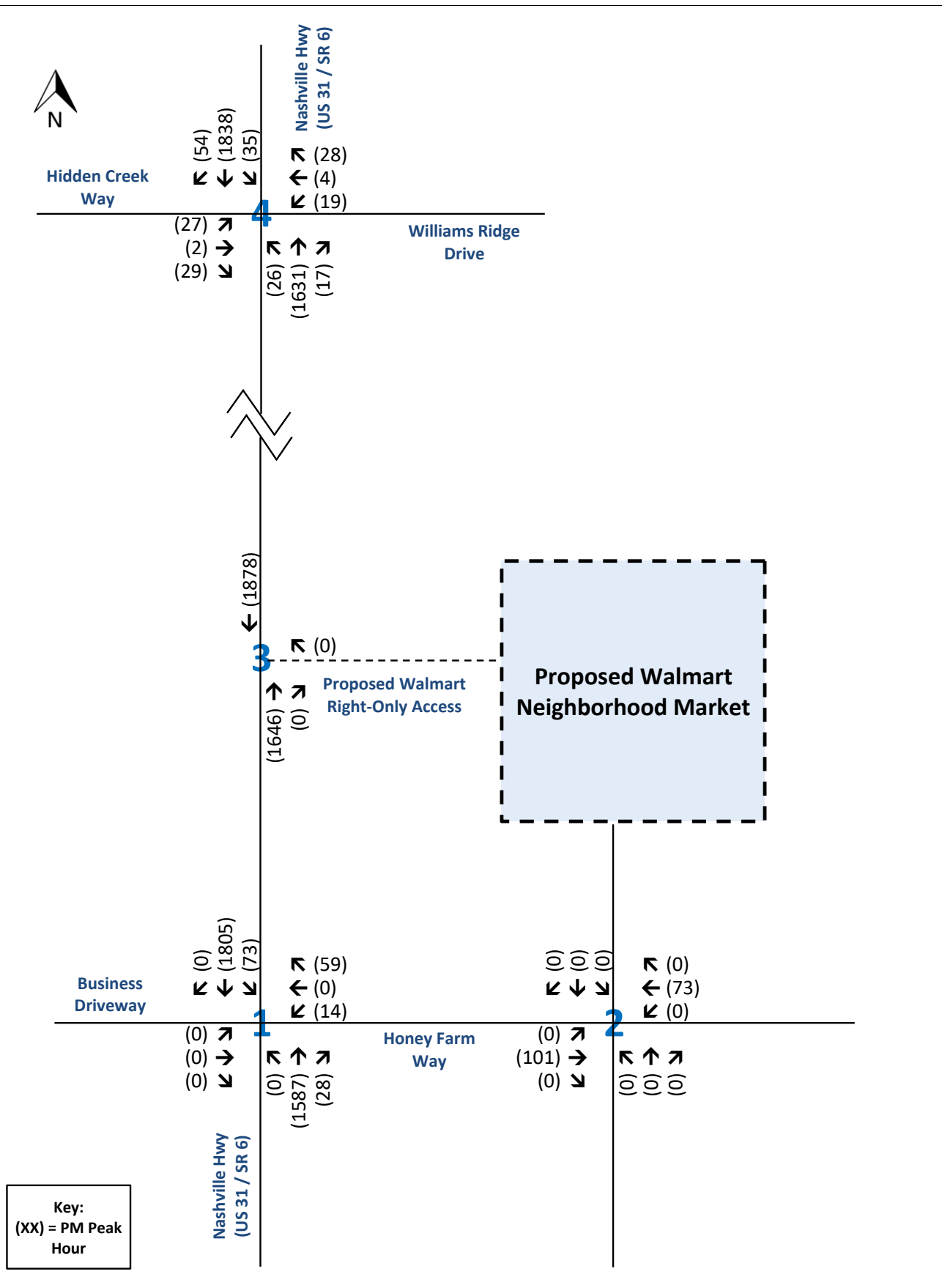
Key:
XX = AM Peak
Hour

Traffic Assignment Worksheet
Total Projected Traffic at Buildout (2026)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



TRAFFIC ASSIGNMENT WORKSHEETS

PM PEAK HOUR



Traffic Assignment Worksheet
Existing Traffic Volumes (2024)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Hidden Creek
Way

(3) ↖
(92) ←
(2) ↓
(1) ↗
(0) →
(1) ↘

Nashville Hwy
(US 31 / SR 6)

↗ (1)
← (0)
↖ (1)

Williams Ridge
Drive

↗ (1)
↘ (82)
↗ (1)



← (94)

↗ (0)
↗ (82)
↗ (0)

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

(0) ↖
(90) ←
(4) ↓
(0) ↗
(0) →
(0) ↘
(0) ↗
(79) ↑
(1) ↗

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

(0) ↖
(0) ↓
(0) ↘
(0) ↗
(4) ←
(0) ↖
(0) ↗
(5) →
(0) ↘
(0) ↗
(0) ↘
(0) ↘

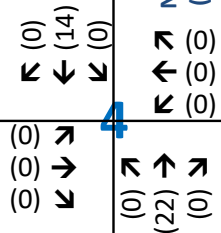
Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Background - Historical Growth Only (2026)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



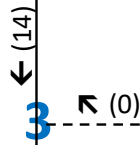


Hidden Creek
Way



Nashville Hwy
(US 31 / SR 6)

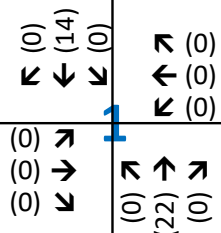
Williams Ridge
Drive



Proposed Walmart
Right-Only Access

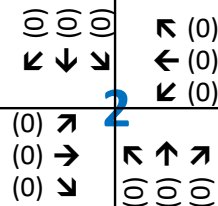
Proposed Walmart
Neighborhood Market

Business
Driveway



Nashville Hwy
(US 31 / SR 6)

