



**HALL COUNTY BOARD OF COMMISSIONERS
WORK SESSION AGENDA**

Hall County Government Center 2nd Floor
2875 Browns Bridge Road
Gainesville, GA 30504

Streamed Live on Hall County Government's Website - www.hallcounty.org
Monday, September 23, 2024 - 03:00 PM

Call to Order

Emergency Management

- 1 Approve the purchase and installation of two (2) Liebert EXM Uninterrupted Power Supply (UPS) systems and associated accessories for E-911 to SHI International Corp. of Somerset, NJ in the amount of \$232,143.14.

Human Resources

- 2 Approve the award of RFP/Q#45-007 Life & Disability Supplemental Health Benefits for Human Resources to Prudential Financial, Inc., of Newark, NJ; authorization for the Chairman to execute all related documents, subject to the review and approval by the County Attorney. The estimated annual cost is \$1,265,569.00.

Planning & Zoning

- 3 **4745 Cagle Mill Road | Rezone** | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) within the Gateway Corridors Overlay District (GCOD) | on a 10.59± acre tract located on the east side of Cornelia Highway (GA-365), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 (pt.) | **Proposed Use: Industrial development** | Commission District 3 | **Josh Boling, applicant**
- 4 **4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone** | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Residential Development (PRD) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 (pt.), 15019 000043 & 15019 000114 | **Proposed Use: 349-unit residential development** | Commission District 3 | **Josh Boling, applicant**
- 5 **2052 Spring Road | Reestablishment of a Nonconforming Use** | on a 0.19± acre tract located on the north side of Spring Road, approximately 237 feet from its intersection with Skelton Road | Zoned H-B, Tax Parcel 00122 002010 | **Proposed Use: Single-family residence** | Commission District 4 | **Ashley Xitlaly Ruelas, applicant**

- 6 **3475 Cook Road | Use Subject to County Commission Approval** | on a 13.91± acre tract located on the east side of Cook Road approximately 1,503 feet from its intersection with Davis Bridge Road | Zoned AR-III & VC; Tax Parcel 10068 000005C | **Proposed Use: 6-lot subdivision** | Commission District 2 | **Decatur Presbyterian Church, applicant**
- 7 **4336, 4370, & 4420 Benefield Road | Rezone** | from Agricultural Residential IV (AR-IV) and Planned Commercial Development (PCD) to Planned Residential Development (PRD) | on a combined 68.83± acre tract located on the south side of Benefield Road, approximately 900 feet from its intersection with Village South Drive | Zoned AR-IV and PCD; Tax Parcels 15028 000014, 000070, & 000090 (pt.) | **Proposed Use: 302-unit residential development** | Commission District 1 | **Edge City Properties, Inc., applicant**
- 8 Public Hearing to amend Chapter 17.216 entitled "Short Term Rental" of the Official Code of Ordinances of Hall County, Georgia by deleting the current Chapter 17.216 of the Code of Ordinances in its entirety and inserting the word "Reserved" in place thereof; to amend Section 17.20.540 by deleting the current Section 17.20.540 and inserting a new Section 17.20.540 in lieu thereof; by inserting a new Chapter 5.100 entitled "Short Term Rentals" in Title 5 of the Code of Ordinances of Hall County, Georgia; and to provide for an effective date for said resolution; to repeal conflicting ordinances and resolutions; and for other purposes.

Public Works and Utilities

- 9 Approval and authorization for the Chairman to execute a renewal application for the WaterFirst Program; authorization for the Chairman to execute any and all documents necessary to effectuate the program's renewal, subject to review and approval by the County Attorney.

County Administrator

Public Comments (PUBLIC HEARING ITEMS (i.e. ZONINGS, ORDINANCE CHANGES, ETC.) WILL ONLY BE RECEIVED AT THE REGULAR SCHEDULED VOTING MEETINGS IN WHICH THE ITEM IS TO BE HEARD) 2 minutes per speaker/20 minutes maximum

Commission Time

Adjourn

Hall County Government welcomes people with disabilities and their trained service animals. For questions about accessibility or to request reasonable accommodations please contact Maria Tuck, Compliance Specialist at 770-531-6712 48 hours prior to the event or as soon as possible.



AGENDA ITEM

Emergency Management

REPORT TO: Work Session (09/23/24)
REPORT TO: Voting Meeting (09/24/24)
ITEM NO: 489/2024
SUBJECT: Approve the purchase and installation of two (2) Liebert EXM Uninterrupted Power Supply (UPS) systems and associated accessories for E-911 to SHI International Corp. of Somerset, NJ in the amount of \$232,143.14.

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: ZB
Recommendation: Approve.

Purpose of Request:
Approve the purchase and installation of two (2) Liebert EXM Uninterrupted Power Supply (UPS) systems and associated accessories for E-911 to SHI International Corp. of Somerset, NJ in the amount of \$232,143.14.

History:
The current UPS at E-911 was installed in 2005 and the batteries were replaced in FY 21. The UPS are currently end of life.

Facts and Issues:
This is for the purchase and installation of two (2) Liebert EXM UPS and associated accessories for E-911 to SHI International Corporation of Somerset, NJ in the amount of \$232,143.14.

Options:

This item is part of the Omnia Partners-IT Solutions Contract #2018011-02.

| | |
|--|---------------|
| Funding Requested | \$ 232,143.14 |
| Are funds within current budget? | Yes |
| Source of Funds | CIP |
| Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? | No |
| Has it been reviewed by the County Attorney? | Yes |
| Is there a deadline for this item? | 2024-10-31 |

Approvals:

| | | | |
|----------------|-----------------|-----------------------|---------------|
| Submit | Approve | Purchasing | Budget |
| ZB | ZB | AP | DA |
| Finance | Attorney | Administration | Clerk |
| TS | WLI | CR | JR |

Attachments:

Financial Supplement
Quote
OMNIA Partners Contract



**HALL COUNTY BOARD OF COMMISSIONERS
FINANCIAL SUPPLEMENT REPORT**

AGENDA ITEM 489/2024

Funds Requested: \$ 232,143.14

Request Budgeted: Yes

Proposed Source of Funding:

Budget Transfer Requested:

CIP

No

Funding Source Items:

| Fiscal Year | Fund | Division | Account | Amount |
|--------------------|------------------------------|-----------------|---------------------------|---------------|
| 2025 | 350-CAPITAL PROJECTS FUND | 3800-E911 | 542500-OTHER EQUIPMENT | \$232,143.14 |

Budget Transfer Items:

Additional Information/Comments:

Contact for Questions: ZB

Phone: 470-201-0795



Pricing Proposal
Quotation #: 25091434
Created On: Jul-17-2024
Valid Until: Dec-31-2024

GA-County of Hall

Inside Sales Account Manager

Jimme Taggart

Phone:
Fax:
Email: jtaggart@hallcounty.org

Nirav Patel

290 Davidson Avenue
Somerset, NJ 08873
United States
Phone: 888-744-4084
Fax: 888-896-8860
Email: Nirav_Patel@shi.com

All Prices are in US Dollar (USD)

| | Product | Qty | Your Price | Total |
|---|--|-----|--------------|-------------|
| 1 | "LBRT EXM 208V UPS" Joe Powell & Associates - Part#: 47SA030DACM0ZY0 Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 | 2 | \$25,537.095 | \$51,074.19 |
| 2 | "CERTIFIED FACTORY TR" Vertiv - Part#: CTD Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 | 2 | \$163.69 | \$327.38 |
| 3 | "LBRT EXM 208V MBC BDC" Joe Powell & Associates - Part#: 47MBD37AC0R0TDF Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 | 2 | \$11,754.30 | \$23,508.60 |
| 4 | "Start-Up 7x24 - UPS" Vertiv - Part#: SUEXM10-40U7 Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 | 2 | \$2,416.57 | \$4,833.14 |
| 5 | "Start-Up 7x24 - MBC" Joe Powell & Associates - Part#: SPEXM10-200U7 Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 | 2 | \$642.21 | \$1,284.42 |
| 6 | "Total Warranty AC Power - EXM 208V 10-40kVA8x5 1PM" Vertiv - Part#: 1WARTOTACPEXM20810-40KVA8x5 Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 | 2 | \$2,558.03 | \$5,116.06 |
| 7 | "Total Warranty AC Power - EXM 208V MBC 8x5 1PM" Joe Powell & Associates - Part#: 1WARTOTACPEXMMBC208V8x5 Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 | 2 | \$1,943.72 | \$3,887.44 |

| | | | | |
|---|--|---|--------------|--------------|
| 8 | INSTALLATION TURNKEY SERVICES ELECTRICAL Joe Powell and Associates - Part#: NPN-POWELL-ITSE Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 | 1 | \$142,111.91 | \$142,111.91 |
| | | | <hr/> | |
| | | | Total | \$232,143.14 |

Additional Comments

Please Note: Vertiv has a zero returns policy.

Please note, if Emergency Connectivity Funds (ECF) will be used to pay for all or part of this quote, please let us know as we will need to ensure compliance with the funding program.

Hardware items on this quote may be updated to reflect changes due to industry wide constraints and fluctuations.

Thank you for choosing SHI International Corp! The pricing offered on this quote proposal is valid through the expiration date listed above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address and applicable Contract Number when submitting a Purchase Order. For any additional information including Hardware, Software and Services Contracts, please contact an SHI Inside Sales Representative at (888) 744-4084. SHI International Corp. is 100% Minority Owned, Woman Owned Business. TAX ID# 22-3009648; DUNS# 61-1429481; CCR# 61-243957G; CAGE 1HTF0

The products offered under this proposal are resold in accordance with the terms and conditions of the Contract referenced under that applicable line item.

City of Mesa, AZ

Contract # 2018011-02

for

Information Technology Solutions and Services

with

SHI International Corp.

Effective: March 1, 2018

The following documents comprise the executed contract between the City of Meza, AZ and SHI International Corp, effective March 1, 2018:

- I. Executed Contract
- II. Mayor and Council Approval
- III. Supplier Response
- IV. Original RFP



AGREEMENT PURSUANT TO SOLICITATION

**CITY OF MESA AGREEMENT NUMBER 2018011
INFORMATION TECHNOLOGY SOLUTIONS & SERVICES**

CITY OF MESA, Arizona ("City")

| | |
|------------------|--|
| Department Name | City of Mesa – Purchasing Division |
| Mailing Address | P.O. Box 1466 Mesa, AZ 85211-1466 |
| Delivery Address | 20 East Main St, Suite 400 Mesa, AZ 85201 |
| Attention | Sharon Brause, CPPO, CPPB, CPCP Senior Procurement Officer |
| E-Mail | Sharon.Brause@MesaAZ.gov |
| Phone | (480) 644-2815 |
| Fax | (480) 644-2655 |

AND

SHI INTERNATIONAL CORP., ("Contractor")

| | |
|-----------------|--|
| Mailing Address | 290 Davidson Ave Somerset, NJ 08873 |
| Remit Address | PO Box 952121 Dallas, TX 75395-2121 |
| Attention | Meghan Flisakowski, Public Program Manager |
| E-Mail | Meghan.Flisakowski@shi.com |
| Phone | 512-517-4088 |
| Fax | 732-652-6599 |
| Website | www.publicsector.shidirect.com/ |

CITY OF MESA AGREEMENT PURSUANT TO SOLICITATION

This Agreement pursuant to solicitation ("Agreement") is entered into this 27th day of February, 2018, by and between the City of Mesa, Arizona, an Arizona municipal corporation ("City"), and SHI INTERNATIONAL CORP, a New Jersey corporation ("Contractor"). The City and Contractor are each a "Party" to the Agreement or together are "Parties" to the Agreement.

RECITALS

- A. The City issued solicitation number 2018011 ("Solicitation") for **INFORMATION TECHNOLOGY SOLUTIONS & SERVICES**, to which Contractor provided a response ("Response"); and
- B. The City Selected Contractor's Response as being in the best interest of the City and wishes to engage Contractor in providing the Services/Products described in the Solicitation and Response.
- C. "Services" means the resale services provided by Contractor under this Agreement; i.e. sourcing and fulfilling the Product and/or providing deliverables identified in an Order.
- D. "Products" means collectively third-party software, computer peripherals, computer hardware, and associated IT services provided by third parties or Contractor, as the case may be.
- E. "Order" means the form of purchase order or other document used for the purpose of ordering Product and/or deliverables pursuant to this Agreement. Order shall also include a phone order or on-line order placed by the City employee to Contractor utilizing the City's corporate procurement card or the City's written or electronic form of purchase requisition.

In consideration of the reciprocal promises contained in the Agreement, and for other valuable and good consideration, which the Parties acknowledge the receipt and sufficiency of, the Parties agree to the following Terms & Conditions.

TERMS & CONDITIONS

- 1. **Term**. This Agreement is for a term beginning on **March 1, 2018** and ending on **February 28, 2023**. The use of the word "Term" in the Agreement includes the aforementioned period as well as any applicable extensions or renewals in accordance with this Section 1.
 - 1.1 **Renewals**. On the mutual written agreement of the Parties, the Term may be renewed up to a maximum of **two (2), one (1) year** periods. Any renewal(s) will be a continuation of the same terms and conditions as in effect immediately prior to the expiration of the then-current term.
 - 1.2 **Extension for Procurement Processes**. Upon the expiration of the Term of this Agreement, including any renewals permitted herein, at the City's sole discretion this Agreement may be extended on a month-to-month basis for a maximum of six (6) months to allow for the City's procurement processes in the selection of a Contractor to provide the Services/Products provided under this Agreement. The City will notify the Contractor in writing of its intent to extend the Agreement at least thirty (30) calendar days prior to the expiration of the Term. Any extension under this Subsection 1.2 will be a continuation of the same terms and conditions as in effect immediately prior to the expiration of the then-current term.
 - 1.3 **Delivery**. Delivery shall be made to the location(s) contained in the Scope of Work within thirty (30) days after receipt of an Order. Contractor agrees to deliver all Products to the desktop of the ordering customer be delivered F.O.B. destination, freight pre-paid and allowed to various locations throughout the City. The City of Mesa shall be responsible for extra incurred fees for expedited shipping or other special delivery requirements. In

many cases within the City, the Contractor may be asked to deliver all goods to the front counter within a given department; this is a City requirement and other participating agencies who utilize this Agreement as a cooperative contract (see Exhibit C, Mesa Standard Terms & Conditions) may have other delivery requirements.

2. **Scope of Work.** The Contractor will provide the necessary staff, Services and associated resources to provide the City with the Services, Products, and obligations attached to this Agreement as Exhibit A ("Scope of Work") Contractor will be responsible for all costs and expenses incurred by Contractor that are incident to the performance of the Scope of Work unless otherwise stated in Exhibit A. Contractor will supply all equipment and instrumentalities necessary to perform the Scope of Work. If set forth in Exhibit A, the City will provide Contractor's personnel with adequate workspace and such other related facilities as may be required by Contractor to carry out the Scope of Work.

The Agreement is based on the Solicitation and Response which are hereby incorporated by reference into the Agreement as if written out and included herein. In addition to the requirements specifically set forth in the Scope of Work, the Parties acknowledge and agree that the Contractor shall perform in accordance with all terms, conditions, specifications and other requirements set forth within the Solicitation and Response unless modified herein.

3. **Orders.** Orders must be placed with the Contractor by either a: (i) Purchase Order when for a one-time purchase; (ii) notice to proceed, or (iii) Delivery Order off a Master Agreement for a requirements contract where multiple as-needed orders will be placed with the Contractor. The City may use the Internet to communicate with Contractor and to place Orders as permitted under this Agreement. The terms and conditions on any order form, quote, or similar document provided by Contractor to the City will not take precedence over the language set forth in this Agreement or any of the documents outlined in Section 4 below.

4. **Document Order of Precedence.** In the event of any inconsistency between the terms of the body of the Agreement, Exhibits, Solicitation, and Response, the language of the documents will control in the following order.

- a. Amendments to the Agreement
- b. Agreement
- c. Exhibits
 1. Mesa Standard Terms & Conditions (Exhibit C)
 2. Pricing (Exhibit B)
 3. Scope of Work (Exhibit A)
 4. Other Exhibits not listed above
- d. Solicitation including any addenda
- e. Contractor's Response

5. **Payment.** Subject to the provisions of the Agreement, the City will pay Contractor the sum(s) described in Exhibit B ("Pricing") in consideration of Contractor's performance of the Scope of Work during the Term.

6. **Pricing.** Contractor's pricing shall be in the format of a minimum percentage discount off a verifiable price index. Contractor may submit discounts for various manufacturers. At the time of purchase, Contractor may offer deeper discounts beyond the discounted price list, based on volume or other factors, as applicable. Minimum discounts will remain firm during the entirety of the Term of the Agreement, unless the Contractor requests to increase its discount percentage, and will include all charges that may be incurred in fulfilling requirement(s). In addition to decreasing prices for the balance of the Term due to a change in market conditions, a Contractor may conduct sales promotions involving price reductions for a specified lesser period. In the event a Product is discontinued, Contractor will provide a Product of the same or greater functionality, utilizing the discount structure.

It is the Contractor's responsibility to provide the City with an up-to-date price list for the duration of the Agreement.

- 6.1 **Prices.** All pricing discounts shall be firm for the Term and all extensions or renewals of the Term except where otherwise provided in this Agreement, and will include all costs of the Contractor providing the Products/Service including transportation and insurance costs. No fuel surcharges will be accepted unless allowed in this Agreement. The City shall not be invoiced at prices higher than those stated in the Agreement.

The Contractor further agrees that any reductions in the price of the Products or Services covered by this Agreement will apply to the undelivered balance. The Contractor shall promptly notify the City of such price reductions.

No price modifications will be accepted without proper request by the Contractor and response by the City's Purchasing Division.

- 6.2 **Price Adjustment.** Any requests for reasonable price adjustments must be submitted in accordance with this section. Requests for adjustment in cost of labor and/or Products must be supported by appropriate documentation. There is no guarantee the City will accept a price adjustment therefore Contractor should be prepared for the Pricing to be firm over the Term of the Agreement. The City is only willing to entertain price adjustments based on an increase to Contractor's actual expenses or other reasonable adjustment in providing the Services/Products under the Agreement. If the City agrees to the adjusted price terms, the City shall issue written approval of the change.

During the sixty (60) day period prior to expiration date of the then-current term of the Agreement, the Contractor may submit a written request to the City to allow an increase to the prices in an amount not to exceed the twelve (12) month change in the **Consumer Price Index for All Urban Consumers** (CPI-U), US City Average, All Items, Not Seasonally Adjusted as published by the U.S. Department of Labor, Bureau of Labor Statistics (<http://www.bls.gov/cpi/home.htm>). The City shall review the request for adjustment and respond in writing; such response and approval shall not be unreasonably withheld.

- 6.3 **Renewal and Extension Pricing.** Any extension of the Agreement will be at the same pricing as the initial term. If the Agreement is renewed in accordance with Section 1, pricing may be adjusted for amounts other than inflation that represent actual costs to the Contractor based on the mutual agreement of the Parties. Contractor may submit a request for a price adjustment along with appropriate supporting documentation demonstrating the cost to the Contractor. Renewal prices shall be firm for the term of the renewal period and may be adjusted thereafter as outlined in Subsection 6.2. There is no guarantee the City will accept a price adjustment.

- 6.4 **Invoices.** Payment will be made to Contractor following the City's receipt of a properly completed invoice. Any issues regarding billing or invoicing must be directed to the City Department/Division requesting the Service or Product from the Contractor. A properly completed invoice should contain, at a minimum, all of the following:

- a. Contractor name, address, and contact information;
- b. City billing information;
- c. City contract number as listed on the first page of the Agreement;
- d. Invoice number and date;
- e. Payment terms;
- f. Date of Service or delivery of Product;
- g. Description of Products or Services provided;
- h. If Products provided, the quantity delivered and pricing of each unit;

- i. Applicable taxes; and
 - j. Total amount due.
- 6.5 **Payment of Funds.** Contractor acknowledges the City may, at its option and where available use a Procurement Card/e-Payables to make payment for orders under the Agreement; otherwise, payment will be through a traditional method of a check or Electronic Funds Transfer (EFT) as available.
- 6.6 **Disallowed Costs, Overpayment.** If at any time the City determines that a cost for which payment was made to Contractor is a disallowed cost, such as an overpayment or a charge for Products/Service not in accordance with the Agreement, the City will notify Contractor in writing of the disallowance; such notice will state the means of correction which may be, but is not limited to, adjustment of any future claim/invoice submitted by Contractor in the amount of the disallowance, or to require repayment of the disallowed amount by Contractor. Contractor will be provided with the opportunity to respond to the notice.

7. **Insurance.**

- 7.1 Contractor must obtain and maintain at its expense throughout the Term of the Agreement, at a minimum, the types and amounts of insurance set forth in this Section 7 from insurance companies authorized to do business in the State of Arizona; the insurance must cover the Products/Service to be provided by Contractor under the Agreement. For any insurance required under the Agreement, Contractor will name the City of Mesa, its agents, representatives, officials, volunteers, officers, elected officials, and employees as additional insured, as evidenced by providing either an additional insured endorsement or proper insurance policy excerpts.

Nothing in this Section 7 limits Contractor's responsibility to the City. The insurance requirements herein are minimum requirements for the Agreement and in no way limit any indemnity promise(s) contained in the Agreement.

- 7.2 The City does not warrant the minimum limits contained herein are sufficient to protect Contractor and subcontractor(s) from liabilities that might arise out of performance under the Agreement by Contractor, its agents, representatives, employees, or subcontractor(s). Contractor is encouraged to purchase additional insurance as Contractor determines may be necessary.
- 7.3 Each insurance policy required under the Agreement must be in effect at or prior to the execution of the Agreement and remain in effect for the Term of the Agreement.
- 7.4 Prior to the execution of the Agreement, Contractor will provide the City with a Certificate of Insurance (using an appropriate "ACORD" or equivalent certificate) signed by the issuer with applicable endorsements. The City reserves the right to request additional copies of any or all of the policies, endorsements, or notices relating thereto required under the Agreement.
- 7.5 When the City requires a Certificate of Insurance to be furnished, Contractor's insurance is primary of all other sources available. When the City is a certificate holder and/or an additional insured, Contractor agrees no policy will expire, be canceled, or be materially changed to affect the coverage available without advance written notice to the City.
- 7.6 The policies required by the Agreement must contain a waiver of transfer rights of recovery (waiver of subrogation) against the City, its agents, representatives, officials, volunteers, officers, elected officials, and employees for any claims arising out of the work of Contractor where permitted by law.

- 7.7 All insurance certificates and applicable endorsements are subject to review and approval by the City's Risk Management Division.
- 7.8 **Types and Amounts of Insurance.** Contractor must obtain and retain throughout the term of the Agreement, at a minimum, the following:
- 7.8.1 Worker's compensation insurance in accordance with the provisions of Arizona law. If Contractor operates with no employees, Contractor must provide the City with written proof Contractor has no employees. If employees are hired during the course of this Agreement, Contractor must procure worker's compensations in accordance with Arizona law.
 - 7.8.2 The Contractor shall maintain at all times during the term of this contract, a minimum amount of \$1 million per occurrence/\$2 million aggregate Commercial General Liability insurance, including Contractual Liability. For Commercial General Liability insurance, the City of Mesa, their agents, officials, volunteers, officers, elected officials or employees shall be named as additional insured, as evidenced by providing an additional insured endorsement.
 - 7.8.3 Automobile liability, bodily injury and property damage with a limit of \$1 million per occurrence including owned, hired and non-owned autos.
8. **Requirements Contract.** Contractor acknowledges and agrees the Agreement is a requirements contract; the Agreement does not guarantee any purchases will be made (minimum or maximum). Orders will only be placed when the City identifies a need and issues a purchase order or a written notice to proceed. The City reserves the right to cancel purchase orders or a notice to proceed within a reasonable period of time of issuance; any such cancellation will be in writing. Should a purchase order or notice to proceed be canceled, the City agrees to reimburse Contractor for any actual and documented costs incurred by Contractor. If the City cancels a purchase order following shipment of the Products but prior to delivery, the City shall pay all freight and handling charges for shipment and return shipment of such Products to Contractor. All returns shall be made in accordance with Contractor's Return Policy found at www.shi.com/returnpolicy and this Agreement, with the terms of this Agreement controlling. The City will not reimburse Contractor for any avoidable costs incurred after receipt of cancellation including, but not limited to, lost profits, shipment of Product, or performance of Services. The City reserves the right to purchase contracted items through other sources if determined in the best interests of the City to do so.
9. **Notices.** All notices to be given pursuant to the Agreement will be delivered to the Contractor at the address listed on Page 1 of this Agreement. Notice will be delivered pursuant to the requirements set forth the Mesa Standard Terms and Conditions that are attached to the Agreement as Exhibit C.
10. **WARRANTY.** Contractor warrants that the Services and Products will conform to the requirements of the Agreement. Additionally, Contractor warrants that all Services will be performed in a good, workman-like and professional manner. The City's acceptance of Services or Products provided by Contractor will not relieve Contractor from its obligations under this warranty. If any Products or Services are of a substandard or unsatisfactory manner as determined by the City, Contractor, at no additional charge to the City, will provide Products or redo such Services until in accordance with this Agreement and to the City's reasonable satisfaction.
11. **OEM PRODUCT WARRANTY.** Contractor is a value-added reseller ("**VAR**") of Products, not the Original Equipment Manufacturer ("**OEM**") or licensor, and, except as provided herein, Contractor disclaims any warranty responsibility regarding warranties provided by the OEM for the Products provided under this Agreement ("**OEM Product Warranty**"). Contractor shall forward the OEM Product Warranties to the City which are provided to Contractor from the OEM of the Product and, to the extent granted by the OEM, the City shall be the beneficiary of the OEM's Product Warranties

with respect to the Product. Contractor is not a party to any such terms of the OEM Product Warranty between the City and OEM and the City agrees to look to the OEM for satisfaction of any and all OEM Product Warranty claims related to that OEM's Product.

EXCEPT AS OTHERWISE PROVIDED IN THIS AGREEMENT, CONTRACTOR HEREBY DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WARRANTY OF NONINFRINGEMENT, OR ANY WARRANTY RELATING TO THIRD PARTY SERVICES OR PRODUCTS. THE DISCLAIMER CONTAINED IN THIS PARAGRAPH DOES NOT AFFECT THE TERMS OF ANY OEM PRODUCT WARRANTY.

12. **Representations of Contractor.** To the best of Contractor's knowledge, Contractor agrees that:
 - a. Contractor has no obligations, legal or otherwise, inconsistent with the terms of the Agreement or with Contractor's undertaking of the relationship with the City;
 - b. Performance of the Services called for by the Agreement do not and will not violate any applicable law, rule, regulation, or any proprietary or other right of any third party;
 - c. Contractor will not use in the performance of Contractor's responsibilities under the Agreement any proprietary information or trade secret of a former employer of its employees (other than City, if applicable); and
 - d. Contractor has not entered into and will not enter into any agreement, whether oral or written, in conflict with the Agreement.

13. **Mesa Standard Terms and Conditions.** Exhibit C to the Agreement is the Mesa Standard Terms and Conditions as modified by the Parties, which are incorporated by reference into the Agreement as though fully set forth herein. In the event of any inconsistency between the terms of the Agreement and the Mesa Standard Terms and Conditions, the language of the Agreement will control. The Parties or a Party are referred to as a "party" or "parties" in the Mesa Standard Terms and Conditions. The Term is referred to as the "term" in the Mesa Standard Terms and Conditions.

14. **Counterparts and Facsimile or Electronic Signatures.** This Agreement may be executed in two (2) or more counterparts, each of which will be deemed an original and all of which, taken together, will constitute one agreement. A facsimile or other electronically delivered signature to the Agreement will be deemed an original and binding upon the Party against whom enforcement is sought.

15. **Incorporation of Recitals and Exhibits.** All Recitals and Exhibits to the Agreement are hereby incorporated by reference into the Agreement as if written out and included herein. In the event of any inconsistency between the terms of the body of the Agreement and the Exhibits, the language of the Agreement will control.

Exhibits to this Agreement are the following:
 - (A) Scope of Work / Technical Specifications
 - (B) Pricing
 - (C) Mesa Standard Terms and Conditions

16. **Attorneys' Fees.** The prevailing Party in any litigation arising out of the Agreement will be entitled to the recovery of its reasonable attorney's fees, court costs, and other litigation related costs and fees from the other Party.

17. **Title, Risk of Loss, Returns.** Contractor shall transfer to the City good and merchantable title to the Product, free from all liens, encumbrances and claims of others, upon delivery of the Product to and its receipt by the City, at which time title and risk of loss shall vest fully in the City, unless

notice of rejection is provided to Contractor's authorized representative within three (3) business days after such delivery. All returns of Product shall be made in accordance with this Agreement and Contractor's Return Policy found at www.shi.com/returnpolicy, with the terms of the Agreement controlling.

18. **Additional Acts.** The Parties agree to execute promptly such other documents and to perform such other acts as may be reasonably necessary to carry out the purpose and intent of the Agreement.
19. **Headings.** The headings of the Agreement are for reference only and will not limit or define the meaning of any provision of the Agreement.

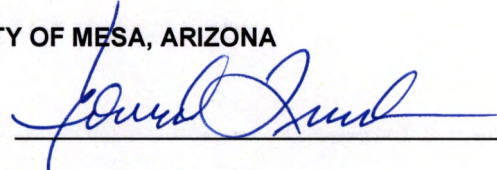
By executing below, each Party acknowledges that it understands, approves, and accepts all of the terms of the Agreement and the attached exhibits.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

CITY OF MESA, ARIZONA

SHI INTERNATIONAL CORP.

By: _____



By: _____



Edward Quedens

Cassie Skelton

Printed Name

Printed Name

Business Services Director

Contracts Manager

Title

Title

2-27-18

2/27/18

Date

Date

REVIEWED BY:

By: _____



EXHIBIT A

SCOPE OF WORK

1. **MINIMUM REQUIREMENTS.** Contractor must meet the following minimum qualifications:
 - a. A full range of information technology solution Products and Services to meet varying requirements of governmental agencies.
 - b. Have a strong national presence as a computer solutions provider.
 - c. Have a distribution model capable of delivering Products, free of charge, in a timely manner on a nationwide basis.
 - d. Have a demonstrated sales presence.
 - e. Ability to provide a toll-free telephone and state of the art electronic facsimile and internet ordering and billing capabilities.
 - f. Be able to meet the minimum requirements of the cooperative purchasing program detailed herein.

2. **ORDERING.** Although the City is open to alternate ordering methods, the primary methods for customers placing orders with the Contractor is through the following:
 - a. Online
 - b. Telephone
 - c. Fax
 - d. Email

3. **SCOPE OF PRODUCTS.** Contractor will provide the ability to purchase a comprehensive, wide variety of Information Technology Solution Products including but not limited to the following categories:
 - a. **Personal Computer Systems:** National brand name desktop PCs, notebooks and laptops from Enterprise Tier and Middle Tier Contractors that are business related computers, manufactured by companies, such as, Apple, COMPAQ, Dell, Gateway, Hewlett Packard, IBM / Lenovo and Toshiba.
 - b. **Standard Business Workstation:** These will be used for typical tasks, which will include word processing, spreadsheet analysis, database management, business graphics, statistical analysis, internet, and other office automation activities. Product will include the operating system license, software media and documentation in the hardware shipment.
 - c. **High End Workstation:** These will be used by application developers using GIS, CASE or other high-level language development tools, Computer Aided Design and Drafting professional, Internet Application developers or other sophisticated application work. Product will include the operating system license, software media and documentation in the hardware shipment.
 - d. **Laptop Computer or Notebook:** These will be used by traveling or remote access users for typical office automation and business productivity use. With a port replicator or docking station, it may also be used as a standard desktop. Product will include the operating system license, software media and documentation in the hardware shipment.
 - e. **Network Equipment:** This includes equipment primarily used for communications over an IP network. This includes layer 2 and layer 3 switches, routers, area wireless access points, point-to-point wireless access, optics, media interfaces (i.e. serial, T1, T3, OC3) and fiber channel. Class of equipment should include home office, small and medium business, and enterprise. Contractors may include, but not limited to, Cisco Systems, Dell,

Juniper Networks, HP, Extreme Networks, Enterasys Networks, D-Link, Netgear, and Brocade Communications Systems.

- f. **Monitors:** These will include plug and play compatible monitors that are manufactured for the above systems and/or any other brand that may be specifically called for by the ordering entity and which meet the most current UL and OSHA requirements.
- g. **Computer and Network Products and Peripherals:** Complete availability of major manufacturers Product lines on items such as, but not limited to RAM, graphic accelerator cards, network interface cards, cables, printers, scanners, keyboards, drives, memory cards, cables, batteries, etc.
- h. **Services:** Services such as cloud computing, consulting, technical support, leasing/financing, trade-ins, repair, design, analysis, configuration, implementation, installation, training, and maintenance, etc. In addition, Services which are related to the design, use or operation of the Products being purchased such as system configurations, testing, hardware/software installation, upgrades, imaging, etc.

Note: All hardware must come fully assembled. For example, if extra memory, additional drives or peripherals are ordered, the Contractor must install them unless the Participating Agency request they not be installed. Contractor shall provide these assembly and installation services as stated in the applicable Order; any additional terms and costs that may apply will be identified in the quote.

In cases of custom configuration (e.g.: imaging, etching, kitting, build to order machines, rack and stack servers) and large roll outs, there may be an additional cost associated with assembly. Any additional costs will be noted at the time of quoting.

Installation/deployment projects typically are governed by a scope of work specific to the project which may require an additional cost. If installation is requested the Contractor will review options and provide the scope of work as well as any associated costs at the time of quoting.

- i. **Comprehensive Product Offering:** Contractor's complete catalog and Services set forth in Exhibit B shall be available. The City reserves the right to accept or reject any or all items offered.
 - j. **Financing:** Options available such as lease programs and conditional sales contracts.
4. **LICENSES.** Participating Agencies may be required to sign a separate agreement, rider or End User Licensing Agreement ("EULA") as required by manufacturers.
5. **DEFECTIVE PRODUCT.** All defective Products shall be replaced and exchanged by the Contractor at no cost to the City in accordance with this Agreement and Contractor's Return Policy found at www.shi.com/returnpolicy, with the terms of this Agreement controlling. Contractor will order a replacement unit within one (1) business day of notice of damage, defect or DOA from the City. The cost of transportation, unpacking, inspection, re-packing, re-shipping or other like expenses shall be paid by the Contractor. All replacement Products must be received by the City within seven (7) days of initial notification.

**EXHIBIT B
PRICING**

| Item # | Product | Product / Group | Discount | Manufacturer Name |
|--------|--------------------------|--|----------|--------------------------------------|
| 1) | Group 1 - Systems | 1) Desktops | 4.50% | SHI's Full Catalog of Systems |
| | | 2) Notebooks | 4.50% | SHI's Full Catalog of Systems |
| | | 3) Tablets | 4.50% | SHI's Full Catalog of Systems |
| | | 4) Servers (1 Processor, 2 Processor, 4+ Processor, Blade, Tower, Unix, Handhelds, etc) | 4.50% | SHI's Full Catalog of Systems |
| 2) | Group 2 - Input Devices | 5) Keyboards | 5.00% | SHI's Full Catalog of Input Devices |
| | | 6) Mice | 5.00% | SHI's Full Catalog of Input Devices |
| | | 7) Imaging Scanners | 4.00% | SHI's Full Catalog of Input Devices |
| | | 8) POS Scanners | 4.00% | SHI's Full Catalog of Input Devices |
| | | 9) Pointing Devices | 4.00% | SHI's Full Catalog of Input Devices |
| | | 10) Bar Code Readers | 4.00% | SHI's Full Catalog of Input Devices |
| | | 11) Audio Input | 4.00% | SHI's Full Catalog of Input Devices |
| | | 12) Input Adapters | 4.00% | SHI's Full Catalog of Input Devices |
| | | 13) PC and Network Cameras | 4.00% | SHI's Full Catalog of Input Devices |
| | | 14) Input Cables | 4.00% | SHI's Full Catalog of Input Devices |
| | | 15) Input Accessories | 4.00% | SHI's Full Catalog of Input Devices |
| 3) | Group 3 - Output Devices | 16) Displays | 4.50% | SHI's Full Catalog of Output Devices |
| | | 17) Printers | 4.50% | SHI's Full Catalog of Output Devices |

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|----|------------------|------------------------------------|-------|--------------------------------------|
| | | 18) Inkjet Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 19) Inkjet Photo Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 20) Laser Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 21) Label Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 22) Dot Matrix Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 23) Multi-Function Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 24) Wide Format Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 25) Multi-Function Inkjet Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 26) Wide Format Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 27) Fax Machine Printers | 4.50% | SHI's Full Catalog of Output Devices |
| | | 28) Printer Accessories | 4.50% | SHI's Full Catalog of Output Devices |
| | | 29) Projectors | 4.50% | SHI's Full Catalog of Output Devices |
| | | 30) Projector Accessories | 4.50% | SHI's Full Catalog of Output Devices |
| | | 31) Audio Input | 4.50% | SHI's Full Catalog of Output Devices |
| | | 32) Video Cards | 4.50% | SHI's Full Catalog of Output Devices |
| | | 33) Sound Cards | 4.50% | SHI's Full Catalog of Output Devices |
| | | 34) Output Accessories | 4.50% | SHI's Full Catalog of Output Devices |
| | | 35) Printer Consumables | 4.50% | SHI's Full Catalog of Output Devices |
| 4) | Group 4 - Memory | 36) Desktop | 4.50% | SHI's Full Catalog of Memory |
| | | 37) Flash | 4.50% | SHI's Full Catalog of Memory |

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| | | 38) Networking | 4.50% | SHI's Full Catalog of Memory |
| | | 39) Notebook | 4.50% | SHI's Full Catalog of Memory |
| | | 40) Printer / Fax | 4.50% | SHI's Full Catalog of Memory |
| | | 41) Server | 4.50% | SHI's Full Catalog of Memory |
| 5) | Group 5 - Storage Devices | 42) Adapters Fiber Channel | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 43) Adapters FireWire / USB | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 44) Adapters IDE/ATA/SATA | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 45) Adapters RAID | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 46) Adapters SCSI | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 47) Bridges & Routers | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 48) Disk Arrays | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 49) Disk Arrays JBOD | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 50) Drives Magneto-Optical | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 51) Drives Removable Disks | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 52) Fiber Channel Switches | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 53) Hard Disks - External | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 54) Hard Disks - Fiber Channel | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 55) Hard Disks - IDE/ATA/S | 4.00% | SHI's Full Catalog of Storage Devices |
| 56) Hard Disks - Notebook | 4.00% | SHI's Full Catalog of Storage Devices | | |
| | | 57) Hard Disks - SCSI | 4.00% | SHI's Full Catalog of Storage Devices |

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| | | 58) Networking Accessories | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 59) Optical Drives - CD-ROM | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 60) Optical Drives - CD-RW | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 61) Optical Drives - DVD-CD | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 62) Optical Drives - DVD-RW | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 63) Storage Accessories | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 64) Storage - NAS | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 65) Storage - SAN | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 66) Tape Autoloaders -AIT | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 67) Tape Autoloaders - DAT | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 68) Tape Autoloaders - DLT | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 69) Tape Autoloaders - LTO | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 70) Tape Drives - 4mm | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 71) Tape Drives - 8mm/VXA | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 72) Tape Drives - AIT | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 73) Tape Drives - DAT | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 74) Tape Drives - DLT | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 75) Tape Drives - LTO/Ultrium | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 76) Tape Drives SDLT | 4.00% | SHI's Full Catalog of Storage Devices |
| | | 77) Tape Drives - Travan | 4.00% | SHI's Full Catalog of Storage Devices |

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| 6) | Group 6 - Network Equipment | 78) 10/100 Hubs & Switches | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 79) Bridges & Routers | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 80) Gigabit Hubs & Switches | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 81) Concentrators & Multiplexers | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 82) Hardware Firewalls | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 83) Intrusion Detection | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 84) KVM | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 85) Modems | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 86) Network Test Equipment | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 87) Network Adapters | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 88) Network Cables | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 89) Network Accessories | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 90) Repeaters & Transceivers | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 91) Wireless LAN Accessories | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 92) Token Authentication | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 93) 10G Fiber Optic Transceivers | 5.00% | SHI's Full Catalog of Network Equipment |
| | | 94) 1G Fiber Optic Transceivers | 5.00% | SHI's Full Catalog of Network Equipment |
| 7) | Group 7 - Software | 95) Licensing Packages (e.g. Microsoft) | 4.50% | SHI's Full Catalog of Software |
| | | 96) Licensing Backup | 4.50% | SHI's Full Catalog of Software |
| | | 97) Licensing Barcode/OC | 4.50% | SHI's Full Catalog of Software |

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| | | 98) Licensing Business Application | 4.50% | SHI's Full Catalog of Software |
| | | 99) Licensing CAD/CAM | 4.50% | SHI's Full Catalog of Software |
| | | 100) Licensing - Cloning | 4.50% | SHI's Full Catalog of Software |
| | | 101) Licensing - Computer Services | 4.50% | SHI's Full Catalog of Software |
| | | 102) Licensing - Database | 4.50% | SHI's Full Catalog of Software |
| | | 103) Licensing - Development | 4.50% | SHI's Full Catalog of Software |
| | | 104) Licensing - Entertainment | 4.50% | SHI's Full Catalog of Software |
| | | 105) Licensing - Financial | 4.50% | SHI's Full Catalog of Software |
| | | 106) Licensing - Flow Chart | 4.50% | SHI's Full Catalog of Software |
| | | 107) Licensing - Graphic Design | 4.50% | SHI's Full Catalog of Software |
| | | 108) Licensing - Handheld | 4.50% | SHI's Full Catalog of Software |
| | | 109) Licensing - Network OS | 4.50% | SHI's Full Catalog of Software |
| | | 110) Licensing - OS | 4.50% | SHI's Full Catalog of Software |
| | | 111) Licensing - Personal Organization | 4.50% | SHI's Full Catalog of Software |
| | | 112) Licensing - Presentation | 4.50% | SHI's Full Catalog of Software |
| | | 113) Licensing - Reference | 4.50% | SHI's Full Catalog of Software |
| | | 114) Licensing - Report Analysis | 4.50% | SHI's Full Catalog of Software |
| | | 115) Licensing - Spreadsheet | 4.50% | SHI's Full Catalog of Software |
| | | 116) Licensing - Utilities | 4.50% | SHI's Full Catalog of Software |
| | | 117) Licensing - Warranties | 4.50% | SHI's Full Catalog of Software |

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| | | 118) Licensing - Web Development | 4.50% | SHI's Full Catalog of Software |
| | | 119) Licensing - Word Processing | 4.50% | SHI's Full Catalog of Software |
| | | 120) Software - Backup | 4.50% | SHI's Full Catalog of Software |
| | | 121) Software - Barcode / OCR | 4.50% | SHI's Full Catalog of Software |
| | | 122) Software - Business Application | 4.50% | SHI's Full Catalog of Software |
| | | 123) Software - CAD/CAM | 4.50% | SHI's Full Catalog of Software |
| | | 124) Software - Cloning | 4.50% | SHI's Full Catalog of Software |
| | | 125) Software - Computer Services | 4.50% | SHI's Full Catalog of Software |
| | | 126) Software - Database | 4.50% | SHI's Full Catalog of Software |
| | | 127) Software - Development | 4.50% | SHI's Full Catalog of Software |
| | | 128) Software - Entertainment | 4.50% | SHI's Full Catalog of Software |
| | | 129) Software - Financial | 4.50% | SHI's Full Catalog of Software |
| | | 130) Software - Flow Chart | 4.50% | SHI's Full Catalog of Software |
| | | 131) Software - Graphic Design | 4.50% | SHI's Full Catalog of Software |
| | | 132) Software - Handheld | 4.50% | SHI's Full Catalog of Software |
| | | 133) Software - OS | 4.50% | SHI's Full Catalog of Software |
| | | 134) Software - Personal Organization | 4.50% | SHI's Full Catalog of Software |
| | | 135) Software - Presentation | 4.50% | SHI's Full Catalog of Software |
| | | 136) Software - Reference | 4.50% | SHI's Full Catalog of Software |
| | | 137) Software - Report Analysis | 4.50% | SHI's Full Catalog of Software |

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| | | 138) Software - Spreadsheet | 4.50% | SHI's Full Catalog of Software |
| | | 139) Software - Utilities | 4.50% | SHI's Full Catalog of Software |
| | | 140) Software - Warranties | 4.50% | SHI's Full Catalog of Software |
| | | 141) Software - Web Development | 4.50% | SHI's Full Catalog of Software |
| | | 142) Software - Word Processing | 4.50% | SHI's Full Catalog of Software |
| 8) | Group 8 - Media Supplies | 143) Media - 4mm tape | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 144) Media - AIT tape | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 145) Media - DAT tape | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 146) Media - DLT tape | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 147) Media LTO / Ultrium tape drive | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 148) Media - Magneto - Optical | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 149) Media - Optical | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 150) Media - SLR tape | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 151) Media - Travan tape | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 152) Media - VXA tape | 4.00% | SHI's Full Catalog of Media Supplies |
| | | 153) Media - zip | 4.00% | SHI's Full Catalog of Media Supplies |
| 9) | Group 9 - Collaboration & IP Telephony | 154) IP phones | 4.00% | SHI's Full Catalog of Collaboration and IP Telephony |
| | | 155) Video conferencing products | 4.00% | SHI's Full Catalog of Collaboration and IP Telephony |
| | | 156) Voice gateways / servers | 4.00% | SHI's Full Catalog of Collaboration and IP Telephony |

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|--------------------------------|------------------|----------------------------------|-------|--|
| | | 157) Headsets | 4.00% | SHI's Full Catalog of Collaboration and IP Telephony |
| | | 158) Audio conferencing products | 4.00% | SHI's Full Catalog of Collaboration and IP Telephony |
| | | 159) Analog phones | 4.00% | SHI's Full Catalog of Collaboration and IP Telephony |
| | | 160) Accessories | 4.00% | SHI's Full Catalog of Collaboration and IP Telephony |
| 10) | Group 10 - Other | 161) Advanced Integration | 4.00% | SHI's Full Catalog of Other |
| | | 162) Asset Disposal | 4.00% | SHI's Full Catalog of Other |
| | | 163) Asset Management | 4.00% | SHI's Full Catalog of Other |
| | | 164) Cables | 4.00% | SHI's Full Catalog of Other |
| | | 165) Cables - custom | 4.00% | SHI's Full Catalog of Other |
| | | 166) Cables - printer | 4.00% | SHI's Full Catalog of Other |
| | | 167) Complex warranties | 4.00% | SHI's Full Catalog of Other |
| | | 168) Desktop Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 169) Display Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 170) Electronic Services | 4.00% | SHI's Full Catalog of Other |
| | | 171) Handheld Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 172) Imaging Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 173) Imaging - Camcorders | 4.00% | SHI's Full Catalog of Other |
| 174) Imaging - Digital Cameras | 4.00% | SHI's Full Catalog of Other | | |

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| | | 175) Internal Lab Service | 4.00% | SHI's Full Catalog of Other |
| | | 176) Lab fees | 4.00% | SHI's Full Catalog of Other |
| | | 177) Managed Services | 4.00% | SHI's Full Catalog of Other |
| | | 178) Miscellaneous solutions | 4.00% | SHI's Full Catalog of Other |
| | | 179) Mounting hardware for vehicles | 4.00% | SHI's Full Catalog of Other |
| | | 180) Networking Warranties | 4.00% | SHI's Full Catalog of Other |
| | | 181) Notebook Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 182) Notebook Batteries | 4.00% | SHI's Full Catalog of Other |
| | | 183) PC Lab order services | 4.00% | SHI's Full Catalog of Other |
| | | 184) POS Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 185) POS Displays | 4.00% | SHI's Full Catalog of Other |
| | | 186) Power Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 187) Power Surge Protection | 4.00% | SHI's Full Catalog of Other |
| | | 188) Power UPS | 4.00% | SHI's Full Catalog of Other |
| | | 189) Server Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 190) Service Charge | 4.00% | SHI's Full Catalog of Other |
| | | 191) System Components | 4.00% | SHI's Full Catalog of Other |
| | | 192) Training Courses | 4.00% | SHI's Full Catalog of Other |
| | | 193) Training Reference Manuals | 4.00% | SHI's Full Catalog of Other |
| | | 194) Warranties - Electronic | 4.00% | SHI's Full Catalog of Other |

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|--|--|-------------------------------------|-------|-----------------------------|
| | | 195) iPad / Tablet Stylus | 4.00% | SHI's Full Catalog of Other |
| | | 196) Mouse / Wrist Pads | 4.00% | SHI's Full Catalog of Other |
| | | 197) Security Locks and Hardware | 4.00% | SHI's Full Catalog of Other |
| | | 198) Tools | 4.00% | SHI's Full Catalog of Other |
| | | 199) Document Scanner Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 200) Flatbed Scanners | 4.00% | SHI's Full Catalog of Other |
| | | 201) Mobile Scanners | 4.00% | SHI's Full Catalog of Other |
| | | 202) Network Scanners | 4.00% | SHI's Full Catalog of Other |
| | | 203) Sheet fed Scanners | 4.00% | SHI's Full Catalog of Other |
| | | 204) Wide Format Scanners | 4.00% | SHI's Full Catalog of Other |
| | | 205) Workgroup / Department Scanner | 4.00% | SHI's Full Catalog of Other |
| | | 206) Build to Order Desktops | 4.00% | SHI's Full Catalog of Other |
| | | 207) Nettop | 4.00% | SHI's Full Catalog of Other |
| | | 208) Point of Sale | 4.00% | SHI's Full Catalog of Other |
| | | 209) Ultra Small Form Factor | 4.00% | SHI's Full Catalog of Other |
| | | 210) Apple / Mac Memory Upgrades | 4.00% | SHI's Full Catalog of Other |
| | | 211) Chips / SIMMs/SIPPs / ROMs | 4.00% | SHI's Full Catalog of Other |
| | | 212) Computer Cases | 4.00% | SHI's Full Catalog of Other |
| | | 213) CPUs / Fans | 4.00% | SHI's Full Catalog of Other |
| | | 214) Memory Accessories | 4.00% | SHI's Full Catalog of Other |

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|--|--|---|-------|-----------------------------|
| | | 215) Motherboards / Chassis | 4.00% | SHI's Full Catalog of Other |
| | | 216) 1 - 2 port Serial Boards | 4.00% | SHI's Full Catalog of Other |
| | | 217) 3+ port Serial Boards | 4.00% | SHI's Full Catalog of Other |
| | | 218) Console Server | 4.00% | SHI's Full Catalog of Other |
| | | 219) Device Server | 4.00% | SHI's Full Catalog of Other |
| | | 220) Terminal Server | 4.00% | SHI's Full Catalog of Other |
| | | 221) Content Management | 4.00% | SHI's Full Catalog of Other |
| | | 222) Firewall / VPN Appliances | 4.00% | SHI's Full Catalog of Other |
| | | 223) Multifunction Security Appliances | 4.00% | SHI's Full Catalog of Other |
| | | 224) Network Camera Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 225) Network Cameras | 4.00% | SHI's Full Catalog of Other |
| | | 226) Physical/Environmental Security | 4.00% | SHI's Full Catalog of Other |
| | | 227) Security Appliance Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 228) Security Tokens | 4.00% | SHI's Full Catalog of Other |
| | | 229) Unified Threat Management | 4.00% | SHI's Full Catalog of Other |
| | | 230) 2-way Radios / Walkie Talkies | 4.00% | SHI's Full Catalog of Other |
| | | 231) Apple Notebooks | 4.00% | SHI's Full Catalog of Other |
| | | 232) Convertible PCs / Slate PCs / iPad | 4.00% | SHI's Full Catalog of Other |
| | | 233) iPad | 4.00% | SHI's Full Catalog of Other |
| | | 234) Slate Tablet Computers | 4.00% | SHI's Full Catalog of Other |

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|--|--|-------------------------------------|-------|-----------------------------|
| | | 235) GPS / PDA | 4.00% | SHI's Full Catalog of Other |
| | | 236) Wireless Communication Devices | 4.00% | SHI's Full Catalog of Other |
| | | 237) Batteries | 4.00% | SHI's Full Catalog of Other |
| | | 238) Power Supplies / Adapters | 4.00% | SHI's Full Catalog of Other |
| | | 239) Rackmount Equipment | 4.00% | SHI's Full Catalog of Other |
| | | 240) Remote Power Management | 4.00% | SHI's Full Catalog of Other |
| | | 241) Surge Suppressors | 4.00% | SHI's Full Catalog of Other |
| | | 242) UPS / Battery Backup | 4.00% | SHI's Full Catalog of Other |
| | | 243) 14" & smaller LCD Display | 4.00% | SHI's Full Catalog of Other |
| | | 244) 15-19" LCD Display | 4.00% | SHI's Full Catalog of Other |
| | | 245) 15-19" Wide LCD Display | 4.00% | SHI's Full Catalog of Other |
| | | 246) 15-19" Wide LED Display | 4.00% | SHI's Full Catalog of Other |
| | | 247) 20-30" LCD Display | 4.00% | SHI's Full Catalog of Other |
| | | 248) 20-30" Wide LCD Display | 4.00% | SHI's Full Catalog of Other |
| | | 249) 20-30" Wide LED Display | 4.00% | SHI's Full Catalog of Other |
| | | 250) PCoIP and Zero Client Displays | 4.00% | SHI's Full Catalog of Other |
| | | 251) Arm Mounts | 4.00% | SHI's Full Catalog of Other |
| | | 252) Ceiling Mounts | 4.00% | SHI's Full Catalog of Other |
| | | 253) Combo Mounts | 4.00% | SHI's Full Catalog of Other |
| | | 254) Desktop Stands / Risers | 4.00% | SHI's Full Catalog of Other |

| | | | | |
|-----|---------------------|--|-----------------------------|------------------------------------|
| | | 255) Flat Wall Mounts | 4.00% | SHI's Full Catalog of Other |
| | | 256) Mount Accessories | 4.00% | SHI's Full Catalog of Other |
| | | 257) Pole Display | 4.00% | SHI's Full Catalog of Other |
| | | 258) Stands / Carts / Feet | 4.00% | SHI's Full Catalog of Other |
| | | 259) Tilt Wall Mounts | 4.00% | SHI's Full Catalog of Other |
| | | 260) C-Cure Products | 4.00% | SHI's Full Catalog of Other |
| | | 261) Istar Products | 4.00% | SHI's Full Catalog of Other |
| | | | | |
| 11) | Group 11 - Services | SERVICE | STANDARD HOURLY RATE | DISCOUNT FROM STANDARD RATE |
| | | Design and Analysis | \$ 125.00 | 4% |
| | | Configuration | \$ 165.00 | 4% |
| | | Implementation | \$ 185.00 | 4% |
| | | Installation | \$ 185.00 | 4% |
| | | Training | \$ 99.00 | 4% |
| | | Maintenance & Support | \$ 99.00 | 4% |
| | | <p>All other Current and Future Products not specifically identified here will be offered at a 4% discount off SHI Advertised List price. Please see description below for more information on SHI's discount model for this contract.</p> | | |

All discounts articulated here represent the minimum discounts off SHI Advertised List Price; actual discounts may be significantly higher.

The comprehensive SHI offering for National IPA consists of all hardware, software, and services available to our customers in the public sector marketplace. The discount structure offered to National IPA is based on our Advertised Price List which can be located on www.shi.com. In many cases, SHI Advertised List Price already reflects a substantial discount off of Manufacturer Published List prices. Given the breadth of manufacturers and products that SHI offers, there will be many opportunities for SHI to secure additional discounts for eligible contract users. We work to provide your contract users with the most advantageous pricing available, above and beyond the minimum discounts offered, whenever possible.

SHI prides ourselves on being honest and transparent with our customers especially when it comes to pricing. We base our discount structure on SHI Advertised Price as this is a verifiable source. We do not inflate this Advertised Price for RFPs in order to make our discounts appear larger. Other vendors may use MSRP or Publisher List price, which can be unreliable as a pricelist may not exist for every product, a pricelist can change from day to day, and a pricelist can be inconsistent depending on where you source the information from. When a vendor manipulates contract language in this manner or uses a loose definition of cost, it results in an increase in profit for them and higher prices for customers.

SHI is willing to provide complete transparency over the life of the contract as it relates to our costs and what we charge National IPA customers.

EXHIBIT C
MESA STANDARD TERMS AND CONDITIONS

1. **INDEPENDENT CONTRACTOR.** It is expressly understood that the relationship of Contractor to the City will be that of an independent contractor. Contractor and all persons employed by Contractor, either directly or indirectly, are Contractor's employees, not City employees. Accordingly, Contractor and Contractor's employees are not entitled to any benefits provided to City employees including, but not limited to, health benefits, enrollment in a retirement system, paid time off or other rights afforded City employees. Contractor employees will not be regarded as City employees or agents for any purpose, including the payment of unemployment or workers' compensation. If any Contractor employees or subcontractors assert a claim for wages or other employment benefits against the City, Contractor will defend, indemnify and hold harmless the City from all such claims.
2. **SUBCONTRACTING.** Contractor may not subcontract work under this Agreement without the express written permission of the City. If Contractor has received authorization to subcontract work, it is agreed that all subcontractors performing work under the Agreement must comply with its provisions. Further, all agreements between Contractor and its subcontractors must provide that the terms and conditions of this Agreement be incorporated therein.
3. **ASSIGNMENT.** This Agreement may not be assigned either in whole or in part without first receiving the other Party's written consent. Any attempted assignment, either in whole or in part, without such consent will be null and void and in such event the other Party will have the right at its option to terminate the Agreement. No granting of consent to any assignment will relieve either Party from any of its obligations and liabilities under the Agreement. Notwithstanding the foregoing, either Party may assign this Agreement and its rights, interests, liabilities and obligations thereunder to a successor pursuant to a merger, consolidation or sale of all or substantially all its assets following sixty (60) days written notice.
4. **SUCCESSORS AND ASSIGNS, BINDING EFFECT.** This Agreement will be binding upon and inure to the benefit of the parties and their respective permitted successors and assigns.
5. **NO THIRD-PARTY BENEFICIARIES.** This Agreement is intended for the exclusive benefit of the parties. Nothing set forth in this Agreement is intended to create, or will create, any benefits, rights, or responsibilities in any third parties.
6. **NON- EXCLUSIVITY.** The City, in its sole discretion, reserves the right to request the Products or Services set forth herein from other sources when deemed necessary and appropriate. No exclusive rights are encompassed through this Agreement.
7. **AMENDMENTS.** There will be no oral changes to this Agreement. This Agreement can only be modified in a writing signed by both parties. No charge for extra work or Product will be allowed unless approved in writing, in advance, by the City and Contractor.
8. **TIME OF THE ESSENCE.** Time is of the essence to the performance of the parties' obligations under this Agreement.
9. **COMPLIANCE WITH APPLICABLE LAWS.**
 - a. **General.** Contractor must procure all permits and licenses, and pay all charges and fees necessary and incidental to the lawful conduct of business. Contractor must stay fully informed of existing and future federal, state, and local laws, ordinances, and regulations that in any manner affect the fulfillment of this Agreement and must comply with the same at its own expense. Contractor bears full responsibility for training, safety, and providing necessary equipment for all Contractor personnel to achieve throughout the term of the Agreement. Upon request, Contractor will demonstrate to the City's satisfaction any programs, procedures, and other activities used to ensure compliance.

- b. **Drug-Free Workplace.** Contractor is hereby advised that the City has adopted a policy establishing a drug-free workplace for itself and those doing business with the City to ensure the safety and health of all persons working on City contracts and projects. Contractor will require a drug-free workplace for all Contractor personnel working under this Agreement. Specifically, all Contractor personnel who are working under this Agreement must be notified in writing by Contractor that they are prohibited from the manufacture, distribution, dispensation, possession, or unlawful use of a controlled substance in the workplace. Contractor agrees to prohibit the use of intoxicating substances by all Contractor personnel, and will ensure that Contractor personnel do not use or possess illegal drugs while in the course of performing their duties.
- c. **Federal and State Immigration Laws.** Contractor agrees to comply with the Immigration Reform and Control Act of 1986 (IRCA) in performance under this Agreement and to permit the City and its agents to inspect applicable personnel records to verify such compliance as permitted by law. Contractor will ensure and keep appropriate records to demonstrate that all Contractor personnel have a legal right to live and work in the United States.
 - i. As applicable to Contractor, under the provisions of A.R.S. § 41-4401, Contractor hereby warrants to the City that Contractor and each of its subcontractors will comply with, and are contractually obligated to comply with, all federal immigration laws and regulations that relate to their employees and A.R.S. § 23-214(A) (hereinafter "Contractor Immigration Warranty").
 - ii. A breach of the Contractor Immigration Warranty will constitute as a material breach of this Agreement and will subject Contractor to penalties up to and including termination of this Agreement at the sole discretion of the City.
 - iii. The City retains the legal right to inspect the papers of all Contractor personnel who provide services under this Agreement to ensure that Contractor or its subcontractors are complying with the Contractor Immigration Warranty. Contractor agrees to assist the City in regard to any such inspections.
 - iv. The City may, at its sole discretion, conduct random verification of the employment records of Contractor and any subcontractor to ensure compliance with the Contractor Immigration Warranty. Contractor agrees to assist the City in regard to any random verification performed.
 - v. Neither Contractor nor any subcontractor will be deemed to have materially breached the Contractor Immigration Warranty if Contractor or subcontractor establishes that it has complied with the employment verification provisions prescribed by Sections 274A and 274B of the Federal Immigration and Nationality Act and the E-Verify requirements prescribed by A.R.S. § 23-214 (A).
- d. **Nondiscrimination.** Contractor represents and warrants that it does not discriminate against any employee or applicant for employment or person to whom it provides services because of race, color, religion, sex, national origin, or disability, and represents and warrants that it complies with all applicable federal, state, and local laws and executive orders regarding employment. Contractor and Contractor's personnel will comply with applicable provisions of Title VII of the U.S. Civil Rights Act of 1964, as amended, Section 504 of the Federal Rehabilitation Act, the Americans with Disabilities Act (42 U.S.C. § 12101 et seq.), and applicable rules in performance under this Agreement.
- e. **State Sponsors of Terrorism Prohibition.** Per A.R.S. § 35-392, Contractor must not be in violation of section 6(j) of the Federal Export Administration Act and subsequently prohibited by the State of Arizona from selling goods or services to the City.

10. **SALES/USE TAX, OTHER TAXES.**

- a. Contractor is responsible for the payment of all taxes including federal, state, and local taxes related to or arising out of Contractor's Services under this Agreement, including by way of illustration but not limitation, federal and state income tax, Social Security tax,

unemployment insurance taxes, and any other taxes or business license fees as required. If any taxing authority should deem Contractor or Contractor employees an employee of the City, or should otherwise claim the City is liable for the payment of taxes that are Contractor's responsibility under this Agreement, Contractor will indemnify the City for any tax liability, interest, and penalties imposed upon the City.

- b. The City is exempt from paying certain federal excise taxes and will furnish an exemption certificate upon request. The City is not exempt from state and local sales/use taxes.
11. **AMOUNTS DUE THE CITY.** Contractor must be current and remain current in all obligations due to the City during the performance of Services under the Agreement. Payments to Contractor may be offset by any delinquent amounts due the City or fees and charges owed to the City.
 12. **PUBLIC RECORDS.** Contractor acknowledges that the City is a public entity, subject to Arizona's public records laws (A.R.S. § 39-121 et. seq.) and that any documents related to this Agreement may be subject to disclosure pursuant to state law in response to a public records request or to subpoena or other judicial process.
 - 12.1. If Contractor believes document related to the Agreement contains trade secrets or other proprietary data, Contractor must notify the City and include with the notification a statement that explains and supports Contractor's claim. Contractor also must specifically identify the trade secrets or other proprietary data that Contractor believes should remain confidential.
 - 12.2. In the event the City determines it is legally required to disclose pursuant to law any documents or information Contractor deems confidential trade secrets or proprietary data, the City, to the extent possible, will provide Contractor with prompt written notice by certified mail, fax, email or other method that tracks delivery status of the requirement to disclose the information so Contractor may seek a protective order from a court having jurisdiction over the matter or obtain other appropriate remedies. The notice will include a time period for Contractor to seek court ordered protection or other legal remedies as deemed appropriate by Contractor. If Contractor does not obtain such court ordered protection by the expiration of said time period, the City may release the information without further notice to Contractor.
 13. **AUDITS AND RECORDS.** Contractor must preserve the records related to this Agreement for six (6) years after completion of the Agreement. The City or its authorized agent reserves the right to inspect any records related to the performance of work specified herein. In addition, the City may inspect any and all payroll, billing or other relevant records kept by Contractor in relation to the Agreement. Contractor will permit such inspections and audits during normal business hours and upon reasonable notice by the City. The audit of records may occur at Contractor's place of business or at City offices, as determined by the City.
 14. **BACKGROUND CHECK.** The City may conduct criminal, driver history, and all other requested background checks of Contractor personnel who would perform Services under the Agreement or who will have access to the City's information, data, or facilities in accordance with the City's current background check policies. Any officer, employee, or agent that fails the background check must be replaced immediately for any reasonable cause not prohibited by law.
 15. **SECURITY CLEARANCE AND REMOVAL OF CONTRACTOR PERSONNEL.** The City will have final authority, based on security reasons: (i) to determine when security clearance of Contractor personnel is required; (ii) to determine the nature of the security clearance, up to and including fingerprinting Contractor personnel; and (iii) to determine whether or not any individual or entity may provide Services under this Agreement. If the City objects to any Contractor personnel for any reasonable cause not prohibited by law, then Contractor will, upon notice from the City, remove any such individual from performance of Services under this Agreement.
 16. **DEFAULT.**
 - a. A party will be in default if that party:

- i. Is or becomes insolvent or is a party to any voluntary bankruptcy or receivership proceeding, makes an assignment for a creditor, or there is any similar action that affects Contractor's capability to perform under the Agreement;
 - ii. Is the subject of a petition for involuntary bankruptcy not removed within sixty (60) calendar days;
 - iii. Conducts business in an unethical manner as set forth in the City Procurement Rules Article 7 or in an illegal manner; or
 - iv. Fails to carry out any term, promise, or condition of the Agreement.
 - b. Contractor will be in default of this Agreement if Contractor is debarred from participating in City procurements and solicitations in accordance with Article 6 of the City's Procurement Rules.
 - c. **Notice and Opportunity to Cure.** In the event a party is in default then the other party may, at its option and at any time, provide written notice to the defaulting party of the default. The defaulting party will have thirty (30) days from receipt of the notice to cure the default; the thirty (30) day cure period may be extended by mutual agreement of the parties, but no cure period may exceed ninety (90) days. A default notice will be deemed to be sufficient if it is reasonably calculated to provide notice of the nature and extent of such default. Failure of the non-defaulting party to provide notice of the default does not waive any rights under the Agreement.
 - d. **Anticipatory Repudiation.** Whenever the City in good faith has reason to question Contractor's intent or ability to perform, the City may demand that Contractor give a written assurance of its intent and ability to perform. In the event that the demand is made and no written assurance is given within five (5) calendar days, the City may treat this failure as an anticipatory repudiation of the Agreement.
17. **REMEDIES.** The remedies set forth in this Agreement are not exclusive. Election of one remedy will not preclude the use of other remedies. In the event of default:
- a. The non-defaulting party may terminate the Agreement, and the termination will be effective immediately or at such other date as specified by the terminating party.
 - b. The City may purchase the Services required under the Agreement from the open market, complete required work itself, or have it completed at the expense of Contractor. If the cost of obtaining substitute Services exceeds the contract price, the City may recover the excess cost by: (i) requiring immediate reimbursement to the City; (ii) deduction from an unpaid balance due to Contractor; (iii) collection against the proposal and/or performance security, if any; (iv) collection against liquidated damages (if applicable); or (v) a combination of the aforementioned remedies or other remedies as provided by law. Costs includes any and all, fees, and expenses incurred in obtaining substitute Services and expended in obtaining reimbursement, including, but not limited to, administrative expenses, attorneys' fees, and costs.
 - c. The non-defaulting party will have all other rights granted under this Agreement and all rights at law or in equity that may be available to it.
 - d. Neither party will be liable for incidental, indirect, special, or consequential damages.
18. **CONTINUATION DURING DISPUTES.** Contractor agrees that during any dispute between the parties, Contractor will continue to perform its obligations until the dispute is settled, instructed to cease performance by the City, enjoined or prohibited by judicial action, or otherwise required or obligated to cease performance by other provisions in this Agreement.
19. **TERMINATION FOR CONVENIENCE.** The City reserves the right to terminate this Agreement in part or in whole upon thirty (30) calendar days' written notice.

20. **TERMINATION FOR CONFLICT OF INTEREST (A.R.S. § 38-511).** Pursuant to A.R.S. § 38-511, the City may cancel this Agreement within three (3) years after its execution, without penalty or further obligation, if any person significantly involved in initiating, securing, drafting, or creating the Agreement for the City becomes an employee or agent of Contractor.
21. **TERMINATION FOR NON-APPROPRIATION AND MODIFICATION FOR BUDGETARY CONSTRAINT.** The City is a governmental agency which relies upon the appropriation of funds by its governing body to satisfy its obligations. If the City reasonably determines that it does not have funds to meet its obligations under this Agreement, the City will have the right to terminate the Agreement without penalty on the last day of the fiscal period for which funds were legally available. In the event of such termination, the City agrees to provide written notice of its intent to terminate thirty (30) calendar days prior to the stated termination date.
22. **PAYMENT TO CONTRACTOR UPON TERMINATION.** Upon termination of this Agreement, Contractor will be entitled only to payment for those Services performed up to the date of termination, and any authorized expenses already incurred up to such date of termination. The City will make final payment within thirty (30) calendar days after the City has both completed its appraisal of the Products and Services provided and received Contractor's properly prepared final invoice.
- Termination of this Agreement shall not affect the obligations of the City or Contractor under any existing Order issued under this Agreement, and such Order shall continue in effect as though this Agreement has not been terminated, and was still in effect with respect to such Order.
23. **NON-WAIVER OF RIGHTS.** There will be no waiver of any provision of this agreement unless approved in writing and signed by the waiving party. Failure or delay to exercise any rights or remedies provided herein or by law or in equity, or the acceptance of, or payment for, any Services hereunder, will not release the other party of any of the warranties or other obligations of the Agreement and will not be deemed a waiver of any such rights or remedies.
24. **INDEMNIFICATION/LIABILITY.**
- a. To the fullest extent permitted by law, Contractor agrees to defend, indemnify, and hold the City, its officers, agents, and employees, harmless from and against any and all liabilities, demands, claims, suits, losses, damages, causes of action, fines or judgments, including costs, attorneys', witnesses', and expert witnesses' fees, and expenses incident thereto, relating to, arising out of, or resulting from: (i) misconduct by Contractor personnel under this Agreement; (ii) any negligent acts, errors, mistakes or omissions by Contractor or Contractor personnel; and (iii) Contractor or Contractor personnel's failure to comply with this Agreement.
 - b. Contractor will update the City during the course of the litigation to timely notify the City of any issues that may involve the independent negligence of the City that is not covered by this indemnification.
 - c. The City assumes no liability for actions of Contractor and will not indemnify or hold Contractor or any third party harmless for claims based on this Agreement or use of Contractor-provided supplies or Services.
 - d. **IN THE EVENT OF ANY LIABILITY INCURRED BY CONTRACTOR OR ANY OF ITS AFFILIATES HEREUNDER, INCLUDING INDEMNIFICATION OF CITY BY CONTRACTOR, THE ENTIRE LIABILITY OF CONTRACTOR AND ITS AFFILIATES FOR DAMAGES FROM ANY CAUSE WHATSOEVER WILL NOT EXCEED \$5,000,000.00 OVER THE ENTIRE TERM OF THE AGREEMENT.**
25. **(RESERVED)**
26. **THE CITY'S RIGHT TO RECOVER AGAINST THIRD PARTIES.** Contractor will do nothing to prejudice the City's right to recover against third parties for any loss, destruction, or damage to City property, and will at the City's request and expense, furnish to the City reasonable assistance and

cooperation, including assistance in the prosecution or defense of suit and the execution of instruments of assignment in favor of the City in obtaining recovery.

27. **NO GUARANTEE OF WORK.** Contractor acknowledges and agrees that it is not entitled to deliver any specific amount of Products or Services or any Products or Services at all under this Agreement and acknowledges and agrees that the Products or Services will be requested by the City on an as needed basis at the sole discretion of the City. Any document referencing quantities or performance frequencies represent the City's best estimate of current requirements, but will not bind the City to purchase, accept, or pay for Products or Services which exceed its actual needs.
28. **OWNERSHIP.** All deliverables, Services, and information provided by Contractor or the City pursuant to this Agreement (whether electronically or manually generated) including without limitation, reports, test plans, and survey results, graphics, and technical tables, originally prepared in the performance of this Agreement, are the property of the City and will not be used or released by Contractor or any other person except with prior written permission by the City. Notwithstanding the foregoing, Contractor shall retain ownership rights to (1) all of its previously existing intellectual property, including any systems, derivatives, modifications and enhancements thereto, (2) confidential information of contractor, and (3) any tools or scripting applications used, developed or created by Contractor or its third-party licensors during the performance of this Agreement.
29. **USE OF NAME.** Contractor will not use the name of the City of Mesa in any advertising or publicity without obtaining the prior written consent of the City.
30. **PROHIBITED ACTS.** Pursuant to A.R.S. § 38-504, a current or former public officer or employee within the last twelve (12) months shall not represent another organization before the City on any matter for which the officer or employee was directly concerned and personally participated in during their service or employment or over which they had a substantial or material administrative discretion. Further, while employed by the City and for two (2) years thereafter, public officers or employees are prohibited from disclosing or using, without appropriate authorization, any confidential information acquired by such personnel in the course of his or her official duties at the City.
31. **FOB DESTINATION FREIGHT PREPAID AND ALLOWED.** All deliveries will be FOB destination freight prepaid and allowed unless otherwise agreed.
32. **RISK OF LOSS.** Contractor agrees to bear all risks of loss, injury, or destruction of goods or equipment incidental to providing these Services and such loss, injury, or destruction will not release Contractor from any obligation hereunder.
33. **SAFEGUARDING CITY PROPERTY.** Contractor will be responsible for any damage to City real property or damage or loss of City personal property when such property is the responsibility of or in the custody of Contractor or its employees.
34. **WARRANTY OF RIGHTS.** Contractor warrants it has title to, or the right to allow the City to use, the Products and Services being provided and that the City may use same without suit, trouble or hindrance from Contractor or third parties.
35. **PROPRIETARY RIGHTS INDEMNIFICATION.** Without limiting the foregoing, Contractor will without limitation, at its expense defend the City against all claims asserted by any person that anything provided by Contractor infringes a patent, copyright, trade secret or other intellectual property right and must, without limitation, pay the costs, damages and attorneys' fees awarded against the City in any such action, or pay any settlement of such action or claim. Each party agrees to notify the other promptly of any matters to which this provision may apply and to cooperate with each other in connection with such defense or settlement. If a preliminary or final judgment is obtained against the City's use or operation of the items provided by Contractor hereunder or any part thereof by reason of any alleged infringement, Contractor will, at its expense and without limitation, either: (a) modify the item so that it becomes non-infringing; (b) procure for the City the right to continue to use the item; (c) substitute for the infringing item other item(s) having at least equivalent capability; or (d) refund to the City an amount equal to the price paid, less reasonable usage, from the time of installation acceptance through cessation of use, which amount will be

calculated on a useful life not less than five (5) years, plus any additional costs the City may incur to acquire substitute Products or Services.

36. **CONTRACT ADMINISTRATION.** The contract will be administered by the Purchasing Administrator and/or an authorized representative from the using department. All questions regarding the contract will be referred to the administrator for resolution. Supplements may be written to the contract for the addition or deletion of Services. Payment will be negotiated and determined by the contract administrator(s).
37. **FORCE MAJEURE.** Failure by either party to perform its duties and obligations will be excused by unforeseeable circumstances beyond its reasonable control, including acts of nature, acts of the public enemy, riots, fire, explosion, legislation, and governmental regulation. The party whose performance is so affected will within five (5) calendar days of the unforeseeable circumstance notify the other party of all pertinent facts and identify the force majeure event. The party whose performance is so affected must also take all reasonable steps, promptly and diligently, to prevent such causes if it is feasible to do so, or to minimize or eliminate the effect thereof. The delivery or performance date will be extended for a period equal to the time lost by reason of delay, plus such additional time as may be reasonably necessary to overcome the effect of the delay, provided however, under no circumstances will delays caused by a force majeure extend beyond one hundred-twenty (120) calendar days from the scheduled delivery or completion date of a task unless agreed upon by the parties.
38. **COOPERATIVE USE OF CONTRACT.** This contract is available through National IPA to agencies nationwide. The City has also entered into various cooperative purchasing agreements with other Arizona government agencies, including the Strategic Alliance for Volume Expenditures (SAVE) cooperative. Under the SAVE Cooperative Purchasing Agreement, any contract may be extended for use by other municipalities, school districts and government agencies through National IPA or SAVE in the State of Arizona with the approval of Contractor. Any such usage by other entities must be in accordance with the statutes, codes, ordinances, charter and/or procurement rules and regulations of the respective government agency.

A contractor, subcontractor or vendor or any employee of a contractor, subcontractor or vendor who is contracted to provide Services on a regular basis at an individual school shall obtain a valid fingerprint clearance card pursuant to title 41, chapter 12, article 3.1. A school district governing board shall adopt policies to exempt a person from the requirements of this subsection if the person's normal job duties are not likely to result in independent access to or unsupervised contact with pupils. A school district, its governing board members, its school council members and its employees are exempt from civil liability for the consequences of adoption and implementation of policies and procedures pursuant to this subsection unless the school district, its governing board members, its school council members or its employees are guilty of gross negligence or intentional misconduct.

Additionally, Contractor will comply with the governing body's fingerprinting policy of each individual school district and public entity. Contractor, subcontractors, vendors and their employees will not provide Services on school district properties until authorized by the school district.

Orders placed by other agencies and payment thereof will be the sole responsibility of that agency. The City is not responsible for any disputes arising out of transactions made by others. The City is not a party to any agreements between the Contractor and National IPA, National IPA and other agencies, the Contractor and other agencies, or any third-party contracts in any way related to this Agreement or the cooperative use of this Agreement.

39. **FUEL CHARGES AND PRICE INCREASES.** No fuel surcharges will be accepted. No price increases will be accepted without proper request by Contractor and response by the City's Purchasing Division.
40. **NOTICES.** All notices to be given pursuant to this Agreement must be delivered to the parties at their respective addresses. Notices may be (i) personally delivered; (ii) sent via certified or registered mail, postage prepaid; (iii) sent via overnight courier; or (iv) sent via email or facsimile.

If provided by personal delivery, receipt will be deemed effective upon delivery. If sent via certified or registered mail, receipt will be deemed effective three (3) calendar days after being deposited in the United States mail. If sent via overnight courier, email or facsimile, receipt will be deemed effective two (2) calendar days after the sending thereof.

41. **GOVERNING LAW, FORUM.** This Agreement is governed by the laws of the State of Arizona. The exclusive forum selected for any proceeding or suit in law or equity arising from or incident to this Agreement will be Maricopa County, Arizona.
42. **INTEGRATION CLAUSE.** This Agreement, including all attachments and exhibits hereto, supersede all prior oral or written agreements, if any, between the parties and constitutes the entire agreement between the parties with respect to the work to be performed.
43. **PROVISIONS REQUIRED BY LAW.** Any provision required by law to be in this Agreement is a part of this Agreement as if fully stated in it.
44. **SEVERABILITY.** If any provision of this Agreement is declared void or unenforceable, such provision will be severed from this Agreement, which will otherwise remain in full force and effect. The parties will negotiate diligently in good faith for such amendment(s) of this Agreement as may be necessary to achieve the original intent of this Agreement, notwithstanding such invalidity or unenforceability.
45. **SURVIVING PROVISIONS.** Notwithstanding any completion, termination, or other expiration of this Agreement, all provisions which, by the terms of reasonable interpretation thereof, set forth rights and obligations that extend beyond completion, termination, or other expiration of this Agreement, will survive and remain in full force and effect. Except as specifically provided in this Agreement, completion, termination, or other expiration of this Agreement will not release any party from any liability or obligation arising prior to the date of termination.
46. **A.R.S. SECTIONS 1-501 and 1-502.** Pursuant to Arizona Revised Statutes Sections 1-501 and 1-502, any person who applies to the City for a local public benefit (the definition of which includes a grant, contract or loan) must demonstrate his or her lawful presence in the United States. As the Agreement is deemed a local public benefit, if Contractor is an individual (natural) person or sole proprietorship, Contractor agrees to sign and submit the necessary documentation to prove compliance with the statutes as applicable.



COUNCIL MINUTES

February 5, 2018

The City Council of the City of Mesa met in a Regular Council Meeting in the Council Chambers, 57 East 1st Street, on February 5, 2018 at 5:45 p.m.

COUNCIL PRESENT

John Giles
David Luna
Mark Freeman
Christopher Glover
Francisco Heredia
Kevin Thompson
Jeremy Whittaker

COUNCIL ABSENT

None

OFFICERS PRESENT

Christopher Brady
Dee Ann Mickelsen
Jim Smith

Mayor's Welcome.

Invocation by Pastor Ben Diaz with Palabra de Vida (Word of Life).

Pledge of Allegiance was led by Councilmember Thompson.

Awards, Recognitions and Announcements.

There were no awards, recognitions or announcements.

1. Take action on all consent agenda items.

All items listed with an asterisk (*) will be considered as a group by the City Council and will be enacted with one motion. There will be no separate discussion of these items unless a Councilmember or citizen requests, in which event the item will be removed from the consent agenda and considered as a separate item. If a citizen wants an item removed from the consent agenda, a blue card must be completed and given to the City Clerk prior to the Council's vote on the consent agenda.

It was moved by Councilmember Thompson, seconded by Councilmember Glover, that the consent agenda items be approved.

Carried unanimously.

*2. Approval of minutes from previous meetings as written.

Minutes from the January 8, 11, and 22, 2018 Council meetings.

3. Take action on the following liquor license applications:

*3-a. It Ain't Chemo

This is a one-day event to be held on Saturday, February 10, 2018 from 9:00 A.M. to 9:00 P.M. at Riverview Park, 2100 West Rio Salado Parkway. **(District 1)**

*3-b. AMC Superstition East 12

A multi-screen cinema is requesting a new Series 6 Bar License for American Multi-Cinema Inc., 1935 South Signal Butte Road - Andrea Dahlman Lewkowitz, agent. There is no existing license at this location. **(District 6)**

*3-c. ATL Wings

A restaurant that serves lunch and dinner is requesting a new Series 12 Restaurant License for Stapley Wings LLC, 1455 South Stapley Drive, Suites 22-24 - Andrea Dahlman Lewkowitz, agent. The existing license held by Mark Killian, sole proprietor, will revert to the State. **(District 4)**

*3-d. Elgin Distillery

This is a one-day craft distillery festival to be held on Saturday, March 3, 2018 from 9:00 A.M. to 4:00 P.M. at Sunland Village, 4601 East Dolphin Avenue. **(District 2)**

*3-e. Village of Elgin Winery

This is a one-day wine festival event to be held on Saturday, March 3, 2018 from 9:00 A.M. to 4:00 P.M. at Sunland Village, 4601 East Dolphin Avenue. **(District 2)**

4. Take action on the following off-track betting license application:

*4-a. Turf Paradise, TP Racing LLLP

New Off-Track Betting License for Turf Paradise, TP Racing LLLP to telecast at Moose & Bear, located at 118 East McKellips Road, Suite 103, TB Concepts LLC. Applicant: Vincent Acri Francia. **(District 1)**

5. Take action on the following contracts:

*5-a. One-Year Renewal to the Term Contract for Executive Physicals for Citywide Departments as requested by the Human Resources Department. **(Citywide)**

This contract provides annual physicals for the City's executive staff as a means of maintaining optimum health. There are approximately 65-70 positions eligible to participate in this program.

The Human Resources Department and Purchasing recommend authorizing the renewal contract with Banner Occupational Health Clinics, at \$88,500, based on estimated usage.

- *5-b. One-Year Renewal to the Term Contract for Deceased Animal Collection Services for the Community Services Department. **(Citywide)**

This contract provides a vendor to collect and dispose of deceased animals up to 150 pounds that are reported within the City. The contractor is responsible for the proper disposal by cremation or other means in accordance with the standards and methods approved by the Maricopa County Health Department.

The Community Services Department and Purchasing recommend authorizing the renewal contract with APM/Couts Enterprises, Inc., dba Arizona Pet Mortuary, at \$54,000, based on estimated usage.

- *5-c. Purchase of One Replacement Fire Apparatus, an Air Light/Rehab Unit, for the Fire and Medical Department (Sole Source). **(Citywide)**

The apparatus being replaced has met established replacement criteria and will be sold by a sealed bid process or traded-in as part of the City's fire apparatus purchase agreement with Pierce Manufacturing. In addition, Fire and Medical will trade-in two units to further offset the price for the Air/Light Rehab unit.

The Fire and Medical Department and Purchasing recommend authorizing the purchase using the City's five-year purchase agreement with Pierce Manufacturing Inc., through their designated local dealer, Hughes Fire Equipment Inc., at \$502,264.75. This purchase is funded by the Capital-General Fund and authorized 2013 Public Safety Bonds.

- *5-d. Three-Year Term Contract for Landscape Maintenance Services for Parks, Retention Basins and Sports Fields - Zones 1, 2, 3 and 4 for the Parks, Recreation and Community Facilities Department (PRCF). **(Citywide)**

These contracts provide landscape maintenance services for sports fields, parkways, medians, parks, retention basins or grounds adjacent to City facilities. The City has divided the landscaping into geographic areas known as Zones 1, 2, 3 and 4. PRCF has done an analysis to bring the work under this contract in-house and, at this time, contracting continues to be in the best financial interest of the City.

The evaluation committee recommends awarding the contract to the highest-scored proposal from Mariposa Landscape Arizona, Inc.; Zone 1, at \$1,435,319.57 annually; Zone 2, at \$959,183.45 annually; Zone 3, at \$974,364.20 annually; and Zone 4, at \$1,221,738.22 annually; based on estimated usage.

- *5-e. Three-Year Term Contract for Plumbing Services for the Parks, Recreation and Community Facilities Department. **(Citywide)**

This contract will establish a list of pre-qualified plumbing contractors to perform plumbing services on various City facilities/projects on an as-needed basis.

The evaluation committee recommends awarding the contract to the four, highest-scored proposals from Mesa Energy Systems Inc.; RKS Plumbing and Mechanical Inc.; Sun Mechanical Inc.; and W.D. Manor Mechanical Contractors, Inc.; cumulatively not to exceed \$100,000 annually, based on estimated usage.

- *5-f. Purchase of Furniture for the Main Library as requested by the Library Services Department. **(Citywide)**

This purchase will provide seating and tables for two new rooms at the Main Library, Teen Room and ThinkSpot. The Library worked with several vendors utilizing cooperative contracts specifying their needs and goals with this project.

The Library Services Department and Purchasing recommend authorizing the purchase using the Northern Arizona University cooperative contract with Atmosphere Commercial Interiors, at \$50,876.25.

- *5-g. **Five-Year Term Contract with CDW Government, LLC and SHI International Corp. for Information Technology Solutions and Services for Various Departments throughout the City. (Citywide)**

This contract will provide the City and participating agencies a full range of information technology solution products and services to meet varying requirements of governmental agencies. The scope of products and services available under these contracts include standard business and high-end workstations; laptop and notebook computers; network equipment; computer and network products and peripherals; monitors; various cloud, consulting, and technical support services; financing; various software products; and the contractors' comprehensive product offering.

Mesa, as the lead agency, has partnered with the National Intergovernmental Purchasing Alliance Company (National IPA) to lead this contract. The contract will be available to over 45,000 public agencies nationally. While no minimum volume is guaranteed to the suppliers, the estimated annual volume of IT Solutions purchased under this master agreement is approximately \$500 million per year. The City will receive rebates annually for administering and awarding this contract.

A committee representing the Police, and Information Technology Departments, City Manager's Office, Police-Information Technology, National IPA and Purchasing evaluated responses. The evaluation committee recommends awarding the contract to the highest-scored proposals from CDW Government, LLC and SHI International Corp., at \$3,100,000 annually, based on estimated usage.

- *5-h. One-Year Term Contract for Electrical and Lighting Supplies for the Materials and Supply Warehouse (for Citywide Departments). **(Citywide)**

Multiple departments use this Citywide contract for their miscellaneous electrical equipment and supplies.

The Business Services Department and Purchasing recommend authorizing the purchase using the State of Arizona cooperative contract with Border States Industries, Inc., at \$100,000, based on estimated usage.

- *5-i. Re-Award the Three-Year Term Contract for Microfilm Conversion Services for the Police Department. **(Citywide)**

This contract will provide services to convert Police Department data from microfilm to digital media. Police, Records Division use microfilm that is becoming worn and damaged. The previous vendor is unable to satisfactorily fulfill the contract requirements.

The Police Department and Purchasing recommend re-awarding the contract to the second highest scored proposal, ICM Conversions, at \$400,000 annually, based on estimated usage.

- *5-j. Purchase of Falcon District Brand Signage as requested by the Economic Development Department. **(Citywide)**

Continuing to build awareness and to promote the Falcon Field Economic Activity Area, this purchase for the Falcon District signage includes the installation of two branded monument signs to be located on Greenfield and Higley Roads, south of the 202. Additionally, the City will install utility and transit signal box wraps and will mount branded banners promoting aerospace, technology, and manufacturing on light poles around the airport.

The Economic Development Department and Purchasing recommend authorizing the purchase using the City of Peoria cooperative contract with YESCO Phoenix, at \$146,670.49. This purchase is funded by Local Streets Sales Tax.

- *5-k. Purchase of Three Replacement Rollback Trailers for the Transportation Department. **(Citywide)**

These trailers will replace three aging equipment trailers that are at the end of their service life. The trailers will meet the needs and safety requirements for transporting the large equipment required to perform street and right-of-way maintenance.

The Transportation Department and Purchasing recommend authorizing the purchase using the National Joint Powers Alliance contract with Empire Southwest (a Mesa business), at \$176,764.77. This purchase is funded by Local Streets Sales Tax.

- *5-l. One-Year Renewal to the Term Contract for Radio-Based Endpoint Encoders (for Water Meter Reading) for the Water Resources Department. **(Citywide)**

This contract provides Itron radio-based endpoint encoders and accessories purchased directly from Itron, Inc., the manufacturer. The endpoint stores 40 days of hourly reads to ensure data integrity and offers advanced customer side leak detection and reverse flow and tamper alarms. Water Utility installs approximately 540 radio-based endpoint encoders on new and existing meters annually.

The Water Resources Department and Purchasing recommend authorizing the renewal with Itron, Inc., at \$100,000, based on estimated usage.

- *5-m. Purchase of Water Treatment Plant Shop Tools and Equipment for the New Signal Butte Water Treatment Plant as requested by the Water Resources Department. **(Citywide)**

This purchase is for tools and equipment needed for the start-up and maintenance in the various shops at the new Signal Butte Water Treatment Plant.

The Water Resources Department and Purchasing recommend awarding the contract to the lowest, responsive and responsible bidders: Copper State Bolt & Nut Co. (a Mesa business); Glendale Industrial Supply, LLC, dba UNICOA Construction and Industrial Supply; Mallory Safety & Supply LLC; and W.W. Grainger, Inc.; cumulatively not to exceed \$153,000, based on estimated usage.

- *5-n. One-Year Renewal to the Term Contract for Fire Hydrant Water Meters for the Water Resources Department. **(Citywide)**

This contract provides 3" fire hydrant water meters to accurately measure construction water use of fire hydrants. The meters are installed by Water Utility staff to serve contractors and other customers needing to connect to City fire hydrants for temporary construction water service and dust control purposes.

The Water Resources Department and Purchasing recommend authorizing the renewal with Badger Meter Inc., dba National Meter Automation, at \$35,000, based on estimated usage.

- *5-o. Greenfield Water Reclamation Plant (GWRP), Phase III Expansion Guaranteed Maximum Price (GMP) No. 2. **(Citywide)**

The City of Mesa, Town of Gilbert, and Town of Queen Creek seek to provide an additional 14 million gallons per day annual average day flow of liquids and solids treatment capacity at the existing GWRP, complete with the required infrastructure, technology, and environmental features to ensure a reliable, efficient, and expanded plant to meet the current and future demands.

Staff recommends awarding the contract for the completion of this project to McCarthy Building Companies in the amount of \$120,302,333 and authorize a change order allowance \$6,015,117 (5%) for a total project amount of \$126,317,450. This project is funded by the Greenfield Water Reclamation Plant Joint Venture Fund, with contributions coming from its members based on usage. Mesa's portion of this GMP is \$72,229,521 and is funded by 2014 authorized Wastewater Bonds.

- *5-p. Sewer Pipe and Manhole Rehabilitation: Mesa Drive, Millet Avenue, Horne, and 6th Avenue. **(District 4)**

The existing sanitary sewer lines covered by this project were built during the 1950's and 1960's. The age of these pipes greatly increases their risk of failure and emergency repairs. This method of construction can be completed while leaving the pipe in place and without excavation. Similarly, the sewer manholes will be cleaned, repaired, and coated in place. Only the concrete adjustment rings will be removed and replaced.

Staff recommends awarding the contract for this project to the lowest, responsible bidder, B and F Contracting, Inc, in the amount of \$1,394,294.67, and authorize a change order allowance in the amount of \$139,430 (10%), for a total amount of \$1,533,724.67. Funding for this project is available from the 2014 Wastewater Bond Program.

- *5-q. Sidewalks at Railroad Crossing on Alma School. **(Districts 3 and 4)**

To continue to meet current railroad approach and clearance standards at the Alma School Road railroad crossing, additional safety improvements will need to be made. The project improvements for roadway and sidewalk approach at this location will facilitate greater public safety and needed clearances from railroad signals along with a smoother roadway crossing of the Union Pacific Railroad track. Mesa will participate in the federally-funded Railway-Highway Grade Crossing Program, and will be responsible

for adjusting the existing concrete sidewalks around the proposed cantilevers and gates, and installing concrete medians.

This project was previously awarded by Council on July 10, 2017, however, the previously selected contractor could not comply with the federal requirements and the project was released for bid a second time.

Staff recommends awarding the contract to the lowest, responsible bidder, AJP Electric, in the amount of \$149,494, plus an additional \$14,949 (10%) as a change order allowance, for a total amount of \$164,443. Funding is available from the Local Streets Sales Tax, of which 94.3% will be reimbursed by Arizona Department of Transportation (Federal) Grant under the Railway-Highway Grade Crossing.

6. Take action on the following resolutions:

- *6-a. Approving and authorizing the City Manager to submit the Second Substantial Amendment to the Fiscal Year 2017/2018 Annual Action Plan to the U.S. Department of Housing and Urban Development related to the allocation of funding obtained under the Community Development Block Grant (CDBG) program. This Amendment will allow for reallocation of \$600,000 in CDBG funds from the Senior Center Renovation Project (247 North Macdonald) to the Eagles Park Project (828 East Broadway Road). **(District 4)** – Resolution No. 11088.
- *6-b. Approving and authorizing the City Manager to enter into a Grant Agreement with the Arizona Department of Public Safety to accept \$1,335,284 in Victims of Crime Act (VOCA) grant funds. The finding will be used for salaries and expenses for the Mesa Prosecutors Office, Victim Services Unit for a three-year period. **(Citywide)** – Resolution No. 11089.
- *6-c. Approving and authorizing the City Manager to enter into a Lease Agreement with New Cingular Wireless PCS for a cellular site on a portion of 5950 East Virginia Street, also known as Mesa Fire Station 214. **(District 5)** – Resolution No. 11090.
- *6-d. Approving and authorizing the City Manager to enter into a Development Agreement for City-Share Reimbursement with PPGN-Ray, LLLP, for the reimbursement of \$100,568 for regional street and street lighting improvements that are being required by the City in conjunction with a proposed residential development known as Crismon Road at PPGN, located at 5461 South Ellsworth Road. **(District 6)** – Resolution No. 11091.
- *6-e. Approving and authorizing the City Manager to enter into an Intergovernmental Agreement with the Maricopa County, Department of Transportation for the pavement rehabilitation of Adobe Road from Higley Road to Recker Road. The City will contribute an estimated \$54,417 for the portion of the project that is within City boundaries that will be funded from the 2013 Streets Bond Program. **(District 5)** – Resolution No. 11092.
- *6-f. Approving and authorizing the City Manager to enter into First Amendments to the Development Agreement, Ground and Air Lease, and License Agreement with 3W Management, LLC, to facilitate the development of, and job creation and retention at, the City-owned property generally located at the southwest corner of Main Street and South Pomeroy and 34 South Pomeroy, which is the development commonly known as The GRID. **(District 4)** – Resolution No. 11093.

7. Introduction of the following ordinance and setting February 26, 2018 as the date of the public hearing on this ordinance:

- *7-a. **ZON17-00323 (District 5)** The 8800 to 8900 blocks of East Main Street (south side). Located west of Red Mountain Freeway on the south side of Main Street (16.4± acres). Rezoning from RS-43 and GC to GC-PAD; and Site Plan Review. This request will allow for the development of an RV dealership and storage facility. Jeff Welker, Welker Development Resources, applicant; Roger D. Overson, owner.

Staff Recommendation: Approval with conditions

P&Z Board Recommendation: Approval with conditions (Vote: 6-0)

8. Discuss, receive public comment, and take action on the following ordinances:

- *8-a. **ZON17-00309 (District 2)** The 5200 block of East Inverness Avenue (south side). Located east of Higley Road south of the US60 Freeway (1.9 ± acres). Rezoning from RM-3-PAD to LC; and Site Plan Review. This request will allow for the development of a commercial building. John Schoenauer, HD Management, applicant; Sevilla, LLC, owner. – Ordinance No. 5419.

Staff Recommendation: Approval with conditions

P&Z Board Recommendation: Approval with conditions (Vote: 7-0)

- *8-b. **ZON17-00283 (District 6)** The 7100 to 7300 blocks of East Ray Road (north side). Located east of Power Road on the north side of Ray Road (56.0± acres). Rezone from LI-AF to LI-AF-PAD. This request will allow for the development of an industrial subdivision. Omar Cervantes, XCL Engineering, LLC, applicant; Phx-Mesa Gateway Airport 193, LLC, owner. – Ordinance No. 5420.

Staff Recommendation: Approval with conditions

P&Z Board Recommendation: Approval with conditions (Vote: 7-0)

- *8-c. **ZON17-00432 (District 3)** The 800 and 900 blocks of West Southern Avenue (south side), the 1200 and 1300 blocks of South Extension Road (west side), and the 800 and 900 blocks of West Grove Avenue (north side). Located at the southwest corner of Southern Avenue and Extension Road (19.3 ± acres). PAD Amendment; Site Plan Modification. This request will allow the development of a new multiple-residence building in an existing multiple-residence complex. Reese Anderson, Pew and Lake, PLC, applicant; Edward B. Frankel, Trustee of the Frankel Family Trust, owner. – Ordinance No. 5421.

Staff Recommendation: Approval with conditions

P&Z Board Recommendation: Approval with conditions (Vote: 7-0)

9. Take action on the following subdivision plat:

- *9-a. "Allred Ranch" **(District 2)** The 2900 to 3100 blocks of East Southern Avenue (north side), and the 900 to 1200 blocks of South Los Alamos (west side). Located east of

Lindsay Road on the north side of Southern Avenue. 108 RSL-4.5 PAD lots (25± acres).
KB Home Phoenix, Inc., developer; Dan Auxier, EPS Group, engineer.

Items not on the Consent Agenda

10. Items from citizens present.

There were no items from citizens present.

11. Adjournment.

Without objection, the Regular Council Meeting adjourned at 5:57 p.m.





JOHN GILES, MAYOR

ATTEST:



DEE ANN MICKELSEN, CITY CLERK

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Regular Council Meeting of the City Council of Mesa, Arizona, held on the 5th day of February, 2018. I further certify that the meeting was duly called and held and that a quorum was present.



DEE ANN MICKELSEN, CITY CLERK



AGENDA ITEM

Human Resources

REPORT TO: Work Session (09/23/24)

REPORT TO: Voting Meeting (09/24/24)

ITEM NO: 492/2024

SUBJECT: Approve the award of RFP/Q#45-007 Life & Disability Supplemental Health Benefits for Human Resources to Prudential Financial, Inc., of Newark, NJ; authorization for the Chairman to execute all related documents, subject to the review and approval by the County Attorney. The estimated annual cost is \$1,265,569.00.

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: DLJ

Recommendation:

Recommend approval.

Purpose of Request:

Approve the award of RFP/Q#45-007 Life & Disability Supplemental Health Benefits for Human Resources to Prudential Financial, Inc., of Newark, NJ; authorization for the Chairman to execute all related documents, subject to the review and approval by the County Attorney. The estimated annual cost is \$1,265,569.00.

History:

Facts and Issues:

RFP/Q#45-007 received 19 bid submissions, (5) declined to quote, (3) only quoted voluntary benefits with no life or disability.

Options:

Deciding factors for the selected vendor involved pricing, credentials, qualifications, experience, financial stability, account management, flexibility, and claims management. Prudential's estimated annual cost is \$1,265,569.

Prudential will provide a 3-year rate guarantee on all lines of coverage, resulting in \$193,000 savings compared to current rates.

Funding Requested \$ 1,265,569.00
Are funds within current budget? Yes
Source of Funds Group Insurance Fund
Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? Yes
Has it been reviewed by the County Attorney? Yes
Is there a deadline for this item?