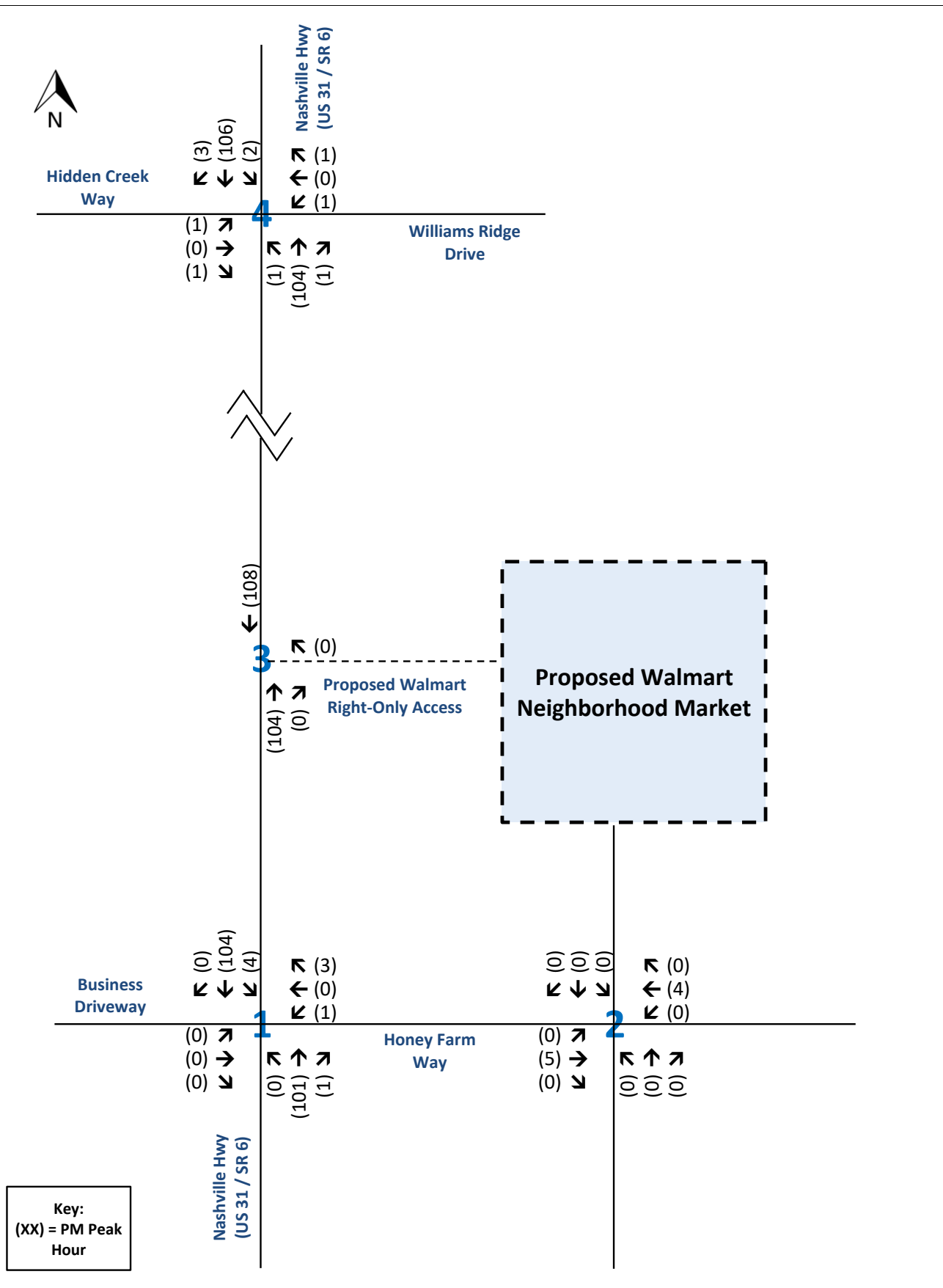
Honey Farm
Way



Key:
(XX) = PM Peak
Hour

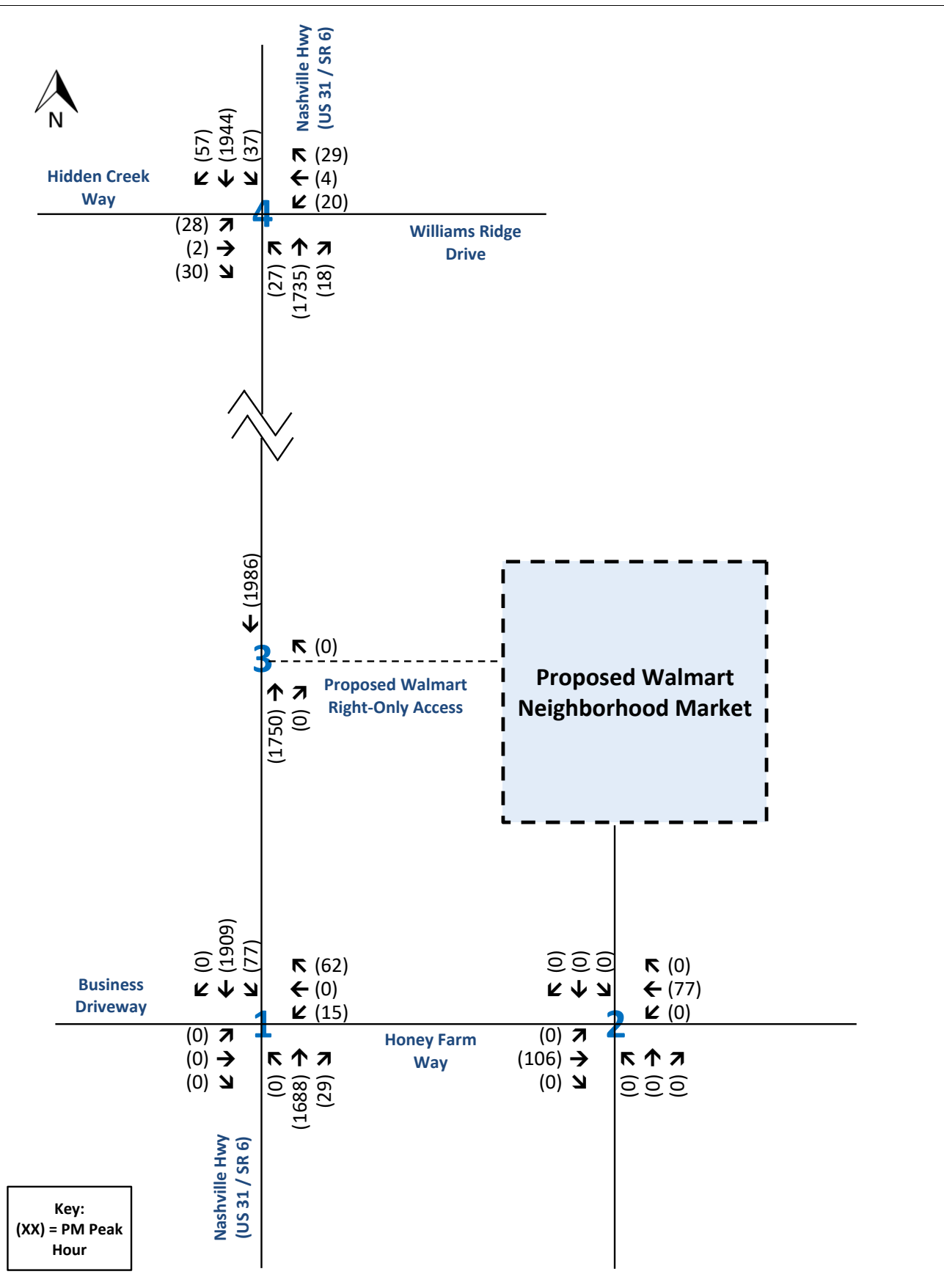
Traffic Assignment Worksheet
Off-Site Traffic Assignment - 2558 Nashville Highway
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