Approvals:

| | | | |
|----------------|-----------------|-----------------------|---------------|
| Submit | Approve | Purchasing | Budget |
| LJ | LJ | AP | DA |
| Finance | Attorney | Administration | Clerk |
| TS | WLI | CR | JR |

Attachments:

Financial Supplement
 Bid Tabulation Summary
 Prudential Proposal
 RFP/Q #45-007 Cost Analysis
 RFQ/P #45-007 SUMMARY SCORING SHEET



**HALL COUNTY BOARD OF COMMISSIONERS
FINANCIAL SUPPLEMENT REPORT**

AGENDA ITEM 492/2024

Funds Requested: \$ 1,265,569.00

Request Budgeted: Yes

Proposed Source of Funding:

Budget Transfer Requested:

Group Insurance Fund

Yes

Funding Source Items:

| Fiscal Year | Fund | Division | Account | Amount |
|--------------------|-----------------------------|---------------------------|--|---------------|
| 2025 | 601-GROUP INSURANCE FUND | 1556 - GROUP INSURANCE | 552400-EMPLOYER INSURANCE PREMIUMS | \$632,785.00 |
| 2026 | 601-GROUP INSURANCE FUND | 1556 - GROUP INSURANCE | 552400-EMPLOYER INSURANCE PREMIUMS | \$632,784.00 |

Budget Transfer Items:

Additional Information/Comments:

Contact for Questions: DLJ

Phone: 770-531-6712

Life/Disability/Worksite Insurance

| | | | | | | |
|-------------------------|-------------------------------|-----------------|----------------|---------------------|-----------------------|---------------------|
| RFQ/P #45-007 | BID TABULATION SUMMARY | | | | | |
| Bidders | Prudential | Met Life | Symetra | The Standard | OCHS | The Hartford |
| Location | Newark, NJ | New York, NY | Bellevue, WA | Portland, OR | Saint Paul, Minnesota | Hartford, CT |
| Technical Scores | 84 | 83 | 81 | 79 | 79 | 75 |
| Cost | \$1,265,569 | \$1,273,498 | \$1,305,242 | \$1,340,538 | \$1,348,655 | \$1,454,807 |

| | | | | | | |
|-------------------------|-----------------------|-----------------|--------------|----------------|---------------------|----------------------|
| Bidders | One America | UNUM | Aflac | Lincoln | TransAmerica | New York Life |
| Location | Indianapolis, Indiana | Chattanooga, TN | Columbus, GA | Radnor, PA | Cedar Rapids, IA | New York, NY |
| Technical Scores | 75 | 67 | 70 | 68 | 67 | Non-Responsive* |
| Cost | \$1,487,929 | \$1,567,650 | \$1,630,785 | \$1,653,354 | \$1,682,579 | |

| | | |
|-------------------------|----------------------|----------------|
| Bidders | Colonial Life | Voya |
| Location | Columbia, SC | New York, NY |
| Technical Scores | Non-Responsive | Non-Responsive |
| Cost | | |

| | |
|--------------------------|----|
| Total Bids mailed out: | 19 |
| Hall County Invitations: | 0 |
| Bids Received: | 14 |
| No Bids: | 5 |

*Non-Responsive means company did not bid on all items



Prudential

Group Benefits Proposal

Proposal to Provide Group Supplemental Health

For: Hall County D/B/A Hall County
Board of Commissioners

By: Lauren Mitchell & Chris Sauer

Coverages: Accident, Critical Illness &
Hospital Indemnity

Effective Date: 1/1/2025

Valid Through: 08/17/2024



TABLE OF CONTENTS

| | |
|--|----|
| Accident Rates and Plan Designs..... | 5 |
| Rates..... | 5 |
| Accident Plan Design | 6 |
| Benefit Descriptions | 15 |
| Accident Limitations and Exclusions..... | 16 |
| Critical Illness Rates and Plan Design | 19 |
| Plan Design | 20 |
| Critical Illness Limitations and Exclusions | 25 |
| Hospital Indemnity Rates and Plan Design..... | 28 |
| Tiered Rates..... | 28 |
| Plan Provisions..... | 29 |
| Schedule of Benefits | 30 |
| Benefit Descriptions | 31 |
| Hospital Indemnity Limitations and Exclusions | 35 |
| Other Requirements, Assumptions, and Provisions..... | 37 |
| Deviations..... | 41 |
| Disclosures | 42 |
| Producer Disclosure: | 42 |
| OFAC Disclosure:..... | 43 |
| General Disclosure:..... | 43 |



Prudential: Future focused. Customer obsessed. Outcomes driven.

Prudential Group Insurance delivers a future-focused benefits approach that is thoughtful, ambitious, and dedicated to meeting the evolving needs of organizations and the individuals who rely on them. We continue to make strategic investments in products, technology, and service that are powered by data and designed to deliver better results for everyone, at every step of their journey.

A customer-obsessed journey with Prudential

Every investment and enhancement we make is focused entirely on customer needs today — and tomorrow. We offer you experiences that deliver:

Flexibility

- Comprehensive and competitively priced products
- Evolving product suite to incorporate emerging medical trends
- Claims analytics to inform strategic plan design and pricing

Efficiency

- Deep platform provider relationships, powered by our PruExchange™ data framework
- Plan setup and enrollment APIs that support faster implementations
- API integrations that simplify the billing process

Value

- Simple, right-touch claims experience with no forms needed or medical records to submit
- Less work as we can work directly with medical providers to fully adjudicate claims
- Help maximize benefits through ongoing claim consultation and monitoring, and Accident and Critical Illness benefit bundling

Driving outcomes that provide employees with financial security during a difficult time

Prudential is committed to helping your employees maximize their benefits with a market-leading claims experience and right-touch support.

Modernizing the claims experience

- Simple 3-step online claim submission
- Proactive prompts for non-medical related benefits (e.g., travel and lodging)
- Auto-pay for Wellness claims with a benefit of \$100 or less — no evidence needed
- Benefit bundling for Accident and Critical Illness
- No paper or electronic forms required



- Mobile optimized

Right-touch support

- Claims integration¹ with Disability, Absence, and Medical
- Auto-pay of claims based on eligible Disability or Absence claims²
- Personal reach out when claim integration is identified to ensure all eligible services are submitted
- Quarterly benefit reminders

30% of Disability claims are from a participant also enrolled in Supplemental Health³

¹ Medical claims integration is available to customers with self-funded medical and over 1,000 eligible lives; ² If Prudential has access to all the necessary medical documentation. If not, we will initiate the claim and reach out to the employee via phone and/or mail to get permission to obtain the necessary documents and ensure all eligible services are submitted; ³ Prudential Book of Business 2020

Group Accident, Group Critical Illness and Group Hospital Indemnity Insurance coverages are limited benefit policies and are not substitutes for medical coverage that provides benefits for medical treatment, including hospital, surgical, and medical expenses, and they do not provide reimbursement for such expenses.

Group Insurance coverages are issued by The Prudential Insurance Company of America, a Prudential Financial Company, Newark, NJ.

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Accident Rates and Plan Designs

| | |
|----------------------------------|---|
| SIC Code | 9111 |
| Situs State | Georgia |
| Number of Eligible | 1,760 |
| Commissions | <p>Our offer includes member heaped commissions. The member heaped commission rates are;</p> <p style="text-align: center;">1st year 70.00%, 2nd year 10.00%, 3rd plus year 10.00%</p> <p>A list bill or pay as deduct billing method are required to pay member heaped commissions. If the employer is unable to support either of these methods, group heaped commission will be payable.</p> |
| Financial Arrangement | Coverage is offered on a non-participating, fully insured basis |
| Premium Contribution | 100% Employee Paid. Payroll deductions will be taken on a post-tax basis. |
| Age Reduction Schedule | None |
| Participation Requirement | Waived |
| Enrollment Mode | Preferred |
| Effective Date | 1/1/2025 |
| Rate Guarantee | 4 Years |

Rates

| Accident Rates | |
|-----------------------|-----------------------------------|
| Tier Level 4 | Medium Plan - Monthly Rate |
| EE Only | \$10.39 |
| EE + Spouse | \$17.28 |
| EE + Child(ren) | \$18.61 |
| Family | \$27.57 |



The above table reflects preferred rates that assume optimal enrollment conditions. Optimal enrollment conditions include either the use of an enrollment firm or “On Ballot” enrollment next to medical, active enrollment, and a minimum of 3 communication touch points (including a group meeting). Non-preferred rates that reflect sub-optimal enrollment conditions are available upon request.

Accident Plan Design

| Coverage Summary | |
|-------------------------------|--|
| Eligibility | <p>All active, full-time & part-time employees working a minimum of 20 hours per week.</p> <p>Employee - Up to age 100 Dependent Spouse – Up to age 100 Dependent Child - Live birth to age 26</p> <p>Eligibility is subject to state laws and regulations.</p> <p>Employee enrollment is required for dependent eligibility. A dependent child(ren) cannot be covered by more than one insured employee.</p> <p>Active at work and dependent non-confinement requirements apply.</p> |
| Benefit Waiting Period | None |
| Coverage Type | 24 Hour |
| Accident Day Limit | 90 days. |
| Guaranteed Issue | All Amounts |

| Covered Benefits | |
|--|---------------|
| Type of Loss | Medium Option |
| Accidental Death Benefits | |
| Basic Accidental Death [Employee] | \$50,000 |
| Basic Accidental Death [Spouse] | \$25,000 |
| Basic Accidental Death [Children] | \$12,500 |
| Accidental Death - Common Carrier [Employee] | \$50,000 |
| Accidental Death - Common Carrier [Spouse] | \$25,000 |
| Accidental Death - Common Carrier [Children] | \$12,500 |
| Accidental Dismemberment Benefits | |



| | |
|---|----------|
| Loss of both hands | \$50,000 |
| Loss of both feet | \$50,000 |
| Loss of one arm | \$25,000 |
| Loss of one foot | \$25,000 |
| Loss of one hand | \$25,000 |
| Loss of one leg | \$10,000 |
| Loss of thumb & index finger on the same hand | \$12,500 |
| Loss of one finger or one toe | \$300 |
| Loss of two or more fingers or toes | \$500 |
| Loss of both arms | \$50,000 |
| Loss of both legs | \$50,000 |
| Functional Loss Benefits | |
| Loss of hearing in both ears | \$25,000 |
| Loss of hearing in one ear | \$15,000 |
| Loss of sight in both eyes | \$25,000 |
| Loss of sight in one eye | \$15,000 |
| Loss of speech | \$25,000 |
| Loss of speech & hearing in both ears | \$50,000 |
| Broken Tooth Benefits | |
| Crown | \$350 |
| Extraction | \$115 |
| Filling | \$90 |
| Burn Benefits [2nd Degree] | |
| Less than 10% | \$100 |
| At least 10% but less than 25% | \$250 |
| At least 25% but less than 35% | \$500 |
| 35% or more | \$5,000 |
| Burn Benefits [3rd Degree] | |
| Less than 10% | \$1,000 |
| At least 10% but less than 25% | \$2,000 |
| At least 25% but less than 35% | \$5,000 |
| 35% or more | \$10,000 |
| Skin Graft Benefits | |



| | |
|---|-------------------------------|
| Skin Graft Due to Burns | 50% |
| Skin Graft Not Due to Burns - Less than 20% | \$500 |
| Skin Graft Not Due to Burns - 20% or more | \$1,000 |
| Additional Injuries | |
| Coma | \$10,000 |
| Concussion | \$200 |
| Dislocation Benefits | |
| Lower jaw | \$500 Closed / \$1,000 Open |
| Spine | \$0 Closed / \$0 Open |
| Collarbone | \$825 Closed / \$1,650 Open |
| Shoulder | \$500 Closed / \$1,000 Open |
| Rib | \$0 Closed / \$0 Open |
| Elbow | \$500 Closed / \$1,000 Open |
| Wrist | \$500 Closed / \$1,000 Open |
| Hand (except fingers) | \$500 Closed / \$1,000 Open |
| Finger | \$150 Closed / \$300 Open |
| Hip | \$3,375 Closed / \$6,750 Open |
| Knee | \$1,650 Closed / \$3,300 Open |
| Ankle | \$1,650 Closed / \$3,300 Open |
| Foot (except toes) | \$500 Closed / \$1,000 Open |
| Toe | \$150 Closed / \$300 Open |
| Partial Dislocation | 25% |
| Eye Injury Benefits | |
| Removal of foreign object | \$150 |
| Surgery | \$300 |
| Fracture Benefits | |
| Skull (non-depressed) | \$2,250 Closed / \$4,500 Open |
| Skull (depressed) | \$4,500 Closed / \$9,000 Open |
| Facial bone (including nose, except upper jaw or lower jaw) | \$675 Closed / \$1,350 Open |
| Upper jaw | \$675 Closed / \$1,350 Open |
| Lower jaw | \$450 Closed / \$900 Open |
| Vertebral processes | \$450 Closed / \$900 Open |
| Vertebral body (except vertebral processes) | \$1,350 Closed / \$2,700 Open |



| | |
|---|-------------------------------|
| Collarbone | \$450 Closed / \$900 Open |
| Shoulder blade | \$450 Closed / \$900 Open |
| Sternum (breastbone) | \$450 Closed / \$900 Open |
| Rib | \$450 Closed / \$900 Open |
| Pelvis (except coccyx) | \$1,350 Closed / \$2,700 Open |
| Coccyx (tailbone) | \$450 Closed / \$900 Open |
| Upper arm | \$675 Closed / \$1,350 Open |
| Forearm | \$450 Closed / \$900 Open |
| Elbow | \$450 Closed / \$900 Open |
| Wrist | \$450 Closed / \$900 Open |
| Hand (except fingers) | \$450 Closed / \$900 Open |
| Finger | \$225 Closed / \$450 Open |
| Hip/Thigh | \$3,375 Closed / \$6,750 Open |
| Kneecap | \$450 Closed / \$900 Open |
| Leg (except thigh) | \$1,350 Closed / \$2,700 Open |
| Ankle | \$450 Closed / \$900 Open |
| Foot (except toes) | \$450 Closed / \$900 Open |
| Toe | \$225 Closed / \$450 Open |
| Chip Fracture | 25% |
| Laceration Benefits | |
| Repaired without stitches | \$50 |
| Repaired with stitches - Less than 2 inches (5.08 cm) | \$150 |
| Repaired with stitches - 2 - 6 inches (5.08 - 15.24 cm) | \$300 |
| Repaired with stitches - Over 6 inches (over 15.24 cm) | \$600 |
| Paralysis Benefits | |
| Four limbs (Quadriplegia) | \$50,000 |
| Three limbs (Triplegia) | \$37,500 |
| Two limbs (Paraplegia/Hemiplegia) | \$25,000 |
| One limb (Uniplegia) | \$12,500 |
| Puncture Wound Benefits | |
| Puncture Wound | \$50 |
| Advanced Diagnostic Testing Benefits | |
| CAT | \$200 |



| | |
|---|---------|
| CT | \$200 |
| EEG | \$200 |
| MRI | \$200 |
| MR | \$200 |
| NCV | \$200 |
| PET | \$200 |
| MRA | \$200 |
| SPECT | \$200 |
| Bone Scintigraphy (Bone Scan) | \$200 |
| Ambulance Benefits | |
| Air Ambulance | \$1,000 |
| Ground/Water Ambulance | \$300 |
| Blood/Plasma/Platelets Benefits | |
| Blood/Plasma/Platelets | \$400 |
| Doctor Follow-Up Visits | |
| Doctor Follow-Up Visits | \$75 |
| Emergency care benefit | |
| Emergency room | \$100 |
| Physician's office | \$100 |
| Urgent care | \$100 |
| Non-Emergency Initial Care Benefits | |
| Non-emergency initial care benefit | \$25 |
| Injection to Prevent or Limit Infection Benefits | |
| Tetanus | \$50 |
| Rabies | \$50 |
| Antivenom | \$50 |
| Immune Globulin | \$50 |
| Joint Replacement Benefits | |
| Joint Replacement Benefit | \$1,000 |
| Lodging Benefits | |
| Lodging Benefit | \$150 |



| Medical Appliance Benefits | |
|--|---------|
| Brace | \$50 |
| Cane | \$50 |
| Crutches | \$50 |
| Walker- expected use < 1yr | \$100 |
| Walker - expected use ≥ 1yr | \$250 |
| Walking boot | \$50 |
| Wheelchair/motorized scooter - expected use < 1 yr | \$100 |
| Wheelchair/motorized scooter - expected use ≥ 1 yr | \$500 |
| Other device used for mobility | \$50 |
| Pain Management Benefits | |
| Epidural | \$100 |
| General anesthesia | \$250 |
| Pain management injections | \$15 |
| Prescription Drug Benefits (Outpatient) | |
| Prescription Drug Benefit (Outpatient) | \$25 |
| Prosthetic Device Benefits | |
| One device only | \$750 |
| More than one device | \$1,500 |
| Surgical Repair Benefits | |
| Abdominal Pelvic Cavity | \$1,500 |
| Cranial | \$1,500 |
| Hernia Repair | \$150 |
| Ruptured Disc | \$1,000 |
| Thoracic Cavity | \$1,500 |
| Tear, cartilage in knee | \$750 |
| Torn, Ruptured or Severed Tendon/Ligament/Rotator cuff Benefits | |
| One tendon/ligament | \$800 |
| One rotator cuff | \$800 |
| Two or more tendons/ligaments | \$1,200 |



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|---|---------|
| Two or more rotator cuffs | \$1,200 |
| Exploratory Surgery Benefits | |
| Exploratory Surgery Benefit (without repair) for any of the procedures listed above or outpatient surgery | \$150 |
| Other Outpatient Surgery Benefits | |
| Other Outpatient Surgery Benefit | \$300 |
| Telemedicine Services Benefits | |
| Telemedicine Services | \$25 |
| Therapy Services Benefits | |
| Cognitive Behavioral Therapy | \$20 |
| Occupational Therapy | \$20 |
| Physical Therapy | \$20 |
| Respiratory Therapy | \$20 |
| Speech Therapy | \$20 |
| Vocational Therapy | \$20 |
| Alternative Therapy Benefits | |
| Alternative Therapy Benefit | \$20 |
| Transportation Benefits | |
| Transportation Benefit | \$100 |
| X-Ray Benefits | |
| X-Ray Benefit | \$50 |
| Hospital Benefits | |
| Hospital Admission Benefit | \$1,000 |
| Intensive Care Unit (ICU) Admission Benefit* | \$1,000 |
| Hospital Confinement Benefit | \$300 |
| Intensive Care Unit (ICU) Confinement Benefit | \$300 |
| Inpatient Rehabilitation Benefits | |



| | |
|--|---------|
| Inpatient Rehabilitation Benefit | \$100 |
| Additional Benefits | |
| Child Care Benefit | \$100 |
| Modification Benefit | \$1,500 |
| Organized Sports Activity Benefit | 25% |
| Wellness Benefit | \$50 |

Treatment Based Accident Plan Design

| Additional Benefits and Provisions | |
|---|--|
| Termination of Coverage | <p>Employee Coverage ends when the employee:</p> <ul style="list-style-type: none"> ▪ is no longer a member of the eligible class. ▪ stops making contributions ▪ reaches age 100 ▪ dies <p>Dependents Coverage for a qualified dependent end:</p> <ul style="list-style-type: none"> ▪ when that dependent ceases to be a Qualified Dependent ▪ when spouse reaches age 100 ▪ Child coverage ends when the child reaches age 26 ▪ when Employee Coverage ends |
| Continuation at Employee's | Coverage will be continued at the active rates at the Employee's option. The Coverage that may be continued is the coverage in place on the date that employment ends or the date work hours are reduced. Coverage may be continued provided premiums continue to be paid on a direct bill basis until the Employee reaches age 100. |
| Waiver of Premium for Total Disability | Not Included |
| Transportation Benefit | Pays a benefit if a Covered Person must travel from their residence more than 50 miles one way, on Doctor's advice, for treatment that is not available locally due to a Covered Accident, Injury, or Illness. This benefit is limited to a max of 2 times per calendar year and 1 max per Covered Person, per Covered Accident. |
| Lodging Benefit | Pays a benefit per day if a Covered Person is confined in a Hospital for treatment of an accidental injury, and a companion who accompanies the Covered Person while the Covered Person is Confined, stays in a Lodging for which a charge is made. The lodging facility must be more than 50 miles one way from the primary residence and proof must be submitted that the companion incurred an expense for staying at the Lodging for each day of the Stay. This benefit is limited to 30 days per calendar year. |



| Additional Benefits and Provisions | |
|--|--|
| Health Screening Benefit (Wellness Benefit) | <p>The Health Screening Benefit (Wellness Benefit) is \$50 for Medium Plan benefit which is payable once per calendar year if the covered person receives one of the following health screening tests while not confined in a hospital:</p> <ol style="list-style-type: none">1. Routine health check-up exam;2. Biopsies for cancer;3. Blood chemistry panel;4. Blood test to determine total cholesterol;5. Blood test to determine triglycerides;6. Bone marrow testing;7. Breast MRI;8. Breast ultrasound;9. Breast sonogram;10. Cancer antigen 15-3 blood test for breast cancer (CA 15-3);11. Cancer antigen 125 blood test for ovarian cancer (CA 125);12. Carcinoembryonic antigen blood test for colon cancer (CEA);13. Carotid doppler;14. Chest x-rays;15. Clinical testicular exam;16. Colonoscopy;17. Complete blood count (CBC);18. Dental exam;19. Digital rectal exam (DRE);20. Doppler screening for cancer;21. Doppler screening for peripheral vascular disease;22. Echocardiogram;23. Electrocardiogram (EKG);24. Electroencephalogram (EEG);25. Endoscopy;26. Eye exam;27. Fasting blood glucose test;28. Fasting plasma glucose test;29. Flexible sigmoidoscopy;30. Hearing test;31. Hemoccult stool specimen; |



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| | <ul style="list-style-type: none"> 32. Hemoglobin A1C; 33. Human papillomavirus (HPV) vaccination; 34. Immunization; 35. Lipid panel; 36. Mammogram; 37. Oral cancer screening; 38. Pap smears or thin prep pap test; 39. Prostate-specific antigen (PSA) test; 40. Serum cholesterol test to determine LDL and HDL levels; 41. Serum protein electrophoresis; 42. Skin cancer biopsy; 43. Skin cancer screening; 44. Skin exam; 45. Stress test on bicycle or treadmill; 46. Successful completion of smoking cessation program; 47. Tests for sexually transmitted infections (STIs); 48. Thermography; 49. Two hours post-load plasma glucose test; 50. Ultrasounds for cancer detection; 51. Ultrasound screening of the abdominal aorta for abdominal aortic aneurysms; 52. Virtual colonoscopy. |
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Benefit Descriptions

| Accident Benefit Descriptions | |
|---|---|
| Accident - Hospital Admission | <p>Pays a benefit if a covered person is admitted for confinement to a Hospital for treatment of a covered accidental injury.</p> <ul style="list-style-type: none"> - Admissions must occur within 90 days of covered accident. - Not payable for ER treatment, outpatient treatment or a stay in an Observation Unit. - Payable no more than one time per covered person, per covered accident. - Payable up to 3 times per calendar year. |
| Accident – Intensive Care unit (ICU) Admission | <p>Pays a benefit, if a covered person, upon initial admission for confinement to a Hospital for treatment of a covered accidental injury, is admitted to an ICU.</p> <ul style="list-style-type: none"> - The ICU admission must occur within 90 days after the covered accidental injury occurs. - Payable no more than one time per covered person, per covered accidental injury. - Payable up to 3 times per calendar year. - When a covered person is admitted to the ICU, <u>only</u> the ICU Admission benefit is paid (i.e., they would not receive the Hospital Admission and the ICU Admission benefit). |



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|---|---|
| Accident - Hospital Confinement | <p>Pays a benefit, if the covered person is confined in the hospital for treatment of a covered accidental injury. When an Admission Benefit is included, the Hospital Confinement Benefit begins on Day 2.</p> <ul style="list-style-type: none"> - Not payable for a confinement less than 24 hours. - Initial hospital confinement must begin within 90 days after the covered accidental injury. - Payable to a maximum of 3 confinements per calendar year, maximum of 365 days per confinement. |
| Accident – Intensive Care unit (ICU) Confinement | <p>Pays a benefit for each day the covered person is confined in an intensive care unit for treatment of a covered accidental injury. When an Admission Benefit is included, the ICU Confinement Benefit begins on Day 2.</p> <ul style="list-style-type: none"> - Not payable for a confinement less than 24 hours. - Initial hospital confinement must begin within 90 days after the covered accidental injury occurs. - Payable to a maximum of 3 times per calendar year, maximum of 30 days per confinement. |

Accident Limitations and Exclusions

| Limitations | |
|--|--|
| Limits for Specific Accidental Losses (If applicable) | <p>(1) Coma Limit: A benefit is not payable for a medically induced Coma.</p> <p>(2) Accident Day Limit: A person must seek treatment within 90 days of the accident.</p> <p>(3) Dislocation Limits:</p> <ul style="list-style-type: none"> (a) A benefit is payable only once for the Dislocation of a joint after the coverage effective date. No benefit is payable for subsequent Dislocations of the same joint after the coverage effective date. (b) If the person suffers more than one Dislocation because of the same Accident, the total benefit payable for all such Dislocations is limited to two times the benefit amount payable for the joint involved which has the highest benefit amount. <p>(4) Fracture Limits:</p> <ul style="list-style-type: none"> (a) If the person suffers more than one Fracture to the same bone as a result of the same Accident, only one Fracture benefit is payable. (b) If the person suffers more than one Fracture because of the same Accident, the total benefit payable for all such Fractures is limited to two times the benefit amount payable for the Fracture involved which has the highest benefit amount. <p>(5) Lodging: Limited to 30 days per calendar year.</p> <p>(6) Inpatient Rehabilitation Benefit: Limited to 15 days per accident, max of 30 days per year.</p> <p>(7) Accident Hospital Confinement: Limited to 365 days per accident, max of 3 per year.</p> |



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| | <p>(8) Accident Intensive Care Unit (ICU) Confinement: Limited to 30 days per accident, max of 3 per year.</p> <p>(9) Sickness- Hospital Confinement Benefit: Limited to 365 days per accident per covered person</p> <p>(10) Sickness- Intensive Care Unit (ICU) Confinement: Limited to 365 days per accident per covered person</p> <p>(11) Therapy Services: Limited to 10 per accident and to 10 per calendar year.</p> |
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Exclusions

An Accidental Loss or Procedure is not covered if it is caused by, contributed to by, or resulting from, directly or indirectly, any of the following:

- (1) Suicide or attempted suicide, while sane.
- (2) Intentionally self-inflicted Injuries, or any attempt to inflict such Injuries.
- (3) Medical malpractice.
- (4) Taking part in any riot or insurrection.
- (5) War, or any act of war. War means declared or undeclared war, and includes resistance to armed aggression. Terrorism is not considered an act of war.
Terrorism means the deliberate use of violence or the threat of violence against civilians to create an emotional response through the suffering of victims or to achieve military, political, religious or social objectives.
- (6) An Accident that occurs while the person is serving on Full-time active duty for more than 90 days in any armed forces. But this does not include Reserve or National Guard active duty for training.
- (7) Travel or flight in any vehicle used for aerial navigation, if:
 - (a) the person is riding as a passenger in any aircraft not intended or licensed for the transportation of passengers;
 - (b) the person is performing as a pilot or a crew member of any aircraft; or
 - (c) the person is riding as a passenger in an aircraft owned, operated, controlled or leased by or on behalf of the Contract Holder or any of its subsidiaries or affiliates.
This includes getting in, out, on or off any such vehicle.
- (8) Commission of a crime for which You have been convicted under state or federal law.
- (9) Being under the influence of alcohol or alcohol intoxication, including but not limited to having a blood alcohol level above the limit for permissible operation of a motor vehicle in the jurisdiction where the Accident occurred, regardless of whether the person:
 - (a) was operating a motor vehicle; and
 - (b) was convicted of an alcohol related offense.
- (10) Being under the influence of or taking any non-Prescription Drug, medication, narcotic, stimulant, hallucinogen, barbiturate, amphetamine, gas, fumes or inhalants, poison or any other controlled substance as defined in Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, as now or hereafter amended, unless prescribed by and administered in accordance with the advice of the person's Doctor.
- (11) Participation in these hazardous sports: scuba diving; bungee jumping; base jumping; skydiving; ziplining; parachuting; hang gliding; paragliding; paramotoring; parascending; or ballooning.
- (12) Treatment for dental care or dental procedures, unless treatment is the result of a Covered Accident, Covered Injury or Covered Illness.
- (13) Elective procedures and/or reconstructive surgery, unless it is a result of trauma, infection or other diseases.



(14) Cosmetic Surgery, except when such Surgery is performed to:

- treat an Injury or Sickness;
- correct a disorder of normal bodily function or structure that was caused by an Injury or Sickness for which Coverage is not otherwise excluded under this Group Insurance Certificate; or
- reconstruct a part of the body which was disfigured or removed as a result of an Injury or Sickness for which Coverage is not otherwise excluded under this Group Insurance Certificate.

(15) The Covered Person's mental illness, or the diagnosis or treatment of such mental illness, except for the Covered Person's use of:

- any drug, medication or sedative that is taken or used as prescribed by a Doctor; or
- an "over the counter" drug, medication or sedative taken as directed; or

(16) Hospital Confinement caused by, contributed to by, or resulting from Mental Illness. However, dementia as a result of stroke, trauma, viral infection, Alzheimer's disease or other conditions not listed which are not usually treated by a mental health provider or other qualified provider using psychotherapy, psychotropic drugs, or other similar methods of treatment are covered under this Group Contract.

Exclusions may not be available or applicable in all states and may vary depending on state laws and regulations.



Critical Illness Rates and Plan Design

| | |
|----------------------------------|---|
| SIC Code | 9111 |
| Situs State | Georgia |
| Number of Eligible Lives | 1,760 |
| Commissions | <p>Our offer includes member heaped commissions. The member heaped commission rates are;</p> <p style="text-align: center;">1st year 70.00%, 2nd year 10.00%, 3rd plus year 10.00%</p> <p>A list bill or pay as deduct billing method are required to pay member heaped commissions. If the employer is unable to support either of these methods, group heaped commission will be payable.</p> |
| Financial Arrangement | Coverage is offered on a non-participating, fully insured basis |
| Premium Contribution | 100% Employee Paid. Payroll deductions will be taken on a post-tax basis. |
| Rate Type | Attained Age |
| Participation Requirement | Waived |
| Enrollment Mode | Preferred |
| Effective Date | 7/1/2024 |
| Rate Guarantee | 4 Years |

Rates

| Attained Age Uni-smoker Rates | | | |
|--------------------------------------|--|---|---|
| Monthly Rate | | | |
| Age | Employee - Per \$10,000 of Coverage | Spouse - Per \$5,000 of Coverage | Child(ren) - Per \$5,000 of Coverage |
| < 25 | 3.324 | 2.120 | 0.001 |
| 25-29 | 4.103 | 2.409 | |
| 30-34 | 5.077 | 3.036 | |



| | | | |
|-------|---------|--------|--|
| 35-39 | 5.754 | 3.307 | |
| 40-44 | 6.620 | 3.763 | |
| 45-49 | 10.767 | 5.628 | |
| 50-54 | 15.972 | 7.910 | |
| 55-59 | 24.519 | 11.553 | |
| 60-64 | 34.749 | 15.958 | |
| 65-69 | 52.677 | 24.088 | |
| 70-74 | 63.945 | 29.314 | |
| 75-79 | 80.729 | 37.845 | |
| 80-84 | 107.261 | 53.102 | |
| 85+ | 138.480 | 69.862 | |

The above table reflects preferred rates that assume optimal enrollment conditions. Optimal enrollment conditions include either the use of an enrollment firm or “On Ballot” enrollment next to medical, active enrollment, and a minimum of 3 communication touch points (including a group meeting). Non-preferred rates that reflect sub-optimal enrollment conditions are available upon request.

Plan Design

| Coverage Summary | |
|---|---|
| Eligibility Employee Spouse/Domestic Partner Children | All active, full-time & part-time employees working a minimum of 20 hours per week. Employee - Up to age 100 Dependent Spouse – Up to age 100 Dependent Child - Live birth to age 26 Eligibility is subject to state laws and regulations. Employee enrollment is required for dependent eligibility. A dependent child(ren) cannot be covered by more than one insured employee. Active at work and dependent non-confinement requirements apply. |
| Maximum Age at Time of Issue | None |
| Benefit Waiting Period | None |
| Benefit Amounts Employee | Any multiple of \$10,000 but not less than \$10,000 and not more than \$30,000 |



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|---|---|
| Spouse/Domestic Partner | Any multiple of \$5,000, but not more than the lesser of \$15,000 or 50% of the Employee Amount. |
| Children | Any multiple of \$5,000, but not more than the lesser of \$15,000 or 50% of the Employee Amount |
| Guaranteed Issue Limit | <p>Employee – \$30,000 Spouse – \$15,000 Child – \$15,000</p> <p>All amounts are Guaranteed Issue during initial eligibility, annual enrollments, and Qualified Life Events. Enrollments are not permitted outside of the initial enrollment, annual enrollments, and Qualified Life Events.</p> <p>Active at work and non-confinement requirements apply.</p> |
| Evidence of Insurability (EOI) | <p>Initial: All eligible employees and dependents are able to enroll without EOI. Annual enrollment: All eligible employees and dependents are able to enroll without EOI. Qualified Life Events: Coverage may be added within 31 days of a Qualified Life Event without EOI.</p> <p>Enrollment at any time other than Initial Enrollment, Annual Enrollment or a Qualified Life Event is not permitted.</p> <p>Active at work and non-confinement requirements apply.</p> |
| Age Reduction Schedule | None |
| Pre-existing Condition Limitation | None |
| Termination of Coverage Employee | <p>Employee Coverage ends when any of the following occur for the employee:</p> <ul style="list-style-type: none"> - Is no longer a member of the eligible class - Reaches the Lifetime Maximum Benefit - Reaches age 100 - Dies - Stops making Contributions |
| Termination of Coverage Spouse | <p>Dependent(s) Coverage ends when any of the following occur for the dependent;</p> <ul style="list-style-type: none"> - That dependent reaches his or her Lifetime Maximum Benefit - When the spouse reaches age 100 - When the dependent ceases to be a qualified dependent - When employee coverage ends |



| | |
|--|--|
| Children | <ul style="list-style-type: none"> - Child coverage ends when the child reaches age 26 - When the dependent ceases to be a qualified dependent - When employee coverage ends |
| Lifetime Benefit Maximum | 500% of amount of insurance. |
| Recurrence | <p>100% of the amount paid for the First Occurrence of the Critical Illness or Procedure up to the Lifetime Maximum Benefit.</p> <p>Recurrence means positive diagnosis of a Critical Illness or Procedure for which a benefit was paid, and the date of diagnosis of recurrence is more than 90 Days after the date of the last medical treatment for the previous occurrence.</p> <p>The amount payable for a Reoccurrence of Skin Cancer is \$500, subject to the Annual Limit for Skin Cancer and the Lifetime Maximum Benefit. Reoccurrence of Skin Cancer means a person is positively diagnosed by a Doctor as having an additional occurrence or reoccurrence of Skin Cancer for which a benefit was paid under this Coverage.</p> <p>There is no separation period requirement for the diagnosis of a separate covered condition.</p> |
| Continuity of Coverage | Included. |
| Continuation of Coverage at Employee's Option | Coverage will be continued at the active rates at the Employee's option. The Coverage that may be continued is the coverage in place on the date that employment ends or the date work hours are reduced. Coverage may be continued provided premiums continue to be paid on a direct bill basis until the Employee reaches age 100. |
| Waiver of Premium for Total Disability | Not Included |

| Covered Conditions | |
|--|---|
| Critical Illnesses and Benefit Amount Payable | Benefits for a Critical Illness are payable when a covered person is diagnosed with a Critical Illness or has the Critical Procedure for the first time while a covered person, and that diagnosis or procedure occurs during the covered person's lifetime or within a reasonable time after the Covered Person's death. |
| Alzheimer's Disease | 100% |
| Amyotrophic Lateral Sclerosis (ALS) | 100% |
| Benign Brain Tumor | 100% |
| Blindness | 100% |
| Cancer – Invasive | 100% |
| Coma | 100% |
| Deafness | 100% |



| | |
|---|---|
| Heart Attack | 100% |
| Loss of Speech | 100% |
| Major Organ Failure | 100% |
| Multiple Sclerosis | 100% |
| Paralysis of Limbs | 100% |
| Parkinson's Disease | 100% |
| Renal Failure | 100% |
| Stroke | 100% |
| Severe Coronary Artery Disease | 50% |
| Aneurysm | 25% |
| Cancer – Non-Invasive (in Situ – other than Skin Cancer) | 25% |
| Sudden Cardiac Arrest | 25% |
| Infectious Disease Benefits: | |
| Infectious Disease Benefits include a 5-day hospital stay requirement. Recurrence for Infectious Disease also has a 5-day hospital stay requirement. Recurrence for Infectious Diseases is payable at 10%. Recurrence benefits for Infectious Diseases require a separation period between payable diagnosis. | |
| Covered Conditions under Infectious Disease | |
| Anthrax | 25% |
| Bacterial Cerebrospinal Meningitis | 25% |
| Cholera | 25% |
| COVID-19 | 25% |
| Diphtheria | 25% |
| Encephalitis | 25% |
| Legionnaire's Disease | 25% |
| Lyme Disease | 25% |
| Malaria | 25% |
| Methicillin-Resistant Staphylococcus Aureus (MRSA) | 25% |
| Necrotizing Fasciitis | 25% |
| Osteomyelitis | 25% |
| Pertussis (whooping cough) | 25% |
| Rabies | 25% |
| Rocky Mountain Spotted Fever | 25% |
| Tetanus | 25% |
| Tuberculosis | 25% |
| Typhoid Fever | 25% |
| Flat Dollar Benefits | |
| Skin Cancer | \$500 payable once per covered person per calendar year, subject to the Lifetime Benefit Maximum. |
| Childhood Benefits | |
| Cerebral Palsy | 100% |



| | |
|---------------------------|------|
| Cleft Lip / Palate | 100% |
| Down Syndrome | 100% |
| Sickle Cell Anemia | 100% |
| Spina Bifida | 100% |

| Additional Benefits and Provisions | |
|--|---|
| Health Screening Benefit (Wellness Benefit) | <p>The Health Screening Benefit (Wellness Benefit) is a \$50 benefit which is payable once per calendar year if the covered person receives one of the following health screening tests while not confined in a hospital:</p> <ol style="list-style-type: none"> 1. Routine health check-up exam; 2. Biopsies for cancer; 3. Blood chemistry panel; 4. Blood test to determine total cholesterol; 5. Blood test to determine triglycerides; 6. Bone marrow testing; 7. Breast MRI; 8. Breast ultrasound; 9. Breast sonogram; 10. Cancer antigen 15-3 blood test for breast cancer (CA 15-3); 11. Cancer antigen 125 blood test for ovarian cancer (CA 125); 12. Carcinoembryonic antigen blood test for colon cancer (CEA); 13. Carotid doppler; 14. Chest x-rays; 15. Clinical testicular exam; 16. Colonoscopy; 17. Complete blood count (CBC); 18. Dental exam; 19. Digital rectal exam (DRE); 20. Doppler screening for cancer; 21. Doppler screening for peripheral vascular disease; 22. Echocardiogram; 23. Electrocardiogram (EKG); 24. Electroencephalogram (EEG); 25. Endoscopy; 26. Eye exam; 27. Fasting blood glucose test; 28. Fasting plasma glucose test; 29. Flexible sigmoidoscopy; 30. Hearing test; |



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| | <ul style="list-style-type: none"> 31. Hemocult stool specimen; 32. Hemoglobin A1C; 33. Human papillomavirus (HPV) vaccination; 34. Immunization; 35. Lipid panel; 36. Mammogram; 37. Oral cancer screening; 38. Pap smears or thin prep pap test; 39. Prostate-specific antigen (PSA) test; 40. Serum cholesterol test to determine LDL and HDL levels; 41. Serum protein electrophoresis; 42. Skin cancer biopsy; 43. Skin cancer screening; 44. Skin exam; 45. Stress test on bicycle or treadmill; 46. Successful completion of smoking cessation program; 47. Tests for sexually transmitted infections (STIs); 48. Thermography; 49. Two hours post-load plasma glucose test; 50. Ultrasounds for cancer detection; 51. Ultrasound screening of the abdominal aorta for abdominal aortic aneurysms; 52. Virtual colonoscopy. |
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Critical Illness Limitations and Exclusions

| Limitations | |
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| Regulatory Considerations | Mandated state variations may result in different benefits/plan offerings, with corresponding rate changes. |
| All states Except California | <p>Limitations (If Applicable)</p> <ul style="list-style-type: none"> • Heart Attack does not include: <ul style="list-style-type: none"> (1) heart attack that occurs during a surgical procedure; (2) other acute coronary syndromes, including but not limited to angina; or (3) heart attack due to either alcohol or drug abuse. ▪ The following are not Invasive Cancer: <ul style="list-style-type: none"> (1) all cancers which are histologically classified as any of the following: pre-malignant, non-invasive, cancer in situ, borderline malignancy or low potential malignancy; |



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| | <ul style="list-style-type: none">(2) all tumors of the prostate unless histologically classified as having a Gleason score of 7 or greater or having progressed to at least clinical TNM classification T2N0M0;(3) chronic lymphocytic leukemia unless histologically classified as having progressed to at least Rai Stage II or above;(4) any skin cancer other than malignant melanoma; or(5) malignant melanomas classified as T1N0M0, for which a pathology report shows maximum thickness less than or equal to 1.0 millimeters using the Breslow method of determining tumor thickness. <ul style="list-style-type: none">▪ Major Organ Failure is defined as the irreversible failure of a Major Organ due to an illness and those failures are; End-stage Heart Disease, End-stage Liver Disease, End-stage Lung Disease, Total Pancreas Failure or Severe Bone Marrow Failure. Major Organs include Heart, Liver, Lung, Pancreas or Bone Marrow. Failure of more than one Major Organ is considered a single Major Organ Failure for the purpose of determining benefits under this critical illness plan. It does not include the transplant of any other organs, parts of organs, stem cells, tissues or cells.• Liver Failure does not include disease due to:<ul style="list-style-type: none">(1) Alcohol;(2) Drug abuse;(3) Drug overdose (including, but not limited to, over-the-counter drugs); or(4) Any hepatitis.▪ Renal Failure does not include renal failure due to diabetes mellitus or hypertension.▪ Stroke does not include transient ischemic attacks (“TIA”).▪ Adrenal Hypo-Function (Addison’s Disease) does not include Adrenal insufficiency resulting from prolonged corticosteroid treatment.▪ Alzheimer’s Disease does not cover any other type of dementia.▪ Encephalitis due to Human Immunodeficiency Virus (HIV) infection is not included.▪ Bacterial Meningitis does not include other forms of meningitis, including viral meningitis.▪ Sickle Cell Anemia: having sickle cell trait alone does not qualify as a valid claim.▪ Coma does not include:<ul style="list-style-type: none">(1) Coma due to either alcohol or drug abuse(2) Persistent vegetative state(3) Medically-induced coma▪ Cancer - <i>Non-Invasive, Skin Cancer</i>. Non-Invasive Skin Cancer means any malignancy of the skin diagnosed with histological confirmation and characterized by uncontrolled growth of malignant cells and invasion of tissue. It includes:<ul style="list-style-type: none">(1) basal cell carcinoma; and(2) squamous cell carcinoma. |
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| | <p>It does not include malignant melanoma, or any condition which may be considered pre-cancerous, such as leukoplakia; actinic keratosis; carcinoid; hyperplasia; non-malignant melanoma; moles; or similar diseases or lesions. Medical evidence of a definite diagnosis of Non-Invasive Skin Cancer by a Doctor is required as proof of claim. A clinical diagnosis will be accepted whenever such diagnosis is consistent with professional medical standards.</p> |
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| Exclusions | |
| <p>A Critical Illness or Procedure is not covered if it is caused by, contributed to by, or resulting from, directly or indirectly, any of the following:</p> | |
| <ul style="list-style-type: none"> • Suicide or attempted suicide. • Intentionally self-inflicted Injuries, or any attempt to inflict such Injuries. • Taking part in any riot or insurrection. • War, or any act of war. War means declared or undeclared war and includes resistance to armed aggression. • Commission of a crime for which You have been convicted under state or federal law. • Being under the influence of or taking any non-prescription drug, prescription drug, narcotic, stimulant, hallucinogen, barbiturate, amphetamine, gas, fumes or inhalants, poison or any other controlled substance as defined in Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, as now or hereafter amended, unless prescribed by and administered in accordance with the advice of the Covered Person's Doctor. • Participation in these hazardous activities: scuba diving; bungee jumping; base jumping; skydiving; ziplining; parachuting; hang gliding; paragliding; paramotoring; parascending; or ballooning. | |
| <p>Exclusions may not be available or applicable in all states and may vary depending on state laws and regulations.</p> | |



Hospital Indemnity Rates and Plan Design

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| SIC Code | 9111 |
| Situs State | Georgia |
| Number of Eligible | 1,760 |
| Commissions | <p>Our offer includes member heaped commissions. The member heaped commission rates are;</p> <p style="text-align: center;">1st year 70.00%, 2nd year 10.00%, 3rd plus year 10.00%</p> <p>A list bill or pay as deduct billing method are required to pay member heaped commissions. If the employer is unable to support either of these methods, group heaped commission will be payable.</p> |
| Financial | Coverage is offered on a non-participating, fully insured basis |
| Premium Contribution | 100% Employee Paid. Payroll deductions will be taken on a post-tax basis. |
| Rate Type | Tiered Rates |
| Participation Requirement | Waived |
| Enrollment Mode | Preferred |
| Effective Date | 1/1/2025 |
| Rate Guarantee | 4 Years |

Tiered Rates

| Hospital Indemnity Rates | |
|---------------------------------|-----------------------------------|
| Tier Level 4 | Medium Plan - Monthly Rate |
| EE Only | \$15.98 |
| EE + Spouse | \$32.85 |
| EE + Child(ren) | \$32.27 |
| Family | \$49.14 |



The above table reflects preferred rates that assume optimal enrollment conditions. Optimal enrollment conditions include either the use of an enrollment firm or “On Ballot” enrollment next to medical, active enrollment, and a minimum of 3 communication touch points (including a group meeting). Non-preferred rates that reflect sub-optimal enrollment conditions are available upon request.

Plan Provisions

| Coverage Summary | |
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| <p>Eligibility</p> <p>Employee Spouse/Domestic Partner Child</p> | <p>All active, full-time & part-time employees working a minimum of 20 hours per week.</p> <p>Employee - Up to age 100 Dependent Spouse – Up to age 100 Dependent Child - Live birth to age 26</p> <p>Eligibility is subject to state laws and regulations.</p> <p>Employee enrollment is required for dependent eligibility. A dependent child(ren) cannot be covered by more than one insured employee.</p> <p>Active at work and dependent non-confinement requirements apply.</p> |
| Maximum Age at Time of Issue | None |
| Benefit Waiting Period | None |
| Guaranteed Issue | <p>All amounts are Guaranteed Issue during initial eligibility and at annual enrollments, as well as for Qualified Life Events. Enrollments will not be allowed outside of initial enrollment, annual enrollments, and Qualified Life Events.</p> <p>Active at work and non-confinement requirements apply.</p> |
| Evidence of Insurability (EOI) | <p>Initial: All eligible employees and dependents are able to enroll without EOI. Annual enrollment: All eligible employees and dependents are able to enroll without EOI. Qualified Life Events: Coverage may be added within 31 days of a Qualified Life Event without EOI.</p> <p>Enrollment at any time other than initial enrollment, annual enrollment or a Qualified Life Event is not permitted.</p> |



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| | Active at work and non-confinement requirements apply. |
| Age Reduction Schedule | None |
| Pre-existing Exclusion | None |
| Pregnancy | Pregnancy is covered under this plan with no waiting period on claims. |
| Termination of Coverage Employee | Employee Coverage ends when any of the following occur for the employee; <ul style="list-style-type: none"> - Is no longer a member of the eligible class - Reaches age 100 - Dies - Stops making Contributions |
| Dependent Spouse | Dependent(s) Coverage ends when any of the following occur for the dependent; <ul style="list-style-type: none"> - When the spouse/domestic partner reaches age 100 - When the dependent ceases to be a qualified dependent - When employee coverage ends |
| Children | <ul style="list-style-type: none"> - Child coverage ends when the child reaches age 26 - When the dependent ceases to be a qualified dependent - When employee coverage ends |
| Continuation of Coverage at Employee's Option | Coverage will be continued at the active rates at the Employee's option. Coverage may be continued for the Employee only or the Employee and Dependents. Coverage may be continued provided premiums continue to be paid on a direct bill basis until the Employee reaches age 100 |
| Waiver of Premium for Total Disability | None |

Schedule of Benefits

| Hospital Indemnity Schedule of Benefits | |
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| Core Benefits | Medium |
| Hospital Admission Benefit | \$1,000 |
| ICU Admission Benefit | \$2,000 |
| Hospital Confinement Benefit | \$200 |
| ICU Confinement Benefit | \$400 |
| Additional Benefits | |
| High Risk Pregnancy Benefit | 25% |
| Hospital Observation Benefit | \$100 |



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| Mental Illness / Nervous Disorder Facility Care Benefit | \$100 |
| Premature Infant | 25% |
| Substance Abuse Benefit | \$100 |
| Health Screening Benefit | \$50 |
| Benefits Payable for Newborns | |
| Intensive Care Unit (ICU) Admission Benefit | Included |
| Hospital Confinement Benefit | Included |
| Intensive Care Unit (ICU) Confinement Benefit | Included |

Benefit Descriptions

| Hospital Indemnity Benefit Descriptions | |
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| Hospital Admission | <p>Pays a benefit if a covered person is admitted for confinement to a Hospital for treatment of a covered accident, injury, or illness.</p> <ul style="list-style-type: none"> - Admissions must occur within 90 days of covered accident, injury, or illness. - Not payable for ER treatment, outpatient treatment or stays of less than 24 hours. - Payable no more than one time per covered person, per covered accident, injury, or illness. - Payable for a stay in observation status of at least 24 hours. - Payable up to 5 times per calendar year. |
| ICU Admission | <p>Pays a benefit, if a covered person, upon initial admission for confinement to a Hospital for treatment of a covered accident, injury, or illness, is admitted to an ICU.</p> <ul style="list-style-type: none"> - The ICU admission must occur within 90 days after the covered accident, injury or illness occurs. - Not payable for an ICU admission less than 24 hours. - Payable no more than one time per covered person, per covered accident, injury or illness. - Payable up to 5 times per calendar year. - When a covered person is admitted to the ICU, <u>only</u> the ICU Admission benefit is paid (i.e., they would not receive the Hospital Admission and the ICU Admission benefit). |
| Hospital Confinement | <p>Pays a benefit, if the covered person is confined in the hospital for treatment of a covered accident, injury, or illness. Payable for up to 30 days per confinement. When an Admission Benefit is included, the Hospital Confinement Benefit begins on Day 2.</p> <ul style="list-style-type: none"> - Not payable for a confinement less than 24 hours. - Initial hospital confinement must begin within 90 days after the covered accident, injury or illness occurs. - Payable to a maximum of 5 confinements per calendar year. |



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| ICU Confinement | <p>Pays a benefit for each day the covered person is confined in an intensive care unit for treatment of a covered accident, injury, or illness. Payable for up to 30 days per confinement. When an Admission Benefit is included, the ICU Confinement Benefit begins on Day 2.</p> <ul style="list-style-type: none"> - Not payable for a confinement less than 24 hours. - Initial hospital confinement must begin within 90 days after the covered accident, injury or illness occurs. - Payable to a maximum of 5 times per calendar year. |
| Hospital Observation Stay | <p>Payable if a Covered Person incurs charges for and receives treatment in an Observation Unit in a Hospital for a period of at least 24 hours.</p> <p>This benefit is not payable for treatment received in an emergency or urgent care department, or facility other than a Hospital. The Hospital Observation Benefit is payable for up to 1 times per Covered Person, per Covered Loss. We will pay the Hospital Observation Benefit no more than 6 times per Covered Person, per Calendar Year.</p> |
| Premature Infant & NICU Benefit | <p>The Amounts of Insurance for certain benefits will be increased by the quoted percentage for an infant dependent who is born before 37 weeks of pregnancy and has a low birth weight of 5.5 pounds or less, or the infant has a medical condition diagnosed by a Doctor that requires special care by a Neonatal Intensive Care Unit (NICU).</p> <p>This increased amount only applies to the following benefits:</p> <p>Hospital Admission Benefit Intensive Care Unit (ICU) Admission Benefit Hospital Confinement Benefit Intensive Care Unit (ICU) Confinement Benefit</p> |
| High Risk Pregnancy Benefit | <p>The Amounts of Insurance for certain benefits will be increased by the quoted percentage for a Confinement due to a Covered Loss that is caused by complications due to High-Risk Pregnancy.</p> <p>This benefit applies only to benefits paid for the Confinement of the Employee or Spouse or Domestic Partner and not to benefits paid for a Dependent Child. It applies only to a Confinement due to Complications of pregnancy and not due to routine childbirth.</p> <p>This increased amount only applies to the following benefits:</p> <p>Hospital Admission Benefit Intensive Care Unit (ICU) Admission Benefit Hospital Confinement Benefit Intensive Care Unit (ICU) Confinement Benefit Hospital Observation Benefit</p> |
| Mental/Nervous Facility Care Benefit | <p>Prudential will pay Mental Illness/Nervous Disorder Facility Care Benefit shown in the Schedule of Benefits section, for each day a Covered Person is confined for treatment at a facility, or unit of a</p> |



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| | <p>Hospital, specializing in psychiatric care due to a Covered Loss. The benefit will be paid for each day of confinement in a facility for Mental Illness or Nervous Disorder.</p> <p>The treatment must be at the direction and under the care of a Doctor or licensed health care professional. The treatment must begin within 30 days following a related Hospital Confinement or Intensive Care Unit (ICU) Confinement for 1 consecutive day(s) or more for which benefits were paid.</p> <p>We will pay the Mental Illness/Nervous Disorder Facility Care Benefit no more than 30 day(s) per Covered Person, per Calendar Year; and 90 day(s) per Covered Person during their lifetime.</p> |
| <p>Substance Abuse Facility Care Benefit</p> | <p>We will pay the Substance Abuse Facility Care Benefit for each day a Covered Person is confined for care at a Substance Abuse Facility.</p> <p>The care must be at the direction and under the care of a Doctor or licensed health care professional and the care must begin within 30 days following a related Hospital Confinement or Intensive Care Unit (ICU) Confinement for 1 consecutive day(s) or more for which benefits were paid.</p> <p>The facility must charge room and board for treatment services.</p> <p>We will pay the Substance Abuse Facility Care Benefit no more than 30 day(s) per Covered Person, per Calendar Year, and 60 day(s) per Covered Person during their lifetime.</p> |
| <p>Benefits Payable for Newborns at Birth</p> | <p>Intensive Care Unit (ICU) Admission Benefit Hospital Confinement Benefit Intensive Care Unit (ICU) Confinement Benefit</p> |



Additional Benefits and Provisions

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| Health Screening Benefit (Wellness Benefit) | <p>The Health Screening Benefit (Wellness Benefit) is \$50 for Medium Plan benefit which is payable once per calendar year if the covered person receives one of the following health screening tests while not confined in a hospital:</p> <ol style="list-style-type: none"> 1. Routine health check-up exam; 2. Biopsies for cancer; 3. Blood chemistry panel; 4. Blood test to determine total cholesterol; 5. Blood test to determine triglycerides; 6. Bone marrow testing; 7. Breast MRI; 8. Breast ultrasound; 9. Breast sonogram; 10. Cancer antigen 15-3 blood test for breast cancer (CA 15-3); 11. Cancer antigen 125 blood test for ovarian cancer (CA 125); 12. Carcinoembryonic antigen blood test for colon cancer (CEA); 13. Carotid doppler; 14. Chest x-rays; 15. Clinical testicular exam; 16. Colonoscopy; 17. Complete blood count (CBC); 18. Dental exam; 19. Digital rectal exam (DRE); 20. Doppler screening for cancer; 21. Doppler screening for peripheral vascular disease; 22. Echocardiogram; 23. Electrocardiogram (EKG); 24. Electroencephalogram (EEG); 25. Endoscopy; 26. Eye exam; 27. Fasting blood glucose test; 28. Fasting plasma glucose test; 29. Flexible sigmoidoscopy; 30. Hearing test; 31. Hemocult stool specimen; 32. Hemoglobin A1C; 33. Human papillomavirus (HPV) vaccination; 34. Immunization; 35. Lipid panel; |
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| | <p>36. Mammogram;</p> <p>37. Oral cancer screening;</p> <p>38. Pap smears or thin prep pap test;</p> <p>39. Prostate-specific antigen (PSA) test;</p> <p>40. Serum cholesterol test to determine LDL and HDL levels;</p> <p>41. Serum protein electrophoresis;</p> <p>42. Skin cancer biopsy;</p> <p>43. Skin cancer screening;</p> <p>44. Skin exam;</p> <p>45. Stress test on bicycle or treadmill;</p> <p>46. Successful completion of smoking cessation program;</p> <p>47. Tests for sexually transmitted infections (STIs);</p> <p>48. Thermography;</p> <p>49. Two hours post-load plasma glucose test;</p> <p>50. Ultrasounds for cancer detection;</p> <p>51. Ultrasound screening of the abdominal aorta for abdominal aortic aneurysms;</p> <p>52. Virtual colonoscopy.</p> |
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Hospital Indemnity Limitations and Exclusions

| Limitations | |
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| Regulatory Considerations | Mandated state variations may result in different benefits/plan offerings, with corresponding rate changes. |
| Limitations | <ul style="list-style-type: none"> • Prudential will not pay the daily Hospital Confinement benefit, ICU Confinement benefit, Skilled Nursing Facility benefit, Skilled Nursing At-Home Care benefit or the Hospice Facility Care benefit concurrently. Only one benefit will be payable, per covered person, per day. The benefit that is payable is whichever is greatest. • Prudential will not pay for Doctor Office Treatment, Urgent Care Treatment or Emergency Care Treatment, for the same covered accident, injury or illness, concurrently. The benefit that is payable is whichever is greatest. • Prudential will not pay for more than one childcare benefit concurrently. Only one childcare benefit will be payable, per covered person, per day. The benefit that is payable is whichever is greatest. |



Exclusions

A Hospital Indemnity Claim or Procedure is not covered if it is caused by, contributed to by, or resulting from, directly or indirectly, any of the following:

- Suicide or attempted suicide.
- Intentionally self-inflicted Injuries, or any attempt to inflict such Injuries.
- Taking part in any riot or insurrection.
- War, or any act of war. War means declared or undeclared war and includes resistance to armed aggression.
- Commission of a crime for which You have been convicted under state or federal law.
- Being under the influence of alcohol or alcohol intoxication, including but not limited to having a blood alcohol level above the limit for permissible operation of a motor vehicle in the jurisdiction where the accident occurred, regardless of whether the person was operating a motor vehicle and was convicted of an alcohol related offense. This exclusion does not apply to the Mental Health Screening Benefit or the Substance Abuse Facility Care Benefit.
- Medical malpractice.
- An accident that occurs while the person is serving on full-time active duty for more than 30 days in any armed forces. But this does not include Reserve or National Guard active duty for training.
- Being under the influence of or taking any non-prescription drug, prescription drug, narcotic, stimulant, hallucinogen, barbiturate, amphetamine, gas, fumes or inhalants, poison or any other controlled substance as defined in Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, as now or hereafter amended, unless prescribed by and administered in accordance with the advice of the Covered Person's Doctor. This exclusion does not apply to the Mental Health Screening Benefit or the Substance Abuse Facility Care Benefit.
- Participation in these hazardous activities: scuba diving; bungee jumping; base jumping; skydiving; ziplining; parachuting; hang gliding; paragliding; paramotoring; parascending; or ballooning.
- Treatment for dental care or dental procedures, unless treatment is the result of a Covered Loss;
- Elective procedures and/or reconstructive surgery, unless it is a result of trauma, infection or other diseases.
- Cosmetic surgery, except when such surgery is performed to treat a Covered Loss, correct a disorder of normal bodily function or structure that was caused by a Covered Loss for which coverage is not otherwise excluded under this Certificate, or reconstruct a part of the body which was disfigured or removed as a result of a Covered Loss for which coverage is not otherwise excluded under this Certificate.
- The Covered Person's Mental Illness, or the diagnosis or treatment of such Mental Illness, except for the Covered Person's use of any drug, medication or sedative that is taken or used as prescribed by a Doctor or an "over the counter" drug, medication or sedative taken as directed. This exclusion does not apply to the Mental Health Screening Benefit or the Mental Illness/Nervous Disorder Facility Benefit.
- Hospital Confinement caused by, contributed to by, or resulting from Mental Illness. However, dementia as a result of stroke, trauma, viral infection, Alzheimer's disease or other conditions not listed which are not usually treated by a mental health provider or other qualified provider using psychotherapy, psychotropic drugs, or other similar methods of treatment are covered under this Certificate.

Exclusions may not be available or applicable in all states and may vary depending on state laws and regulations.



Other Requirements, Assumptions, and Provisions

| Enrollment Strategy Requirements |
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| <p><u>Preferred Enrollment Conditions:</u></p> <p>ENROLLMENT STRATEGY REQUIREMENTS</p> <p>Prudential's proposal assumes the employer is using an optimal enrollment approach. This includes:</p> <ul style="list-style-type: none"> ▪ An agreed-upon enrollment strategy: <ul style="list-style-type: none"> ○ The usage of an enrollment firm, Or ○ An active, "on ballot" enrollment next to medical elections, and a communication campaign with 3 touchpoints (listed below) ▪ Premiums collected via payroll deduction ▪ No other competing plan of the same product <p>Prudential will collaborate with you to create the right communications strategy for engaging your employees. Our dedicated team has the expertise to help you design and execute a communication plan that drives awareness and engagement. Prudential offers full service enrollment solutions, including:</p> <ul style="list-style-type: none"> ▪ On-site group meetings ▪ Emails and Ecards ▪ Letters ▪ Post cards ▪ Content for employer communications ▪ Posters ▪ Enrollment kits <p>Direct home mailings are available. Please note this requires a minimum of 7 business days following receipt of the required file layout.</p> |

| Minimum Participation Requirements | | |
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| | 100-999 Lives | 1,000 + Lives |
| All Voluntary Products | 10% | 5% |

Minimum Participation requirements may be waived* if one or more of the following exists:

- Employer contributes to premium, or
- An Enrollment Services Firm utilizing one on one enrollers is used, or
- Takeover participation is greater than 10%, or
- Enrollment in the Voluntary programs is through an Active enrollment and the employee election to the Voluntary coverage is "On Ballot" and positioned after the Medical election.



* Subject to state specific requirements.

| Prudential Services | |
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| Recordkeeping and Billing Services | <p>Prudential provides our full recordkeeping services which include maintaining the enrollment elections and changes of each enrolled employee, managing the continuation process, calculating the premium and payroll deductions, and support to the employees through a call center and/or message center. Prudential offers multiple options from a billing perspective to allow for payroll deduction, list bill or self-bill.</p> <p>To enable these services, ongoing enrollment information can be provided via file feeds or uploading ongoing change spreadsheet on the employer portal. Employers/TPAs are accountable to manage eligibility and provide accurate enrollment information.</p> |
| Claims | <p>Claims submission can be done electronically through the Employee portal or handled through telephone and paper submission to Prudential. Prudential will provide the claimant with the necessary paperwork to complete their claim submission. A customer service line will be available for claimants to ask any questions they may have regarding their claim. Once a decision has been made, payments will be made directly to the claimant.</p> |
| Communications | <p>Prudential will deliver individual certificates to Employees that have completed the Enrollment requirements.</p> |
| GI Recordkeeping | |
| Claim Facilitation | <p>Upon request to file a claim, Prudential sends a claim package to the insured. Prudential assembles all the necessary components in order to make a claim decision. Prudential is available to answer any questions via a toll-free customer service line.</p> |
| Enrollment | <p>Prudential will process all enrollments – for initial enrollment, individuals experiencing qualified life events, and for new hires. Enrollment is supported through telephonic or paper-based options.</p> <p>To support Customers, Prudential accepts enrollments from platform providers and enrollment firms.</p> <p>Prudential sends out new hire kits, which guide new employees through the enrollment process for their optional coverages.</p> |



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| Eligibility and Coverage Record Maintenance | Prudential receives and processes eligibility files containing coverage and salary changes. Prudential distributes certificates, summaries of benefits, and New Hire Kits as part of this service. |
| Bill Preparation | Prudential provides a detailed list bill that displays individual employee participation and total participation based on age or location criteria. |
| Payroll Deduction | Prudential provides the payroll deduction amount and applies client remittances to individual certificate holders. Prudential will administer payroll deductions to match your payroll frequency. |
| Continuation Processing | Prudential will work directly with terminated employees to provide information on porting the coverage through the Continuation option. Prudential would also handle on-going administration and billing for those that continue coverage. |

| Other Assumptions & Provisions | |
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| Underwriting Assumptions | <ul style="list-style-type: none"> ▪ Annual premium amounts are based on the estimated case size and are provided for illustrative purposes only. ▪ If enrollment or volume changes of more than 10% during the initial rate guarantee period from those stated in this proposal, we reserve the right to take immediate action, including but not limited to revising rates or terminating coverage. ▪ If any plan designs are changed, we reserve the right to take immediate action, including but not limited to revising rates or terminating coverage. ▪ If a change in applicable law requires a change in the insurance provided by the policy or the classes of persons eligible for insurance under the plan, we reserve the right to take immediate action, including but not limited to revising rates or terminating coverage. ▪ Prudential's offer assumes that all covered employees are U.S. Employees residing in the United States. Any foreign exposure must be approved by Underwriting before coverage will be offered. All premium and claims must be paid in US dollars. ▪ The rates are contingent upon the use of Prudential's standard contract (plans, provisions, and exclusions), unless otherwise explicitly identified. ▪ Eligibility limitations may apply based upon state laws and regulations. ▪ For employers with less than 500 lives, our offer is only valid if two or more Voluntary products are sold. |



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| | <ul style="list-style-type: none"> ▪ Please be aware that certain employer terms and conditions, such as those found in employer’s general services agreements, that were not previously disclosed in the request for proposal may impact our offer. We reserve the right to make adjustments to our offer if the disclosure of such terms and conditions does not occur prior to our initially released offer. ▪ Employees that reside in California, Massachusetts, New York, New Jersey, or the District of Columbia are required to have Major Medical Insurance coverage in order to be eligible to enroll in any Voluntary plan. ▪ Prudential is responding to your request for a proposal. All proposal materials have been prepared assuming that one carrier will be selected for all coverages, and we have accordingly quoted each product line on that basis. To the extent that you choose otherwise, our pricing assumptions and quote may vary. |
| State and Federal Mandates | Benefit provisions are subject to state and federal mandates. Future mandates will be incorporated into the plan as of the date required by law. |
| Tax Advice | This proposal is conditional upon our understanding that the customer will consult with their own tax adviser regarding any potential imputed income reporting requirements. Prudential cannot provide tax advice to customers. |
| Grace Period | This proposal assumes premium remission within the 31-day grace period. At this time, Prudential does not charge a late fee or interest penalty for payment of premiums after the due date. Prudential reserves the right to charge interest or penalties for premium payments received after the grace period. |
| ERISA | <p>The employer will disclose the plan costs to the employees, as required by ERISA.</p> <p>Our standard administration expenses for ERISA cases contemplate production of one Schedule A (ERISA) for each insured Accounting Case each policy year with dates coinciding with the anniversary date of the group policy.</p> |

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| Domestic Partner | <p>The term Domestic Partner, if used, is a person who:</p> <ol style="list-style-type: none"> (1) Satisfies the requirements for being a domestic partner, registered domestic partner or party to a civil union under the law of your jurisdiction of residence; or (2) Is a person of the same or opposite sex who satisfies all of the following: <ol style="list-style-type: none"> (a) is age 18 or older; and |
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|--|--|
| | <p>(b) is not related to you by blood or a degree of closeness that would prohibit marriage in the law of the jurisdiction in which you reside; and</p> <p>(c) is mentally competent to consent to contract; and</p> <p>(d) is not married to another person under statutory or common law nor in a domestic partnership, registered domestic partnership or civil union with another person; and</p> <p>(e) is not otherwise a Qualified Dependent under the Program; and</p> <p>(f) is in a single dedicated, serious, and committed relationship with you; and</p> <p>(g) has shared a single permanent residence with you for at least 12 consecutive months; and</p> <p>(h) is financially interdependent with you.</p> <p>Where requested by Prudential, you and/or your Domestic Partner certify that all of the above requirements are satisfied. Such certification shall be in a format satisfactory to Prudential.</p> <p>Note that if the client's intention is to provide domestic partner coverage only for same sex (and not opposite sex), Prudential will require a signed hold harmless agreement.</p> |
|--|--|

Deviations

- The rates are contingent upon the use of Prudential's standard contract (plans, provisions, and exclusions), unless otherwise explicitly identified. If substantial changes are requested to standard Prudential contractual language and/or agreements, Prudential reserves the right to review the costs associated with review and implementation of any changes and to charge them back to the client.
- This proposal provides a general description of Prudential's group insurance products. Product offerings, including limitations or exclusions, may not be available or applicable in all states and may vary depending on state laws and regulations. If there are any discrepancies between this proposal and the contract, the contract shall govern. Prudential has a website that sets forth state-specific coverage requirements based on the insured's state of residence. The website is located at www.prudential.com/etonline. The access code(s) for this group during the pre-sale period is/are; VAI1 for Accident Insurance.
- Coverage for employees is subject to filing approval in all locations
- Prudential's offer assumes that all eligible employees are U.S. Citizens residing in the United States. Coverage to U.S. expatriates may be provided under certain circumstances. When your active employee population includes expatriates, Prudential will determine if they can be included as part of the eligible group.
- The minimum lead time required to implement your plan will be 60 days, measured from the notification of sale to the plan effective date.



Disclosures

HSA Disclosure:

If your employees [partners, members] participate in a Health Savings Account, also known as an HSA, or plan to do so in the future, they should be aware that the IRS limits the types of supplemental insurance they may have in addition to an HSA while maintaining its tax-exempt status. The policy (or parts of the policy) are designed to be HSA compatible based on current understanding of relevant tax law and available guidance to-date. It is ultimately the employer's [partnership, union, association's] responsibility to consult tax and legal advisors to determine which supplemental benefits may be offered to employees [partners, members]. Prudential cannot provide tax and/or legal advice.

Producer Disclosure:

As a condition of this proposal, Prudential requires the producer to fully disclose to client all commissions and fees payable to the producer by Prudential in connection with the proposed insurance coverage(s) and services. Prudential further requires that client consent, in writing, to the payment of all such commissions and fees by Prudential to the producer, a copy of which consent must be provided to Prudential at the point of sale.

In addition, Prudential will pay an RFP Administrative Fee for proposal services as determined by Prudential to in connection with your insurance policy. Additional amounts may be determined or reconciled based on actual enrollment.

Third Party Reimbursements

We have included the cost of certain expense reimbursements as described below in the insured premium rates or in the service fees. Subsequent to receipt of initial premium payment, we will reimburse the Enrollment Firm/BenAdmin/Vendor for these expenses upon receipt of invoice evidencing these services were performed.

Payments will be made to Enrollment Firm/BenAdmin/Vendor

One Time Tech Credit

- The services below will be provided:
 - 1) Enrollment Processing and Communication Services
 - 2) Design of Policyholder's benefit administration system
 - 3) Billing Services
 - 4) Premium Remittance
 - 5) Claims Adjudication



- Services are to be provided in preparation for the 1/1/2026 effective date and for the initial 3 Years rate guarantee thereafter.
- Services are to be provided for the following coverage(s): Accident, Critical Illness and Hospital Indemnity.
- The expense in the amount of \$10,000 is included in the insured premium rates or in their services fees. The cost is spread over the rate guarantee period.
- Terms of payment are as follows: Payments are made to the Enrollment Firm/BenAdmin/Vendor per invoice.

Please note that Prudential can also provide the services listed above. Prudential cannot agree to include in the cost of insurance a request for reimbursement of an expense for a type of service not covered by the above categories or not permissible under applicable law or regulation.

OFAC Disclosure:

This proposal is conditioned upon our understanding that you comply with the statutes, regulations, Executive Orders, and other programs administered by the Office of Foreign Assets Control (OFAC) of the U.S. Department of the Treasury.

Medicare and Medicaid Disclosure:

Critical Illness Insurance, Accident Insurance and Hospital Indemnity Insurance are not Medicare Supplement insurance plans and are not medical coverage. These plans do not provide any type of medical coverage and are not a substitute for medical coverage or disability insurance. Critical Illness Insurance, Accident Insurance and Hospital Indemnity Insurance may be coordinated with Medicare or Medicaid. As a result, certain benefits payable to you under these plans may result in a corresponding reduction in the Medicare or Medicaid benefits otherwise payable to you. If you are eligible for Medicare, review the Guide to Health Insurance for People with Medicare available from the company.

Cannabis Disclosure:

Prudential Group Insurance will not do business with entities engaged directly in cannabis activities in the United States. In addition, Prudential Group Insurance will not do business with a person or entity that does business or is affiliated with entities engaged directly in cannabis activities in the United States (affiliation may be determined based upon a particular ownership percentage of the equity of such a business, or upon sharing a common parent with such a business).

General Disclosure:

This proposal is released with the understanding that it will be presented to interested parties only by an appropriately licensed & appointed individual pursuant with state licensing and appointment rules. Any



questions regarding these rules can be addressed to our Broker Administration Unit at 1-888-778-6639. Any violations will result in commissions being withheld in accordance with state regulations.

In providing the plan of benefits briefly outlined in this proposal, Prudential will utilize standard benefit language as filed with and approved by the state. Based on the information provided, we believe all of the provisions of the insurance plan we are being asked to provide are on file and approved. Should this not be the case, filing approval will need to be received before booklets, certificates, or other enrollment material that describe provisions subject to filing can be distributed.

New Mexico Product Availability:

Based on recent amendments to New Mexico's regulations that were effective 1/1/2024, our ability to insure 100 or more New Mexico residents is contingent upon approval of our product filings by the state of New Mexico. Prudential's coverage is subject to any changes to the final amended regulation, the Group Customer's Plan, or any other requirements that could affect Prudential's continued use of its approved contracts and product filings. The Group Customer is responsible for informing Prudential if they have 100 or more New Mexico residents eligible for coverage at any time. Failure to provide such information on a timely basis could impact Prudential's ability to provide coverage to the New Mexico residents.

NOTICE REGARDING PRODUCER COMPENSATION

External Producers

This section applies only if your producer is receiving commission and/or supplemental compensation.

External producers are individuals or entities who represent you, the client, in the solicitation, negotiation or effectuation of the sale of insurance as their producer or consultant of record. The specific functions of external producers may vary but can include guidance through the proposal process and coordination of the client's data with one or more carriers. External producers are not Prudential employees and may have brokerage relationships with other insurance carriers. Please contact your producer for further information regarding their role during the proposal process and for information about any possible alternative quotes received from other insurance carriers.

Producers who place business with Prudential may be eligible to receive commissions and supplemental compensation unless you advise us otherwise.

Commissions are payable as a percentage of paid premiums, a fixed dollar amount, or as a dollar amount based on the total number of eligible lives or enrolled lives for as long as the producer is recognized as the Producer of Record on your policy.



Under Prudential's Supplemental Commission Program (SCP), supplemental compensation ranges from 0% to 10% of group insurance premium on Critical Illness, Accident, and Voluntary AD&D products and 0% to 7% of group insurance premium on all other products. The actual percentage payable under Prudential's SCP is determined based on the aggregate annual premium due on eligible cases that your producer has in force with Prudential. The cost of supplemental compensation is not charged directly to policies. As a result, your rates are unaffected whether or not your producer receives supplemental compensation. You or your producer can elect to opt out of Prudential's SCP.

More information about eligibility criteria and payment calculation under Prudential's SCP is available to clients on Prudential's website at www.prudential.com/scp. Questions regarding producer compensation may be e-mailed to GLDI.Broker.Admin@prudential.com. Or, if you would like to speak with someone about producer compensation, contact your Prudential representative or call (888) 598-5671 from 8am to 5pm Eastern time.

Internal Producers

This section only applies if your contract is issued in the State of New York

Internal producers, including without limitation, sales representatives, account executives and other employees providing sales support, are individuals employed by The Prudential Insurance Company of America (Prudential) who are responsible for representing Prudential and our product portfolio during the proposal process. Prudential provides sales compensation to such internal producers when business is placed with our clients. Compensation varies based on the products placed, volume of premium and cases placed with Prudential but generally can be identified as production payments, goal-based payments, profitability, and/or direct or indirect compensation related to high achievement. An internal producer may be entitled to one or all of these types of compensation. Prudential is providing this disclosure on behalf of any and all such internal producers employed by Prudential in connection with the sales activity described herein.

You may obtain information about expected producer compensation, including information about alternative quotes, if any, based in whole or part on the sale and additional information about the specific internal producers involved in this transaction. This additional information regarding internal producer compensation may be requested via e-mail by writing to Sales.Data.and.Compensation@prudential.com, or by calling 973-548-5100.

COST ANALYSIS



| | Current | Renewal | Proposed | Proposed | Proposed |
|---------------------------------------|-------------|--------------|---------------|---------------|---------------|
| Life AD&D | | | | | |
| Annual Premium | \$386,480 | \$466,050 | \$372,840 | \$309,184 | \$459,230 |
| Rate Guarantee | Expiring | 2 Years | 3 Years | 3 Years | 3 Years |
| Retiree Life | | | | | |
| Annual Premium | \$16,020 | \$20,025 | \$15,379 | \$16,020 | \$19,705 |
| Rate Guarantee | Expiring | 2 Years | 3 Years | 3 Years | 3 Years |
| Voluntary Life | | | | | |
| Annual Premium | \$261,502 | \$287,743 | \$261,502 | \$261,478 | \$261,502 |
| Rate Guarantee | Expiring | 2 Years | 3 Years | 3 Years | 3 Years |
| Short Term Disability | | | | | |
| Annual Premium | \$536,269 | \$536,269 | \$416,972 | \$420,380 | \$335,168 |
| Rate Guarantee | Expiring | 2 Years | 3 Years | 3 Years | 3 Years |
| Voluntary Long Term Disability | | | | | |
| Annual Premium | \$258,507 | \$258,507 | \$206,806 | \$258,507 | \$229,638 |
| Rate Guarantee | Expiring | 2 Years | 3 Years | 3 Years | 3 Years |
| Total All Lines | | | | | |
| Annual Premium | \$1,458,778 | \$1,568,593 | \$1,273,498 | \$1,265,569 | \$1,305,242 |
| Annual Change vs Current | | \$109,815.16 | -\$185,279.76 | -\$193,208.79 | -\$153,535.83 |
| Annual % Change vs Current | | 7.5% | -12.7% | -13.2% | -10.5% |

This summary is for illustrative purposes only and is not a binding quote.
Pricing Assumes Package Sale unless otherwise noted.
Please refer to carrier proposal for full details.

SUMMARY SCORING SHEET PROPOSALS/PRICING AND THEN INTERVIEW

| CRITERIA | Total Possible Points | COMPANY NAME/RATING | | | | | | | | | | |
|---|-----------------------|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | UNUM | The Standard | Transamerica | The Hartford | Ochs | One America | Aflac | MetLife | Prudential | Symetra | Lincoln |
| Demonstrated understanding of the services and needs required by the County and provided solutions on how to address the following: | | | | | | | | | | | | |
| Flexibility-including but not limited to plan design, attendance at open enrollment meetings, customized packets/forms, claims administration | 10 | 8.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 10.00 | 10.00 | 10.00 | 9.00 |
| Claims Management- employee experience, turnaround time, customer service support | 10 | 7.00 | 9.00 | 9.00 | 10.00 | 10.00 | 10.00 | 9.00 | 10.00 | 10.00 | 10.00 | 8.00 |
| Ease Administrative Burden - including but not limited to eligibility verification, billing, claims questions, and portal access | 10 | 7.00 | 9.00 | 9.00 | 9.00 | 10.00 | 10.00 | 9.00 | 10.00 | 10.00 | 10.00 | 9.00 |
| Credentials, qualifications, experience, and financial stability of the firm, as well as the account manager and designated service team. | 10 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| Compliance with Contractual Terms and Conditions and overall quality and completeness of proposal response | | | | | | | | | | | | |
| Value Adds | 5 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Pricing Considerations: Rate / Rate Guarantee Length | 40 | 30.00 | 37.00 | 25.00 | 32.00 | 35.00 | 31.00 | 28.00 | 38.00 | 39.00 | 36.00 | 27.00 |
| TOTAL SCORE (out of 85): | | 67.00 | 79.00 | 67.00 | 75.00 | 79.00 | 75.00 | 70.00 | 83.00 | 84.00 | 81.00 | 68.00 |
| Rank: | | 10 | 4 | 10 | 6 | 4 | 6 | 8 | 2 | 1 | 3 | 9 |

We will add the scoring here once we have tallied all the scores from the interview process...

| | Total Points Possible | UNUM | The Standard | Transamerica | The Hartford | Ochs | One America | Aflac | MetLife | Prudential | Symetra | Lincoln |
|-------------------------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| SCORE FROM ABOVE | 85 | 67.00 | 79.00 | 67.00 | 75.00 | 79.00 | 75.00 | 70.00 | 83.00 | 84.00 | 81.00 | 68.00 |
| Interview/Finalist Presentation | 15 | N/A | 10.00 | N/A | N/A | 11.00 | N/A | N/A | 12.00 | 14.00 | 14.00 | N/A |
| TOTAL SCORE (out of 100): | | 67.00 | 89.00 | 67.00 | 75.00 | 90.00 | 75.00 | 70.00 | 95.00 | 98.00 | 95.00 | 68.00 |
| Rank: | | 10 | 5 | 10 | 6 | 4 | 6 | 8 | 2 | 1 | 2 | 9 |



AGENDA ITEM

Planning & Zoning

REPORT TO: Work Session (09/23/24)

REPORT TO: Voting Meeting (09/24/24)

ITEM NO: 511/2024

SUBJECT: **4745 Cagle Mill Road | Rezone** | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) within the Gateway Corridors Overlay District (GCOD) | on a 10.59± acre tract located on the east side of Cornelia Highway (GA-365), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 (pt.) | **Proposed Use: Industrial development** |Commission District 3 | **Josh Boling, applicant**

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: BG
Recommendation:
Approve Withdrawal

Purpose of Request:
4745 Cagle Mill Road | Rezone | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) within the Gateway Corridors Overlay District (GCOD) | on a 10.59± acre tract located on the east side of Cornelia Highway (GA-365), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 (pt.) | **Proposed Use: Industrial development** |Commission District 3 | **Josh Boling, applicant**

History:

Facts and Issues:

Options:

| | |
|--|---------|
| Funding Requested | \$ 0.00 |
| Are funds within current budget? | No |
| Source of Funds | |
| Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? | No |
| Has it been reviewed by the County Attorney? | Yes |

Is there a deadline for this item?

Approvals:

| Submit | Approve | Attorney | Administration |
|---------------|----------------|-----------------|-----------------------|
| KE | BG | WLI | CR |
| Clerk | | | |
| JR | | | |

Attachments:

- Board Memo
- Recommendation Report
- Request to Withdraw
- Application
- Narrative
- Site Plan
- Maps
- Deed
- Legal Description
- Preliminary Stormwater Report
- Sewer Application
- Sewer Letter
- Environmental Health Comments
- GDOT Comments
- GDOT Letter
- Public Works Comments
- Fire Comments
- Notice Sign Photo



Hall County Government

COMMUNITY DEVELOPMENT & INFRASTRUCTURE
PLANNING AND ZONING

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6809 | f: 770.531.3902

PLANNING AND ZONING
DIRECTOR
Beth Garmon

To: Richard Higgins, Chairman
Kathy Cooper, District 1 Commissioner
Billy Powell, District 2 Commissioner
Gregg Poole, District 3 Commissioner
Jeff Stowe, District 4 Commissioner

From: Beth Garmon, Director of Planning & Zoning

Date: September 9, 2024

Subject: **4745 Cagle Mill Road | Rezone** | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) & Gateway Corridors Overlay District (GCOD) | on a 10.59± acre tract located on the east side of Cornelia Highway (GA-365), approximately 4,970 feet from Cagle Road | **Proposed Use: Industrial development | Josh Boling, applicant**

The request before you is the request of Josh Boling to rezone from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) & Gateway Corridors Overlay District (GCOD) to allow industrial development. This item is located within Commission District 3.

At their August 19, 2024 meeting, the Hall County Planning Commission voted to withdraw **(5-0)**.

Staff recommendation: **Approval, with conditions**, as the proposed use is consistent with the “Lake Area Residential” future land use classification within the Comprehensive Plan

There was **one (1) comment submitted** in advance of the Planning Commission meeting on June 17, 2024 and **no one spoke during any of the public hearings**.

**HALL COUNTY PLANNING COMMISSION
RECOMMENDATION REPORT**

Applicant Josh Boling

Request Rezone from Agricultural Residential (AR-III, 17.110 & AR-IV, 17.120) to Planned Industrial Development (PID, 17.180.090) and Gateway Corridor Overlay District (17.420)

Proposed Use Industrial Development

Size 10.59± acres

Zoning Current: Agricultural Residential (AR-III, 17.110 & AR-IV, 17.120) Proposed: Planned Industrial Development (PRD, 17.180.090) and Gateway Corridor Overlay District (17.420)

Location **4745 Cagle Mill Road | 15007 000254 (pt.)**

Commission District Three

Planning Commission Date May 20, 2024

Staff Recommendation **Approval**, as the proposed use is consistent with the surrounding zoning districts and the Comprehensive Plan.

Record Number HZON24-0007

Planning Commission Recommendation..... **Withdrawal**

Vote: 5-0

Excerpts from the minutes of the August 19, 2024 meeting

Applicant's Presentation:

Katie Greenway, Planning and Zoning Administrator, stated the applicant has requested withdrawal.

Motion: A motion to withdraw was made by Mr. Hunt and seconded by Mr. Sosebee. Vote: 5-0

Staff recommends APPROVAL of the applicant's request, with the following conditions:

1. The property shall be developed in accordance with the site plan dated March 26, 2024, and as described in the project narrative dated March 22, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
 2. No variances, conditional uses, or development exceptions are granted as part of this request unless explicitly listed herein.
 3. Development shall be permitted to provide 5 truck trailer parking spaces per site plan submitted on March 26, 2024.
 4. County maintained roads shall end at the edge of the right-of-way of Highway 365 - Cornelia Highway and shall not include any portion of the roadway within the development.
 5. The non-residential development shall be subject to the standards of the Gateway Corridors Overlay District (GCOD, 17.420) standards. No variances to Gateway Corridor Overlay Districts standards are granted other than those approved herein (GCOD, 17.420).
 6. A 50-foot planted buffer shall be provided along the south edge adjacent to the Agricultural Residential III (AR-III) zoned parcels.
 7. Permitted uses shall be limited to retail, industrial parks, offices and office buildings, radio and television studios, family day care home, and group day care home as described in the project narrative submitted on March 22, 2024. No outdoor storage shall be allowed with this zoning action.
 8. The development shall be served by public sewer, with the obtainment of all required easements and other construction costs such as a lift station and force main to be the responsibility of the developer.
 9. Coordination and approval from both GDOT and Hall County Engineering shall be required for implementation of traffic study recommendations as part of the development process. Such improvements will be the financial responsibility of the developer.
 10. The following statement regarding the potential impacts of agricultural operations in the area shall be made a part of any plat recorded on the property:
"Owners, occupants, and users of property shown on this plat are hereby informed of the impacts associated with normal farming practices which may take place on adjacent and nearby property including, but not limited to, noise, odors, dust, the operation of machinery of any kind, the storage and disposal of manure, and the application of fertilizers, herbicides, and pesticides. Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices."
 11. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.
-

The following should be considered as exceptions to the Official Code of Hall County, and shall warrant further determination by the Board should it choose to approve the submitted narrative and site plan:

17.420.050.B - Non-residential property development standards.

- Conditional uses. The following uses are allowed in the GCOD only if such use is permitted in the underlying zoning district and the board of commissioners grants a conditional use for such use pursuant to the procedures of the Hall County Zoning Ordinance: Outdoor storage
 - Applicant has included outdoor trailer parking on the north portion of the property.

17.420.050.C - Transitional buffers.

- 1. Applicability.
 - a. Transitional buffers required in this section shall provide an effective visual screen between dissimilar uses or activities.
 - b. A transitional buffer shall be required along and inside the property line of a non-residential property abutting a residentially zoned property.
 - c. Transitional buffers are required along and inside the property line at the perimeter of a planned development district that abuts single-family residential zoning or uses, in accordance with the requirements of this subsection, but no transitional buffers are required between dissimilar uses within the planned development district.
 - Applicant has not included a 50-foot buffer on the submitted site plan along the AR-III zoned parcels to the south.

17.420.050.D.2.a Other Landscape and Screening Standards – Street Frontage

- Along each street frontage there shall be a ten-foot-wide landscape strip, continuous along the frontage except for perpendicular crossings for driveways and utilities.
 - Applicant has not included a 10-foot landscape strip on the submitted site plan along Highway 365 – Cornelia Highway.

17.420.050.D.4.a Waste receptacles.

- Waste receptacles, including dumpsters, garbage cans, or grease containers shall be located in the rear or side yard and placed at least 20 feet from any street, public sidewalk, or property line that abuts residential zoning or residential use. Such waste receptacles shall be screened from view from all property lines and public areas of the site by a minimum six feet high wall constructed of masonry or solid wood with an opaque gate.
 - Applicant has not included screening on site plan submitted on March 26, 2024.

17.420.050.E.1.b. Parking Lot Design – Parking Requirements

- Maximum number of parking spaces. The maximum number of parking spaces that may be constructed on impervious surfaces shall be no more than 125 percent of the minimum number of required parking spaces required in 17.250 of the Hall County Zoning Regulations.

- I. The applicant has proposed a combined 61 parking spaces; however, the type of businesses for the proposed industrial development are not specified in the submitted narrative, so an exact parking requirement cannot be determined at this time.

17.420.050.H.2.c Non-residential property development standards.

- Building materials used for all four sides of new or reconstructed buildings are restricted to the following:
 - I. Brick.
 - II. Stone. Natural stone such as, but not limited to, granite, limestone, and marble are allowed building materials. Terra cotta and/or cast stone, which simulate natural stone, are also acceptable. Painted stone is prohibited.
 - III. Split-face block/concrete masonry unit (CMU) is restricted to 50 percent of the surface area of each side of a principal building.
 - IV. Stucco is restricted to 50 percent of the surface area of each side of a building.
 - V. Glass and glass block.
 - VI. Exposed concrete block, painted concrete block, metal, tilt/up and pre-cast concrete are prohibited materials for any exterior wall
 - The applicant has proposed two buildings to be constructed. However, no renderings have been provided. It cannot be determined if the building materials standards are being met.
-

Summary Analysis

The applicant is requesting to rezone a combined 10.59 ± acre property zoned Agricultural Residential III and IV (AR-III, 17.110 & AR-IV, 17.120) to Planned Industrial Development (PID, 17.180.090) for an undefined light industrial development. The narrative states the development will be split into two separate lots divided by an internal driveway. Per the narrative, the property is developed with a manmade pond and a small residential building. The applicant has also applied for a concurrent rezoning request on the remaining 62.08± acre portion of this parcel to Planned Residential Development (PRD) for a 324-lot residential subdivision (HZON24-0006). This staff report will focus on the PID rezoning request.

Per the submitted narrative and site plan, the development will include two industrial buildings totaling 38,000 square feet with stormwater management areas identified on both proposed tracts of the development. A portion of the property is within the North Oconee Reservoir Watershed Protection District and the western boundary abuts the North Oconee River which requires a 100-foot undisturbed buffer and a 150-foot impervious setback along the identified state waters (17.225.040). This area is also impacted by the County Studied Flood and FEMA Flood Zones.

The applicant proposes permitted uses to include retail, industrial parks, offices and office buildings, radio and television studios, storage yards, family day care home, and group day care home. No lots will accommodate any food processing plants. The narrative states that parking and loading spaces will be consistent with Hall County code. Outdoor trailer storage is also proposed in the narrative and identified on the site plan as 5 tractor trailer parking spaces on the northern portion of the property. The development will also include one free standing sign for each building and one sign for the residential

subdivision (HZON24-0006). No variances have been requested and a master sign plan has not been provided.

Per the submitted narrative, the property will be served by Hall County sanitary sewer, and the developer will connect to utilities in the area via an onsite pump station, with an existing force main located within the industrial parcel frontage along Cornelia Highway (SR 365).

Several variances have been identified as part of this request. Any deficiencies identified as part of the plan will be required to comply with the requirements of the PID standards unless specifically granted by the board in the conditions of approval.

GCOD Analysis

| <u>Standard</u> | <u>Compliance</u> | <u>Proposed Work</u> | <u>Notes</u> |
|--|--------------------------|---|---|
| 17.420.050.C – Transitional buffers | Does Not Comply | 50-foot transitional buffer | Applicant has not included a 50-foot transitional buffer adjacent to residentially-zoned parcel on the site plan. |
| 17.420.050.D – Other landscape and screening standards | Does Not Comply | 10-foot landscape strip along street frontage | Applicant has not proposed to include a 10-foot landscape strip along Cornelia Highway (SR 365). |
| 17.420.050.E – Parking lot design | Unknown | 61 total spaces provided for both buildings | The use of each building has not been provided and therefore it cannot be determined if the parking space requirements have been met. |
| 17.420.050.F – Outdoor lighting | Does Not Comply | — | Applicant has not provided lighting information. |
| 17.420.050.G – Interparcel access | Complies | — | Access drive also serves proposed adjacent residential development. |
| 17.420.050.H – Architectural standards for non-residential buildings | Unknown | — | The applicant has not provided any architectural renderings. |
| 17.420.060 – Signs | Unknown | — | Applicant has proposed a sign for each tract and one for the subdivision accompanying the development; however, no sign plans or renderings have been submitted and no variances from GCOD standards have been requested. |

Based on the future land-use plan, staff finds the *requested zoning designation is consistent with the Hall County Comprehensive Plan future land use designation of Employment Corridor*. Employment Corridor support Industrial uses, business parks, and technology based operations.

Zoning Analysis

When considering a zoning amendment to the zoning maps, the following items must be considered:

1. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property; **The zoning proposal may be suitable given the context of the Employment Corridor designation, although Commercial use may be more appropriate if the adjacent property were to be used for higher-density residential development.**
2. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property; **The proposed zoning classification of Planned Industrial Development (PID, 17.180.090) will permit more intense uses than that of most adjacent or nearby parcels.**
3. Whether the property to be affected by the zoning proposal has reasonable economic use as currently zoned. **The property appears to have reasonable economic use as currently zoned.**
4. Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, or utilities; **Per the submitted traffic study, improvements to existing turn lanes on access points along Cornelia Highway (SR 365), Cagle Mill Road, and Whitehall Road are recommended. Coordination with GDOT and Hall County Engineering will be required for the implementation of the recommendations.**
5. Whether the zoning proposal is in conformity with the policy and intent of the land use plan; **The proposed use is consistent with the Comprehensive Plan and the “Employment Corridor” land use designation.**
6. The extent to which property values are diminished by the existing zoning restrictions; **Staff is unable to determine the extent to which property values are diminished by the existing zoning restrictions.**
7. The extent to which the destruction of the subject property's value under the existing zoning promotes the health, safety, morals or general welfare of the public; **Staff is unable to comment on the impact of property values without a full market analysis. Multiple factors impact property value including construction types, proposed uses, and maintenance. Often it is difficult to determine the effect of a development on adjacent properties until the development is completed.**
8. The relative gain to the public as compared to the hardship imposed upon the individual property owner; **Staff has not identified a hardship imposed on the property owner as the property is currently zoned.**
9. The length of time the property has been vacant as zoned considered in the context of land development in the area in the vicinity of the property; **The parcel is currently developed with a small manmade pond and small residential building.**

10. Whether there are other existing or changing conditions affecting the use or development of the property which give supporting grounds for either approval or disapproval of the zoning proposal; **The ongoing growth of industrial development in this area, most notably attributed to existing industrial uses such as Kubota as well as the upcoming Blue Ridge Connector, supports additional commercial and industrial development.**
11. Whether the change would create an isolated district unrelated to the surrounding districts; **The proposed zoning is a Planned Industrial Development (PID, 17.180.090). Per the Official Code of Hall County, Planned Development Districts (17.180) are to be utilized as a "floating zone" which shall mean that areas will not be pre-designated as planned development districts but rather each such designation shall result from a specific and separate application for amendment. The proposed intensity of use is higher than that found on most surrounding properties.**
12. Whether the present zoning district boundaries are illogically drawn in relation to existing conditions in the area; **There is no evidence that the present zoning district boundaries are illogically drawn.**
13. Whether the change requested is out of scale with the needs of the county as a whole or the immediate neighborhood; **The proposal is not out of scale with the needs of the county as a whole.**
14. Whether it is impossible to find adequate sites for the proposed use in districts permitting such use and already appropriately zoned; **There are other properties within the County that support industrial uses based on the Future Land Use Map, though the combined development as proposed cannot be developed in any districts without County Commission approval.**
15. Whether the need for rezoning could be handled instead by a variance request to the [Planning Commission]; **The request could not be handled alternatively as a variance.**
16. Whether there would be an ecological or pollution impact resulting from major modifications to the land if the request is granted; **Any land disturbance activities on the property shall be required to go through the land development permitting process and as a result are subject to local, state, and federal regulations. As a result, there should not be an ecological or pollution impact resulting from any modification to the land if the request is granted.**
17. Whether there is reasonable evidence based upon existing and anticipated land use that would indicate a mistake was made in the original zoning of the property; **There is no indication that a mistake was made in the original zoning.**

A Planned Industrial Development (PID, 17.180.090) allows for more flexibility in the design and development of the property and should consist of land which has been designated for a planned, organized and controlled industrial use or for multiple but compatible industrial uses in a planned industrial park. The standards employed should be designed to encourage the formation and continuance of a compatible environment for the planned industrial uses and the surrounding land uses. Carefully planned office and commercial uses may be incorporated as part of a planned industrial development.

17.380.050. - Submission requirements for a rezoning request

- A. Any person or persons requesting a change in the official zoning map or use subject to approval of the county commission shall file an application with a plat or map of the property

attached thereto, together with payment of such fees set forth in chapter 17.30 to cover administrative and advertising costs, in the planning department office. Such person or persons or their authorized agent shall appear in person at the public hearing held to consider the district change. **The proposal meets the requirement. The applicant has paid the appropriate fees and understands that someone must be present at both the Hall County Planning Commission meeting and the voting meeting of the Hall County Board of Commissioners.**

- B. All applications for a change of zoning classification or use subject to approval of the county commission shall include:
 - 1. A narrative statement identifying the existing and proposed use of the property and addressing each of the criteria set forth in section 17.380.060.C of this section [chapter]. **Proposal does provide a narrative outlining the intent of the development however, the applicant has not prepared a response to each of the criteria listed in 17.380.060.C.**
 - 2. A site plan drawn to scale designating the area covered by the application and identifying existing and proposed buildings and uses, adjacent existing land uses, zoning on contiguous parcels, including those across an abutting public right-of-way, and any other significant site improvements proposed to accommodate the proposed use or buffer adjacent uses, etc., or a plat of the subject property where no specific land use is proposed. In cases where only a plat or map is provided and no land use is proposed, the planning commission and county commission shall evaluate the application based on the most intense possible land use permitted in the proposed district. **The proposal meets this requirement.**
- C. For any application for a slow rate land treatment system (see chapter 17.20), the following additional requirements apply. **The proposed development will utilize public water and public sewer system.**
- D. For any application proposing the development of 100 or more residential dwelling units, a traffic impact study shall be submitted prior to consideration of the application by the planning commission. At the applicant's expense, the traffic impact study shall be prepared by a professional engineer in accordance with requirements established by the Hall County Engineering Department. The engineering department shall review the traffic impact study and forward any comments to the Hall County Planning Commission. **The proposal does meet the requirement. A traffic study has been conducted. Improvements are recommended and will require the coordination of GDOT and Hall County Engineering.**

Development Support and Constraints – Departmental / Agency Comments

Hall County Environmental Health

In an email dated April 17, 2024, Emily McGahee stated “No comment. Public sewer.”

Hall County Fire Marshal

In an email dated April 18, 2024, John Hornick, NPQ Fire Inspector 1, Plans Review Lieutenant stated “The Hall County Fire Marshal’s Office considers the plan conceptual in nature, and if approved may require modifications during the development review process.”

Hall County Public Works and Utilities

In a memorandum from Public Works and Utilities dated April 18, 2024, Bill Nash, Director, stated the following:

Engineering:

Property is in major flood area
Show FEMA and Hall County studied Flood plains that are present on site
Property is in north Oconee WPD
Show N. Oconee WPD buffers
No rise study required for construction in flood zone
Roads should be private

Traffic:

Roadways are shown as private, however, this should be required.
Access from Cornelia Hwy (SR 365) is shown as private, however, Label indicates “end of county maintained right-of-way” internally. Clarify.
Additional comments may be necessary after clarification.
Fire only access on White Hall Road must be gated and no ability for internal traffic to turn around is provided.
Recommend the gravel section of Cagle Mill Road be improved to county paved standards to White Hall Road in order to facilitate site traffic to and from Old Cornelia Hwy.
Site plan indicates a fire only access on Cagle Mill Road labeled as “Gated fire only entrance with Knox Box” However no access is shown. Clarify.
GDOT permit required for Cornelia Hwy (SR 365) access.

Utilities:

Hall County lift station on GA 365

Hall County Tax Assessor

No Comments

Georgia Department of Transportation

In an email dated April 18, 2024, Veronica Chavers, D1TO Civil Engineer 3, stated that this project will required GDOT coordination for driveway access to SR 365/Cornelia Hwy.

FW: Cagle Mill Rezoning Projects

Kristie Turner (Planning) <kturner@hallcounty.org>

Thu 8/1/2024 5:18 PM

To: Lilibian Cortez (CDI: Building Inspection) <lcortez@hallcounty.org>

Lali,

Please add the email below to the Accela case as record of withdraw request. Thanks.

Regards,

Kristie Turner
Principal Planner
Hall County Community Development and Infrastructure
(direct office) 770-297-6853
kturner@hallcounty.org



From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>

Sent: Tuesday, July 30, 2024 10:09 AM

To: Josh Boling <jboling@acmpts.com>; Kristie Turner (Planning) <kturner@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; bachj@pondco.com

Subject: Re: Cagle Mill Rezoning Projects

Good morning, Josh.

Thank you for following up. Yes, we did receive your email and will notify the board of your request to withdraw. There is nothing else needed from you at this point.

When you are ready to resubmit, just reach out to any or all of us and we can get the project going again.

Please let me know if you have any other questions.

Thank you,
Beth Garmon

From: Josh Boling <jboling@acmpts.com>

Sent: Tuesday, July 30, 2024 9:57 AM

To: Kristie Turner (Planning) <kturner@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; bachj@pondco.com

<bachj@pondco.com>

Subject: RE: Cagle Mill Rezoning Projects

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Wanted to make sure you all received the email below! Thanks so much.

From: Josh Boling

Sent: Monday, July 29, 2024 7:49 AM

To: Kristie Turner (Planning) <kturner@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; bachj@pondco.com

Subject: RE: Cagle Mill Rezoning Projects

Hi Kristie,

Thanks for the follow-up. We need to withdraw for now. I hope to have a revised application in within the next month.

Thanks,

Josh

From: Kristie Turner (Planning) <kturner@hallcounty.org>

Sent: Tuesday, July 23, 2024 2:35 PM

To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Josh Boling <jboling@acmpts.com>; bachj@pondco.com

Subject: RE: Cagle Mill Rezoning Projects

Josh,

I am following up on the below email regarding your project on Cagle Mill Road. Per our conversation below, updates for the project were due July 22nd. At this point, you have the option to proceed with the application as is at the August 19th Planning Commission meeting or withdraw the application. As we have not received any updates and this case has been tabled repeatedly, it is staff's recommendation that you withdraw this application until the project is ready to proceed. Opting to withdraw allows you to resubmit the application at a later date after staff has had a chance to review the changes.

A response as to how you wish to proceed is needed by this **Friday, July 26th**.

Regards,

Kristie Turner

Principal Planner

Hall County Community Development and Infrastructure

(direct office) 770-297-6853

kturner@hallcounty.org



From: Kristie Turner (Planning)

Sent: Tuesday, June 11, 2024 12:27 PM

To: Josh Boling <jboling@acmpts.com>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>

Subject: RE: Cagle Mill Rezoning Projects

Josh,

Thank you for the confirmation. We will present your request to **table to Aug 19th at the June 17th** Planning meeting. We look forward to seeing updated information for the project by **July 22nd**.

Please let me know if you have any questions.

Regards,

Kristie Turner

Principal Planner

Hall County Community Development and Infrastructure

(direct office) 770-297-6853

kturner@hallcounty.org



From: Josh Boling <jboling@acmpts.com>

Sent: Tuesday, June 11, 2024 12:19 PM

To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>

Subject: RE: Cagle Mill Rezoning Projects

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Lets do August 19th just so we have enough time to get everything done by then. Thanks!

From: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Sent: Wednesday, June 5, 2024 10:28 AM
To: Josh Boling <jboling@acmpts.com>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

Josh,

Thank you for your response. Would you like to table to August 5th? If so, all items will need to be submitted to staff by July 8th.

We also have an August 19th Planning Commission meeting which would require all items submitted by July 22nd.