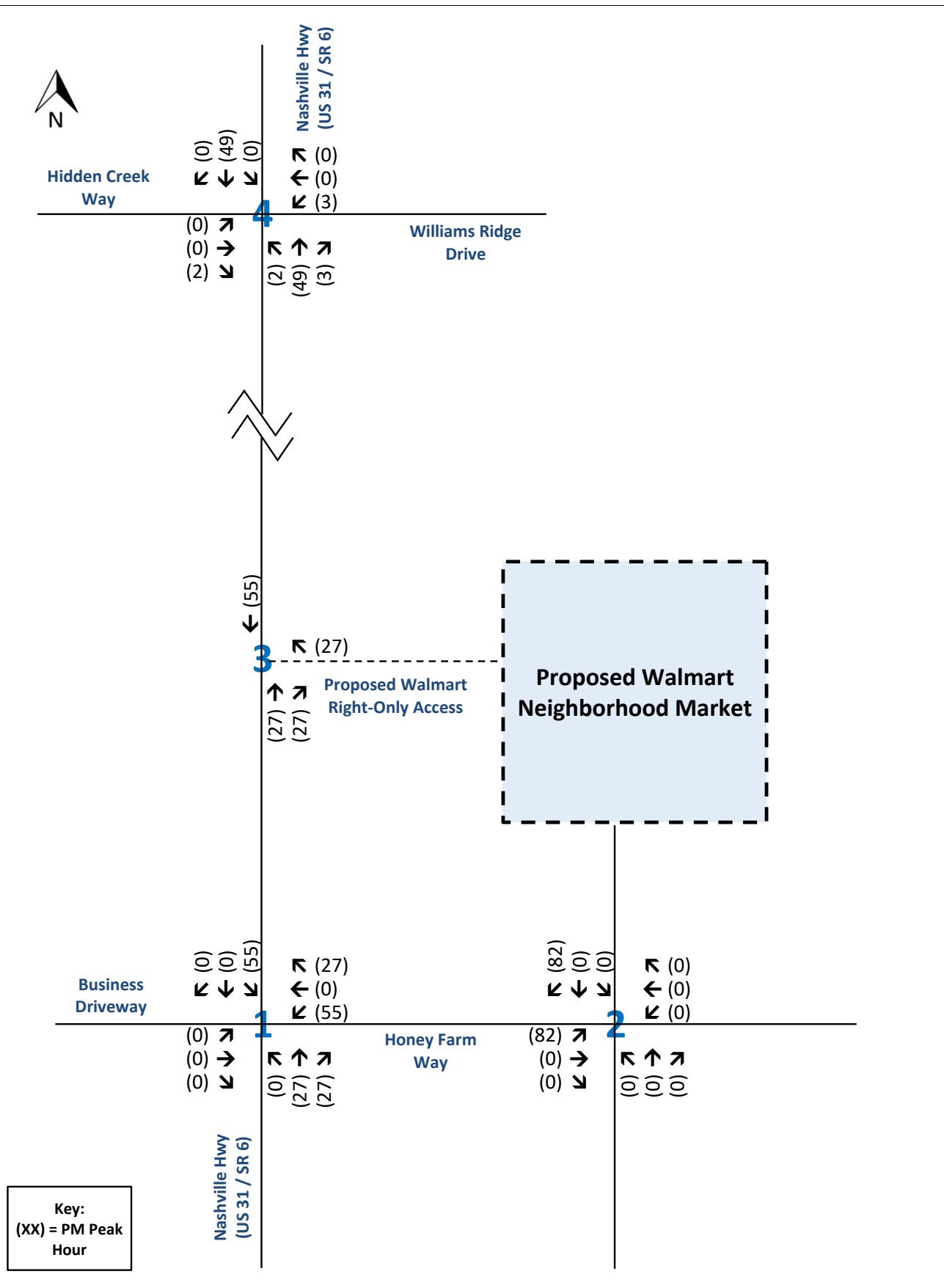
Traffic Assignment Worksheet
Background (Growth + Offsite)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet
Background Traffic Volumes (2026)
 Honey Farm - Walmart Neighborhood Market
 Columbia, Tennessee





Traffic Assignment Worksheet

Primary Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Hidden Creek
Way

(0) (0) (0)
← ↓ ↘
(0) (0) (0)
→ ↘ ↘
(1) (1) (1)

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive



← (23)
3

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

(0) (0) (23)
← ↓ ↘
(0) (0) (0)
→ ↘ ↘
(0) (0) (23)

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

(0) (0) (0)
← ↓ ↘
(0) (0) (0)
→ ↘ ↘
(45) (42) (0) (0)

Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet

Primary Traffic Assignment - Fast-Food Restaurant with Drive-Through

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Hidden Creek
Way

(0) ↖
(0) ←
(13) ↓
(0) ↘
(0) ↗
(0) →
(1) ↙

Nashville Hwy
(US 31 / SR 6)

↗ (0)
← (0)
↖ (1)

Williams Ridge
Drive

↖ (0)
↗ (10)
↘ (1)



← (14)
↖ (0)
↗ (12)
↘ (0)

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

(0) ↖
(0) ←
(0) ↓
(14) ↘
(0) ↗
(0) →
(0) ↙
(0) ↖
(0) ↗
(14) ↘

Honey Farm
Way

(0) ↖
(0) ←
(0) ↓
(0) ↘
(0) ↗
(0) →
(28) ↙
(23) ↖
(0) ↗
(0) ↘

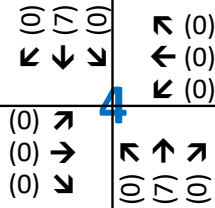
Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Fast Casual Restaurant
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



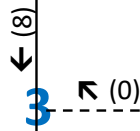


Hidden Creek
Way



Nashville Hwy
(US 31 / SR 6)

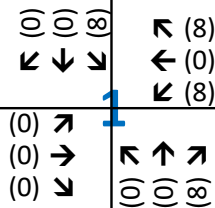
Williams Ridge
Drive



Proposed Walmart
Right-Only Access

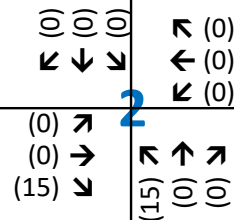
Proposed Walmart
Neighborhood Market

Business
Driveway



Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way



Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Future Retail
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

(0) (0) (0)
← (34) ↓ (0)
↑ (0) → (0) ↓ (0)
↑ (0) → (0) ↓ (0)

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive

← (34)

3

↑ (20) → (0) ↓ (0)

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

(0) (0) (0) (34)
← (0) ↓ (0) ↓ (0)
↑ (0) → (0) ↓ (0)
↑ (0) → (0) ↓ (14)

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

(0) (0) (0) (0)
← (0) ↓ (0) ↓ (0)
↑ (0) → (28) ↓ (0)
↑ (0) → (48) ↓ (0)
↑ (0) → (0) ↓ (0)

2

Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet

Primary Traffic Assignment - Multifamily Housing (Low-Rise)

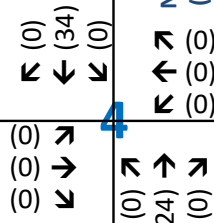
Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Hidden Creek
Way



Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive



← (34)

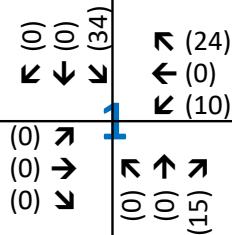
3



Proposed Walmart
Right-Only Access

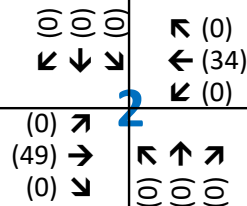
Proposed Walmart
Neighborhood Market

Business
Driveway



Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way



2

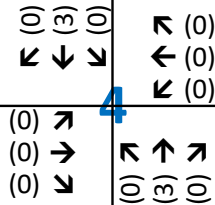
Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Townhomes
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way



Nashville Hwy
(US 31 / SR 6)

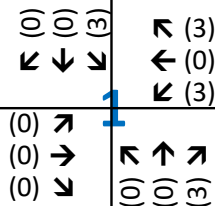
Williams Ridge
Drive



Proposed Walmart
Right-Only Access

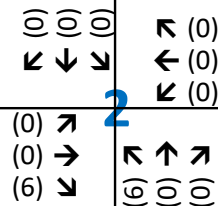
Proposed Walmart
Neighborhood Market

Business
Driveway



Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way



Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Mini-Warehouse
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

(0) (0) (0)
← ↓ ↘
(0) (8) (0)
↘ ↓ ↙
(0) (0) (0)
↘ ↓ ↙

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive

← (8)
3

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

(0) (0) (8)
← ↓ ↘
(0) (0) (0)
↘ ↓ ↙
(0) (0) (0)
↘ ↓ ↙

Honey Farm
Way

(0) (0) (0)
← ↓ ↘
(0) (0) (0)
↘ ↓ ↙
(0) (0) (0)
↘ ↓ ↙

Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Primary Traffic Assignment - Health Department
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

(0) ↖
(0) ←
(168) ↓
(0) ↗
(0) ↖
(0) ←
(5) ↗

Nashville Hwy
(US 31 / SR 6)

Williams Ridge
Drive

(3) ↖
(151) ↗
(5) ↗



(179) ←
(27) ↖
(134) ↗
(27) ↗

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

(0) ↖
(0) ←
(179) ↓
(0) ↗
(0) ↖
(0) ←
(136) ↗
(0) ↖
(0) ↗
(27) ↗
(112) ↗

Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way

(82) ↖
(0) ←
(0) ↓
(0) ↗
(82) ↖
(113) ↗
(94) ↗
(86) ↖
(0) ↖
(0) ↗

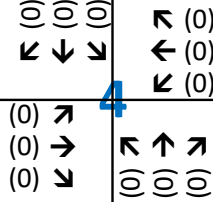
Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Total Primary Traffic Assignment
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



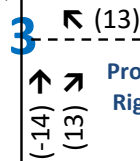


Hidden Creek
Way



Nashville Hwy
(US 31 / SR 6)

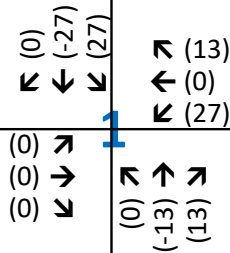
Williams Ridge
Drive



Proposed Walmart
Right-Only Access

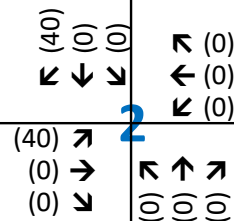
Proposed Walmart
Neighborhood Market

Business
Driveway



Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way



Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet

Pass-by Traffic Assignment - Grocery Store (Walmart Neighborhood Market)

Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee





Hidden Creek
Way

(0) (0) (0)
← ↓ →
(0) →
(0) →
(0) →

Nashville Hwy
(US 31 / SR 6)

↑ (0)
← (0)
← (0)

Williams Ridge
Drive

← (0) ↑ ↑
(-2) (0)



← (0)
3

↑ (-2) ↑ (0)

Proposed Walmart
Right-Only Access

Proposed Walmart
Neighborhood Market

Business
Driveway

(0) (-23) (23)
← ↓ →
(0) →
(0) →
(0) →

↑ (21)
← (0)
← (21)

Honey Farm
Way

← (0) ↑ ↑
(-23) (23)

Nashville Hwy
(US 31 / SR 6)

(0) (0) (0)
← ↓ →
(0) →
(0) →
(45) ↓

2
← (42) ↑ (0) ↑ (0)

Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet

Pass-by Traffic Assignment - Fast-Food Restaurant with Drive-Through

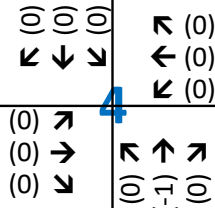
Honey Farm - Walmart Neighborhood Market

Columbia, Tennessee



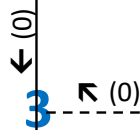


Hidden Creek
Way



Nashville Hwy
(US 31 / SR 6)

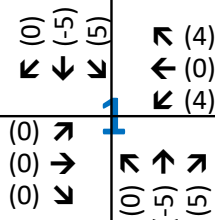
Williams Ridge
Drive



Proposed Walmart
Right-Only Access

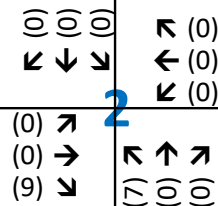


Business
Driveway



Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way



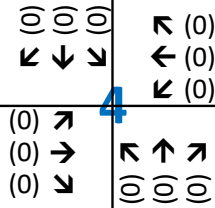
Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Pass-by Traffic Assignment - Fast Casual Restaurant
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



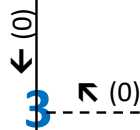


Hidden Creek
Way



Nashville Hwy
(US 31 / SR 6)

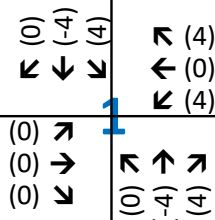
Williams Ridge
Drive



Proposed Walmart
Right-Only Access

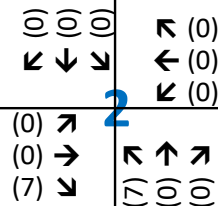
Proposed Walmart
Neighborhood Market

Business
Driveway



Nashville Hwy
(US 31 / SR 6)

Honey Farm
Way



Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Pass-by Traffic Assignment - Future Retail
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

(0) (0) (0)
← ↓ ↘
(0) →
(0) →
(0) ↘

Nashville Hwy
(US 31 / SR 6)

↗ (0)
← (0)
← (0)

Williams Ridge
Drive

↗ (0)
↗ (-3)
↗ (0)



← (0)

3

↗ (13)

Proposed Walmart
Right-Only Access

↗ (-17)
↗ (13)

Proposed Walmart
Neighborhood Market

Business
Driveway

(0) (0) (-59) (59)
← ↓ ↘
(0) →
(0) →
(0) ↘
(0) ↗
(-45) ↗
(45) ↗

Nashville Hwy
(US 31 / SR 6)