Thank you,

Katie Greenway
Planning and Zoning Administrator
Hall County Community Development and Infrastructure
(direct office) 770-297-2649
klgreenway@hallcounty.org



From: Josh Boling <jboling@acmpts.com>
Sent: Tuesday, June 4, 2024 5:04 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

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My guess is we will have our revised plans and memo by the first week in July. Which I assume puts us on the August 8 meeting?

From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Sent: Monday, June 3, 2024 2:45 PM
To: Josh Boling <jboling@acmpts.com>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>
Subject: Re: Cagle Mill Rezoning Projects

Hi Josh.

This email is sufficient. We would prefer to table to a specific date - it helps us keep track of items and ensure nothing falls through the cracks. Could we list the second meeting in July as our target date?

I am copying Katie and Kristie in so they can notify the board tonight.

Thanks,
Beth

Beth Garmon

Assistant Director of Planning and Development
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

All **ZONING**, **PLAT**, and **BUILDING PERMIT** submittals may be submitted online through [Accela](#). Plat inquiries may be submitted to plats@hallcounty.org. Zoning and general inquiries may be submitted to planning@hallcounty.org.

From: Josh Boling <jboling@acmpts.com>
Sent: Monday, June 3, 2024 2:30 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

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Hi Beth,

I hate to do this again, but we want to indefinitely postpone our application while we work through a few more design changes. I would expect to resubmit our application sometime in July. What do you need from me to do this?

Thanks!

Josh

From: Josh Boling
Sent: Friday, May 24, 2024 12:33 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

Beth,

Per my voicemail, we would like to table to the June 17th planning / July 25th Board meeting. Is that possible and when would we need the revised plans/data to you?

Thanks,

Josh

From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Sent: Friday, May 10, 2024 2:28 PM
To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Josh Boling <jboling@acmpts.com>; Stephen Lovett (<slovett@nortoncommercial.com>) <slovett@nortoncommercial.com>
Subject: RE: Cagle Mill Rezoning Projects

Thank you for letting us know, Josh.

Please note, if you plan to make any revisions, it would be helpful for staff to receive those by next Friday, May 17th in order to update the staff reports. If you think one week is not enough time to accomplish this, please let us know.

Thank you,
Beth

Beth Garmon

Assistant Director of Planning and Development
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

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From: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Sent: Friday, May 10, 2024 2:17 PM
To: Josh Boling <jboling@acmpts.com>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (<slovett@nortoncommercial.com>) <slovett@nortoncommercial.com>
Subject: RE: Cagle Mill Rezoning Projects

Thank you for the clarity!

Katie Greenway
Planning and Zoning Administrator
Hall County Community Development and Infrastructure
(direct office) 770-297-2649
klgreenway@hallcounty.org



From: Josh Boling <jboling@acmpts.com>
Sent: Friday, May 10, 2024 2:15 PM
To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>
Subject: RE: Cagle Mill Rezoning Projects

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Lets table both please. Thank you.

From: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Sent: Friday, May 10, 2024 2:06 PM
To: Josh Boling <jboling@acmpts.com>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>
Subject: RE: Cagle Mill Rezoning Projects

Good afternoon Josh,

Could you please clarify which request you would like to table? The PID, PRD, or both.

Thank you,

Katie Greenway
Planning and Zoning Administrator
Hall County Community Development and Infrastructure
(direct office) 770-297-2649
klgreenway@hallcounty.org



From: Josh Boling <jboling@acmpts.com>
Sent: Friday, May 10, 2024 1:36 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (slovett@nortoncommercial.com)

<slovett@nortoncommercial.com>

Cc: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>

Subject: RE: Cagle Mill Rezoning Projects

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Beth,

Could we request to table this to application the June 3rd meeting?

Thanks,

Josh

From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>

Sent: Thursday, May 9, 2024 3:49 PM

To: Josh Boling <jboling@acmpts.com>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>

Cc: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>

Subject: RE: Cagle Mill Rezoning Projects

Good afternoon,

I am finalizing our staff reports for the May 20th Planning Commission meeting and noticed that there have been no changes to the PID requested zoning for 4745 Cagle Mill. At our last meeting, it seemed likely that we might receive an updated narrative for this project – should we proceed with the PID zoning as originally submitted?

Thank you,
Beth

Beth Garmon

Assistant Director of Planning and Development
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

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From: Josh Boling <jboling@acmpts.com>
Sent: Friday, April 26, 2024 12:19 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>
Cc: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

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Ok great. Thank you for the clarification.

From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Sent: Friday, April 26, 2024 12:11 PM
To: Josh Boling <jboling@acmpts.com>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>
Cc: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Subject: Cagle Mill Rezoning Projects

Good afternoon,

Just wanted to reach out and let you know that we looked at the stream closer going through the middle of the project site, and determined that it is classified as an intermittent stream which is not subject to the double-buffer requirements of the North Oconee Watershed.

Thank you,
Beth

Beth Garmon
Assistant Director of Planning and Development
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

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ZONING APPLICATION

Applicant (Name & Mailing Address)

Josh Boling
 6525 The Corners Parkway
 Peachtree Corners, GA 30092
 Phone 678-894-3990
 Email Address jboling@acmapts.com
 Proposed Use PID

Property Owner (Name & Mailing Address)

Josh Boling
 6525 The Corners Parkway
 Peachtree Corners, GA 30092
 Phone 678-894-3990
 Email Address jboling@acmapts.com

Contact Person (Name & Mailing Address)

Josh Boling
 6525 The Corners Parkway
 Peachtree Corners, GA 30092
 Phone 678-894-3990
 Email Address jboling@acmapts.com
 Tax Parcel Number 15007000254
 Location Address 4745 Cagle Mill Rd

Status of Applicant

- Owner
- Option to Purchase
- Area Resident
- Other

Requested Action

Existing Zoning: AR-III
 Rezone to: _____
 Fee:\$ _____
 Receipt #: _____
 Check #: _____

Acreege 10.59

I hereby certify that the above information and all attached information are true and correct.

Sign _____ Date: _____

Applicant must complete all information above. Failure to complete this section will result in the refusal of the application. The Planning Department has 15 days to review all applications and will set the dates for each application. If the application is found insufficient, an agenda date will not be set until the required information is submitted. Please note that the Planning Commission and County Commission dates are tentative.

Application Withdrawal: I hereby **withdraw** the application.

Sign _____ Date: _____

Staff Use Only

Application Date: _____ Taken by: _____
 Tentative Planning Commission Date: _____ Tentative County Commission Date: _____
 County Commission District: _____

AUTHORIZATION OF PROPERTY OWNERS

Note: If the applicant is the property owner, please disregard this form.

Name of owner(s) John Davenport for CBD Investments, LLC

Address TWO RAVINIA DR, SUITE 850
ATLANTA, GA 30346

Phone Number _____

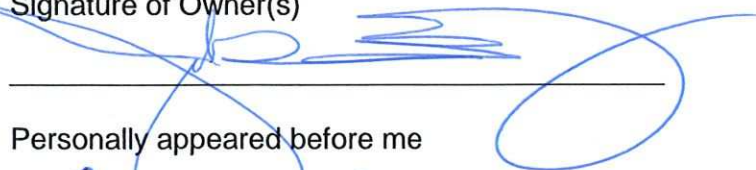
Name of applicant(s) Josh Boling

Address 6525 The Corners Parkway, Suite 216
Peachtree Corners, GA 30092

Phone Number 678-894-3990

I swear that I am the owner of the property which is the subject matter of the attached applications as shown in the records of Hall County, Georgia.

I authorize the person named above to act as applicant in the pursuit of a rezoning, permissive use, or variance of this property.

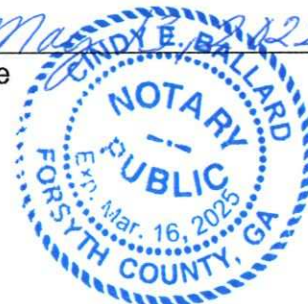
Signature of Owner(s)


Personally appeared before me
Cindy E. Ballard

who swears that the information contained in this authorization is true and correct to the best of his/her knowledge and belief.

Cindy E. Ballard
Notary Public

Mandy E. Ballard
Date



CAMPAIGN CONTRIBUTIONS DISCLOSURE FORM

This form must be completed by the applicant and property owner, or person representing the property owner, for all zoning actions.

OCGA § 36-67A-3[C] Disclosure of campaign contributions:

(b) When any applicant for zoning action has made, within two years immediately preceding the filing of the applicant's application for the zoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

(3) The name and official position of the local government official to whom the campaign contribution was made; and

(4) The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution.

(b) The disclosures required by subsection (a) of this Code section shall be filed within ten days after the application for the zoning action is first filed. (Code 1981, Section OCGA § 36-67A-3[C], enacted by GA L. 1986, page 1269, Section 1, GA L. 1991, page 1365, Section 1).

I hereby certify that I have read the above and that:

I have** _____ I have not X _____

within the two years immediately preceding this date, made any contribution(s) aggregating \$250.00 or more to any local government official involved in the review or consideration of this application.

****If you have made such contributions, you must provide the data required below within ten (10) days of filing this application.**

Name of Official(s): _____

Office: _____

Dollar Amount: _____

Date of Contribution: _____

Applicant's/Owner's Signature: Josh Boling

Date: 5/16/2022

Applicant's/Owner's Name (Printed): Josh Boling

REZONING ANALYSIS REPORT FOR:

Residence at Cagle Mill

4745 Cagle Mill Road

Hall County, Georgia

(Industrial Area)

Prepared By:

POND

3500 Parkway Lane, Suite 500
Peachtree Corners, Georgia 30092

678.336.7740

www.pondco.com

Project No. 1220263

March 22, 2024

TABLE OF CONTENTS

| | |
|--|---|
| PROPOSED USE | 2 |
| PROPOSED STANDARDS FOR DEVELOPMENT | 2 |
| PROPOSED SIGNS AND SPECIFICATIONS..... | 3 |
| PROVISIONS FOR WATER AND WASTE-WATER DISPOSAL..... | 3 |
| INDUSTRIAL BUILDING'S LOCATION..... | 4 |

PROJECT SUMMARY

There is a 72.67 Acre lot (Parcel Number 15007 000254) in unincorporated Hall County, currently zoned AR-III and AR-IV, located at address 4745 Cagle Mill Road. The site is bounded to the north-west by GDOT Highway 365, to the south-west and north-east by privately owned properties zoned AR-IV, and to the south-east by Cagle Mill Road. The existing site is subdivided by the North Oconee River and is primarily undeveloped woods with moderately sloping terrain of Madison sandy loam soil. A portion of the lot is located in flood zone designated zone 'a' according to FEMA Firm Map 13139C0225G effective 12/01/2022. The existing lot also features a man-made off-line pond and a small residential building located within a clearing to the south-east of the river.

The 10.59 acres of the lot between Highway 365 and the North Oconee River (existing zoning AR-III) is proposed to be rezoned and developed as light industrial, and the remaining 62.08 acres of the lot between North Oconee River and Cagle Mill Road (existing zoning AR-IV) is proposed to be rezoned and developed as a planned residential development under a separate application.

Refer to the attached map below which provides detailed information regarding the locations and proposed use.

PROPOSED USE

10.59 acres is proposed to be developed for industrial use. This area is currently zoned AR-III and is proposed to be Planned Industrial Development ([PID](#)). The proposed industrial area is divided into two parcels by a public roadway with a roundabout. The public roadway, with a 60 foot of right of way, serves as the access to both sides of the commercial areas as well as a primary access to the residential development.

The specific industrial uses within these lots have not been determined, however, it is anticipated that approximately 38,000 sf of warehouse or storage space will be developed in accordance with uses adjacent to this area and across the highway. Permitted uses include retail, industrial parks, offices and office buildings, radio and television studios, storage yards, family day care home, and group day care home. Adhering to Hall County code, the northern and southern industrial parcels are provided 29 spaces and 32 spaces respectively. Additionally, each industrial facility has two proposed loading docks. Operating hours of such business will be determined at a future time.

Presently, the zoning transition occurs at approximately the centerline of stream, and that approximate demarcation was maintained for the proposed zoning transition line.

PROPOSED STANDARDS FOR DEVELOPMENT

The proposed zoning for the industrial area is Planned Industrial Development ([PID](#)).

Two industrial buildings with a total of 38,000 SF. are proposed:

Parking spaces and loading spaces provided will be consistent with the County Development Code.

Dumpster pads are provided on both industrial lots.

Outdoor trailer and/or equipment storage is shown within the north industrial lot.

These lots will not accommodate any food processing plants.

Road access to the industrial facilities is proposed to be a public roadway designed to Hall County standards.

Water quality features are provided / designed for water control purposes.

Gabion and/or modular block wall are required to meet significant topographic conditions.

PROPOSED SIGNS AND SPECIFICATIONS

The industrial parcels will include one free-standing sign for each tract and one sign for the residential subdivision. Signs will be located outside of the right-of-way per code, and limited to the size allowable by code, to be confirmed during the permitting process.

PROVISIONS FOR WATER AND WASTE-WATER DISPOSAL

Water is available on the north-west side of highway 365. Water is provided by the City of Gainesville via a 12" water main. This development proposes to bore under the highway to tie into the existing main.

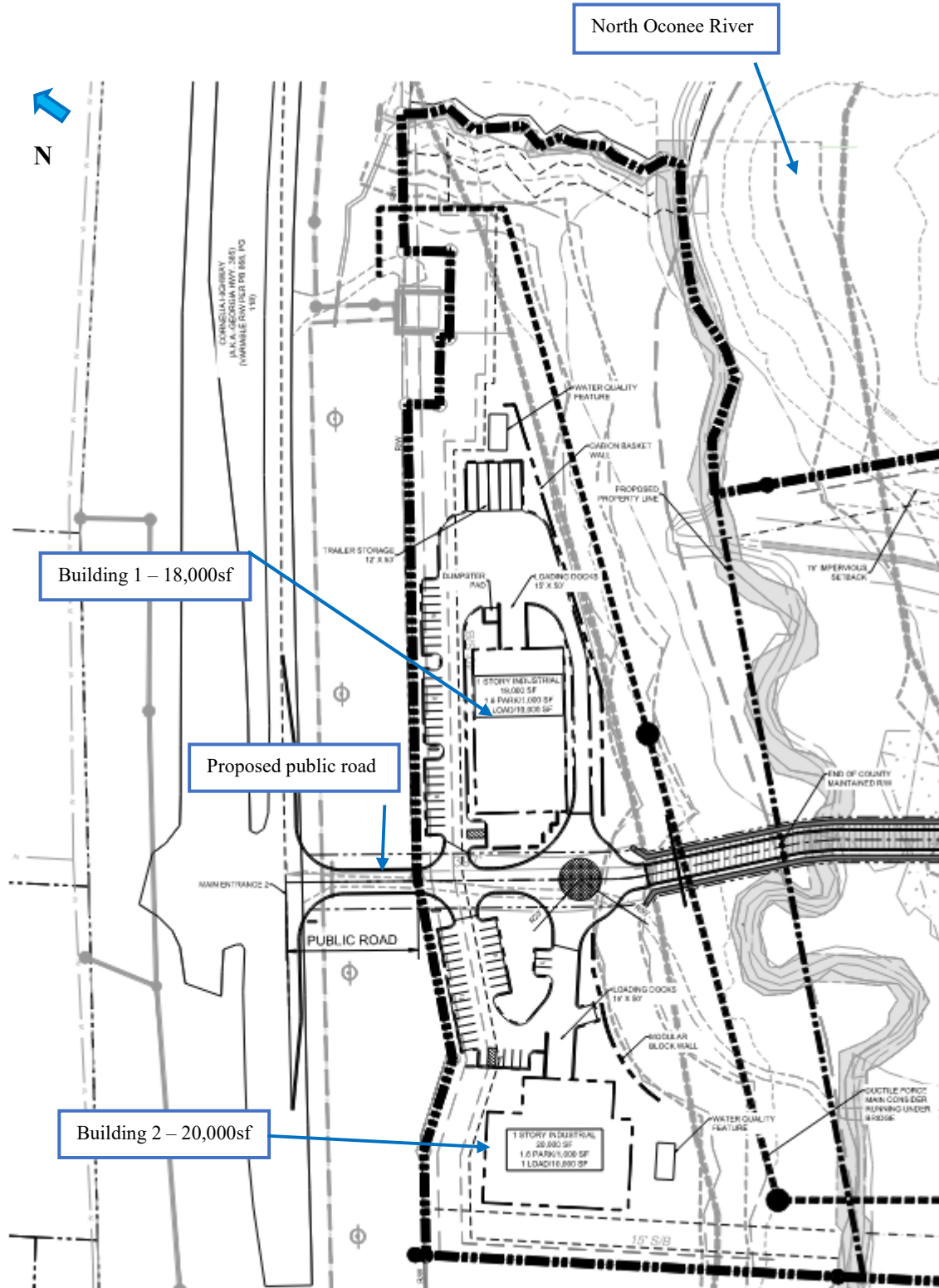
Sanitary sewer is available in the form of an existing Hall County lift station located within the property frontage to the north along Highway 365. Sanitary sewer lines for the proposed industrial developments will tie into the proposed private force-main line from the adjoining residential development located to the south-east of the site. The proposed private lift station is located south-east of the industrial parcel. The two proposed industrial facilities will tie into the private force-mainline via manholes located on the southern corner of each proposed industrial parcel.

PLANS FOR PROTECTING ABUTTING PROPERTIES

To separate the industrial out-parcels from the residential use, the stream buffers of the North Oconee River will ensure that a minimum of 200' is provided between any uses other than walking trails that may be constructed within the floodplain. As such, no additional planted or zoning buffer is proposed within the industrial development.

The industrial parcel is separated from the north lots via a secondary stream buffer providing 100 feet of undisturbed separation. Along the southern lot, a code-required 50' planted buffer is provided.

INDUSTRIAL BUILDING'S LOCATION



6

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3

2

1

EXISTING ZONING: AGRICULTURAL RESIDENTIAL III (AR-III)
 PROPOSED ZONING: PLANNED INDUSTRIAL DISTRICT (PID)
 CHARACTERISTICS: (HALL COUNTY REF. CODE) - 17.180.090
 A PLANNED INDUSTRIAL DEVELOPMENT SHOULD CONSIST OF LAND WHICH HAS BEEN DESIGNATED FOR A PLANNED, ORGANIZED AND CONTROLLED INDUSTRIAL USE OR FOR MULTIPLE BUT COMPATIBLE INDUSTRIAL USES IN A PLANNED INDUSTRIAL PARK. THE STANDARDS EMPLOYED SHOULD BE DESIGNED TO ENCOURAGE THE FORMATION AND CONTINUANCE OF A COMPATIBLE ENVIRONMENT FOR THE PLANNED INDUSTRIAL USES AND THE SURROUNDING LAND USES. CAREFULLY PLANNED OFFICE AND COMMERCIAL USES MAY BE INCORPORATED AS PART OF A PLANNED INDUSTRIAL DEVELOPMENT.

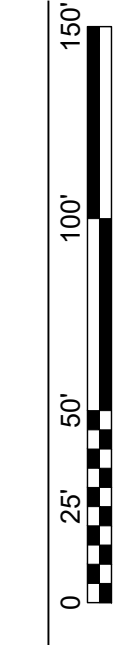
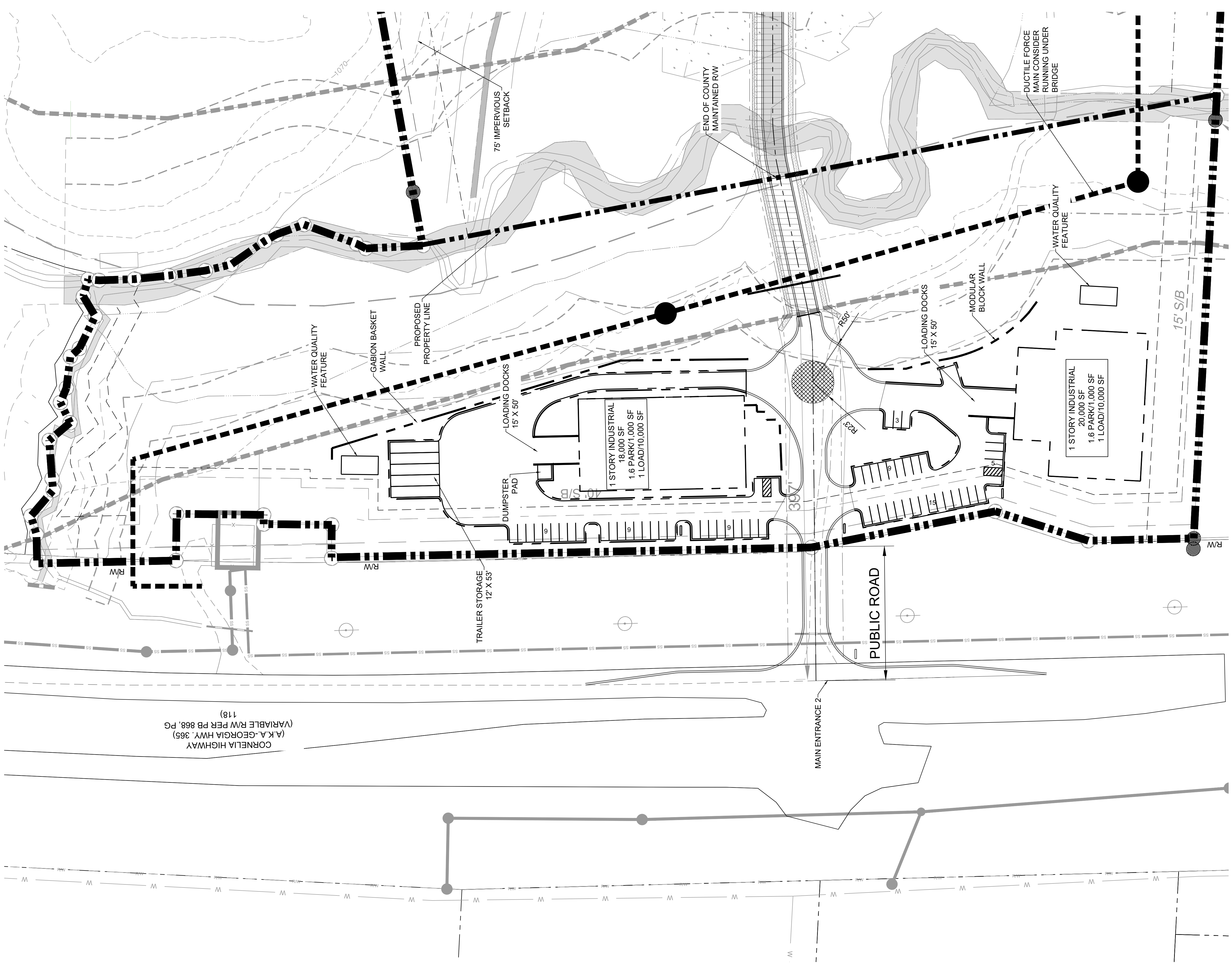
PERMITTED USES:
 RETAIL INDUSTRIAL PARKS, OFFICES AND OFFICE BUILDINGS, RADIO AND TELEVISION STUDIOS, STORAGE YARDS, FAMILY DAY CARE HOME, AND GROUP DAY CARE HOME
 REQUIRED PLANS: (HALL COUNTY REF. CODE) - 17.180.090
 ALL OF THE GENERAL AND SPECIAL REQUIREMENTS FOR PLANNED DEVELOPMENTS SHALL BE PROVIDED. THE FOLLOWING SPECIFIC ITEMS SHALL ALSO BE ADDRESSED:

1. A SITE PLAN INDICATING THE PROPOSED SITE PREPARATION AND GRADING, STREETS AND PARKING AREAS, LOADING ZONES, OUTDOOR STORAGE AREAS, RAIL FACILITIES, STORM DRAINAGE, WATER, GAS AND SEWAGE SYSTEMS AND ALL BUFFER AREAS.
2. THE DEVELOPMENT CONTROLS FOR THE DISTRICT SHALL BE DETAILED (LOT COVERAGE, SETBACKS, BUILDING HEIGHTS, LOT SIZES, ETC.). IF STANDARDS ARE NOT SPECIFICALLY PROPOSED, THEN THE APPLICABLE STANDARDS IN THE LIGHT INDUSTRIAL (H) DISTRICT, TOGETHER WITH THE SCREENING AND BUFFER REQUIREMENTS, SHALL APPLY.
3. IF OFFICE OR COMMERCIAL USES ARE PROPOSED IN CONJUNCTION WITH THE PLANNED INDUSTRIAL DEVELOPMENT, THEN THE APPLICABLE REQUIREMENTS IN THE PLANNED OFFICE DEVELOPMENT OR THE PLANNED COMMERCIAL DEVELOPMENT [DISTRICT] SHALL BE PROVIDED.
4. A PROPOSED DEVELOPMENT SCHEDULE AND LISTING OF PROPOSED USES SHALL BE PROVIDED.

| PARKING SPACES | REQUIRED | PROVIDED |
|------------------|----------|----------|
| NORTH INDUSTRIAL | 29 | 29 |
| SOUTH INDUSTRIAL | 32 | 32 |

| LOADING DOCKS | REQUIRED | PROVIDED |
|------------------|----------|----------|
| NORTH INDUSTRIAL | 2 | 2 |
| SOUTH INDUSTRIAL | 2 | 2 |

TOTAL INDUSTRIAL ZONED AREA: 10.59 AC.
 TOTAL PROPOSED INDUSTRIAL BLDG: 38,000 SF
 REQUIRED OPEN SPACE (40%): 4.2 AC
 PROVIDED OPEN SPACE: 7.9 AC
 RATIO (OPEN SPACE / TOTAL AREA) = 75%
 REQUIRED CONTIGUOUS OPEN SPACE (75%) = 3.2 AC
 PROVIDED CONTIGUOUS OPEN SPACE (100%) = 4.3 AC
 (AS PER 17.430.120)



A1 INDUSTRIAL EXHIBIT
 SCALE: 1" = 50'



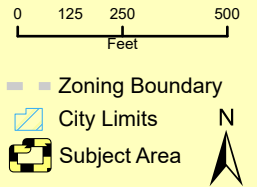
Applicant: JOSH BOLING

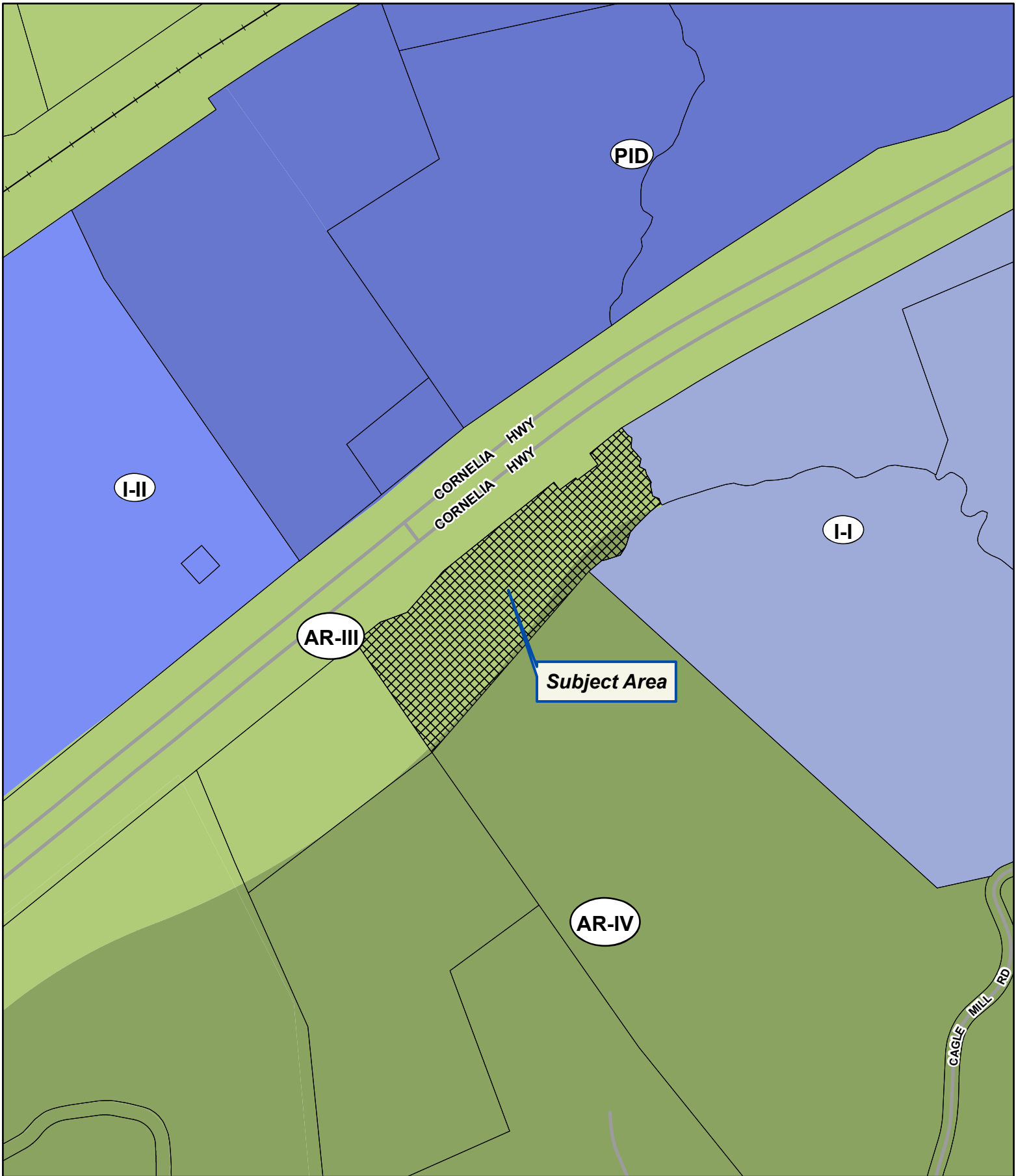
Tax Parcel #: 15007 000254 (PT.)

Location: 4745 CAGLE MILL ROAD, LULA, GA 30554

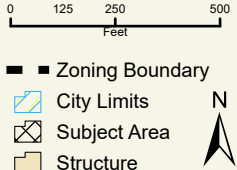
Commission District 3

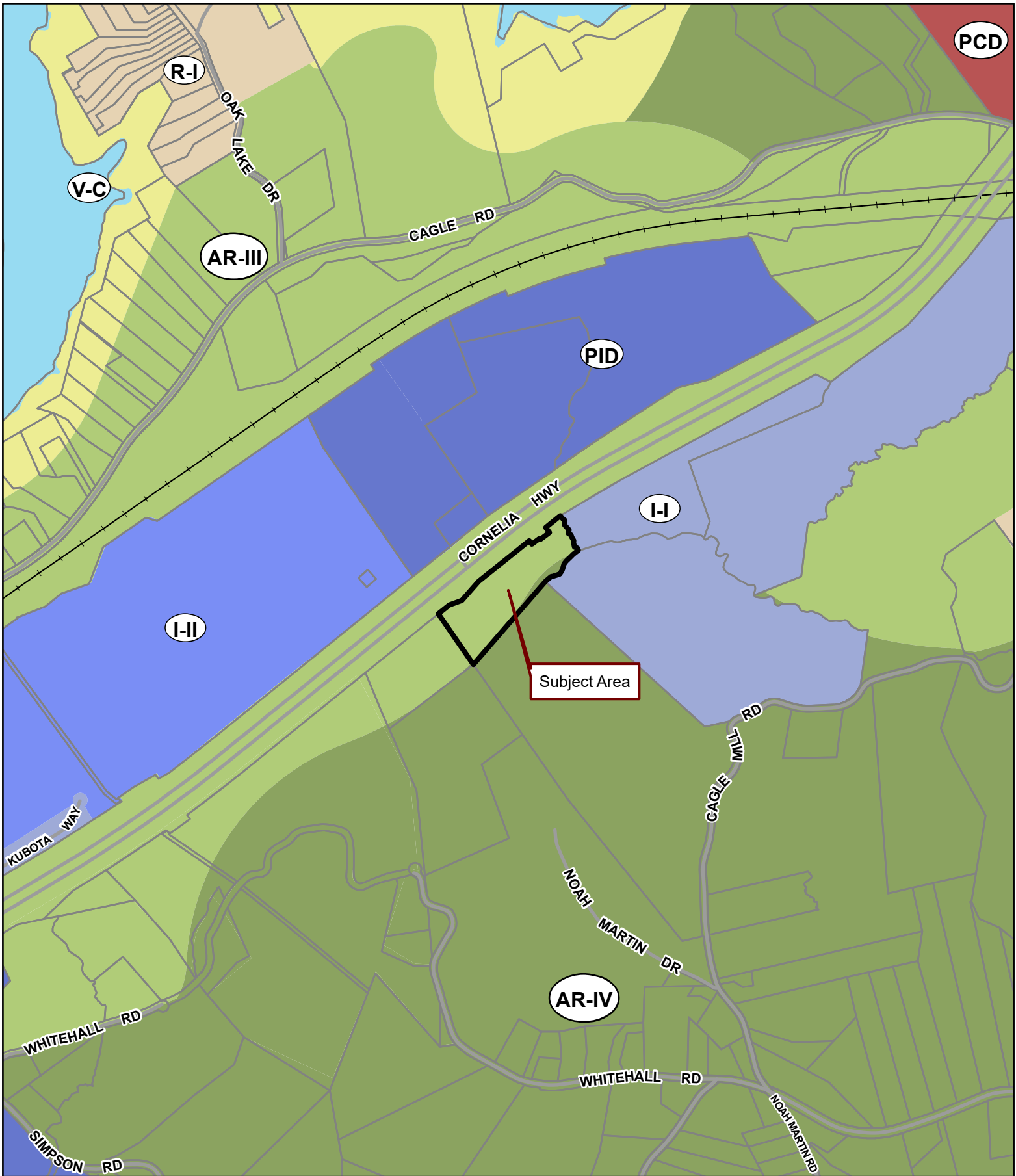
PC Mtg. Date: 05/20/24



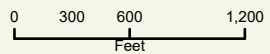


Applicant: JOSH BOLING
Tax Parcel #: 15007 000254 (PT.)
Location: 4745 CAGLE MILL ROAD, LULA, GA 30554
Commission District 3 **PC Mtg. Date: 05/20/24**





Applicant: JOSH BOLING
Tax Parcel #: 15007 000254 (PT.)
Location: 4745 CAGLE MILL ROAD, LULA, GA 30554
Commission District 3 **PC Mtg. Date: 05/20/24**



- Zoning Boundary
 - ▭ City Limits
 - ▭ Subject Area
 - ▭ Structure
- N
↑

eFiled and eRecorded
DATE: 09/02/2021
TIME: 4:12 PM
DEED BOOK: 8919
PAGE: 632 - 640
FILING FEES: \$25.00
TRANSFER TAX: \$995.00
PARTICIPANT ID: 6515028652
PT61: 069-2021-008810
RECORDED BY: CH
CLERK: Charles Baker, C.S.C
Hall County, GA

After recording return to:
T. Wesley Robinson
Hulsey, Oliver & Mahar, LLP
P.O. Box 1457
Gainesville, GA 30503

LIMITED WARRANTY DEED

**STATE OF GEORGIA
COUNTY OF HALL.**

THIS INDENTURE is made as of August 31, 2021, between Matthew H. Sweat, Tecla B. Sweat, Dr. Roy W. Sweat, Whitney Sweat Colvert, James David Colvert, Warren R. Sweat, and Carol G. Sweat (hereinafter referred to as "Grantor") and CBD Investments, LLC, (hereinafter referred to as "Grantee") ("Grantor" and "Grantee" to include their respective successors, legal representatives and assigns where the context requires or permits).

WITNESSETH

GRANTOR, in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and does hereby grant, bargain, sell, alien, convey and confirm unto Grantee all that tract or parcel of land lying and being in Hall County, Georgia (hereinafter referred to as the "Land") as more particularly described in the attached Exhibit "A", which Exhibit is incorporated herein.

TO HAVE AND TO HOLD the Land, together with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of Grantee forever in **FEE SIMPLE**; subject only to the matters (hereinafter referred to as "Permitted Exceptions") set out in the attached Exhibit "B", which Exhibit is incorporated herein.

AND GRANTOR WILL WARRANT and forever defend the right and title to the Land unto Grantee against the claims of any persons owning, holding or claiming by, through or under Grantor, except for claims arising under or by virtue of the Permitted Exceptions.

EXECUTED under seal as of the date above.


SELLER:

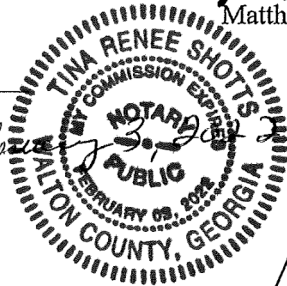
Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

My Commission Expires:


Matthew H. Sweat (SEAL)

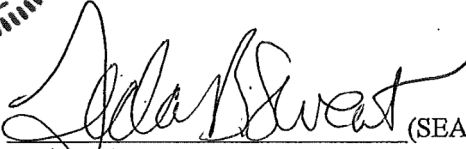


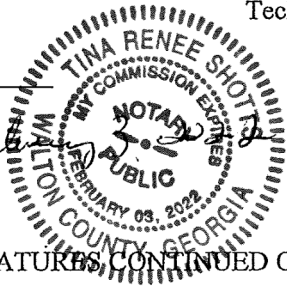
Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

My Commission Expires:

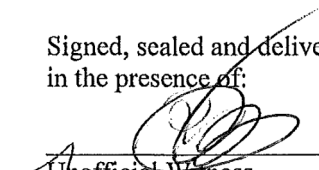

Tecla B. Sweat (SEAL)



SIGNATURES CONTINUED ON NEXT PAGE

Signed, sealed and delivered
in the presence of:

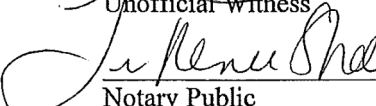
SELLER:




Unofficial Witness



Dr. Roy W. Sweat



Notary Public
My Commission Expires: 



SIGNATURE CONTINUED ON NEXT PAGE

Signed, sealed and delivered
in the presence of:

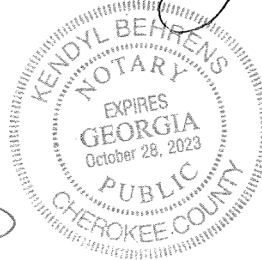
[Signature]
Unofficial Witness

[Signature]
Notary Public

My Commission Expires: 10/28/2023

SELLER:

Whitney Sweet Colvert (SEAL)
Whitney Sweet Colvert



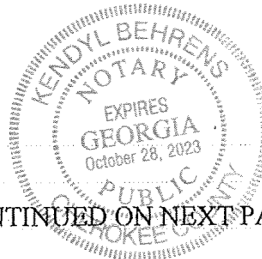
Signed, sealed and delivered
in the presence of:

[Signature]
Unofficial Witness

[Signature]
Notary Public

My Commission Expires: 10/28/2023

James David Colvert (SEAL)
James David Colvert



SIGNATURES CONTINUED ON NEXT PAGE

SELLER:

Signed, sealed and delivered
in the presence of:

Ammy Aulle

Unofficial Witness

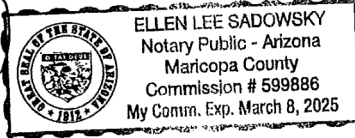
Warren R. Sweat (SEAL)

Warren R. Sweat

Ellen Lee Sadowsky

Notary Public

My Commission Expires:



Signed, sealed and delivered
in the presence of:

Ammy Aulle

Unofficial Witness

Carol G. Sweat (SEAL)

Carol G. Sweat

Ellen Lee Sadowsky

Notary Public

My Commission Expires:

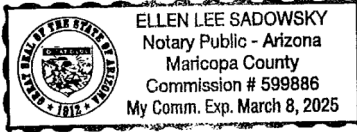


Exhibit "A"

All that tract or parcel of land lying and being in the Glade District, 1680th G.M.D., Hall County, Georgia, as shown on a plat of survey for Roy W. Sweat, dated August 26, 2021, prepared by Davis Engineering and Surveying, which plat is incorporated herein by reference as part of this description, and being more particularly described as follows:

COMMENCING at a point at the center line intersection of Cornelia Highway (A.K.A – Georgia Highway 365 with a variable right-of-way) & Whitehall Road;
THENCE, N56°11'39"E a distance of 5169.73' to a 1/2" rebar found at the southeasterly right-of-way of Cornelia Highway; said 1/2" rebar found being the POINT OF BEGINNING;
THENCE, along the southeasterly right-of-way of Cornelia Highway, N51°12'43"E a distance of 114.40' to a point;
THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N70°01'31"E a distance of 105.64' to a point;
THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N41°22'31"E a distance of 201.81' to a point;
THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N51°17'49"E a distance of 520.40' to a point;
THENCE, leaving the southeasterly right-of-way of Cornelia Highway, S37°11'56"E a distance of 35.17' to a point;
THENCE, N53°11'56"E a distance of 73.74' to a point;
THENCE, S37°07'39"E a distance of 9.89' to a point;
THENCE, N53°11'56"E a distance of 94.51' to a point;
THENCE, N36°48'04"W a distance of 50.66' to a point at the southeasterly right-of-way of Cornelia Highway;
THENCE, along the southeasterly right-of-way of Cornelia Highway, with a curve to the left, having an arc length of 150.51' and a radius of 1357894.46', with a chord bearing of N51°17'21"E and a chord length of 150.51' to a point at the centerline of a stream;
THENCE, leaving the southeasterly right-of-way of Cornelia Highway and along the centerline of the stream, the following courses and distances: S38°50'03"E a distance of 31.52' to a point; S54°21'59"E a distance of 20.77' to a point; S03°11'08"W a distance of 36.93' to a point; S43°00'29"E a distance of 12.62' to a point; S41°46'52"E a distance of 41.52' to a point; S12°11'07"W a distance of 29.69' to a point; S62°59'59"E a distance of 24.36' to a point; S14°56'48"E a distance of 16.99' to a point; S30°19'03"E a distance of 34.13' to a point; S09°56'03"W a distance of 13.24' to a point; S11°18'23"E a distance of 38.83' to a point;
S68°19'26"E a distance of 25.08' to a point; S21°38'47"E a distance of 19.26' to a point; S57°49'27"W a distance of 11.76' to a point; S50°31'32"W a distance of 38.63' to a point; S46°31'17"W a distance of 37.15' to a point; S44°47'21"W a distance of 40.08' to a point; S39°03'52"W a distance of 28.80' to a point; S17°33'11"W a distance of 44.56' to a point; S23°04'47"W a distance of 14.42' to a point; S32°49'06"W a distance of 31.63' to a point; S72°28'48"W a distance of 60.48' to a point; S79°34'58"W a distance of 11.47' to a point;

S49°33'11"W a distance of 61.63' to a point;
THENCE, leaving the centerline of stream, S47°40'59"E a distance of 1728.25' to a 1/2" rebar found;
THENCE, N77°43'24"E a distance of 196.66' to a 1/2" rebar found at the westerly right-of-way of Cagle Mill Road (60' right-of-way);
THENCE, along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 104.74' and a radius of 113.90', with a chord bearing of S03°54'12"W and a chord length of 101.09' to a point,
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S23°10'28"E a distance of 94.22' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the right, having an arc length of 257.36' and a radius of 205.00', with a chord bearing of S12°47'27"W and a chord length of 240.79' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S48°45'23"W a distance of 67.26' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 208.94' and a radius of 260.00', with a chord bearing of S25°44'04"W and a chord length of 203.36' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S02°42'45"W a distance of 221.60' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the right, having an arc length of 90.62' and a radius of 370.00', with a chord bearing of S09°43'45"W and a chord length of 90.40' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S16°44'45"W a distance of 122.67' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 107.52' and a radius of 330.00', with a chord bearing of S07°24'42"W and a chord length of 107.05' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S01°55'21"E a distance of 410.83' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 78.24' and a radius of 830.00', with a chord bearing of S04°37'23"E and a chord length of 78.21' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S07°19'24"E a distance of 49.75' to a 1/2" rebar set;
THENCE, leaving the westerly right-of-way of Cagle Mill Road, S77°17'15"W a distance of 169.36' to a 1-1/2" open top pipe found;
THENCE, N38°50'17"W a distance of 1454.15' to a 1/2" rebar found;
THENCE, N34°59'05"W a distance of 1336.17' to a point;
THENCE, N34°32'20"W a distance of 480.79' to a 1/2" rebar found; said 1/2" rebar found being the POINT OF BEGINNING.
Said property containing 72.67 acres.

Exhibit "B"
Permitted Exceptions

- (a) All matters as shown on plat of survey for Roy Sweat dated November 5, 1973, last revised November 15, 1985, recorded in Plat Book 108, Page 78, Hall County, Georgia Records;
- (b) Judgment in favor of Southern Bell Telephone and Telegraph Company dated June 7, 1989, recorded in Deed Book 1356, Pages 100-104, Hall County, Georgia Deed Records;
- (c) Easement Agreement by and between Dr. Roy W. Sweat and Hall County, Georgia, dated September 12, 2000, recorded in Deed Book 3750, Pages 134-136, Hall County, Georgia Deed Records;
- (d) Right of Way Deed to Department of Transportation dated March 2, 1979, recorded in Deed Book 702, Pages 147-148, Hall County, Georgia Deed Records;
- (e) Rights of upper and lower riparian owners in and to the waters of creeks crossing or adjoining the property, and the natural flow thereof, free from diminution or pollution;
- (f) Easement to Georgia Power Company dated February 26, 2008, recorded in Deed Book 6341, Pages 32-35, Hall County, Georgia Deed Records;
- (g) Right of Way Deed to Hall County dated September 3, 1999, recorded in Deed Book 3556, Page 317, Hall County, Georgia Deed Records.
- (h) Right of Way and Easement Agreement to Southern Bell Telephone and Telegraph Company dated May 2, 1989, recorded in Deed Book 1349, Pages 120-141, Hall County, Georgia Deed Records;
- (i) Subject to Easement described in Indenture from Georgia Kraft Company to Arthur F. Rees, IV, dated April 1, 1975, recorded in Deed Book 57, Pages 319-320, Hall County, Georgia Deed Records;
- (j) Easement to Atlanta Gas Light Company dated December 18, 1968, recorded in Deed Book 389, Pages 250-253, Hall County, Georgia Deed Records;
- (k) Affidavit of Possession executed by Robert L. Campbell, as Manager of Inland-Rome, Inc., and recorded in Deed Book 1414, Pages 133-138, Hall County, Georgia Deed Records;
- (l) Certificate of Merger from Rome Kraft Company to Georgia Kraft Company dated December 6, 1973, recorded in Deed Book 548, Page 432, Hall County, Georgia Deed Records;

- (m) All matters as shown on plat of survey for Roy W. Sweat dated August 26, 2021, as prepared by Davis Engineering & Surveying. Plat reveals the following:
 - (i) A portion of the property is located within the 100-year flood zone area;
 - (ii) A portion of the property is located within a 25' state waters buffer;
 - (iii) A portion of the property is located within a 50' vegetative buffer;
 - (iv) A portion of the property is located with a 75' impervious setback
 - (v) Setbacks
 - (vi) The Oconee River forms the northeast property line
 - (vii) 15' telecommunications easement running across northwest portion of subject property.

- (n) Subject to 2021 Hall County taxes, and subsequent years not yet due and payable.

EXHIBIT A – LEGAL DESCRIPTION – INDUSTRIAL TRACT

All that tract or parcel of land lying and being in the Glade District, 1680th G.M.D., Hall County, Georgia, as shown on a plat of survey for Roy W. Sweat, dated August 26, 2021, prepared by Davis Engineering and Surveying, which plat is incorporated herein by reference as part of this description, and being more particularly described as follows:

COMMENCING at a point at the center line intersection of Cornelia Highway (A.K.A - Georgia Highway 365 with a variable right-of-way) & Whitehall Road;

THENCE, N56°11'39"E a distance of 5169.73' to a 1/2" rebar found at the southeasterly right-of-way of Cornelia Highway; said 1/2" rebar found being the POINT OF BEGINNING;

THENCE, along the southeasterly right-of-way of Cornelia Highway, N51°12'43"E a distance of 114.40' to a point;

THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N70°01'31 "E a distance of 105.64' to a point;

THENCE, continuing along die southeasterly right-of-way of Cornelia Highway, N41 °22'31 "E a distance of 201.81' to a point;

THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N51°17'49"E a distance of 520.40' to a point;

THENCE, leaving the southeasterly right-of-way of Cornelia Highway, S37°11'56"E a distance of 35.17' to a point;

THENCE, N53°11'56"E a distance of 73.74' to a point;

THENCE, S37°07'39"E a distance of 9.89' to a point;

THENCE, N53°11'56"E a distance of 94.51' to a point;

THENCE, N36°48'04"W a distance of 50.66' to a point at the southeasterly right-of-way of Cornelia Highway;

THENCE, along the southeasterly right-of-way of Cornelia Highway, with a curve to the left, having an arc length of 150.5 T and a radius of 1357894.46', with a chord bearing of N51°17'21"E and a chord length of 150.51' to a point at the centerline of a stream;

THENCE, leaving the southeasterly right-of-way of Cornelia Highway and along the centerline of the stream, the following courses and distances: S38°50'03"E a distance of 31.52' to a point;

S54°21'59"E a distance of 20.77' to a point; S03°11'08"W a distance of 36.93' to a point;

S43°00'29"E a distance of 12.62' to a point; S41°46'52"E a distance of 41.52' to a point;

S12°11'07"W a distance of 29.69' to a point; S62°59'59"E a distance of 24.36' to a point;

S14°56'48"E a distance of 16.99' to a point; S30°19'03"E a distance of 34.13' to a point;

S09°56'03"W a distance of 13.24' to a point; S11°18'23"E a distance of 38.83' to a point;

S68°19'26"E a distance of 25.08' to a point; S21°38'47"E a distance of 19.26' to a point;

EXHIBIT A – LEGAL DESCRIPTION – INDUSTRIAL TRACT

S57°49'27"W a distance of 11.76' to a point; S50°31'32"W a distance of 38.63' to a point;

S46°31'17"W a distance of 37.15' to a point; S44°47'21"W a distance of 40.08' to a point;

S39°03'52"W a distance of 28.80' to a point; S17°33'11"W a distance of 44.56' to a point;

S23°04'47"W a distance of 14.42' to a point; S32°49'06"W a distance of 31.63' to a point;

S72°28'48"W a distance of 60.48' to a point; S79°34'58"W a distance of 11.47' to a point;

S49°33'11"W a distance of 61.63' to a point;

THENCE, leaving the centerline of stream, S41°46'25"W a distance of 876.07' to a point;

THENCE, N34°24'19"W a distance of 481.09' to a 1/2" rebar found; said 1/2" rebar found being the POINT OF BEGINNING.

Said property containing 10.57 acres.

PRELIMINARY STORMWATER ASSESSMENT

FOR

**CAGLE MILL RESIDENTIAL
AND COMMERCIAL
DEVELOPMENT**

**4745 CAGLE MILL RD, LULA, GA 30554
4691 NOAH MARTIN DR, LULA, GA 30554**



3500 Parkway Lane, Suite 500
Peachtree Corners, Georgia 30092
678.336.7740
www.pondco.com
Pond & Company Project No. 1220263

Issued: March 22, 2024

TABLE OF CONTENTS

| | |
|---|----------|
| PROJECT DESCRIPTION | 2 |
| METHODOLOGY | 2 |
| HYDROLOGIC ANALYSIS..... | 3 |
| Predevelopment Conditions..... | 3 |
| Post-Development Conditions | 4 |
| Study Point(s) | 5 |
| Additional Information | 5 |
| STORMWATER MANAGEMENT DESIGN | 5 |
| Water Quality / Runoff Reduction..... | 6 |
| Channel Protection, Overbank Flood Protection, and Extreme Flood Protection | 6 |
| RUNOFF SUMMARY TABLES | 6 |
| DOWNSTREAM ANALYSIS..... | 7 |
| CONCLUSION | 7 |

APPENDICES

- Appendix A: Location Map, FEMA Firmette, Flow Summaries, and Rainfall Reports
- Appendix B: "TBD"
- Appendix C: Drainage Maps, StreamStats report, Alta Survey, and Soils Map
- Appendix D: Time of Concentration Calculations
- Appendix E: Hydraflow Hydrograph Model Output
- Appendix F: Georgia TSS Spreadsheet

PROJECT DESCRIPTION

This Preliminary Hydrology Study has been prepared for Cagle Mill, residential and commercial development in Hall County, Georgia. The property has been surveyed at 72.67 acres and is owned by CBD Investments, LLC. Cornelia Highway (GA State Road #365) abuts the site from the northwest side and Cagle Mill Road from the southeast side. The North Oconee River crosses the site.