↗ (42)
← (0)
← (56)

Honey Farm
Way

(40) (0) (0)
← ↓ ↘
(40) ↗
(0) →
(61) ↘
(56) ↗
(0) ↗
(0) ↗

2

Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Total Passby Traffic Assignment
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

← (0)
← (168)
↓ (0)

Nashville Hwy
(US 31 / SR 6)

↑ (0)
← (0)
← (5)

Williams Ridge
Drive

(0) ↑
(0) →
(4) ↓

(3) ↑
(148) →
(5) ↓



← (179)

3

↑ (40)

Proposed Walmart
Right-Only Access

(117) ↑
(40) →

Proposed Walmart
Neighborhood Market

Business
Driveway

← (0)
← (-59)
↓ (238)

↑ (176)
← (0)
← (192)

(0) ↑
(0) →
(0) ↓

(0) ↑
(-18) →
(157) ↓

Honey Farm
Way

↑ (122)
← (0)
↓ (0)

↑ (0)
← (99)
← (0)

(122) ↑
(113) →
(155) ↓

(142) ↑
(0) →
(0) ↓

Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet

Site Generated Traffic

Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee





Hidden Creek
Way

(57)
(2112)
(37)

Nashville Hwy
(US 31 / SR 6)

(29)
(4)
(25)

Williams Ridge
Drive

(28)
(2)
(34)

(30)
(1883)
(23)



(2165)

(40)

Proposed Walmart
Right-Only Access

(1867)
(40)

Proposed Walmart
Neighborhood Market

Business
Driveway

(0)
(1850)
(315)

(238)
(0)
(207)

(0)
(0)
(0)

(0)
(1670)
(186)

Honey Farm
Way

(122)
(0)
(0)
(0)
(176)
(0)

(122)
(219)
(155)

(142)
(0)
(0)

Key:
(XX) = PM Peak
Hour

Traffic Assignment Worksheet
Total Projected Traffic at Buildout (2026)
Honey Farm - Walmart Neighborhood Market
Columbia, Tennessee



APPENDIX F
TURN LANE
EVALUATIONS

RIGHT TURN LANE
EVALUATIONS

RIGHT TURN LANE EVALUATION

Based on NCHRP 457

PROJECT: **Proposed Walmart Neighborhood Market - Honey Farm Crossing**

LOCATION: **#2 - Honey Farm Way & Walmart Access / Commercial Access**

SECENARIO: **2026 Projected Traffic Volumes**

TIME PERIOD: **AM Peak Hour**

DIRECTION: **Westbound**

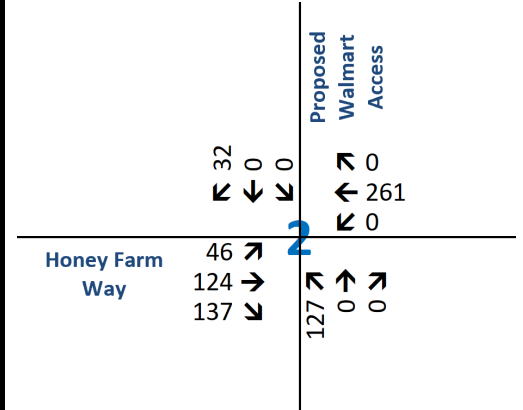


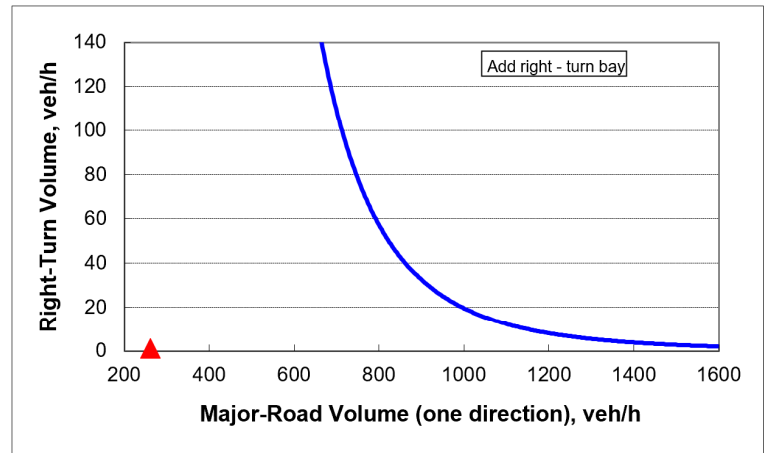
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	261
Right-turn volume, veh/h:	1

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	12651
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



RIGHT TURN LANE EVALUATION

Based on NCHRP 457

PROJECT: **Proposed Walmart Neighborhood Market - Honey Farm Crossing**

LOCATION: **#2 - Honey Farm Way & Walmart Access / Commercial Access**

SECENARIO: **2026 Projected Traffic Volumes**

TIME PERIOD: **PM Peak Hour**

DIRECTION: **Westbound**

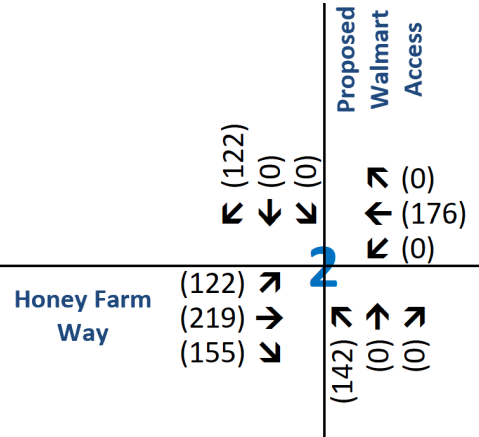


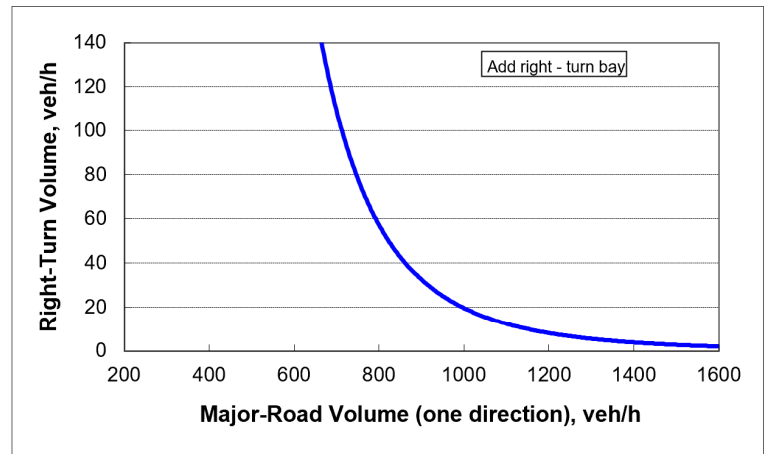
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	176
Right-turn volume, veh/h:	1

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	84486
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