Based on FIRM Panel Maps 13139C0225F, dated September 29, 2006, The North Oconee River in our site is within a Special Flood Hazard Area Flood Zone "A" (Appendix A).

This project intends to develop the site into two different parcels, commercial and residential areas. In the residential area, there will be 235 units of single-family, 50 units of townhomes, a clubhouse, and an amenities area. The commercial space will be adjacent to Cornelia Highway and mostly contain industrial-use buildings with a visitor's parking lot.

The development is anticipated to disturb about 75 percent of the site area. More detailed explanations will be provided in the final report. The site will drain to the North Oconee River on the west side of the property, which is also part of the floodplain.

The new construction will include the installation of a new BMP as follows:

- Regenerative Stormwater Conveyance: One (1)
- Stormwater wetlands: Two (2)
- Stormwater Wet Pond: One (1)
- Enhance Swale: One (1)
- Bioretention Basins: Two (2)

The following report describes the methodology and the associated analysis results to meet the proposed developments above performance criteria.

METHODOLOGY

Hydrograph modeling and pond routing are performed using Hydraflow Hydrographs Extension for AutoCAD Civil 3D 2018. Soil Conservation Service (SCS) hydrograph method generates Type II 24-hour hydrographs for all pre-and post-developed basins during storm events. SCS runoff curve numbers are taken from the *Georgia Stormwater Management Manual (GSMM)*. Curve numbers are selected based on existing and revised proposed ground covers located on soil group B. Where ground cover is not uniform over a basin area, a weighted curve number is calculated based on the area of each type of ground cover. Time of concentration calculations for each basin (pre- and post- developed) are performed per the procedure found in USDA's Technical Release 55 *Urban Hydrology for Small Watersheds* (TR-55) and Watershed Lag Method.

HYDROLOGIC ANALYSIS

Predevelopment Conditions

The existing area of the site is primarily wooded. Existing conditions basin maps can be found in Appendix C. Runoff from 3 basins drain to Study point 1 (SP-1), as follows:

- Existing Basin "A" is 53.31 acres located northwest of the site. The maximum allowable curve number for this basin is 55. This basin has a Time Concentration of 23 minutes.

| PRE-DEV BASIN A | | | | | |
|-------------------|--|------------------|-----------------|-------------------|--------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| A | | Woods | 53.31 | 55 | 2932.1 |
| | | Total Area = | 53.31 | Weighted CN = | 55 |

- Existing Basin "B" is 15.75 acres located southwest of the site. The maximum allowable curve number for this basin is 55. This basin has a Time of Concentration of 21.1 minutes.

| PRE-DEV BASIN B | | | | | |
|-------------------|--|------------------|-----------------|-------------------|-------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| B | | Woods | 15.75 | 55 | 866.3 |
| | | Total Area = | 15.75 | Weighted CN = | 55 |

- Existing Basin "B2" is 70 acres located southeast of the site. The maximum allowable curve number for this basin is 55. This basin has a time of Concentration of 10 minutes.

| PRE-DEV BASIN B-2 | | | | | |
|-------------------|--|------------------|-----------------|-------------------|------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| B | | Woods | 70.0 | 55 | 3850 |
| | | Total Area = | 70.0 | Weighted CN = | 55 |

- Existing Basin "C" is 6.07 acres located southeast of the site. The maximum allowable curve number for this basin is 55. This basin has a Time of Concentration of 22.9 minutes.

| PRE-DEV BASIN C | | | | | |
|-------------------|--|------------------|-----------------|-------------------|-------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| C | | Woods | 6.07 | 55 | 333.9 |
| | | Total Area = | 6.07 | Weighted CN = | 55 |

- Upstream Basin area is 3176.07 acres. To determine the area of the upstream basin, we subtract the entire area to SP-1 based on StreamStats (See appendix C) to the total area of pre-developed basins A, B, and C. We also use StreamStats to determine the impervious, grass area, and wooded percentages. Based on the StreamStats report, the total area drain to SP-1 is 3251.2 acres. The time of concentration of Upstream Basin is 436.7 min. The maximum allowable curve number for Upstream Basin is 67. Below is the breakdown of each area.

| UPSTREAM BASIN | | | | |
|-------------------|------------------------|-----------------|----------------------|-----------|
| Basin Description | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| UPSTREAM | Grass (Fair Condition) | 603.50 | 69 | 41641.5 |
| | Woods | 1870.67 | 55 | 102886.9 |
| | Impervious | 701.90 | 98 | 68786.2 |
| | Total Area = | 3176.07 | Weighted CN = | 67 |

Post-Development Conditions

The revised development encompasses a new commercial and residential area. Three basins are draining to SP-1 in the post-developed condition, as follows:

- Post-Basin “A” consists of 44.56 acres. Since most of the area is new residential development, per GSMM table 3.1.5-1, we use a Curve Number of 85 (1/8 acres or less [townhouse]). This basin has a Time of Concentration of 10.3 minutes.

| POST-DEV BASIN A | | | | |
|-------------------|-----------------------------|-----------------|----------------------|-----------|
| Basin Description | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| A | 1/8 AC or less (Townhouses) | 44.56 | 85 | 3787.6 |
| | Total Area = | 44.56 | Weighted CN = | 85 |

- Post Basin “A” (Bypass) consists of 25.8 acres. The proposed area in this basin is mostly commercial, some residential, and the bridge. We assumed additional impervious on this area is 6.5 acres which makes the curve number 70. The time of concentration of this basin is 18.4 minutes

| POST DEV BASIN A (BYPASS) | | | | |
|---------------------------|---------------------|-----------------|----------------------|-----------|
| Basin Description | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| A | Woods | 19.30 | 61 | 1177.3 |
| | Impervious | 6.50 | 98 | 637.0 |
| | Total Area = | 25.80 | Weighted CN = | 70 |

- Post-Basin “B” consists of 67.44 acres. The majority of the area is phase 2 of the new development approx. 38 acres, the rest will be recreate space or will remain wooded. Hence, we use a Curve Number of 80. This basin has a Time of Concentration of 5 minutes.

| POST-DEV BASIN B | | | | |
|-------------------|-----------------------------|-----------------|----------------------|-----------|
| Basin Description | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| B | 1/8 AC or less (Townhouses) | 1.95 | 85 | 165.8 |
| | Total Area = | 1.95 | Weighted CN = | 85 |

Water Quality / Runoff Reduction

According to the Georgia Stormwater Management Manual, Section 2.2.2:

“Treat the runoff from 85% of the storms that occur in an average year and reduce average annual post-development total suspended solids loadings by 80%. Average rainfall events across that state of Georgia equates to treating storm events of 1.2 inches or less, as well as the first 1.2 inches of runoff for all more significant storm events.

Communities that adopt runoff reduction may waive the water quality treatment volume from this standard if 100% of the 1.0-inch runoff reduction volume is achieved.”

As can be seen by referring to the TSS spreadsheet summary in Appendix F, this site does not achieve 100% Runoff Reduction (RRv), but 80% of the total TSS is removed.

Channel Protection, Overbank Flood Protection, and Extreme Flood Protection

The Channel Protection criteria are typically achieved by providing 24 hours of extended detention for runoff generated by the 1-year, 24-hour rainfall event. The overbank flood protection criteria generally are achieved by attenuating the post-development flows not to exceed the predevelopment flows for the 1, 2, 5, 10, and 25-year storm events. The extreme flood protection criteria are typically achieved by safely controlling and conveying the 100-year storm event.

It is recommended that these criteria not be required for this project due to the nature of the development and the site’s proximity to the 100-year floodplain. While this site is anticipated to contribute pollutants via stormwater runoff to be treated by the water quality measures listed above, the expected increase in peak runoff flows will not be significant, and flooding will not be exacerbated. See below for a summary of peak runoff rates for all storm events and Appendix E for Hydraflow Hydrograph model results.

RUNOFF SUMMARY TABLES

The tables below summarize runoff contributions to the Study Point 1 (SP-1)

| Return Frequency | PRE DEV BASIN A (Hyd 8) (CFS) | POST DEV BASIN A (Hyd 20) (CFS) | NET INCREASE (CFS) |
|------------------|-------------------------------|---------------------------------|--------------------|
| 1 | 292.32 | 295.02 | 2.7 |
| 2 | 394.61 | 397.57 | 2.96 |
| 5 | 586.83 | 590.12 | 3.29 |
| 10 | 765.47 | 768.95 | 3.48 |
| 25 | 1037.95 | 1041.59 | 3.64 |
| 50 | 1263.74 | 1267.44 | 3.7 |
| 100 | 1504.81 | 1508.51 | 3.7 |

- Post-Basin “C” consists of 2.82 acres. Since most of the area is new residential development, per GSMM table 3.1.5-1, we use a Curve Number of 85 (1/8 acres or less [townhouse]). This basin has a Time of Concentration of 9.3 minutes.

| POST-DEV BASIN C | | | | | |
|-------------------|--|-----------------------------|-----------------|----------------------|-----------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| C | | 1/8 AC or less (Townhouses) | 2.82 | 85 | 239.7 |
| | | Total Area = | 2.82 | Weighted CN = | 85 |

- Upstream Basin remains the same under Post-Developed conditions.

Study Point(s)

Study Point 1 (SP-1)

SP-1 is located on North Oconee creek on the west side of the site. As mentioned, Basin A, B, C, and Upstream will be combined and drained to SP-1.

Delineation of all pre-developed and post-develop basins was based on StreamStats and Hall County GIS topography of the surrounding. All off-site area surfaces were determined based on aerial imagery from Hall County GIS. Below is a summary of areas contributing to each basin to compare predevelopment and post-development maps.

| SP | Description | Pre-Developed Drainage Areas (acres) | | | Post-Developed Drainage Areas (acres) | | | |
|--|----------------|--------------------------------------|-------|---------|---------------------------------------|-------|---------|---------|
| | | Off- | On- | Total | Off- | On- | By- | Total |
| SP-1 | Basin A | | 53.31 | 53.31 | | 44.56 | 25.80 | 70.36 |
| | Basin B | | 15.75 | 15.75 | | 1.95 | | 1.95 |
| | Basin C | | 6.07 | 6.07 | | 2.82 | | 2.82 |
| | Upstream Basin | 3176.07 | | 3176.07 | | | 3176.07 | 3176.07 |
| Total Drainage Area analyzed in Study Point 1: | | | Pre- | 3251.20 | | | Post- | 3251.20 |

Study Point 2 (SP-2)

SP-2 is located at the confluence of a tributary of North Oconee feeds into the creek. Basin B-2 will drain to SP-2.

Additional Information

For further information on the hydrologic analysis of this project, see the Pre/Post Development Drainage Maps and StreamStats report in Appendix C. For Time of Concentration Calculations, see Appendix D. See Appendix A for summary peak runoff rates for all storm events and Appendix E for Hydraflow Hydrograph model results.

STORMWATER MANAGEMENT DESIGN

This section describes what stormwater management measures are proposed to meet the performance criteria for the post-development condition. A BMP inspection schedule and checklist will be provided separately before approval.

DOWNSTREAM ANALYSIS

As described in the Georgia Stormwater Management Manual, the point at which the site accounts for 10% of the total drainage basin (10% point) typically reveals the most severe issues regarding the timing of hydrographs.

Since the site area (72.67 ac) is less than 10% of the total drainage area (3,251.52 ac), a downstream analysis will be located at SP-1.

CONCLUSION

This report demonstrates that the stormwater management practices designed herein will satisfy stormwater management and storm drainage requirements for the project based upon the following conclusions:

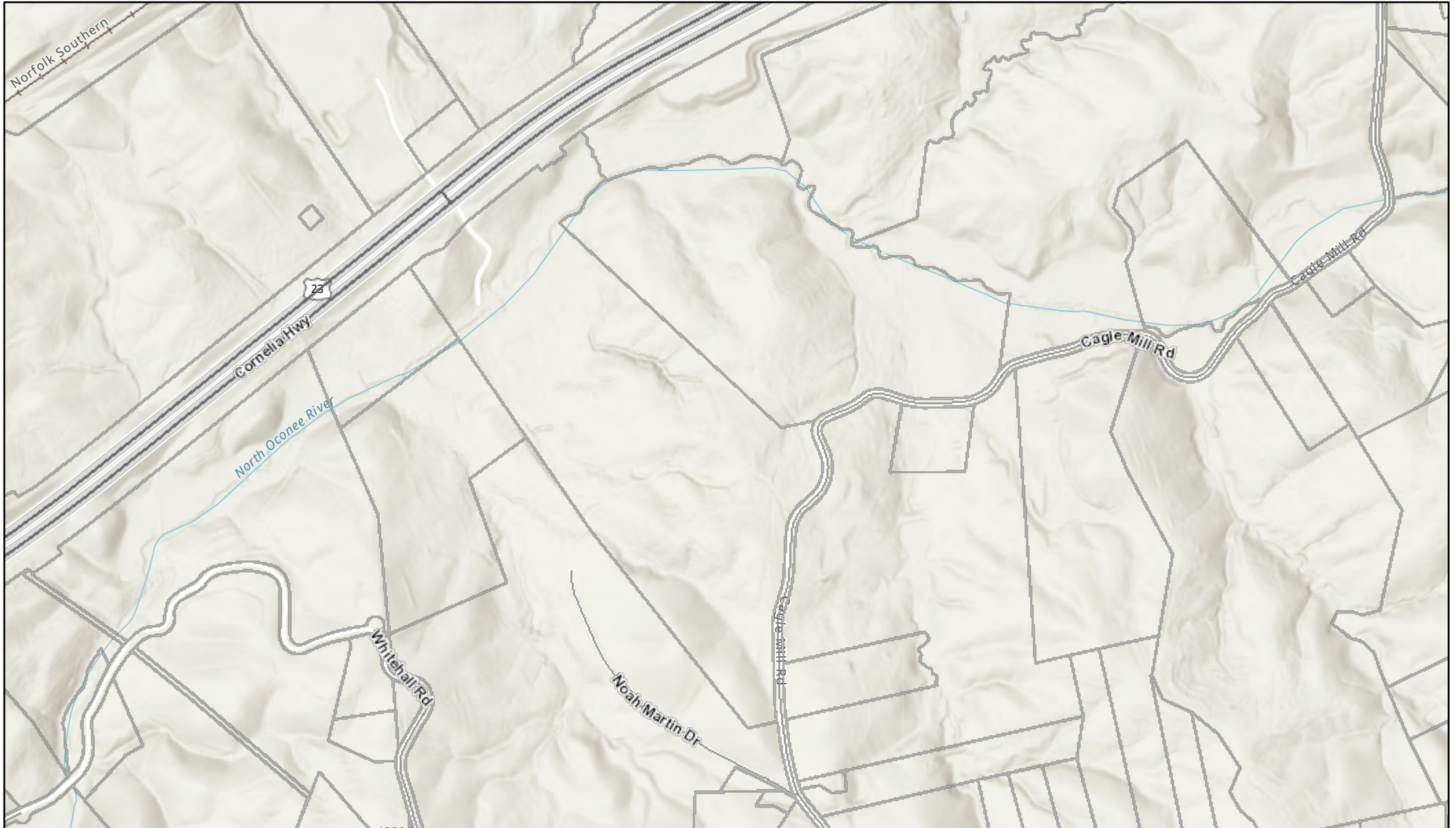
- 1) Water Quality is provided by using BMPs, reducing the Total Suspended Solids.
- 2) Peak flows are anticipated to increase due to this project, but not significantly. In addition, the site is adjacent to the Creek floodplain area. Due to these conditions, it is recommended that the Channel Protection, Overbank Flood Protection, and Extreme Flood Protection criteria be waived for this project.
- 3) No adverse downstream impacts are anticipated due to this development per hydraulic analysis.

The stormwater management facilities will continue to meet the regulatory requirements discussed herein only if the facilities are adequately maintained regularly. Any sediment or trash that accumulates in the facilities should be removed immediately.

This report and associated construction plans only pertain to the topics stated herein. The designer has not evaluated with regards to any other topic including, but not limited to: structural or geotechnical evaluations, environmental evaluations, etc.

Appendix A

Location Map



8/4/2022, 11:33:36 AM

- | | | | | |
|-----------------|----------------|-------------|-----------|--------------------|
| Parcel Boundary | BUFORD | GAINESVILLE | OAKWOOD | Arterial-Collector |
| Counties | CLERMONT | GILLSVILLE | RESTHAVEN | Interstate |
| Citylimits | FLOWERY BRANCH | LULA | Roads | Railway |
| BRASELTON | | | Local | |

1:11,015

0 412.5 825 1,650 ft

0 125 250 500 m

Esri Community Maps Contributors, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, FEMA, GHCGIS

Web AppBuilder for ArcGIS

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The projection used in the preparation of this map was Georgia State Plane West Zone (FIPS zone 1002). The horizontal datum was NAD 83, GRS 80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information about the bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Digital Orthophotos produced by Hall County, Georgia and the Center for GIS, Georgia Institute of Technology at a scale of 1:12,000 and dated 2005 or later.

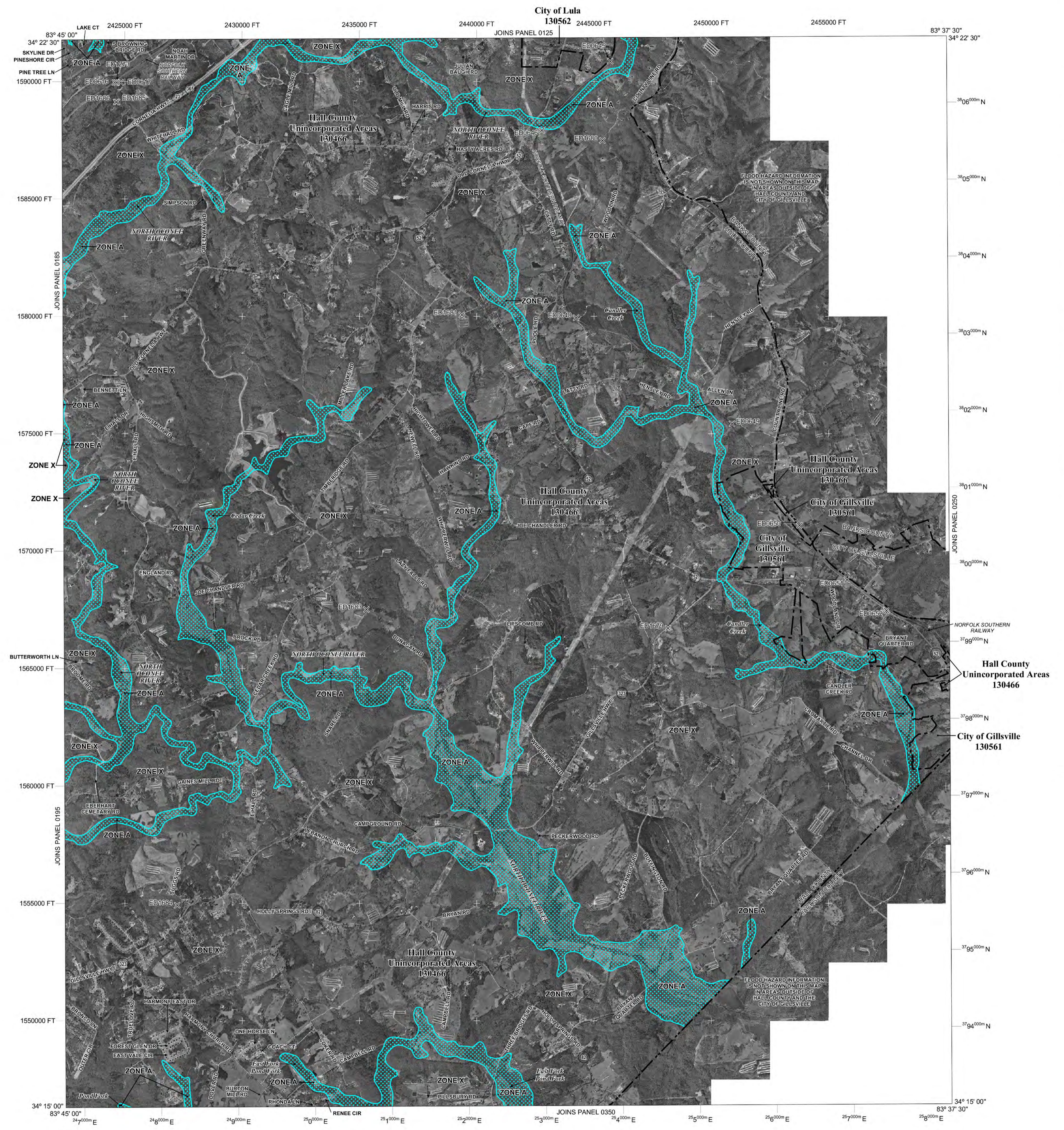
The profile baselines depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the Flood Insurance Study report. As a result of improved topographic data, the profile baseline, in some cases, may deviate significantly from the channel centerline or appear outside the Special Flood Hazard Area.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the FEMA Map Service Center at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and their website at www.fema.gov/msc.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at www.fema.gov.



LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
- ZONE A
No Base Flood Elevations determined.
- ZONE AH
Base Flood Elevations determined.
- ZONE AO
Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AR
Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99
Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently identified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE V
Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE VE
Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS
ZONE X
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS
ZONE X
Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D
Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
- OTHERWISE PROTECTED AREAS (OPAs)
CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet
(EL 987)
- Base Flood Elevation value where uniform within zone; elevation in feet
(EL 987)
- Referenced to the North American Vertical Datum of 1988
- Cross section line
A
- Transect line
23
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
45° 02' 08", 93° 02' 12"
- 5000-foot grid ticks; Georgia State Plane coordinate system, West zone (FIPS Zone 1002), Transverse Mercator
- 1000-meter Universal Transverse Mercator grid values, zone 16
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
DX5510x
- River Mile
M1.5

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
MARCH 21, 2000

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
September 29, 2006 - to increase Base Flood Elevations; to update corporate limits and map format; to add road and road names; to change Special Flood Hazard Areas; to reflect updated topographic information.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0225F

FIRM
FLOOD INSURANCE RATE MAP

HALL COUNTY, GEORGIA AND INCORPORATED AREAS

PANEL 225 OF 377
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---------------------|--------|-------|--------|
| GILLSVILLE, CITY OF | 130561 | 0225 | F |
| HALL COUNTY | 130466 | 0225 | F |
| LULA, CITY OF | 130562 | 0225 | F |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 13139C0225F
MAP REVISED SEPTEMBER 29, 2006

Federal Emergency Management Agency



NOAA Atlas 14, Volume 9, Version 2
 Location name: Lula, Georgia, USA*
 Latitude: 34.3726°, Longitude: -83.7237°
 Elevation: 1044 ft**



* source: ESRI Maps
 ** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerials](#)

PF tabular

| PDS-based point precipitation frequency estimates with 90% confidence intervals (ir | | | | | | | | | |
|---|-------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----|
| Duration | Average recurrence interval (years) | | | | | | | | |
| | 1 | 2 | 5 | 10 | 25 | 50 | 100 | 200 | |
| 5-min | 5.04 (4.13-6.24) | 5.76 (4.70-7.13) | 6.95 (5.66-8.60) | 7.94 (6.47-9.86) | 9.34 (7.46-11.7) | 10.4 (8.22-13.2) | 11.5 (8.90-14.7) | 12.7 (9.55-16.3) | (1 |
| 10-min | 3.69 (3.02-4.57) | 4.22 (3.45-5.22) | 5.08 (4.15-6.30) | 5.81 (4.73-7.22) | 6.83 (5.46-8.60) | 7.63 (6.01-9.65) | 8.44 (6.52-10.8) | 9.27 (6.99-12.0) | (7 |
| 15-min | 3.00 (2.46-3.71) | 3.43 (2.80-4.24) | 4.13 (3.38-5.12) | 4.73 (3.85-5.87) | 5.56 (4.44-7.00) | 6.20 (4.89-7.85) | 6.86 (5.30-8.76) | 7.54 (5.68-9.73) | (6 |
| 30-min | 2.08 (1.70-2.58) | 2.39 (1.95-2.95) | 2.89 (2.36-3.58) | 3.31 (2.69-4.11) | 3.90 (3.11-4.90) | 4.35 (3.43-5.50) | 4.81 (3.72-6.14) | 5.28 (3.98-6.81) | (4 |
| 60-min | 1.33 (1.09-1.65) | 1.52 (1.24-1.88) | 1.84 (1.50-2.28) | 2.11 (1.72-2.62) | 2.51 (2.01-3.17) | 2.83 (2.24-3.59) | 3.16 (2.45-4.05) | 3.51 (2.66-4.55) | (2 |
| 2-hr | 0.813 (0.672-0.993) | 0.922 (0.762-1.13) | 1.11 (0.919-1.36) | 1.28 (1.06-1.58) | 1.54 (1.25-1.93) | 1.74 (1.39-2.19) | 1.96 (1.54-2.49) | 2.19 (1.68-2.82) | (1 |
| 3-hr | 0.610 (0.507-0.740) | 0.688 (0.572-0.835) | 0.828 (0.687-1.01) | 0.955 (0.790-1.16) | 1.15 (0.941-1.43) | 1.31 (1.06-1.64) | 1.48 (1.17-1.87) | 1.67 (1.29-2.13) | (1 |
| 6-hr | 0.381 (0.320-0.456) | 0.427 (0.359-0.512) | 0.511 (0.429-0.613) | 0.587 (0.491-0.707) | 0.704 (0.584-0.870) | 0.801 (0.654-0.993) | 0.907 (0.726-1.14) | 1.02 (0.798-1.29) | (0 |
| 12-hr | 0.238 (0.203-0.282) | 0.268 (0.228-0.317) | 0.319 (0.270-0.378) | 0.364 (0.308-0.433) | 0.431 (0.360-0.523) | 0.485 (0.399-0.591) | 0.542 (0.438-0.668) | 0.603 (0.476-0.752) | (0. |
| 24-hr | 0.146 (0.126-0.171) | 0.165 (0.142-0.194) | 0.198 (0.169-0.231) | 0.225 (0.192-0.264) | 0.263 (0.221-0.314) | 0.294 (0.244-0.352) | 0.325 (0.264-0.394) | 0.357 (0.284-0.438) | (0. |
| 2-day | 0.086 (0.075-0.099) | 0.098 (0.085-0.113) | 0.117 (0.101-0.135) | 0.133 (0.115-0.154) | 0.156 (0.132-0.183) | 0.173 (0.145-0.205) | 0.191 (0.157-0.229) | 0.209 (0.168-0.254) | (0. |
| 3-day | 0.063 (0.055-0.073) | 0.071 (0.062-0.082) | 0.085 (0.074-0.097) | 0.096 (0.084-0.111) | 0.112 (0.096-0.131) | 0.125 (0.105-0.147) | 0.138 (0.114-0.164) | 0.151 (0.122-0.182) | (0. |
| 4-day | 0.051 (0.045-0.058) | 0.057 (0.050-0.065) | 0.068 (0.059-0.077) | 0.077 (0.067-0.088) | 0.089 (0.077-0.104) | 0.099 (0.084-0.116) | 0.109 (0.091-0.129) | 0.119 (0.097-0.143) | (0. |
| 7-day | 0.035 (0.031-0.039) | 0.038 (0.034-0.043) | 0.045 (0.040-0.051) | 0.050 (0.044-0.057) | 0.058 (0.050-0.067) | 0.064 (0.055-0.074) | 0.070 (0.059-0.082) | 0.077 (0.063-0.091) | (0. |
| 10-day | 0.028 (0.025-0.031) | 0.030 (0.027-0.034) | 0.035 (0.031-0.040) | 0.039 (0.035-0.044) | 0.045 (0.039-0.051) | 0.049 (0.042-0.057) | 0.054 (0.046-0.063) | 0.058 (0.048-0.069) | (0. |
| 20-day | 0.018 (0.017-0.020) | 0.020 (0.018-0.022) | 0.023 (0.021-0.026) | 0.025 (0.023-0.028) | 0.029 (0.025-0.032) | 0.031 (0.027-0.035) | 0.034 (0.029-0.039) | 0.036 (0.030-0.042) | (0. |
| 30-day | 0.015 (0.014-0.016) | 0.016 (0.015-0.018) | 0.019 (0.017-0.020) | 0.020 (0.018-0.022) | 0.023 (0.020-0.025) | 0.024 (0.021-0.027) | 0.026 (0.022-0.030) | 0.028 (0.023-0.032) | (0. |

| | | | | | | | | | |
|---------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-----|
| 45-day | 0.012 (0.011-0.014) | 0.014 (0.012-0.015) | 0.015 (0.014-0.017) | 0.017 (0.015-0.018) | 0.018 (0.016-0.020) | 0.020 (0.017-0.022) | 0.021 (0.018-0.023) | 0.022 (0.018-0.025) | (0. |
| 60-day | 0.011 (0.010-0.012) | 0.012 (0.011-0.013) | 0.013 (0.012-0.015) | 0.015 (0.013-0.016) | 0.016 (0.014-0.017) | 0.017 (0.015-0.019) | 0.018 (0.015-0.020) | 0.018 (0.016-0.021) | (0. |

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

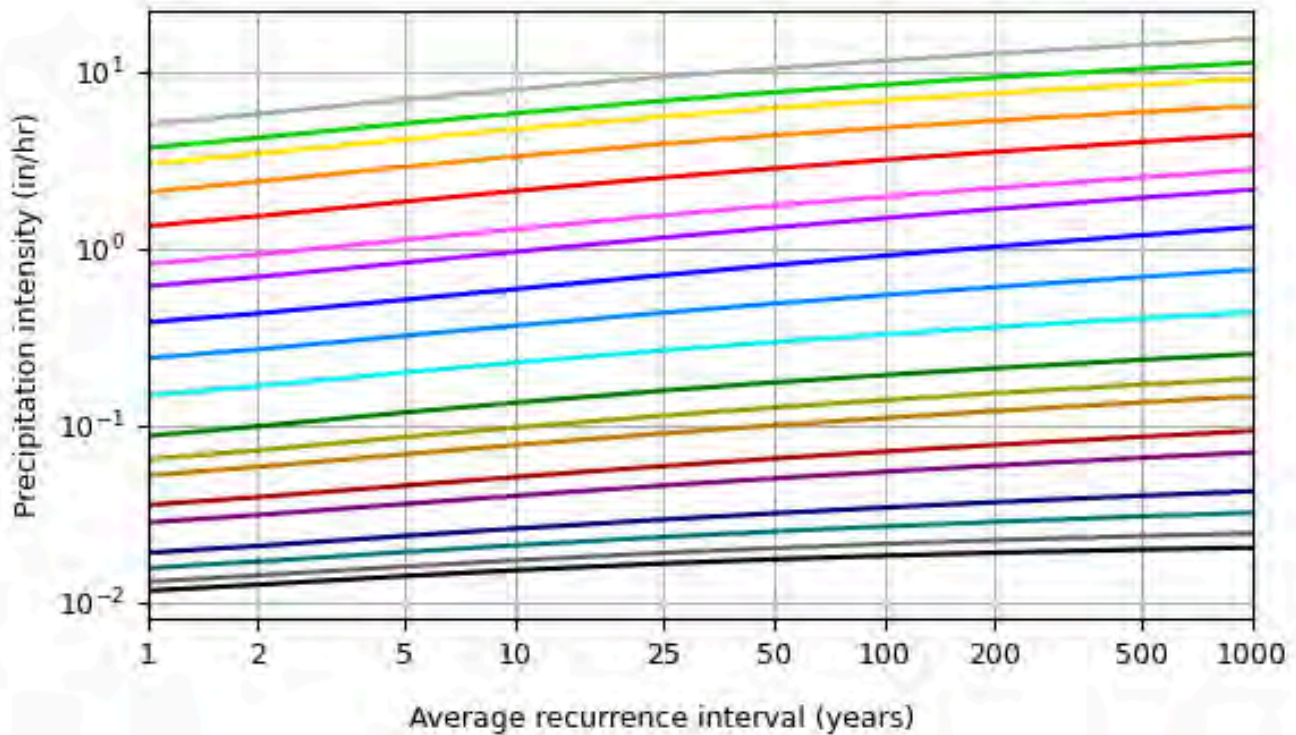
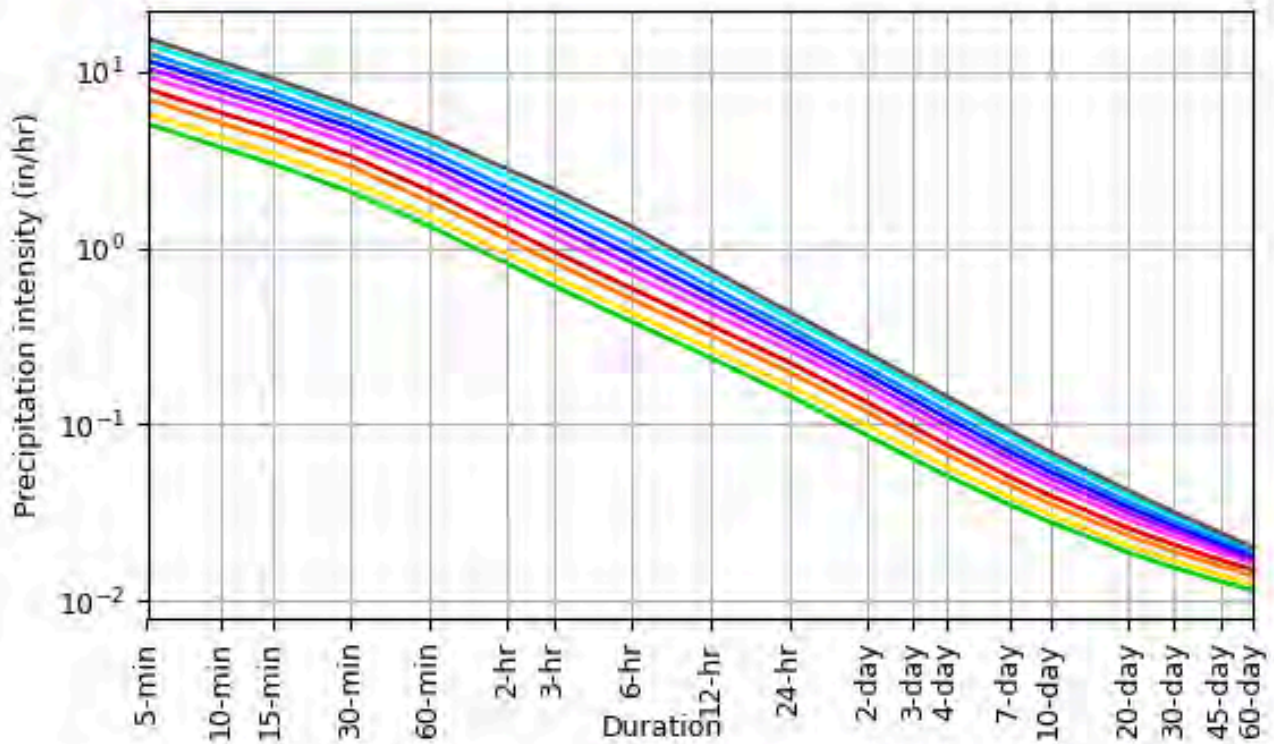
Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

PDS-based intensity-duration-frequency (IDF) curves

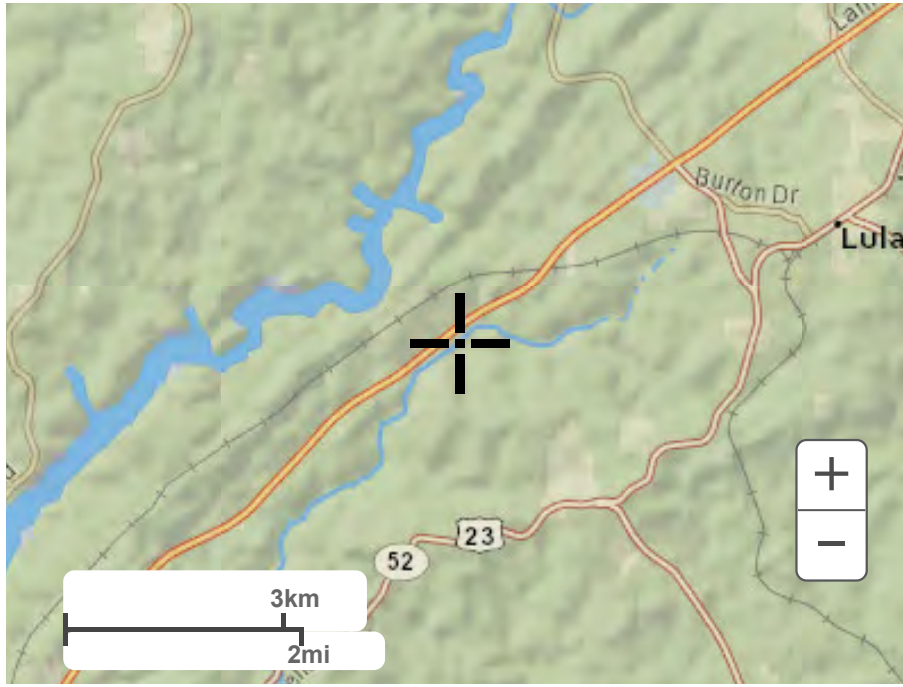
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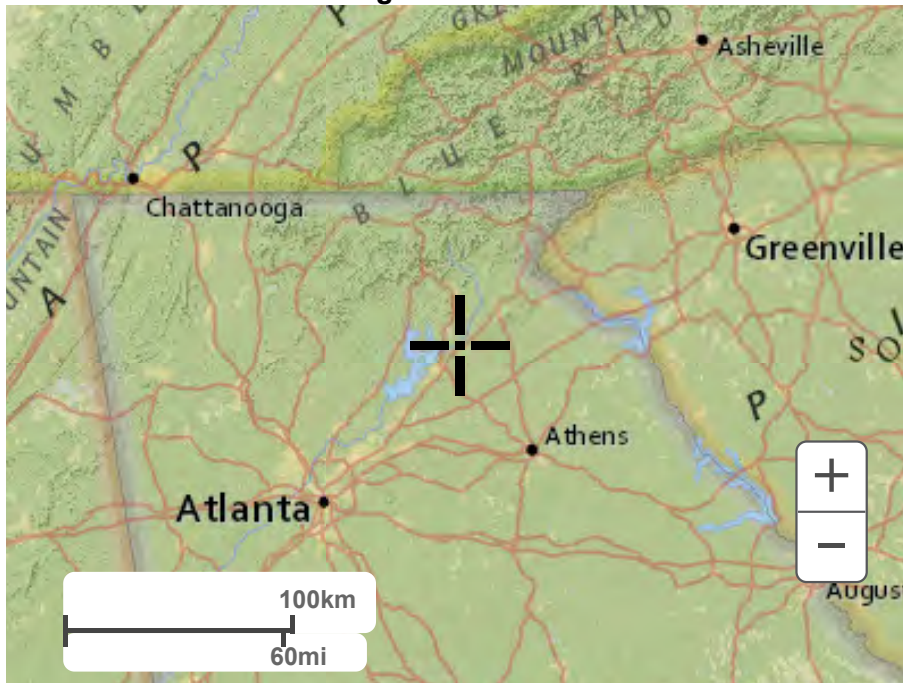
[Back to Top](#)

Maps & aerials

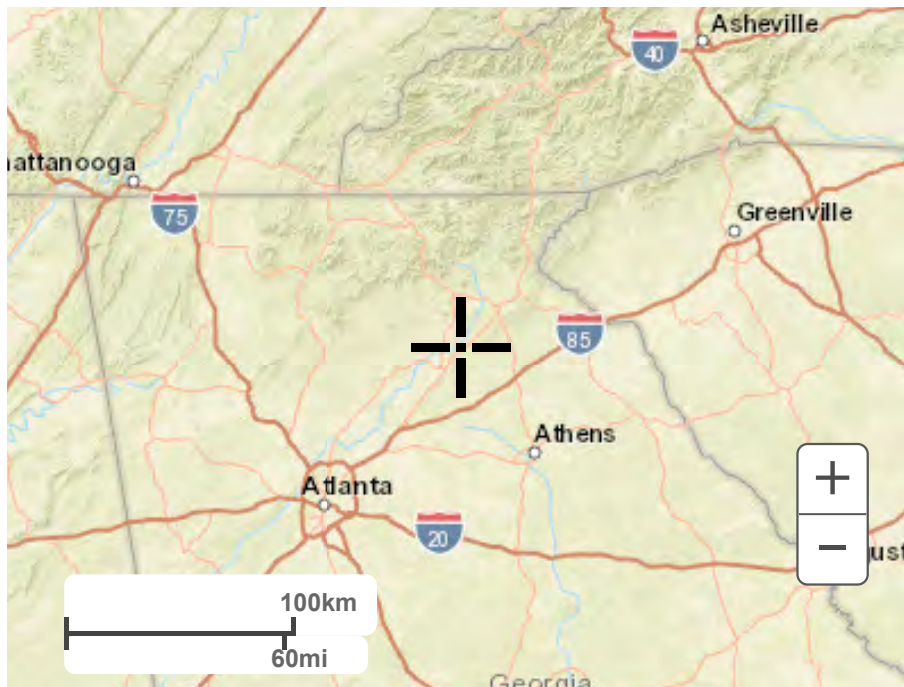
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



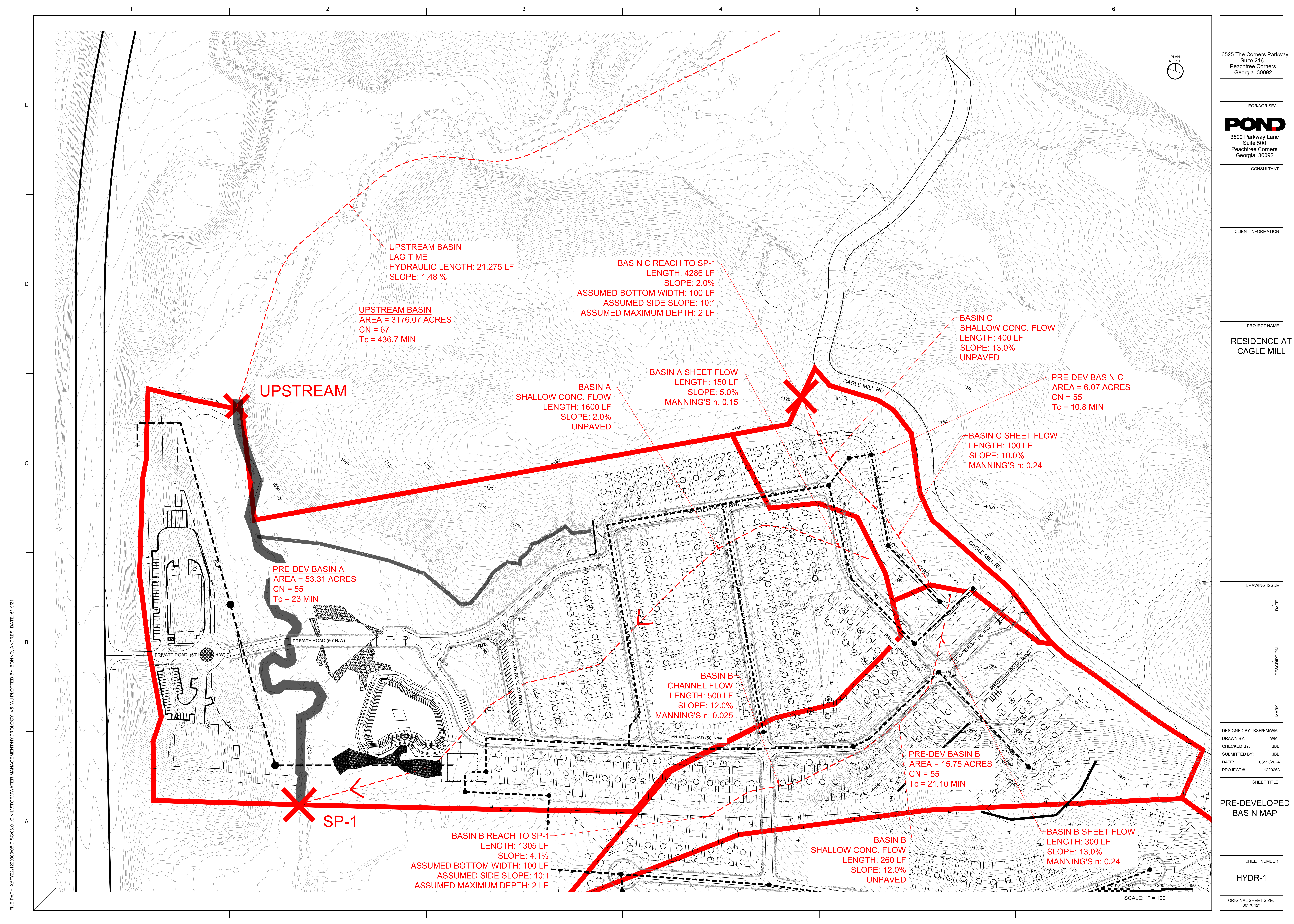
[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

Appendix B

Appendix C



FILE PATH: X:\F\21122000\GIS\DISC\03_01_CIVIL\STORMWATER\MANAGEMENT\HYDROLOGY_V5_VUJ_PLOTTED BY BONNO, ANDRES DATE: 5/19/21



6525 The Corners Parkway
Suite 216
Peachtree Corners
Georgia 30092

EOR/AOR SEAL
POND
3500 Parkway Lane
Suite 500
Peachtree Corners
Georgia 30092
CONSULTANT

CLIENT INFORMATION

PROJECT NAME
**RESIDENCE AT
CAGLE MILL**

DRAWING ISSUE

DATE

DESCRIPTION

MARK

DESIGNED BY: KSHIEMWJ
DRAWN BY: WMJ
CHECKED BY: JBB
SUBMITTED BY: JBB
DATE: 03/22/2024
PROJECT #: 1220263

SHEET TITLE

**PRE-DEVELOPED
BASIN MAP**

SHEET NUMBER

HYDR-1

ORIGINAL SHEET SIZE:
30" X 42"

UPSTREAM BASIN
LAG TIME
HYDRAULIC LENGTH: 21,275 LF
SLOPE: 1.48 %

UPSTREAM BASIN
AREA = 3176.07 ACRES
CN = 67
Tc = 436.7 MIN

BASIN C REACH TO SP-1
LENGTH: 4286 LF
SLOPE: 2.0%
ASSUMED BOTTOM WIDTH: 100 LF
ASSUMED SIDE SLOPE: 10:1
ASSUMED MAXIMUM DEPTH: 2 LF

BASIN C SHALLOW CONC. FLOW
LENGTH: 400 LF
SLOPE: 13.0%
UNPAVED

PRE-DEV BASIN C
AREA = 6.07 ACRES
CN = 55
Tc = 10.8 MIN

UPSTREAM

BASIN A SHALLOW CONC. FLOW
LENGTH: 1600 LF
SLOPE: 2.0%
UNPAVED

BASIN A SHEET FLOW
LENGTH: 150 LF
SLOPE: 5.0%
MANNING'S n: 0.15

BASIN C SHEET FLOW
LENGTH: 100 LF
SLOPE: 10.0%
MANNING'S n: 0.24

PRE-DEV BASIN A
AREA = 53.31 ACRES
CN = 55
Tc = 23 MIN

BASIN B CHANNEL FLOW
LENGTH: 500 LF
SLOPE: 12.0%
MANNING'S n: 0.025

PRE-DEV BASIN B
AREA = 15.75 ACRES
CN = 55
Tc = 21.10 MIN

SP-1

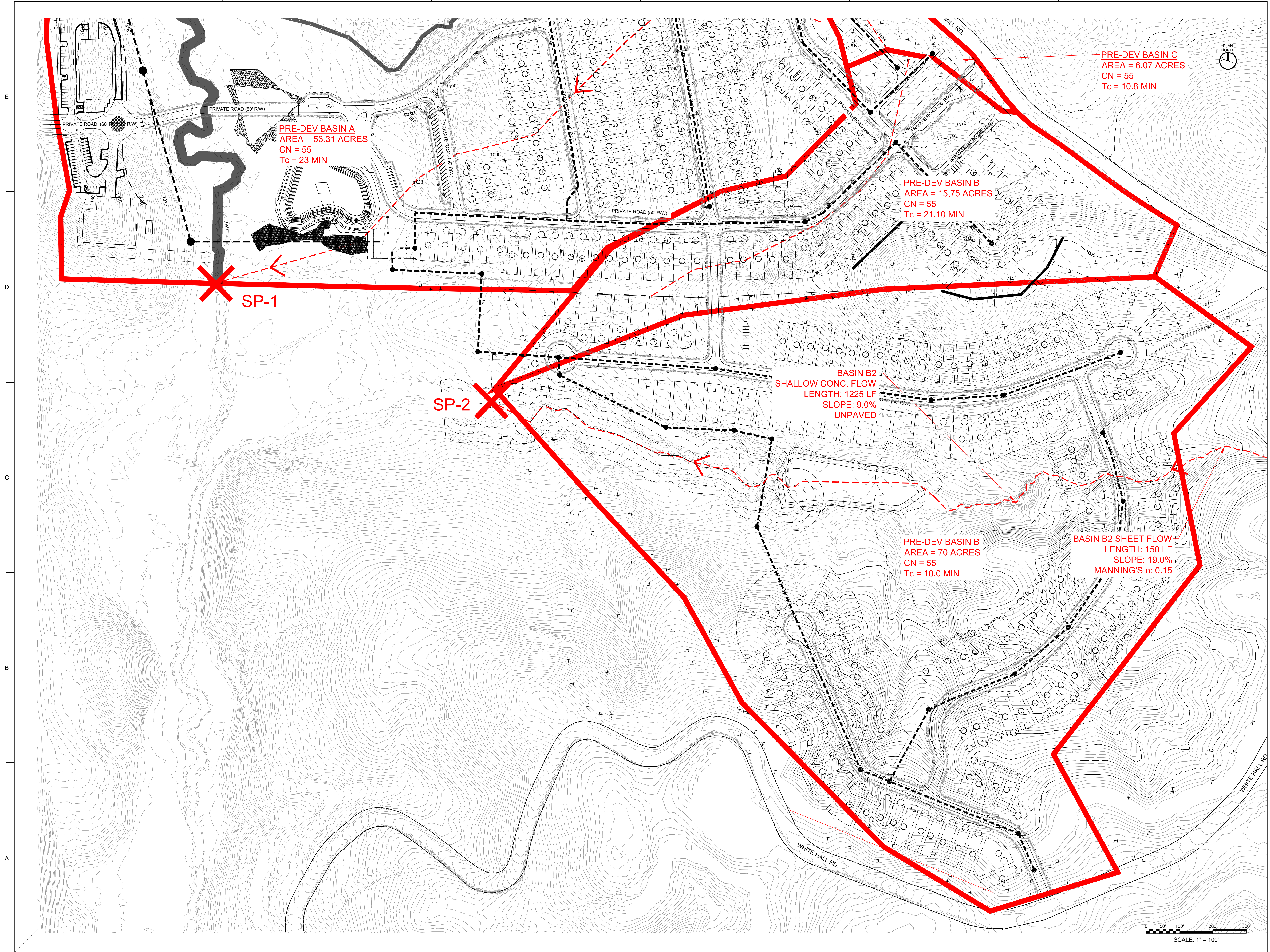
BASIN B REACH TO SP-1
LENGTH: 1305 LF
SLOPE: 4.1%
ASSUMED BOTTOM WIDTH: 100 LF
ASSUMED SIDE SLOPE: 10:1
ASSUMED MAXIMUM DEPTH: 2 LF