RIGHT TURN LANE EVALUATION

Based on NCHRP 457

PROJECT: **Proposed Walmart Neighborhood Market - Honey Farm Crossing**

LOCATION: **#3 - Nashville Hwy & Proposed Walmart Right-Only Access**

SECENARIO: **2026 Projected Traffic Volumes**

TIME PERIOD: **AM Peak Hour**

DIRECTION: **Northbound**

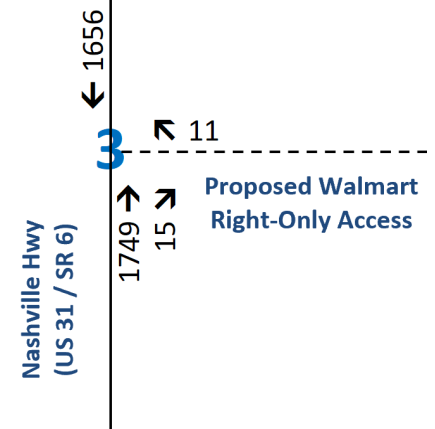


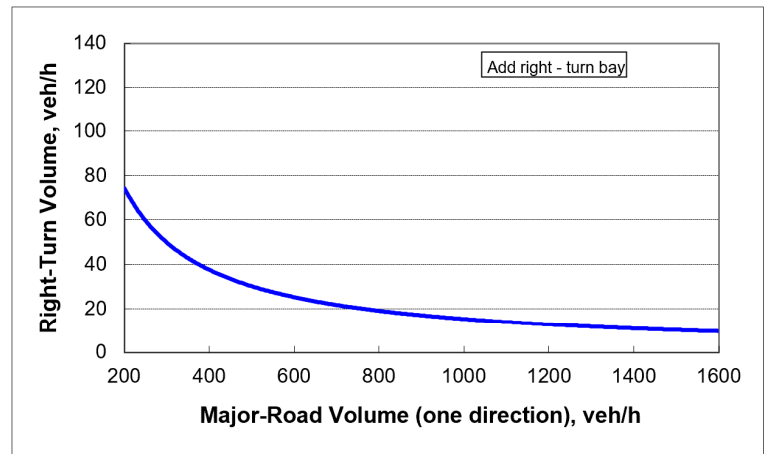
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	55
Major-road volume (one direction), veh/h:	1764
Right-turn volume, veh/h:	15

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	9
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Add right-turn bay.	



RIGHT TURN LANE EVALUATION

Based on NCHRP 457

PROJECT: **Proposed Walmart Neighborhood Market - Honey Farm Crossing**

LOCATION: **#3 - Nashville Hwy & Proposed Walmart Right-Only Access**

SECENARIO: **2026 Projected Traffic Volumes**

TIME PERIOD: **PM Peak Hour**

DIRECTION: **Northbound**

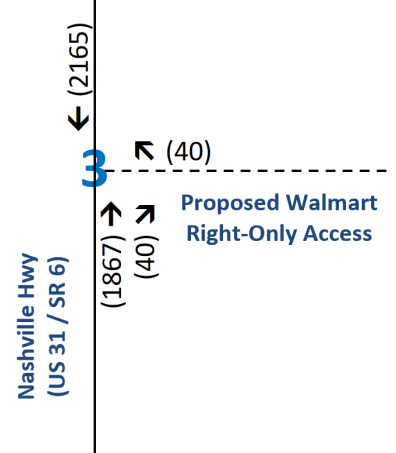


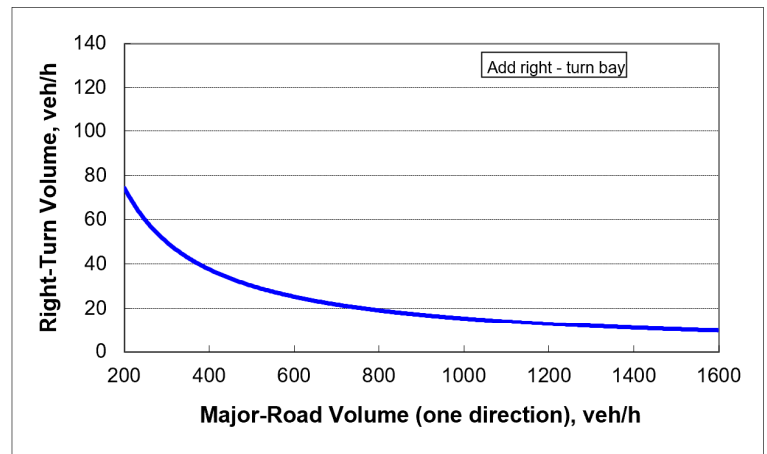
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	55
Major-road volume (one direction), veh/h:	1907
Right-turn volume, veh/h:	40

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	8
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Add right-turn bay.	





December 18, 2024

Ms. Olivia DuPuy
Carlson Consulting Engineers, Inc
7068 Ledgestone Commons
Bartlett, TN 38133
Sent via email: OliviaDuPuy@carlsonconsulting.net

RE: Water Availability Letter

Honey Farm Walmart Neighborhood Market
2248 Nashville Hwy
Tax Map 51, Parcel 58
Columbia, Maury County, TN

Dear Ms. DuPuy:

Columbia Power and Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation, various Planning Commissions and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies, water service will be made available on a first-come, first-served basis, subject to availability of all CPWS-furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development is 45,000 square foot grocery store. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model and is able to provide domestic and fire protection service, including a minimum of 1,350 gpm, while maintaining state standards for level of service and pressures in this portion of the distribution system. CPWS can provide water for the proposed development according to the following requirements:

- The above request translates to a 25.5 Single Family Unit (SFU) flow demand equivalent.
- A new 12-inch water main will be extended in an easement from the existing stubout at the West corner of the property through the Nashville Highway frontage of the lot.

All of the above requirements up to and including the meter(s) are to be constructed and paid for by the Applicant and dedicated to CPWS once complete. No construction of water

infrastructure shall be initiated until final construction plans have been approved by CPWS (including, if necessary, TDEC approval).

This Water Availability Letter will expire in one-hundred twenty (120) days unless vested by payment of water service fees and impact fees for the proposed project. Any request for water availability after the expiration date of this letter will be considered a new application.

Once you have received this Water Availability Letter, next steps in the process to vest water service from CPWS are as follows:

- Remit to CPWS new water service fees for plan review/design development, TDEC coordination (if necessary), and inspection as follows:

\$1,500 + \$370 per SFU equivalent

- Applicant will prepare design drawings for review and approval by CPWS for construction of the proposed water system improvements.
 - Provide design drawings in AutoCAD and .pdf format for CPWS review of proposed development. Include design drawings for grading, drainage, roadway improvements, buried (wet and dry) utilities, water systems, and surface improvements.
 - If necessary, CPWS will provide hydraulic calculations and a letter of approval to support your submittal to TDEC for review and approval.
 - Once comments received from TDEC have been addressed and approved, CPWS will approve the Construction Drawings for the proposed water system improvements.
- As an option, the applicant may request CPWS design the water infrastructure to support the proposed development project. Under this option, the applicant will:
 - Provide site base CAD files in DWG format, including roads, lot lines, existing and proposed contours, and other existing and proposed utilities, for use in development of water construction drawings.
 - CPWS will then develop design drawings for the water system improvements and submit to TDEC for review and approval.
- Current water service fees due prior to CPWS review or development of design plans are listed in the table below. *Note that payment of Water Service Fees will extend the expiration of this Water Availability Letter for one year, while the applicant is working with CPWS on design and review of the improvement drawings.*

Water Service Fees	SFUs	Total
\$1,500 + 370 per SFU	25.5	\$10,935.00

- Upon Construction Drawing approval by CPWS, applicant may then pay Impact Fees and schedule the pre-construction meeting. Pre-construction meeting will be canceled and re-scheduled unless all impact fees are paid at least 48 hours prior, or surety is provided in lieu of full payment.

- Water meters will be ordered by CPWS once meter fees are paid by the Applicant.
 - Meter fees are subject to change based on final design and the prevailing Board-approved rates at time of payment.
 - Meters are not ordered until fees are paid and may result in extended lead-times.
 - Note that meter fees are charged at time of purchase, based on price of meter at that time.
- Applicants will be charged Impact Fees and Meter Fees in effect at time of payment. Please see CPWS website for schedule of impact fees and timing of planned fee escalations. Anticipated meter costs and impact fees for this project are according to the following table:

Impact Fees and Meter Costs	Number	\$ / Unit	Total
6" Fire Meter Cost	1	Current Price	Deferred
2" Service Meter Cost	1	Current Price	Deferred
¾" Irrigation Meter Cost	1	\$540	Deferred
Current Impact Fee for 2" Service Meter	1	\$27,000	\$27,000
Current Impact Fee for ¾" Irrigation Meter	1	\$5,000	\$5,000
Estimate of Fees Due Prior to Pre-Construction Meeting =			\$32,000

- After the pre-construction meeting, CPWS will then issue a formal Notice to Proceed. No construction of water improvements may take place prior to the Notice to Proceed.
- Applicant is required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure. No construction of water improvements may take place without a CPWS inspector present.

Please feel free to contact me at 931-388-4833 x7655 or Matt.Wheeler@cpws.com if you have questions or would like to discuss.

Sincerely,



Matthew J. Wheeler, P.E.
Vice President of Water Resources, CPWS

cc: Bart Anderson, CPWS
Eric King, Inflo Design Group
File 24-077



WASTEWATER DEPARTMENT

12 November 2024

Olivia DuPuy
Carlson Consulting Engineers, Inc.
7068 Ledgestone Commons
Bartlett, TN 38133

RE: 2248 Nashville Hwy, Columbia, TN 38401; Neighborhood Walmart

Olivia,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. Any Final Plat approval and Dedication are both subject to installation and function, as determined by our Department. No detailed design plan for an extension of the sewer has been proposed at this time.

A handwritten signature in blue ink, appearing to read "Donnie Boshers". The signature is fluid and cursive, with the first name "Donnie" being more prominent than the last name "Boshers".

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department



December 16, 2024

City of Columbia
700 N Garden Street
Columbia, TN 38401

Re: Preliminary PUD Project – Floor Plans
#03908-1000 Walmart Neighborhood Market

To Whom It May Concern:

The floor plans are not a requirement for a Preliminary PUD submittal. However, if they are needed for review, please let me know and I will get these plans from the architect as promptly as possible.

Thank you for taking the time to review this letter, and if you need any additional information or have any questions, please do not hesitate to contact me.

Thank you,

Olivia DuPuy

Olivia DuPuy, EI
Carlson Consulting Engineers, Inc.



December 16, 2024

City of Columbia
700 N Garden Street
Columbia, TN 38401

Re: Preliminary PUD Project Narrative
#03908-1000 Walmart Neighborhood Market

To Whom It May Concern:

This letter serves as a summary of the landholder's interest in the land proposed to be developed and a written statement of concurrence from all parties having a beneficial interest in the affected property.

The proposed project is a Walmart Neighborhood Market at the parcel 051 058, which is located the intersection of Nashville Highway and Honey Farm Way. The parcel is currently zoned PUD-MU (Planned Unit Development – Mixed Use).

The proposed project consists of site clearing, grading, drainage installation, utility installation, paving, and building construction of the Walmart Neighborhood Market.

In accordance with the City of Columbia's Zoning Code, the project's design considered the guidelines and regulations outlined in this document. Due to site constraints and other applicable items, not all design principles were achievable. The applicant will request for relief from the City of Columbia Planning Commission within the submittal package. Any additional relief request not captured in this initial list will be coordinated with the Planning staff.

Thank you for taking the time to review this letter, and if you need any additional information or have any questions, please do not hesitate to contact me.

Thank you,

A handwritten signature in cursive script that reads 'Olivia DuPuy'.

Olivia DuPuy, EI
Carlson Consulting Engineers, Inc.



Preliminary Plat, Site Development Plan, and PUD Checklist

Development: #03908-1000 Walmart Neighborhood Market

This checklist shall be completed, and included with the submittal documents. If the submittal does not contain a completed checklist, it shall be deemed incomplete. All below listed items shall be included in the submittal documents and plans, as well as any further information required by the City of Columbia to evaluate compliance and to perform a full and complete review. See Zoning Ordinance Article 8 and Subdivision Regulations.

General

- ☒ Name of development
- ☒ Contact info for the owner and licensed design professional(s) preparing plan: name, address, email, phone
- ☒ Plan sealed by a design professional licensed in the State of Tennessee.
- ☒ North Arrow, legend, and site vicinity map
- ☒ Graphic Scale: between 1 in. = 10 ft. and 1 in. = 100 ft.
- ☒ Survey stamped by a State of Tennessee Licensed Professional Land Surveyor, with all project boundaries including bearings and angles to the nearest hundredth, utilities, and existing streets and rights-of-way.
- ☒ Note referencing Tennessee State Plane Coordinate System, NAD 83 Datum
- ☒ All property boundaries, existing easements, and encumbrances
- ☒ Parcel identification, owner, and deed and plat references of adjoining properties
- N/A Proposed phasing and timetable for all phases of development
- ☒ Traffic Impact Study, as required.
- ☒ The substance of all existing and proposed covenants, easements, or other restrictions. **AS SHOWN ON ALTA**

Lots and Land-Use

- ☒ The size of total property to be developed in square feet and acres
- ☒ Lot numbers of all proposed lots, with dimensions, locations, and square footage
- N/A A tabulation of the land area to be devoted to various uses and activities and overall densities.
- ☒ Typical lot layout depicting proposed setbacks, yards, and easements, where applicable

Structures

- ☒ Location and approximate dimensions of all existing and proposed structures.
- ☒ Location of all earth retaining structures, with approximate top and bottom of wall elevations.
- ☒ Existing and intended use of all buildings and structures on site, including the number of dwelling units and density, where applicable
- ☒ Location, type, and size of proposed signs
- ☒ Approximate height, bulk, and the utilization of structures including activities and the number of living units.