BASIN B SHALLOW CONC. FLOW
LENGTH: 260 LF
SLOPE: 12.0%
UNPAVED

BASIN B SHEET FLOW
LENGTH: 300 LF
SLOPE: 13.0%
MANNING'S n: 0.24

SCALE: 1" = 100'

FILE PATH: X:\F\2211220003\G.DISC\03.01.CIVIL\STORMWATER.MANAGEMENT\HYDROLOGY_V5_VU1.PLOTTED BY: BONNO, ANDRES DATE: 5/19/21



PRE-DEV BASIN C
 AREA = 6.07 ACRES
 CN = 55
 Tc = 10.8 MIN

PRE-DEV BASIN A
 AREA = 53.31 ACRES
 CN = 55
 Tc = 23 MIN

PRE-DEV BASIN B
 AREA = 15.75 ACRES
 CN = 55
 Tc = 21.10 MIN

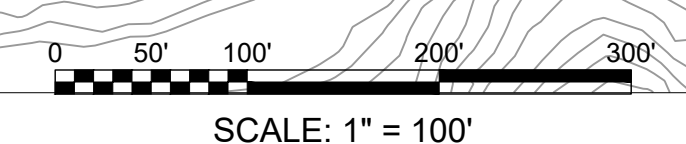
SP-1

SP-2

BASIN B2
 SHALLOW CONC. FLOW
 LENGTH: 1225 LF
 SLOPE: 9.0%
 UNPAVED

PRE-DEV BASIN B
 AREA = 70 ACRES
 CN = 55
 Tc = 10.0 MIN

BASIN B2 SHEET FLOW
 LENGTH: 150 LF
 SLOPE: 19.0%
 MANNING'S n: 0.15



SCALE: 1" = 100'

6525 The Corners Parkway
 Suite 216
 Peachtree Corners
 Georgia 30092

EOR/AOR SEAL
POND
 3500 Parkway Lane
 Suite 500
 Peachtree Corners
 Georgia 30092
 CONSULTANT

CLIENT INFORMATION

PROJECT NAME
**RESIDENCE AT
 CAGLE MILL**

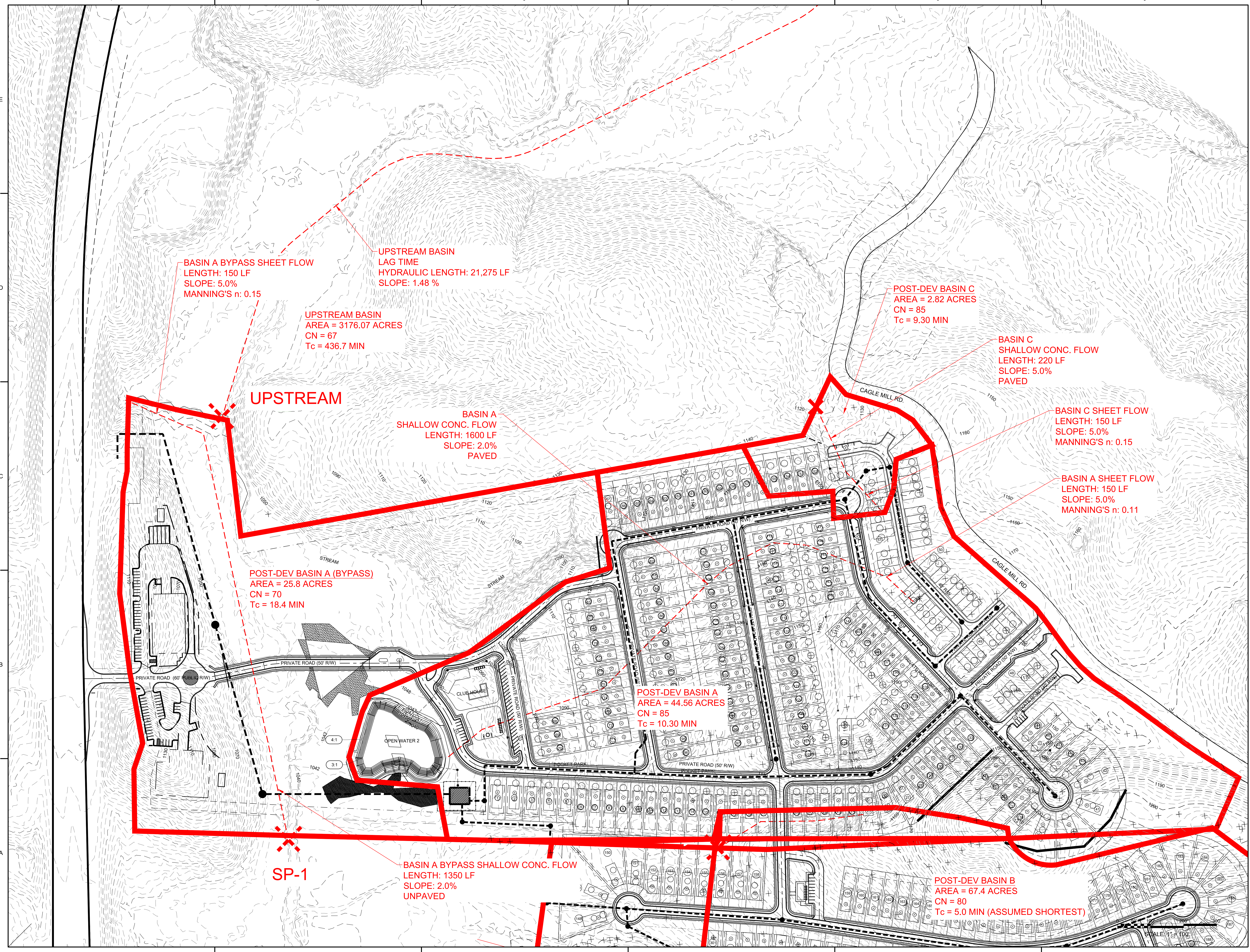
| DRAWING ISSUE | DATE | DESCRIPTION | MARK |
|------------------------|------|-------------|------|
| DESIGNED BY: KSHIEMWUJ | | | |
| DRAWN BY: WMJ | | | |
| CHECKED BY: JBB | | | |
| SUBMITTED BY: JBB | | | |
| DATE: 03/22/2024 | | | |
| PROJECT # 1220263 | | | |
| SHEET TITLE | | | |

**PRE-DEVELOPED
 BASIN MAP**

SHEET NUMBER
HYDR-2

ORIGINAL SHEET SIZE:
 30" X 42"

FILE PATH: X:\FY22\12200303\6.DISC\03.01.CIVIL\STORMWATER\MANAGEMENT\HYDROLOGY_V5_MJ_PLOTTED BY: BONNO, ANDRES DATE: 5/18/21



BASIN A BYPASS SHEET FLOW
LENGTH: 150 LF
SLOPE: 5.0%
MANNING'S n: 0.15

UPSTREAM BASIN
LAG TIME
HYDRAULIC LENGTH: 21,275 LF
SLOPE: 1.48 %

UPSTREAM BASIN
AREA = 3176.07 ACRES
CN = 67
Tc = 436.7 MIN

UPSTREAM

BASIN A
SHALLOW CONC. FLOW
LENGTH: 1600 LF
SLOPE: 2.0%
PAVED

POST-DEV BASIN A (BYPASS)
AREA = 25.8 ACRES
CN = 70
Tc = 18.4 MIN

POST-DEV BASIN C
AREA = 2.82 ACRES
CN = 85
Tc = 9.30 MIN

BASIN C
SHALLOW CONC. FLOW
LENGTH: 220 LF
SLOPE: 5.0%
PAVED

BASIN C SHEET FLOW
LENGTH: 150 LF
SLOPE: 5.0%
MANNING'S n: 0.15

BASIN A SHEET FLOW
LENGTH: 150 LF
SLOPE: 5.0%
MANNING'S n: 0.11

POST-DEV BASIN A
AREA = 44.56 ACRES
CN = 85
Tc = 10.30 MIN

SP-1

BASIN A BYPASS SHALLOW CONC. FLOW
LENGTH: 1350 LF
SLOPE: 2.0%
UNPAVED

POST-DEV BASIN B
AREA = 67.4 ACRES
CN = 80
Tc = 5.0 MIN (ASSUMED SHORTEST)

6525 The Corners Parkway
Suite 216
Peachtree Corners
Georgia 30092

EOR/AOR SEAL
POND
3500 Parkway Lane
Suite 500
Peachtree Corners
Georgia 30092
CONSULTANT

CLIENT INFORMATION

PROJECT NAME
**RESIDENCE AT
CAGLE MILL**

DRAWING ISSUE

DATE

DESCRIPTION

MARK

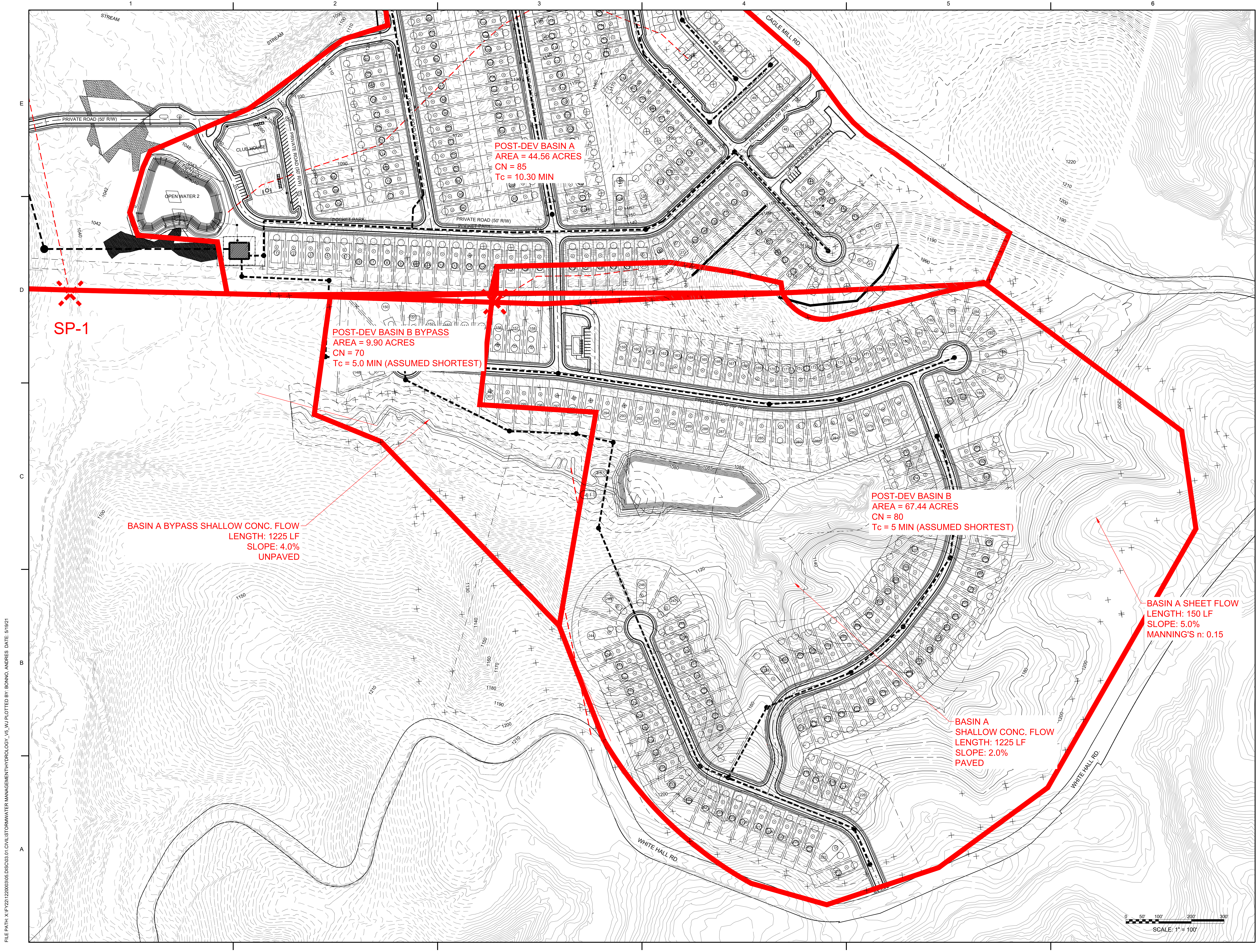
DESIGNED BY: KSHIEMWJ
DRAWN BY: WMJ
CHECKED BY: JBB
SUBMITTED BY: JBB
DATE: 03/22/2024
PROJECT #: 1220263
SHEET TITLE

**POST DEVELOPED
BASIN MAP**

SHEET NUMBER

HYDR-3

ORIGINAL SHEET SIZE:
30" X 42"



FILE PATH: X:\FY22\12200303\6.DISC\03.01.CIVIL\STORMWATER\MANAGEMENT\HYDROLOGY_V5_MJU_PLOTTED BY BONNO ANDRES DATE: 5/19/21

6525 The Corners Parkway
Suite 216
Peachtree Corners
Georgia 30092

EOR/AOR SEAL
POND
3500 Parkway Lane
Suite 500
Peachtree Corners
Georgia 30092
CONSULTANT

CLIENT INFORMATION

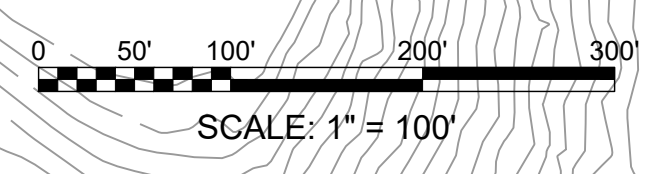
PROJECT NAME
**RESIDENCE AT
CAGLE MILL**

| DRAWING ISSUE | DATE | DESCRIPTION | MARK |
|-------------------------|------|-------------|------|
| DESIGNED BY: KSHIEM/MWJ | | | |
| DRAWN BY: WMJ | | | |
| CHECKED BY: JBB | | | |
| SUBMITTED BY: JBB | | | |
| DATE: 03/22/2024 | | | |
| PROJECT #: 1220263 | | | |
| SHEET TITLE | | | |

**POST DEVELOPED
BASIN MAP**

SHEET NUMBER
HYDR-4

ORIGINAL SHEET SIZE:
30" X 42"



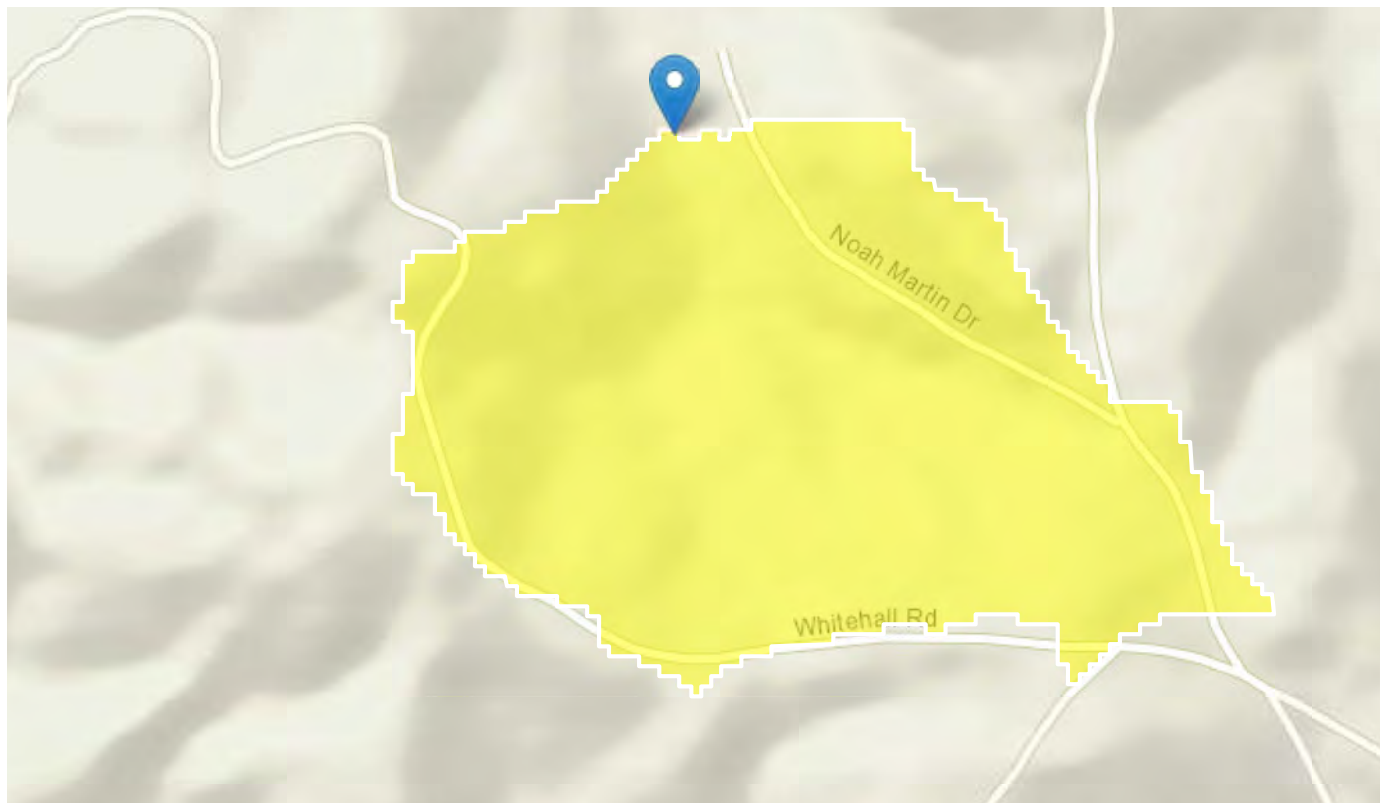
Cagle Mill Phase 2- StreamStats Report

Region ID: GA

Workspace ID: GA20240228150937256000

Clicked Point (Latitude, Longitude): 34.36732, -83.72267

Time: 2024-02-28 10:09:59 -0500



[+ Collapse All](#)

➤ Basin Characteristics

| Parameter Code | Parameter Description | Value | Unit |
|----------------|---|--------|--------------|
| BSLDEM10M | Mean basin slope computed from 10 m DEM | 15.896 | percent |
| CSL10_85 | Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known | 315 | feet per mi |
| DRNAREA | Area that drains to a point on a stream | 0.12 | square miles |
| ELEV | Mean Basin Elevation | 1180 | feet |

| Parameter Code | Parameter Description | Value | Unit |
|-----------------------|--|--------------|-------------|
| ELEVMAX | Maximum basin elevation | 1261 | feet |
| GWHEAD | Mean basin elevation minus minimum basin elevation | 106 | feet |
| I24H100Y | Maximum 24-hour precipitation that occurs on average once in 100 years | 7.76 | inches |
| I24H10Y | Maximum 24-hour precipitation that occurs on average once in 10 years | 5.38 | inches |
| I24H25Y | Maximum 24-hour precipitation that occurs on average once in 25 years | 6.3 | inches |
| I24H50Y | Maximum 24-hour precipitation that occurs on average once in 50 years | 7.02 | inches |
| LC06AGRI | Percent agriculture computed as total of grass, pasture, and crops, NLCD classes 71, 81 and 82 | 1.153 | percent |
| LC06DEV | Percentage of land-use from NLCD 2006 classes 21-24 | 12.536 | percent |
| LC06FOREST | Percentage of forest from NLCD 2006 classes 41-43 | 85.253 | percent |
| LC06IMP | Percentage of impervious area determined from NLCD 2006 impervious dataset | 1.12 | percent |
| LC11DEV | Percentage of developed (urban) land from NLCD 2011 classes 21-24 | 13.1 | percent |
| LC11IMP | Average percentage of impervious area determined from NLCD 2011 impervious dataset | 1.49 | percent |
| MINBELEV | Minimum basin elevation | 1074 | feet |
| PCTREG1 | Percentage of drainage area located in Region 1 - Piedmont / Ridge and Valley | 100 | percent |
| PCTREG2 | Percentage of drainage area located in Region 2 - Blue Ridge | 0 | percent |
| PCTREG3 | Percentage of drainage area located in Region 3 - Sandhills | 0 | percent |
| PCTREG4 | Percentage of drainage area located in Region 4 - Coastal Plains | 0 | percent |
| PCTREG5 | Percentage of drainage area located in Region 5 - Lower Tifton Uplands | 0 | percent |

| Parameter Code | Parameter Description | Value | Unit |
|-----------------------|---|--------------|---------------|
| PRECPRIS00 | Basin average mean annual precipitation for 1971 to 2000 from PRISM | 57.2 | inches |
| RELIEF | Maximum - minimum elevation | 187 | feet |
| RRMEAN | Relief ratio defined as $(ELEV-MINBELEV)/(ELEVMAX-MINBELEV)$ | 0.569 | dimensionless |

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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Application Version: 4.19.4

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

Custom Soil Resource Report Soil Map




Map Scale: 1:12,900 if printed on A landscape (11" x 8.5") sheet.

0 150 300 600 900 Meters
0 500 1000 2000 3000 Feet


Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84


MAP LEGEND


Area of Interest (AOI)

 Area of Interest (AOI)




















Soils







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Barrow, Hall, and Jackson Counties, Georgia
 Survey Area Data: Version 18, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 19, 2022—Apr 20, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------------|----------------|
| Cc | Cartecay and Chewacla soils | 18.0 | 2.5% |
| MdD | Madison sandy loam, 10 to 15 percent slopes | 9.6 | 1.3% |
| MdE | Madison sandy loam, 15 to 25 percent slopes | 232.6 | 32.5% |
| MIC2 | Madison sandy clay loam, 6 to 10 percent slopes, moderately eroded | 19.6 | 2.7% |
| MID2 | Madison sandy clay loam, 10 to 15 percent slopes, moderately eroded | 225.0 | 31.5% |
| MuF | Musella cobbly clay loam, 15 to 35 percent slopes | 54.2 | 7.6% |
| PaE | Pacolet sandy loam, 15 to 25 percent slopes | 25.7 | 3.6% |
| PTF | Pacolet-Tallapoosa association, steep | 66.0 | 9.2% |
| To | Toccoa soils | 63.6 | 8.9% |
| W | Water | 0.8 | 0.1% |
| Totals for Area of Interest | | 715.0 | 100.0% |

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different

Custom Soil Resource Report

management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Appendix D

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 1

PRE-DEV BASIN A

| <u>Description</u> | <u>A</u> | <u>B</u> | <u>C</u> | <u>Totals</u> |
|------------------------------------|----------------|---------------|---------------|------------------|
| Sheet Flow | | | | |
| Manning's n-value | = 0.150 | 0.011 | 0.011 | |
| Flow length (ft) | = 150.0 | 0.0 | 0.0 | |
| Two-year 24-hr precip. (in) | = 2.20 | 0.00 | 0.00 | |
| Land slope (%) | = 5.00 | 0.00 | 0.00 | |
| Travel Time (min) | = 11.33 | + 0.00 | + 0.00 | = 11.33 |
| Shallow Concentrated Flow | | | | |
| Flow length (ft) | = 1600.00 | 0.00 | 0.00 | |
| Watercourse slope (%) | = 2.00 | 0.00 | 0.00 | |
| Surface description | = Unpaved | Paved | Paved | |
| Average velocity (ft/s) | =2.28 | 0.00 | 0.00 | |
| Travel Time (min) | = 11.69 | + 0.00 | + 0.00 | = 11.69 |
| Channel Flow | | | | |
| X sectional flow area (sqft) | = 0.00 | 0.00 | 0.00 | |
| Wetted perimeter (ft) | = 0.00 | 0.00 | 0.00 | |
| Channel slope (%) | = 0.00 | 0.00 | 0.00 | |
| Manning's n-value | = 0.015 | 0.015 | 0.015 | |
| Velocity (ft/s) | =0.00 | 0.00 | 0.00 | |
| Flow length (ft) | ({0})0.0 | 0.0 | 0.0 | |
| Travel Time (min) | = 0.00 | + 0.00 | + 0.00 | = 0.00 |
| Total Travel Time, Tc | | | | 23.00 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 2

PRE-DEV-BASIN B

| <u>Description</u> | <u>A</u> | | <u>B</u> | | <u>C</u> | | <u>Totals</u> |
|------------------------------------|----------------|----------|-------------|----------|-------------|----------|------------------|
| Sheet Flow | | | | | | | |
| Manning's n-value | = 0.240 | | 0.011 | | 0.011 | | |
| Flow length (ft) | = 300.0 | | 0.0 | | 0.0 | | |
| Two-year 24-hr precip. (in) | = 2.20 | | 0.00 | | 0.00 | | |
| Land slope (%) | = 13.00 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 19.60 | + | 0.00 | + | 0.00 | = | 19.60 |
| Shallow Concentrated Flow | | | | | | | |
| Flow length (ft) | = 260.00 | | 0.00 | | 0.00 | | |
| Watercourse slope (%) | = 12.00 | | 0.00 | | 0.00 | | |
| Surface description | = Unpaved | | Paved | | Paved | | |
| Average velocity (ft/s) | =5.59 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 0.78 | + | 0.00 | + | 0.00 | = | 0.78 |
| Channel Flow | | | | | | | |
| X sectional flow area (sqft) | = 4.00 | | 0.00 | | 0.00 | | |
| Wetted perimeter (ft) | = 8.00 | | 0.00 | | 0.00 | | |
| Channel slope (%) | = 10.00 | | 0.00 | | 0.00 | | |
| Manning's n-value | = 0.025 | | 0.015 | | 0.015 | | |
| Velocity (ft/s) | =11.85 | | 0.00 | | 0.00 | | |
| Flow length (ft) | 500.0 | | 0.0 | | 0.0 | | |
| Travel Time (min) | = 0.70 | + | 0.00 | + | 0.00 | = | 0.70 |
| Total Travel Time, Tc | | | | | | | 21.10 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 3

PRE-DEV-BASIN C

| <u>Description</u> | <u>A</u> | | <u>B</u> | | <u>C</u> | | <u>Totals</u> |
|------------------------------------|---------------|----------|-------------|----------|-------------|----------|------------------|
| Sheet Flow | | | | | | | |
| Manning's n-value | = 0.240 | | 0.011 | | 0.011 | | |
| Flow length (ft) | = 100.0 | | 0.0 | | 0.0 | | |
| Two-year 24-hr precip. (in) | = 2.20 | | 0.00 | | 0.00 | | |
| Land slope (%) | = 10.00 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 9.04 | + | 0.00 | + | 0.00 | = | 9.04 |
| Shallow Concentrated Flow | | | | | | | |
| Flow length (ft) | = 600.00 | | 0.00 | | 0.00 | | |
| Watercourse slope (%) | = 13.00 | | 0.00 | | 0.00 | | |
| Surface description | = Unpaved | | Paved | | Paved | | |
| Average velocity (ft/s) | =5.82 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 1.72 | + | 0.00 | + | 0.00 | = | 1.72 |
| Channel Flow | | | | | | | |
| X sectional flow area (sqft) | = 0.00 | | 0.00 | | 0.00 | | |
| Wetted perimeter (ft) | = 0.00 | | 0.00 | | 0.00 | | |
| Channel slope (%) | = 0.00 | | 0.00 | | 0.00 | | |
| Manning's n-value | = 0.015 | | 0.015 | | 0.015 | | |
| Velocity (ft/s) | =0.00 | | 0.00 | | 0.00 | | |
| Flow length (ft) | ({0})0.0 | | 0.0 | | 0.0 | | |
| Travel Time (min) | = 0.00 | + | 0.00 | + | 0.00 | = | 0.00 |
| Total Travel Time, Tc | | | | | | | 10.80 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 11

POST-DEV BASIN A

| <u>Description</u> | <u>A</u> | | <u>B</u> | | <u>C</u> | | <u>Totals</u> |
|------------------------------------|---------------|----------|-------------|----------|-------------|----------|------------------|
| Sheet Flow | | | | | | | |
| Manning's n-value | = 0.011 | | 0.011 | | 0.011 | | |
| Flow length (ft) | = 150.0 | | 0.0 | | 0.0 | | |
| Two-year 24-hr precip. (in) | = 3.89 | | 0.00 | | 0.00 | | |
| Land slope (%) | = 5.00 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 1.05 | + | 0.00 | + | 0.00 | = | 1.05 |
| Shallow Concentrated Flow | | | | | | | |
| Flow length (ft) | = 1600.00 | | 0.00 | | 0.00 | | |
| Watercourse slope (%) | = 2.00 | | 0.00 | | 0.00 | | |
| Surface description | = Paved | | Paved | | Paved | | |
| Average velocity (ft/s) | =2.87 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 9.28 | + | 0.00 | + | 0.00 | = | 9.28 |
| Channel Flow | | | | | | | |
| X sectional flow area (sqft) | = 2.00 | | 0.00 | | 0.00 | | |
| Wetted perimeter (ft) | = 4.00 | | 0.00 | | 0.00 | | |
| Channel slope (%) | = 5.00 | | 0.00 | | 0.00 | | |
| Manning's n-value | = 0.015 | | 0.015 | | 0.015 | | |
| Velocity (ft/s) | =13.96 | | 0.00 | | 0.00 | | |
| Flow length (ft) | ({0})0.0 | | 0.0 | | 0.0 | | |
| Travel Time (min) | = 0.00 | + | 0.00 | + | 0.00 | = | 0.00 |
| Total Travel Time, Tc | | | | | | | 10.30 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 12

POST-DEV BASIN A (BYPASS)

| <u>Description</u> | <u>A</u> | <u>B</u> | <u>C</u> | <u>Totals</u> |
|------------------------------------|---------------|---------------|---------------|------------------|
| Sheet Flow | | | | |
| Manning's n-value | = 0.150 | 0.011 | 0.011 | |
| Flow length (ft) | = 150.0 | 0.0 | 0.0 | |
| Two-year 24-hr precip. (in) | = 3.89 | 0.00 | 0.00 | |
| Land slope (%) | = 5.00 | 0.00 | 0.00 | |
| Travel Time (min) | = 8.52 | + 0.00 | + 0.00 | = 8.52 |
| Shallow Concentrated Flow | | | | |
| Flow length (ft) | = 1350.00 | 0.00 | 0.00 | |
| Watercourse slope (%) | = 2.00 | 0.00 | 0.00 | |
| Surface description | = Unpaved | Paved | Paved | |
| Average velocity (ft/s) | =2.28 | 0.00 | 0.00 | |
| Travel Time (min) | = 9.86 | + 0.00 | + 0.00 | = 9.86 |
| Channel Flow | | | | |
| X sectional flow area (sqft) | = 2.00 | 0.00 | 0.00 | |
| Wetted perimeter (ft) | = 4.00 | 0.00 | 0.00 | |
| Channel slope (%) | = 10.00 | 0.00 | 0.00 | |
| Manning's n-value | = 0.150 | 0.015 | 0.015 | |
| Velocity (ft/s) | =1.97 | 0.00 | 0.00 | |
| Flow length (ft) | ({0})0.0 | 0.0 | 0.0 | |
| Travel Time (min) | = 0.00 | + 0.00 | + 0.00 | = 0.00 |
| Total Travel Time, Tc | | | | 18.40 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 14

POST-DEV BASIN C

| <u>Description</u> | <u>A</u> | | <u>B</u> | | <u>C</u> | | <u>Totals</u> | |
|------------------------------------|---------------|----------|-------------|----------|-------------|----------|---------------|-----------------|
| Sheet Flow | | | | | | | | |
| Manning's n-value | = 0.150 | | 0.011 | | 0.011 | | | |
| Flow length (ft) | = 150.0 | | 0.0 | | 0.0 | | | |
| Two-year 24-hr precip. (in) | = 3.89 | | 0.00 | | 0.00 | | | |
| Land slope (%) | = 5.00 | | 0.00 | | 0.00 | | | |
| Travel Time (min) | = 8.52 | + | 0.00 | + | 0.00 | = | 8.52 | |
| Shallow Concentrated Flow | | | | | | | | |
| Flow length (ft) | = 220.00 | | 0.00 | | 0.00 | | | |
| Watercourse slope (%) | = 5.00 | | 0.00 | | 0.00 | | | |
| Surface description | = Paved | | Paved | | Paved | | | |
| Average velocity (ft/s) | =4.55 | | 0.00 | | 0.00 | | | |
| Travel Time (min) | = 0.81 | + | 0.00 | + | 0.00 | = | 0.81 | |
| Channel Flow | | | | | | | | |
| X sectional flow area (sqft) | = 0.00 | | 0.00 | | 0.00 | | | |
| Wetted perimeter (ft) | = 0.00 | | 0.00 | | 0.00 | | | |
| Channel slope (%) | = 0.00 | | 0.00 | | 0.00 | | | |
| Manning's n-value | = 0.015 | | 0.015 | | 0.015 | | | |
| Velocity (ft/s) | =0.00 | | 0.00 | | 0.00 | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Flow length (ft) | ({0})0.0 | | 0.0 | | 0.0 | | | |
| Travel Time (min) | = 0.00 | + | 0.00 | + | 0.00 | = | 0.00 | |
| Total Travel Time, Tc | | | | | | | = | 9.30 min |

Appendix E

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

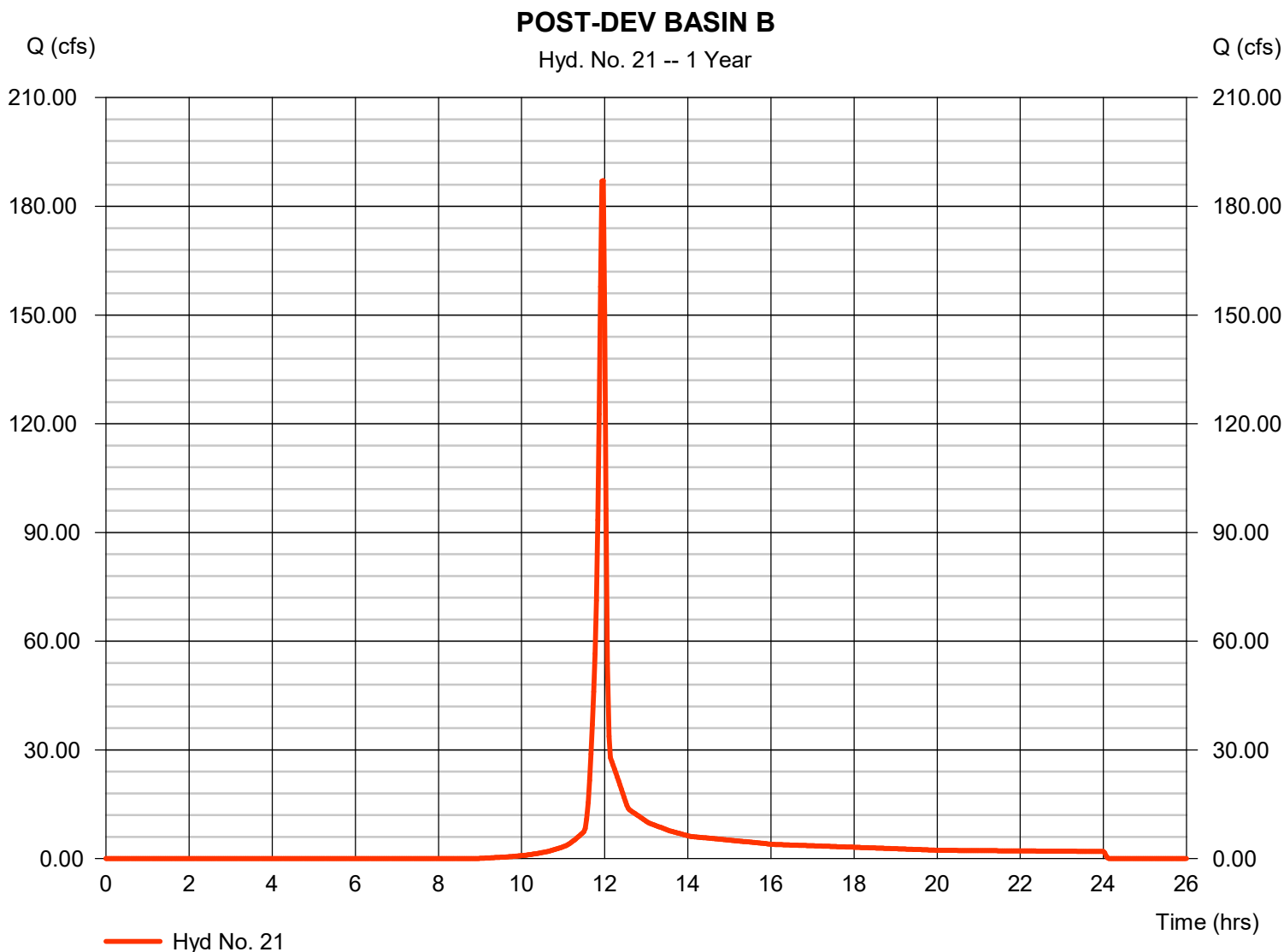
Wednesday, 02 / 28 / 2024

Hyd. No. 21

POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 187.09 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 377,378 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 3.51 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440



Hydrograph Report

Hyd. No. 22

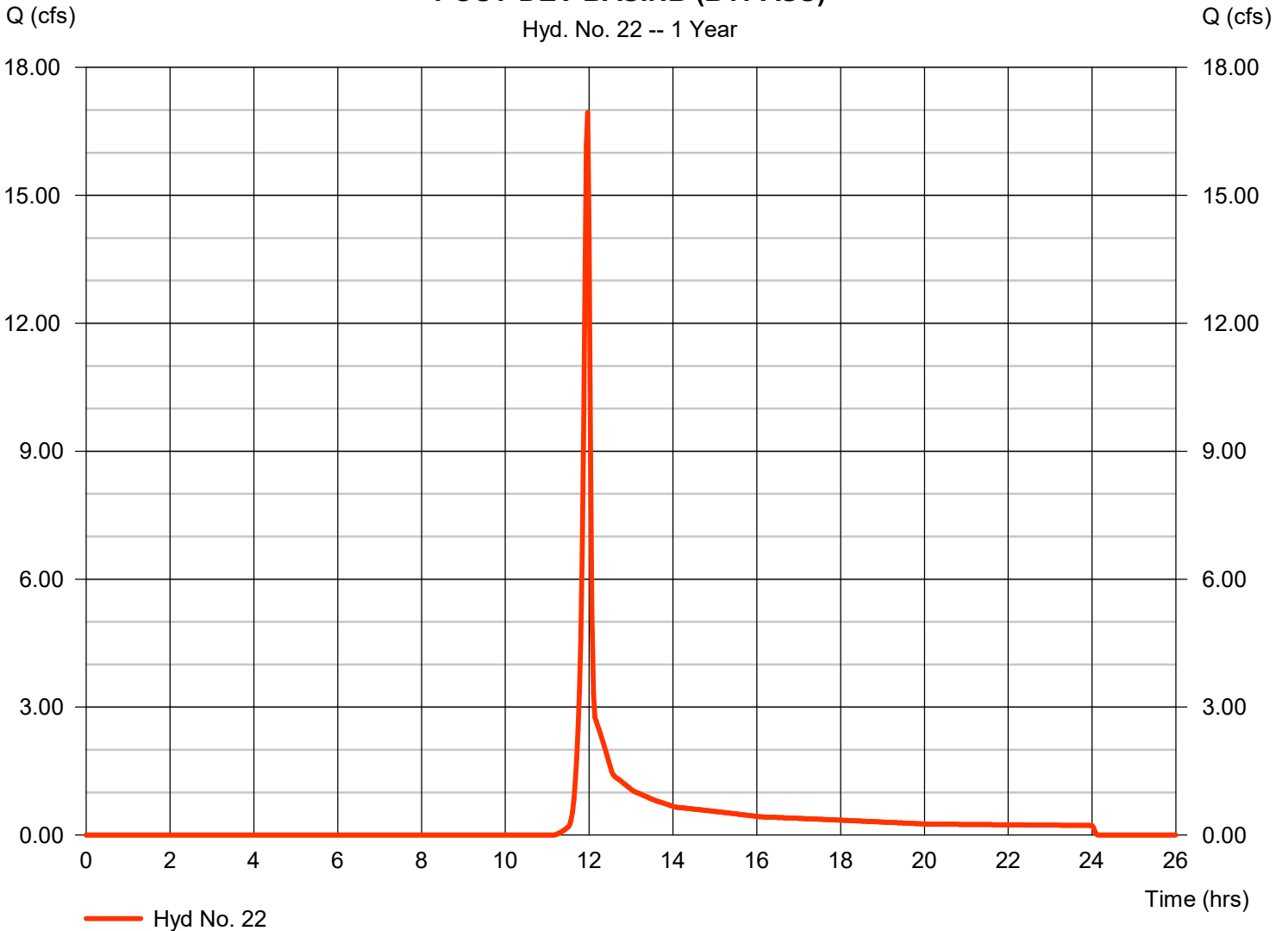
POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 16.94 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 34,172 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 3.51 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900

POST-DEV BASINB (BYPASS)

Hyd. No. 22 -- 1 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 23

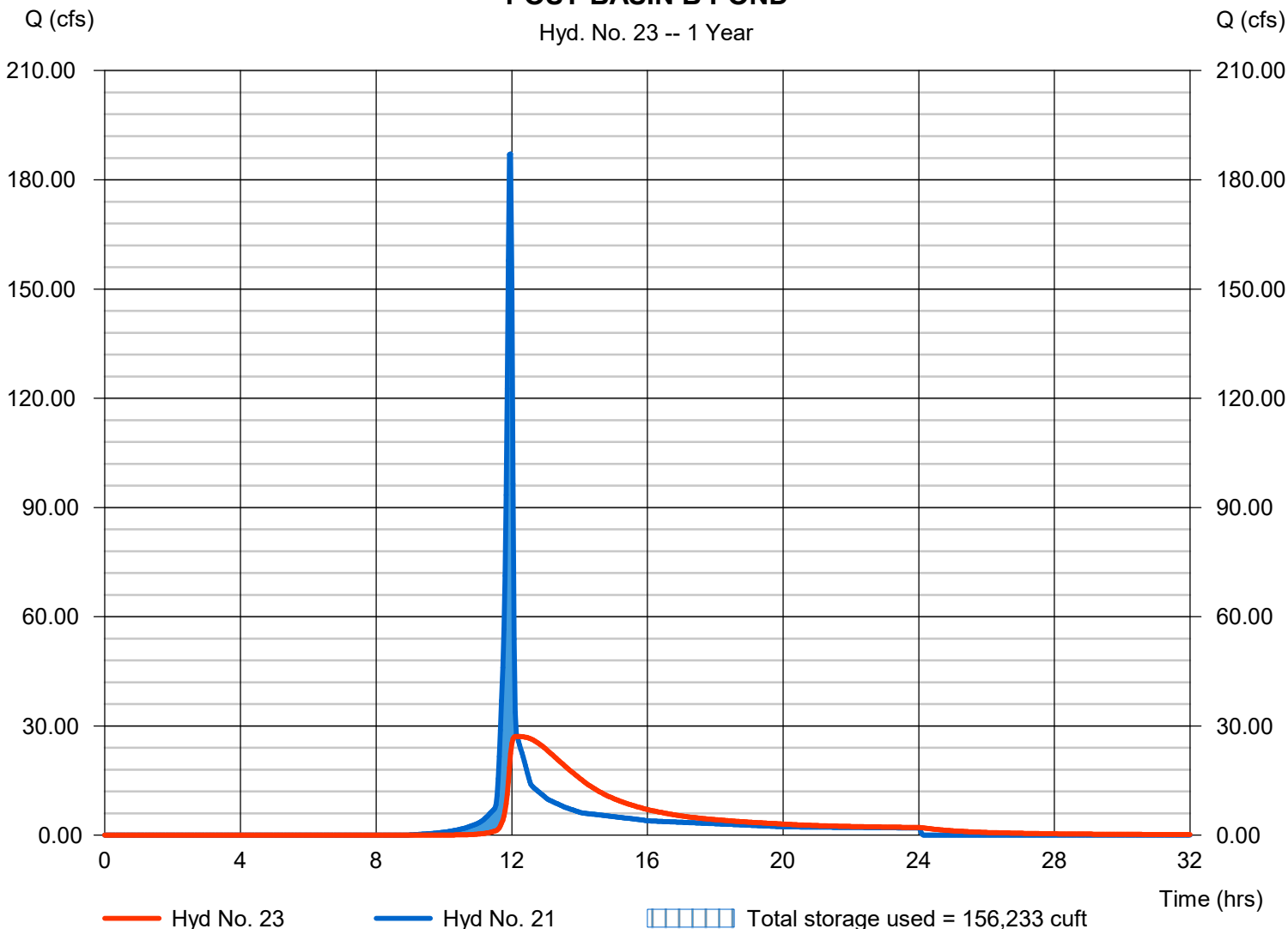
POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 27.08 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 12.17 hrs |
| Time interval | = 2 min | Hyd. volume | = 377,329 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1083.43 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 156,233 cuft |

Storage Indication method used.