Grading, Drainage, and Storm

- ☒ Existing conditions and contours at vertical intervals of not more than two (2) feet
- ☒ General proposed contours at vertical intervals of not more than two (2) feet
- N/A FEMA Special Flood Hazard Area (SFHA), 100-year Floodplain (F-P), and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date, and flood insurance zones
- N/A Location and dimension of aquatic buffer zones
- ☒ General layout of the proposed storm drainage system including surface and subsurface drainage systems, areas for detention, and water quality devices.
- N/A Identification of all critical lots

Streets, Parking, and Pedestrian Elements

- N/A Proposed street and alley rights-of-way, typical sections, widths, classification, names, and proposed ownership and maintenance responsibility
- ☒ Proposed connections to existing and proposed streets (including classification) located outside the development
- N/A Proposed improvements as identified in the Traffic Impact Study, as required
- ☒ Existing and proposed sidewalks, trails, and other pedestrian elements
- ☒ Existing and proposed on-street and off-street parking and loading areas
- ☒ Summary of all provided and required parking

Landscaping, Open Space, and Amenities

- ☒ Natural features on site including, but not limited to, wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, excessive slopes, and forested areas
- ☒ Landscaped areas and buffers with details on proposed plantings, existing vegetation, and other features.
- N/A The location and size of all common open space, parkland dedications, and dedications and reservations of land for public uses.
- N/A Any amenity features and structures for private or public benefit.
- ☒ Location, dimension, and materials of fences and walls
- ☒ Tree Canopy retention

Utilities

- ☒ General layout and location of existing and proposed utilities and utility features including, but not limited to potable water, fire hydrants, sanitary sewer, storm sewer, and power and communication facilities.
- ☒ Acknowledgement from water, sewer, and power utility providers that the proposed development may be adequately served with existing infrastructure, or if improvements are required to adequately serve the development, a general statement of the improvements.

THE WATER AVAILABILITY LETTER HAS BEEN REQUESTED, BUT
HAS NOT BEEN RECEIVED AT THIS TIME.



PUD Specific Items

- ☒ List of all deviations from PUD Standards requested
- ☒ The nature of the landholder's interest in the land proposed to be developed and a written statement of concurrence from all parties having a beneficial interest in the affected property.
- ☒ Location and approximate dimensions of all existing and proposed structures including approximate height, bulk, and the utilization of structures including activities and the number of living units. Include architectural renderings of all proposed structures with materials listed.
- ☒ The substance of covenants, grants of easements or other restrictions to be imposed upon the use of the land, buildings and structures including proposed easements for public utilities on the property or documentation of off-site easements.
- ☒ Exterior lighting plan.

If the application is deemed incomplete by the Zoning Administrator, a written request shall be made within ten days after the original submittal, for further information. In such case the application shall be held in abeyance until deemed complete for final review. No plan shall be formally presented for Planning Commission action until such plan is found complete, compliant with City standards, and ready for review.

Checklist Completed By:

Olivia DuPuy

Print Name

Olivia DuPuy

Signature

Digitally signed by Olivia
DuPuy
Date: 2024.12.16 10:10:35
-06'00'

12/16/2024

Date



CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

PLANNING COMMISSION
PROJECT DEVELOPMENT APPLICATION

SUBMITTAL REQUIREMENTS

Final Plat: * 1 hard copy of all materials for submittal + PDF copy on a USB flash drive (no multiple applications on one storage device)

Fold hard copy submittals larger than 8½"x11"

All Others: * Please submit the Application online at [City of Columbia | Permitting \(onlana.com\)](http://City of Columbia | Permitting (onlana.com))

ADDRESS/LOCATION	2248 Nashville Hwy, Columbia, TN 38401		
	TAX MAP: 051	GROUP:	PARCEL: 058
SUMMARY OF NATURE OF REQUEST AND WORK	Project construction will consist primarily of site clearing, grading, drainage installation, utility installation, paving, and building construction of the Walmart Neighborhood Market #03908-1000.		

DATE OF PRE-APPLICATION CONFERENCE	7/24/2024	<i>Pre-application meetings are scheduled for Wednesdays.</i>
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SELECT REQUEST	SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO:
☐ Comprehensive Plan Amendment ☐ Annexation ☐ Rezoning ☐ Preliminary Plat ☐ Final Plat ☒ PUD Preliminary Master Plan ☐ PUD Final Site Plan ☐ Site Development Plan ☐ Other: <i>*File naming nomenclature examples:</i> <i>Freedom Point Site Plan</i> <i>Freedom Point Master Plan</i> <i>Freedom Point Final Plat</i>	<u>Annexations:</u> ☐ Annexation Permission Form <u>Annexations/Rezoning/Plan Amendments:</u> ☐ Requested Zone Listed ☐ Statement of Compliance with Comprehensive Plan ☐ Concept Plan <u>Preliminary Plats/Site Development Plans:</u> ☐ Plans and/or Plats conforming to City standards with signed and completed check list <u>All Annexations/Rezoning/Preliminary Plats/Site Development Plans and PUDS:</u> ☒ Receipt of Payment for Pre-Application Meeting ☒ Written Legal Description copy ☒ Columbia Water System Availability Letter ☒ Columbia Waste Water Department Will Serve Letter

	Plats/PUDs:
	☒ Project Name (include Sections & Phases) #03908-1000 Walmart Neighborhood Market
	N/A Total Number of Lots/Residential Units
	☒ Square Footage of Non-Residential Floor Space 45,002 SF
	☒ Total acreage 7.49 AC

Applications and all required submittals must be filed with the Department of Development Services prior to the established deadline. Both the applicant and property owner (if different from applicant) must sign the application. Any requests to defer or move the item to future meeting dates must be requested by the resubmittal date listed on the Planning Commission schedule.

APPLICANT

All communications go to the Applicant's email that is provided.

NAME	Olivia DuPuy	PHONE	901-384-0404
ADDRESS	7068 Ledgestone Commons, Bartlett, TN 38133	EMAIL	OliviaDuPuy@carlsonconsulting.net

PROPERTY OWNER NAME	EMG Honey Farm LLC (Drew Smith)	PHONE	469-585-7913
ADDRESS	6148 Lee Highway, Suite 300, Chattanooga, TN 37421	EMAIL	drew.smith@equitasmg.com

If owner is not a natural person, documentation must be provided showing signing authority on behalf of the entity. If multiple persons are listed as owners in the records of the Maury County Assessor, all owners must sign or the signatory must provide documentation of authority to apply on behalf of record owner (i.e., Power of Attorney or notarized Letter of Authorization). In filling out this application, I attest that (1) I am familiar with the rules, regulations, and procedures of the City of Columbia & (2) all information contained herein is accurate & true to the best of my knowledge.

Olivia DuPuy

APPLICANT NAME

Olivia DuPuy

APPLICANT SIGNATURE

11/26/2024

DATE

Drew Smith

PROPERTY OWNER NAME

Drew Smith

PROPERTY OWNER SIGNATURE

11-26-24

DATE