POST-BASIN B POND

Hyd. No. 23 -- 1 Year



Pond No. 4 - WET POND 2

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 1080.00 ft

Stage / Storage Table

| Stage (ft) | Elevation (ft) | Contour area (sqft) | Incr. Storage (cuft) | Total storage (cuft) |
|------------|----------------|---------------------|----------------------|----------------------|
| 0.00 | 1080.00 | 40,453 | 0 | 0 |
| 1.00 | 1081.00 | 43,362 | 41,895 | 41,895 |
| 2.00 | 1082.00 | 46,333 | 44,835 | 86,730 |
| 3.00 | 1083.00 | 49,368 | 47,838 | 134,567 |
| 4.00 | 1084.00 | 52,465 | 50,904 | 185,471 |
| 5.00 | 1085.00 | 55,624 | 54,031 | 239,502 |
| 6.00 | 1086.00 | 62,132 | 58,842 | 298,345 |
| 7.00 | 1087.00 | 68,890 | 65,475 | 363,820 |
| 8.00 | 1088.00 | 75,899 | 72,359 | 436,179 |
| 9.00 | 1089.00 | 83,159 | 79,494 | 515,672 |

Culvert / Orifice Structures

| | [A] | [B] | [C] | [PrfRsr] |
|-----------------|-----------|------|------|----------|
| Rise (in) | = 42.00 | 0.00 | 0.00 | 0.00 |
| Span (in) | = 42.00 | 0.00 | 0.00 | 0.00 |
| No. Barrels | = 1 | 0 | 0 | 0 |
| Invert El. (ft) | = 1080.00 | 0.00 | 0.00 | 0.00 |
| Length (ft) | = 20.00 | 0.00 | 0.00 | 0.00 |
| Slope (%) | = 1.00 | 0.00 | 0.00 | n/a |
| N-Value | = .013 | .013 | .013 | n/a |
| Orifice Coeff. | = 0.60 | 0.60 | 0.60 | 0.60 |
| Multi-Stage | = n/a | No | No | No |

Weir Structures

| | [A] | [B] | [C] | [D] |
|----------------|-----------|---------------|------|---------|
| Crest Len (ft) | Inactive | Inactive | 0.00 | 35.00 |
| Crest El. (ft) | = 1087.00 | 1083.50 | 0.00 | 1088.50 |
| Weir Coeff. | = 3.33 | 3.33 | 3.33 | 3.33 |
| Weir Type | = 1 | Rect | --- | Ciplti |
| Multi-Stage | = Yes | Yes | No | No |
| Exfil.(in/hr) | = 0.000 | (by Wet area) | | |
| TW Elev. (ft) | = 0.00 | | | |

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

| Stage ft | Storage cuft | Elevation ft | Civ A cfs | Civ B cfs | Civ C cfs | PrfRsr cfs | Wr A cfs | Wr B cfs | Wr C cfs | Wr D cfs | Exfil cfs | User cfs | Total cfs |
|----------|--------------|--------------|-----------|-----------|-----------|------------|----------|----------|----------|----------|-----------|----------|-----------|
| 0.00 | 0 | 1080.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 0.000 |
| 1.00 | 41,895 | 1081.00 | 6.26 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 6.256 |
| 2.00 | 86,730 | 1082.00 | 16.11 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 16.11 |
| 3.00 | 134,567 | 1083.00 | 24.98 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 24.98 |
| 4.00 | 185,471 | 1084.00 | 50.79 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 50.79 |
| 5.00 | 239,502 | 1085.00 | 79.15 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 79.15 |
| 6.00 | 298,345 | 1086.00 | 95.49 ic | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 95.49 |
| 7.00 | 363,820 | 1087.00 | 106.13 ic | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 106.13 |
| 8.00 | 436,179 | 1088.00 | 115.80 ic | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 115.80 |
| 9.00 | 515,672 | 1089.00 | 124.72 ic | --- | --- | --- | 0.00 | 0.00 | --- | 41.21 | --- | --- | 165.93 |

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

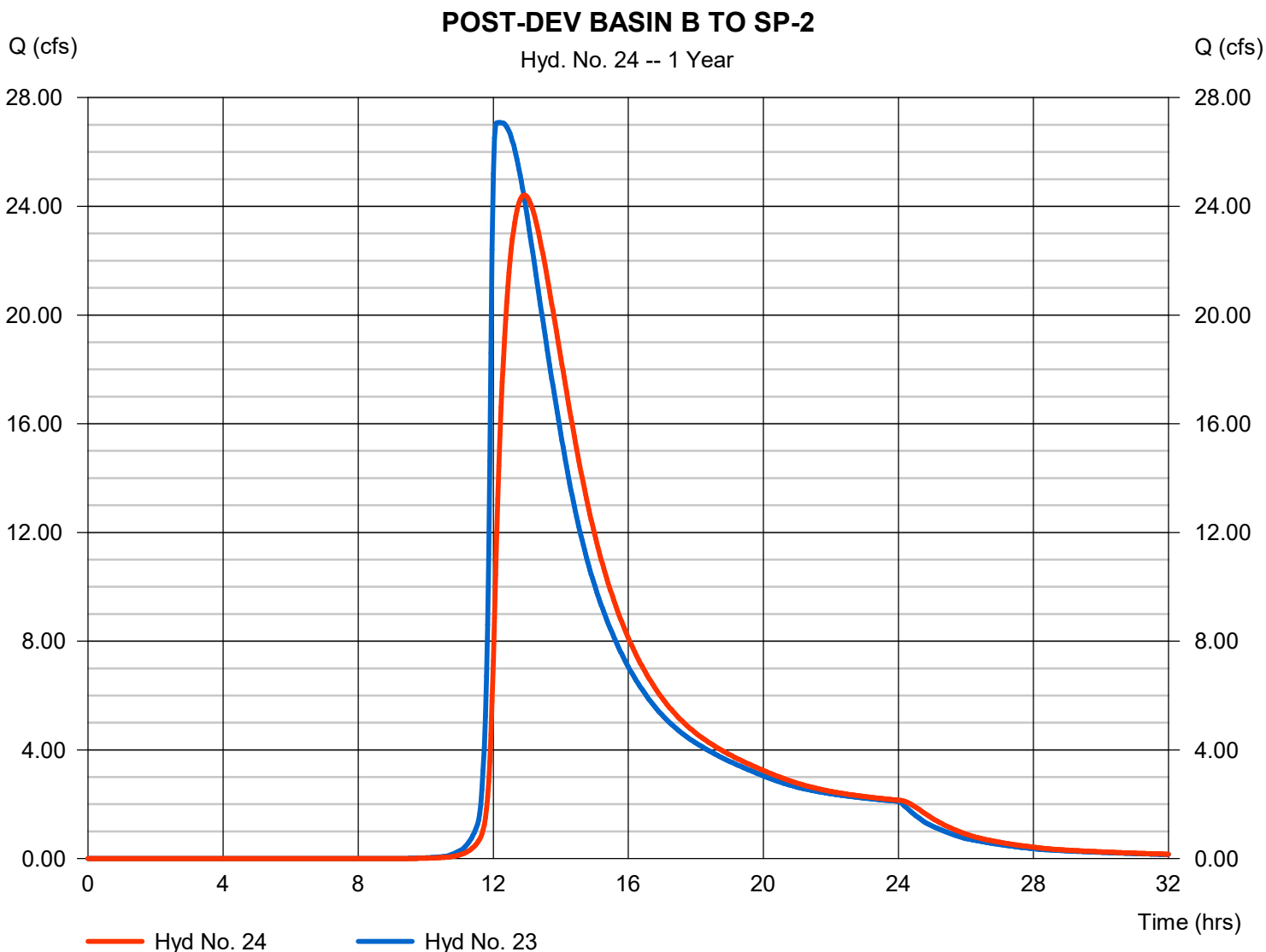
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 24.41 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 12.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 376,886 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 0.78 ft/s | Routing coeff. | = 0.0887 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

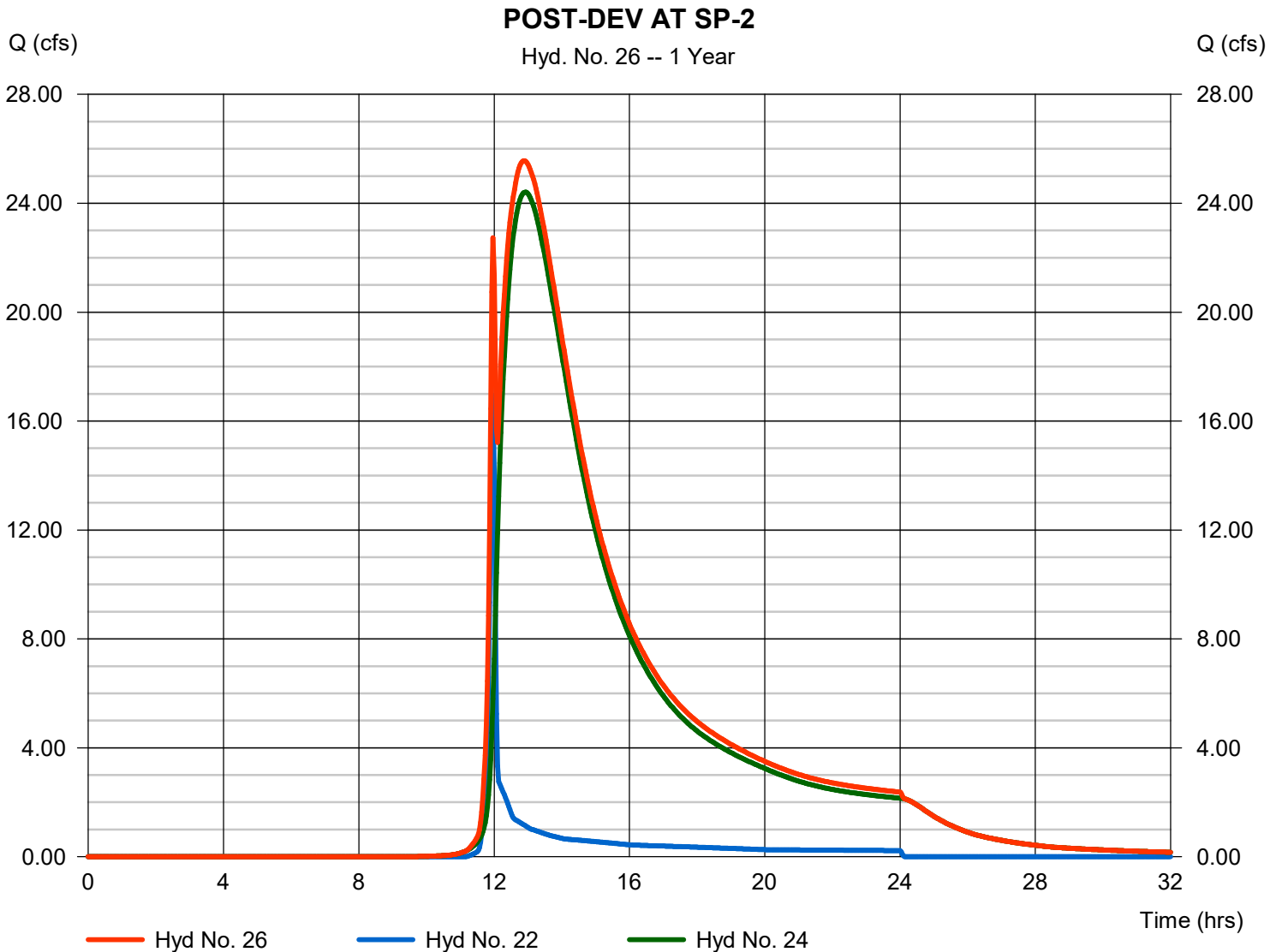
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 1 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 25.56 cfs
Time to peak = 12.90 hrs
Hyd. volume = 411,058 cuft
Contrib. drain. area = 9.900 ac



Hydrograph Report

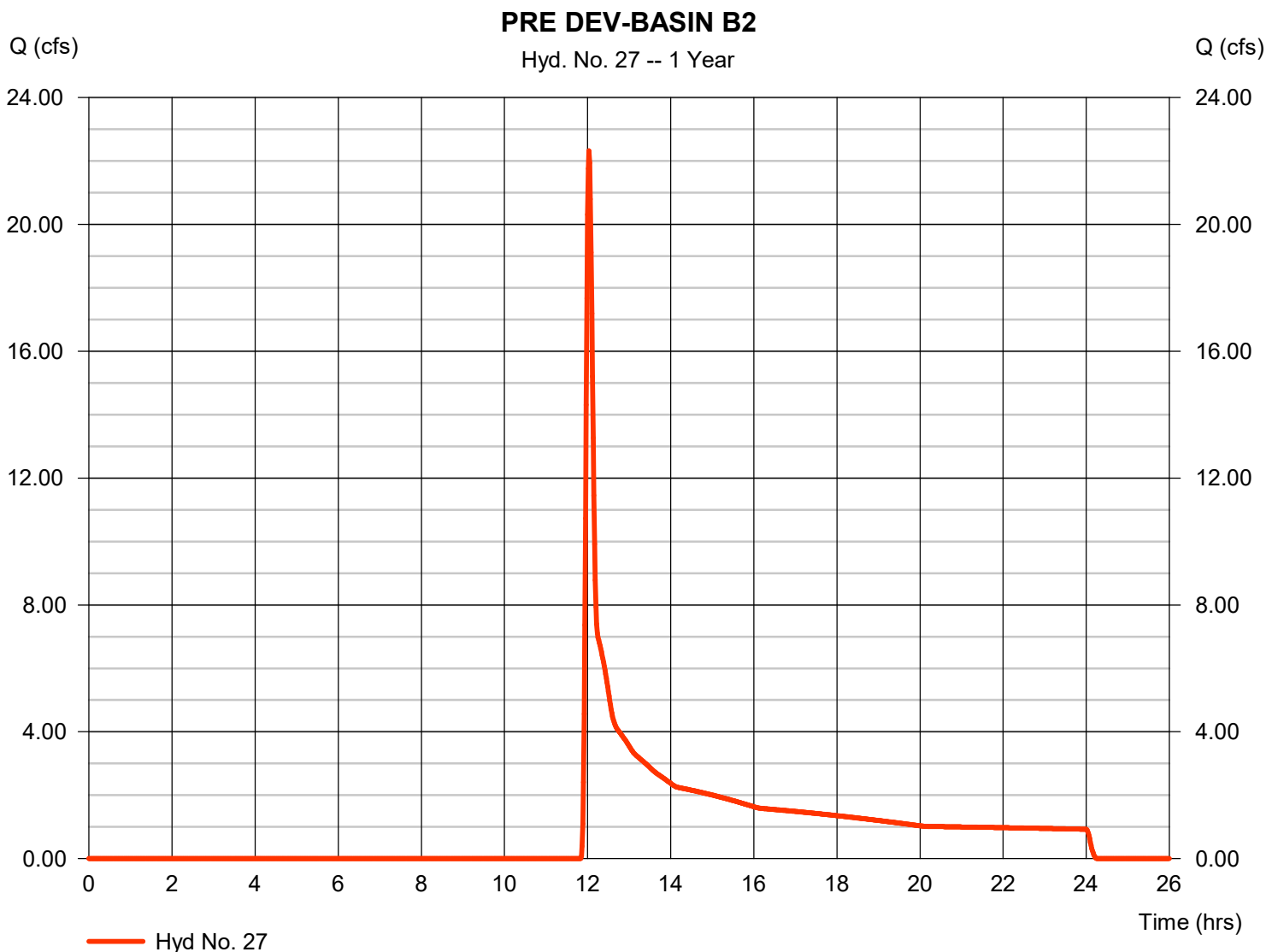
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 22.32 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 12.03 hrs |
| Time interval | = 1 min | Hyd. volume | = 88,707 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 3.51 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

POST-DEV BASIN B

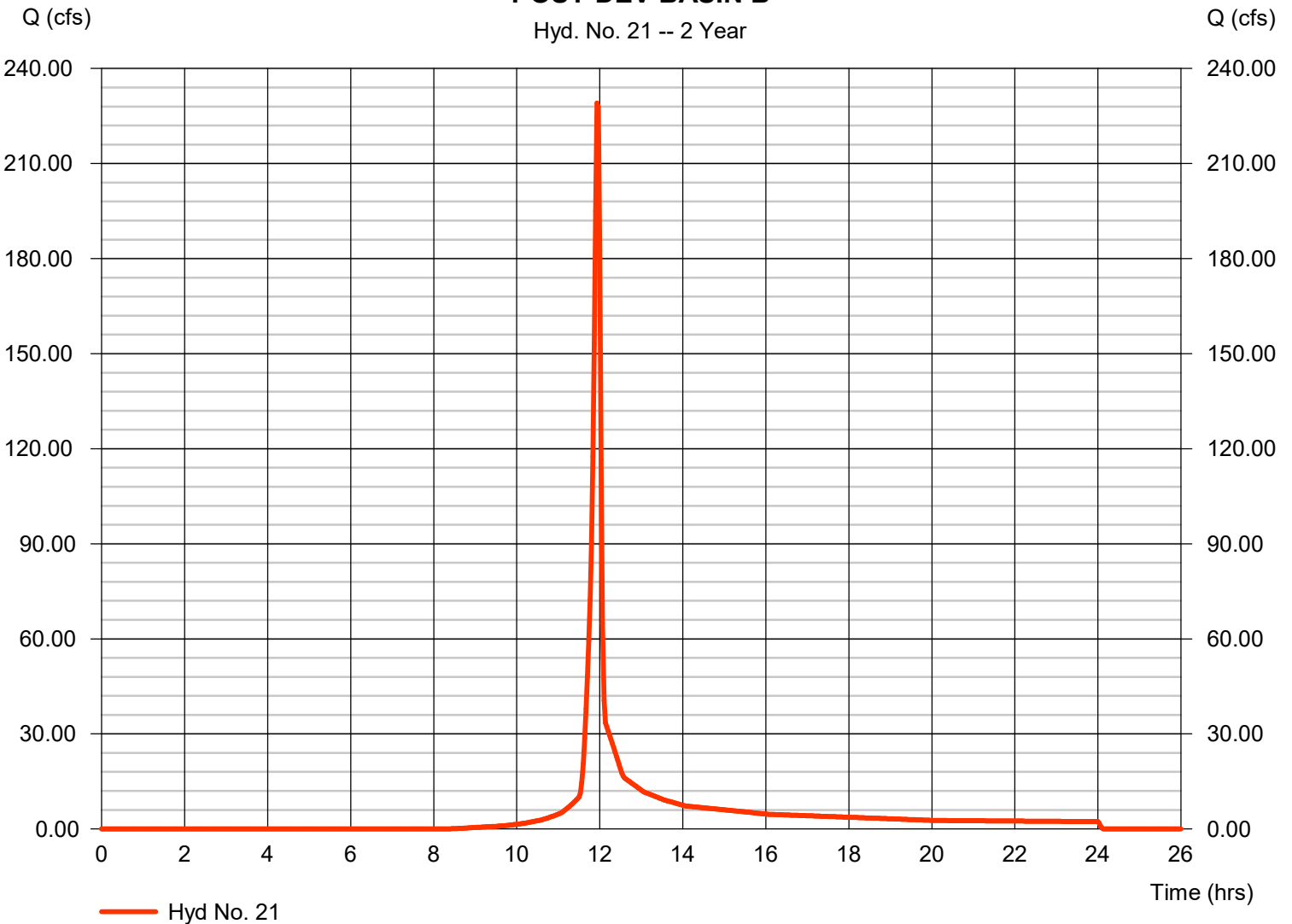
Hydrograph type = SCS Runoff
Storm frequency = 2 yrs
Time interval = 2 min
Drainage area = 67.440 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 3.97 in
Storm duration = 24 hrs

Peak discharge = 229.10 cfs
Time to peak = 11.93 hrs
Hyd. volume = 462,892 cuft
Curve number = 80*
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 2 Year



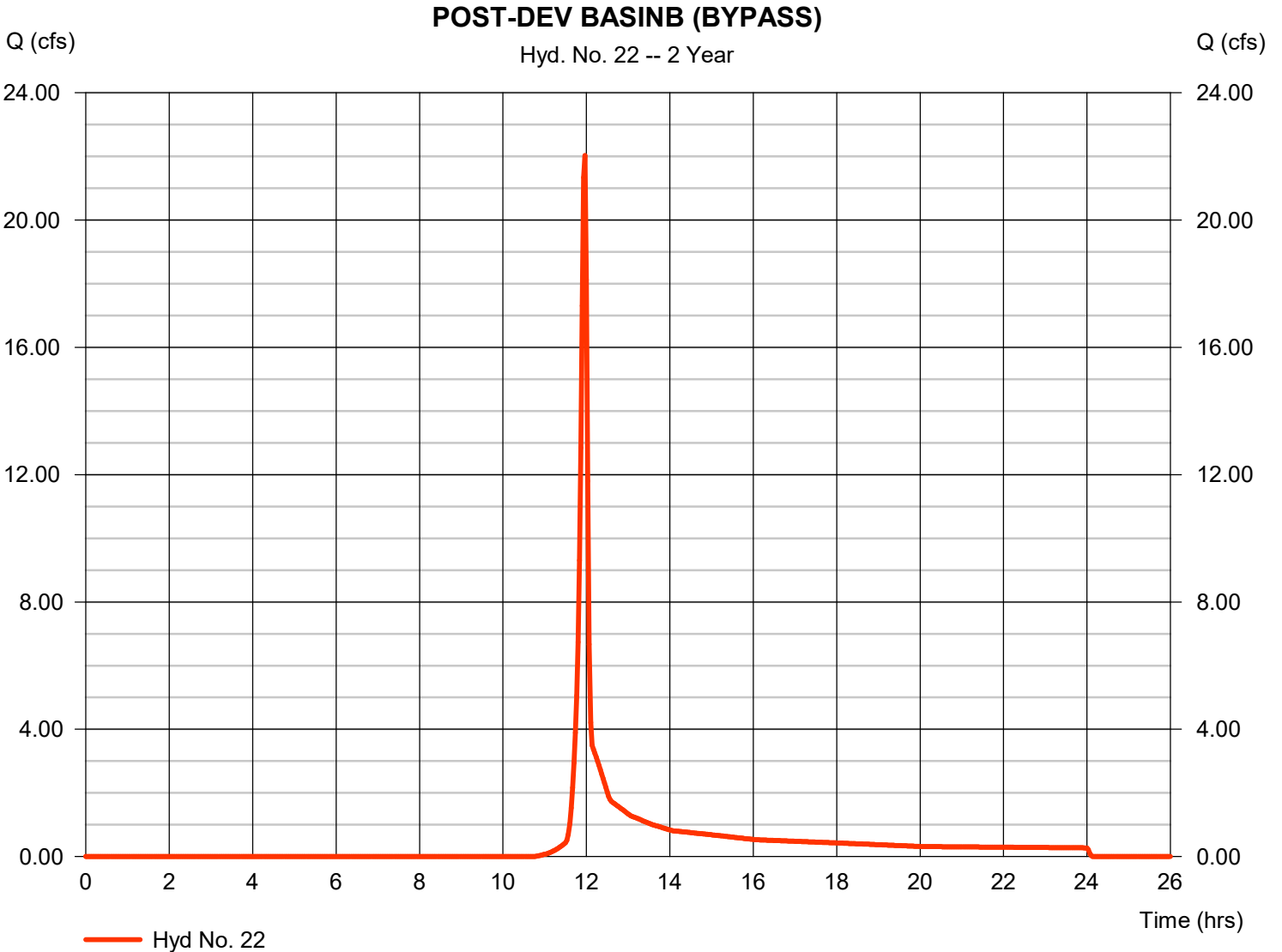
Hydrograph Report

Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 22.03 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 44,125 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 3.97 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

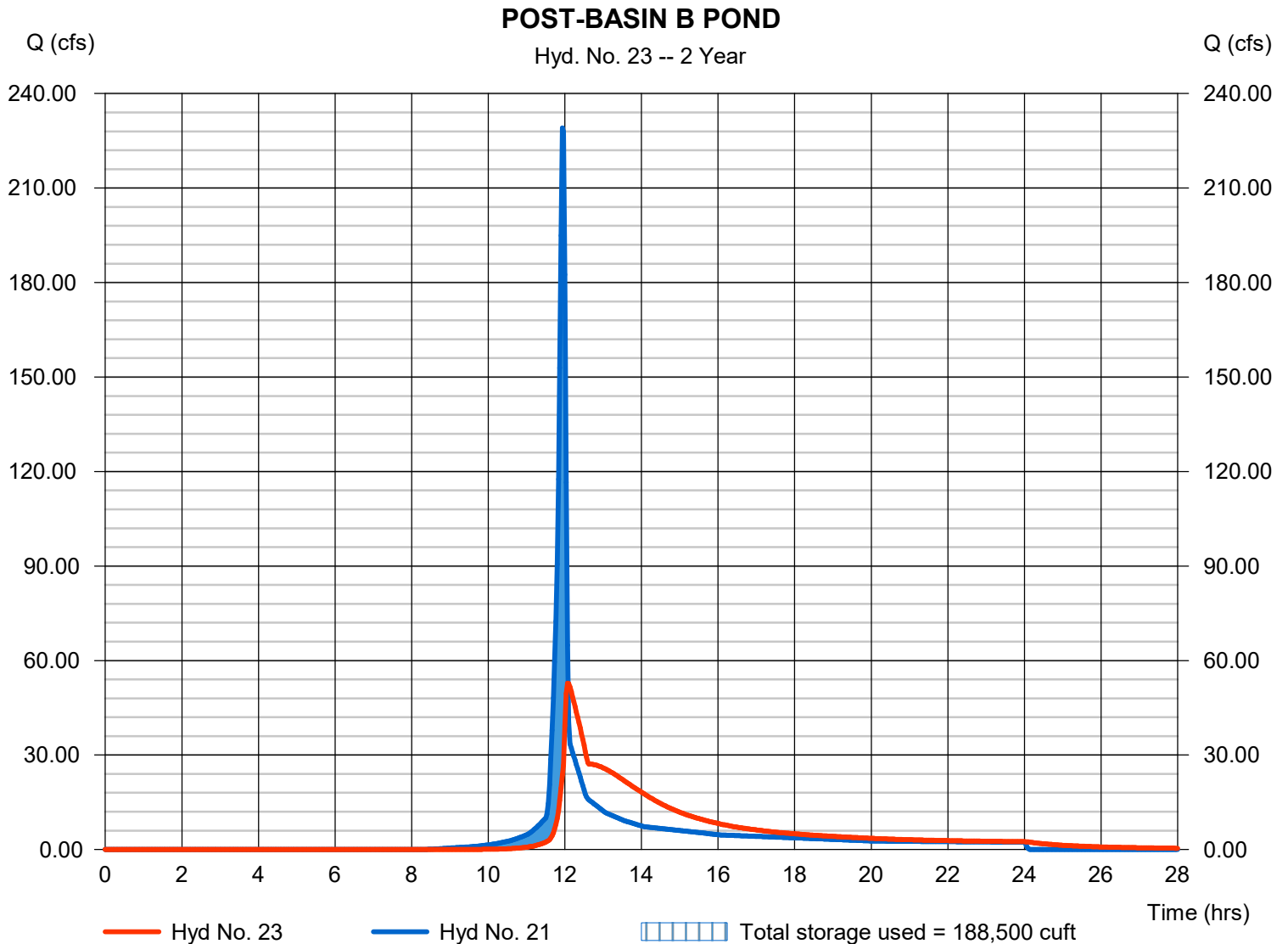
Wednesday, 02 / 28 / 2024

Hyd. No. 23

POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 52.76 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 462,843 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1084.06 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 188,500 cuft |

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

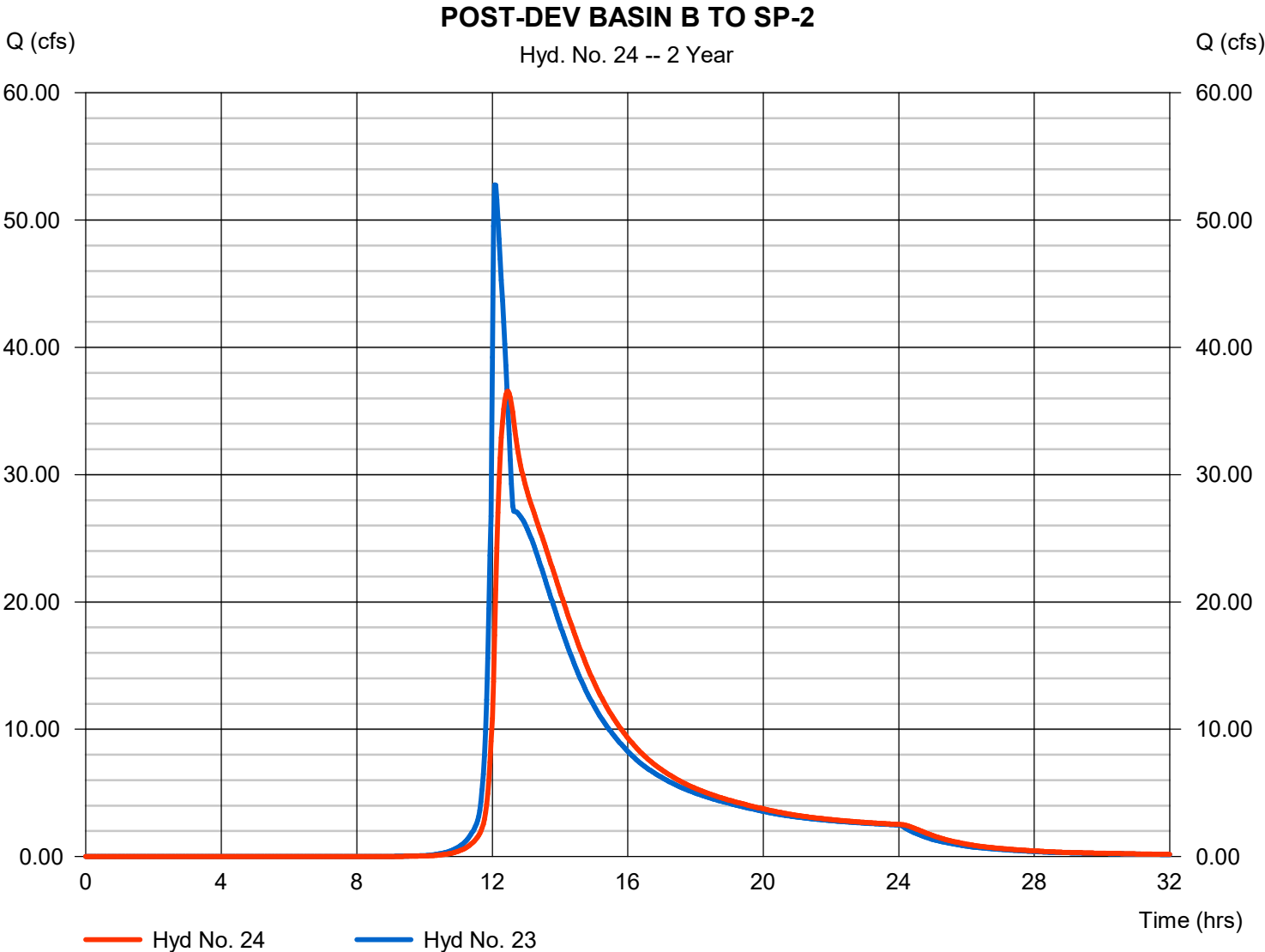
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 36.54 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 12.47 hrs |
| Time interval | = 2 min | Hyd. volume | = 462,400 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 0.90 ft/s | Routing coeff. | = 0.1019 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

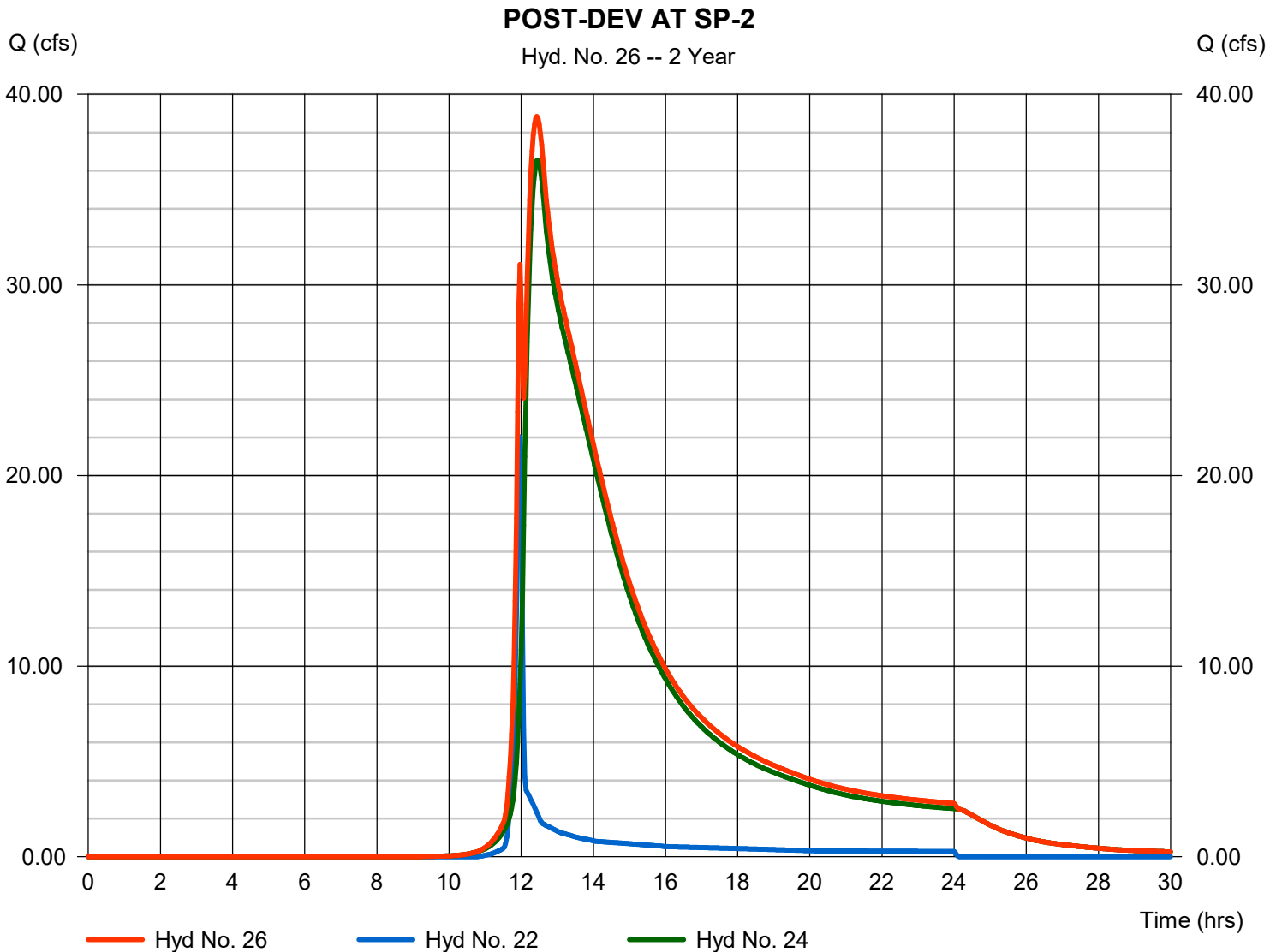
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 38.84 cfs
Time to peak = 12.43 hrs
Hyd. volume = 506,525 cuft
Contrib. drain. area = 9.900 ac



Hydrograph Report

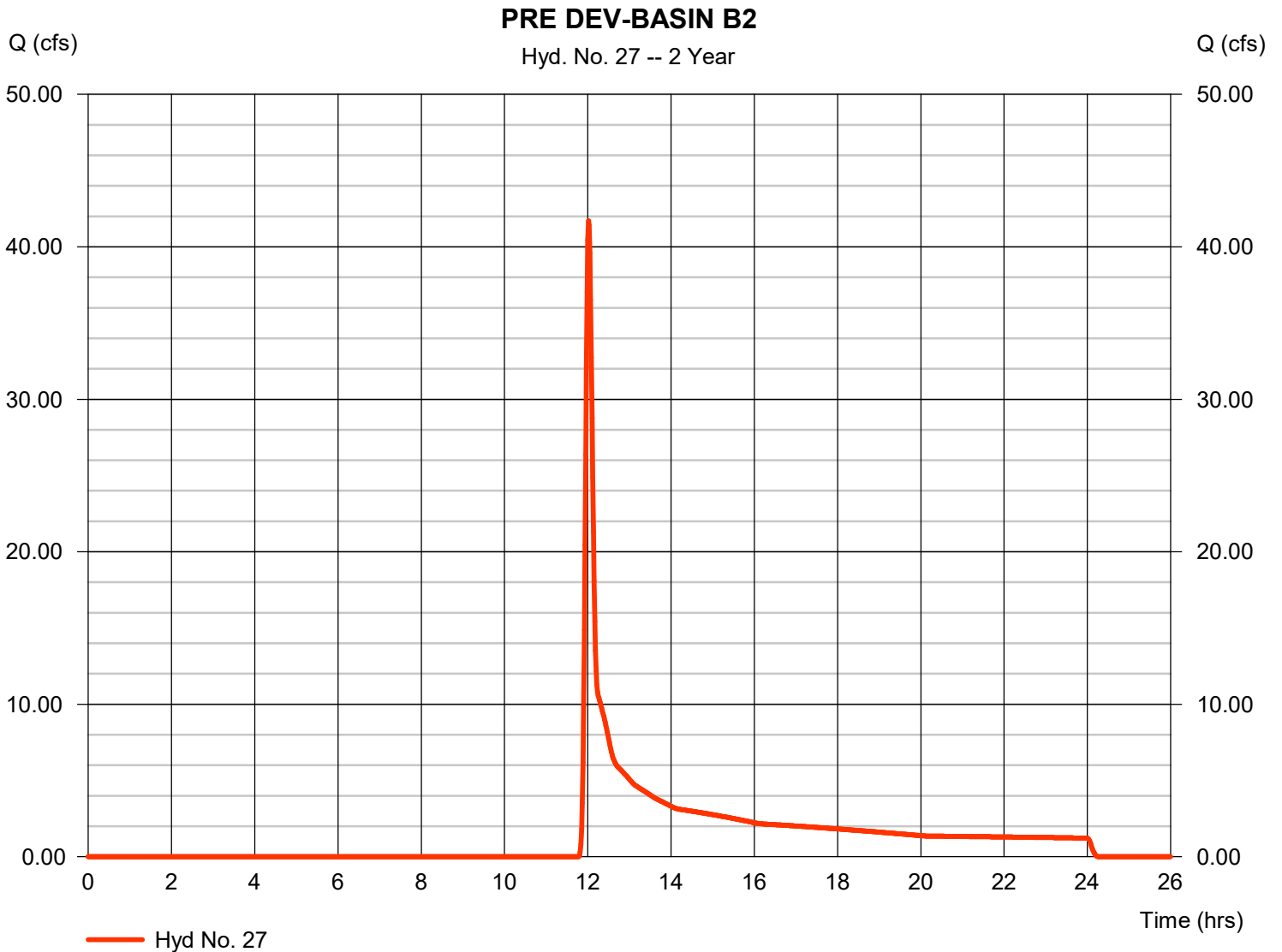
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 41.71 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 12.02 hrs |
| Time interval | = 1 min | Hyd. volume | = 131,594 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 3.97 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

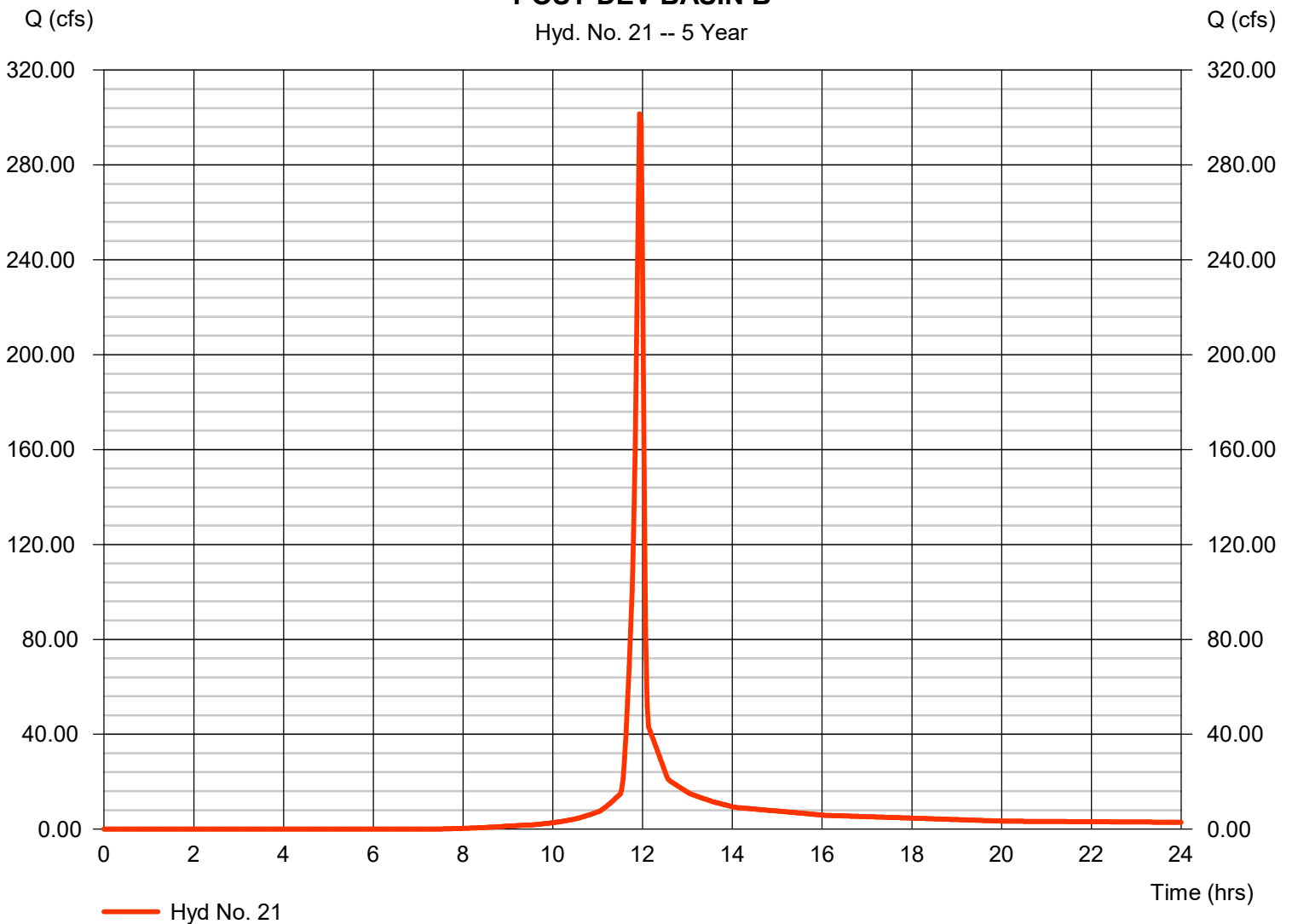
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 301.57 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 612,163 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 4.74 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 5 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 22

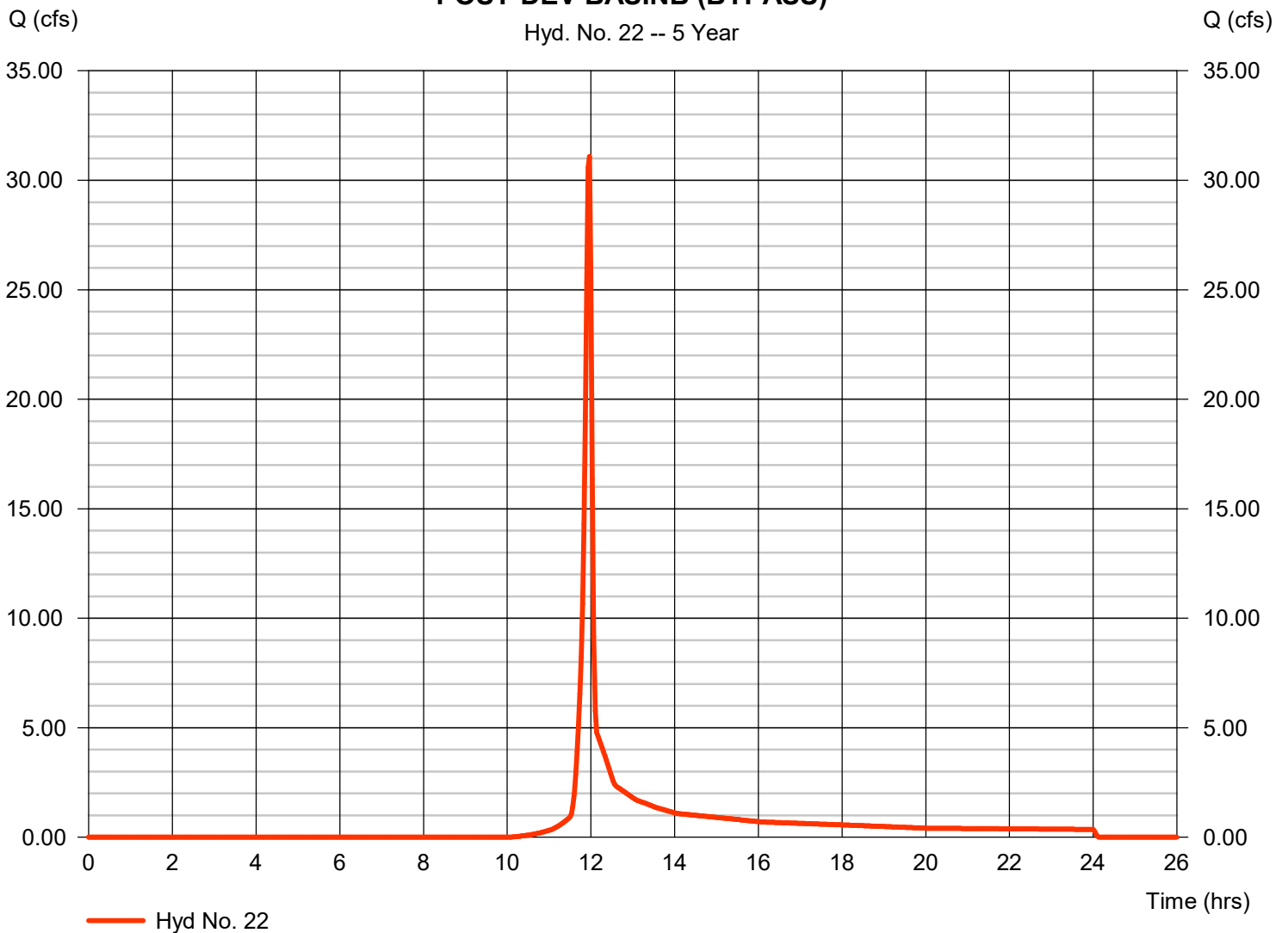
POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 31.08 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 62,183 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 4.74 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900

POST-DEV BASINB (BYPASS)

Hyd. No. 22 -- 5 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

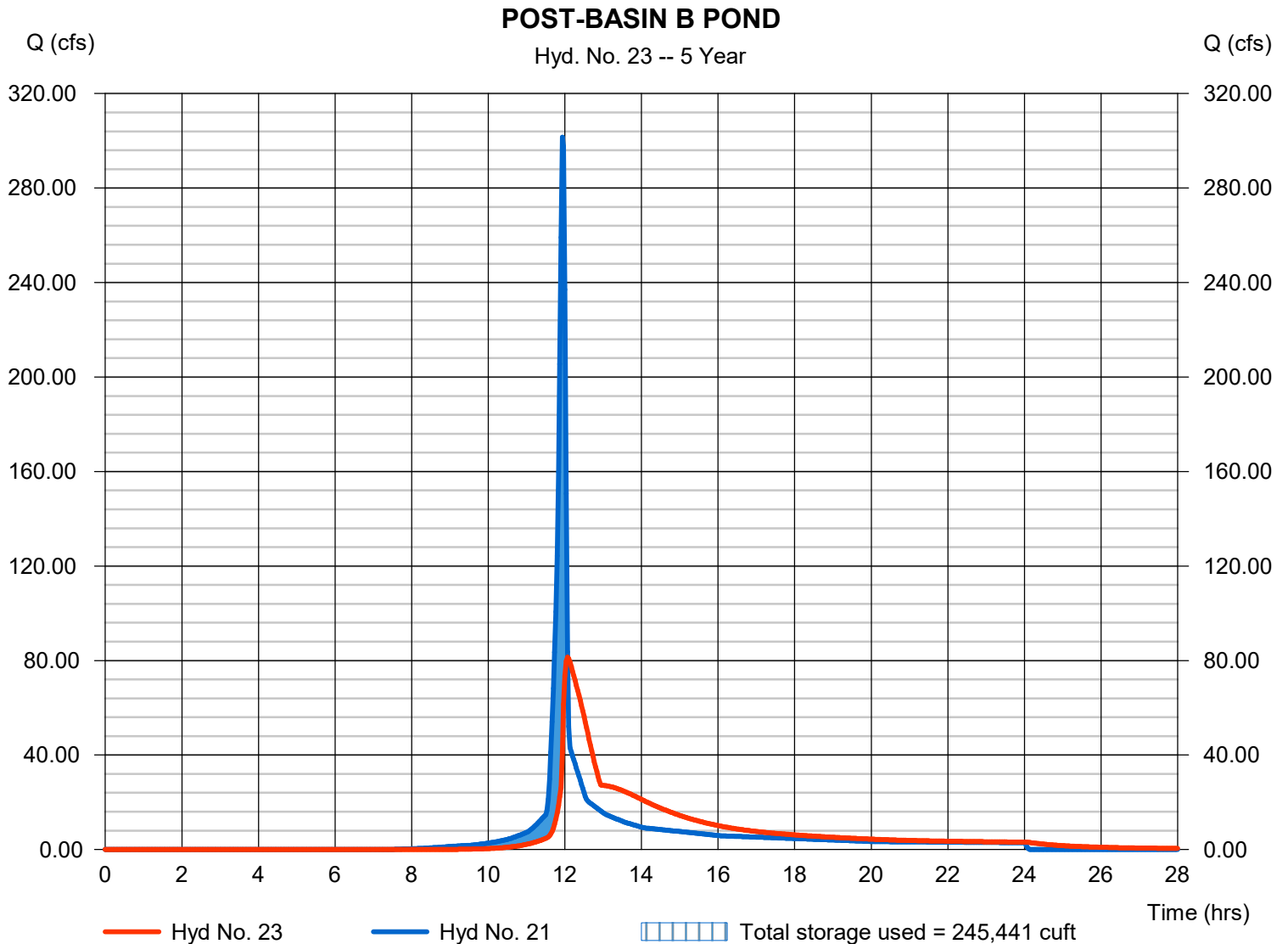
Wednesday, 02 / 28 / 2024

Hyd. No. 23

POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 81.47 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 612,112 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1085.10 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 245,441 cuft |

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

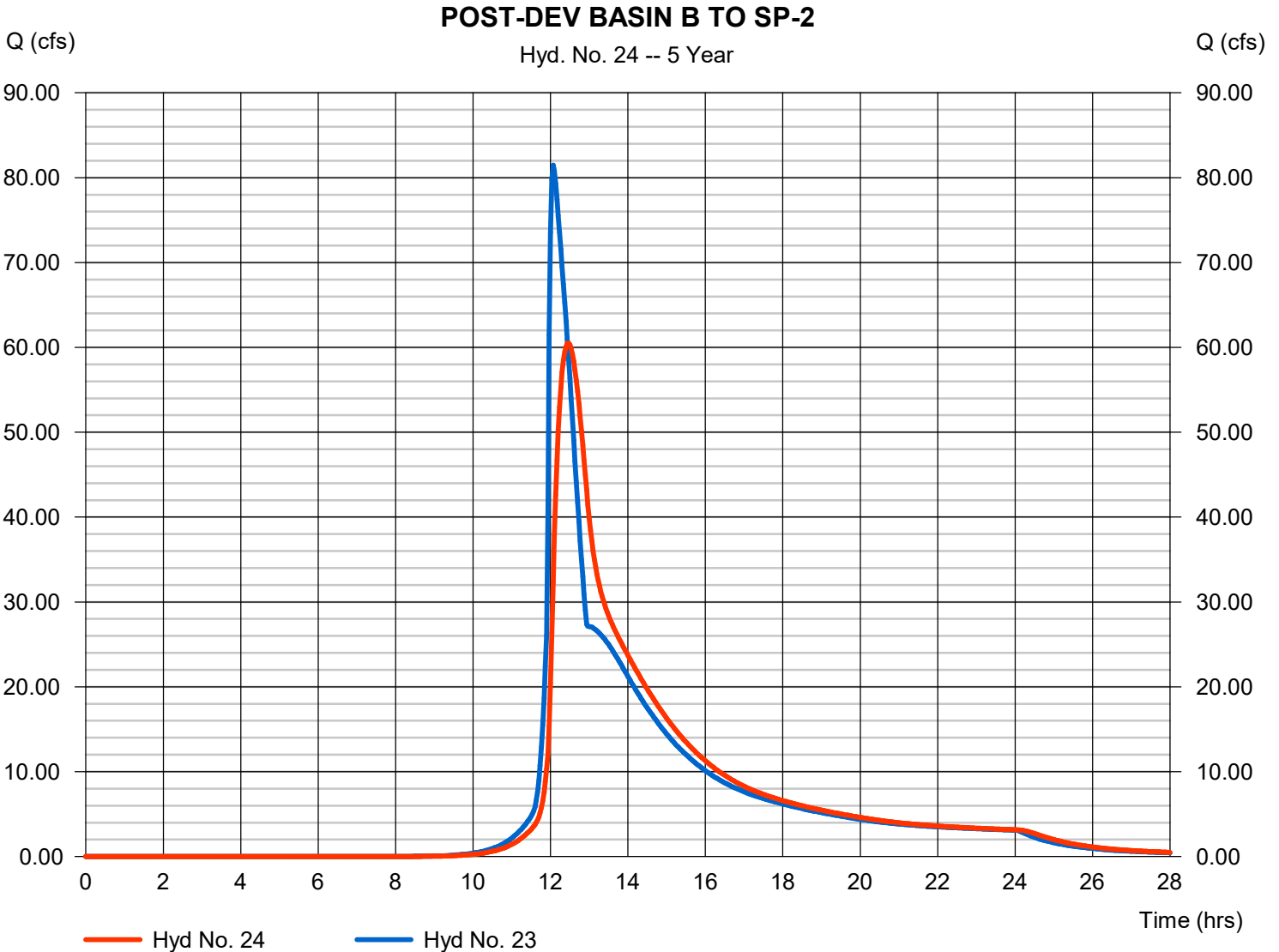
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 60.51 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 12.47 hrs |
| Time interval | = 2 min | Hyd. volume | = 611,670 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.00 ft/s | Routing coeff. | = 0.1115 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

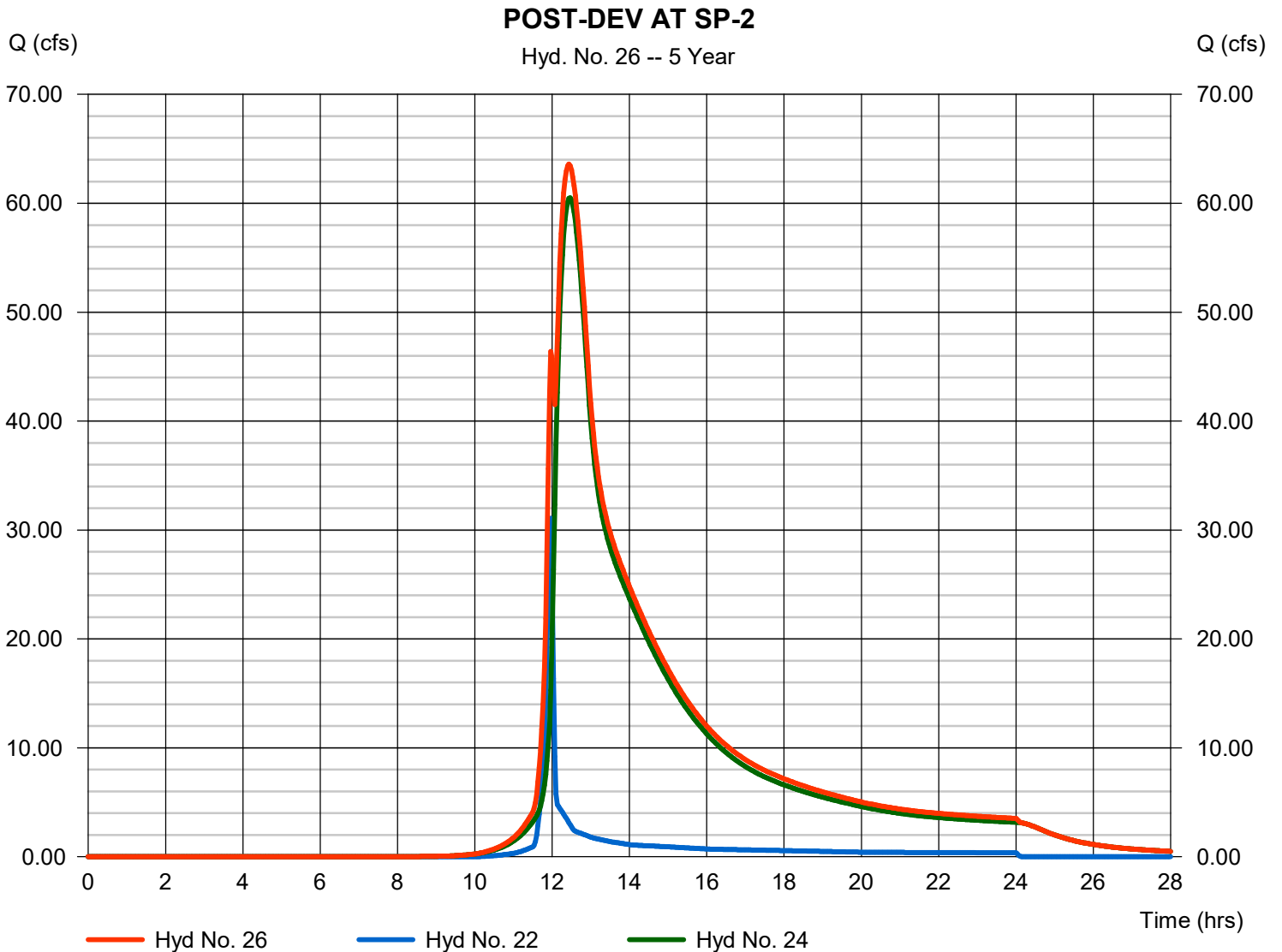
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 5 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 63.59 cfs
Time to peak = 12.43 hrs
Hyd. volume = 673,852 cuft
Contrib. drain. area = 9.900 ac

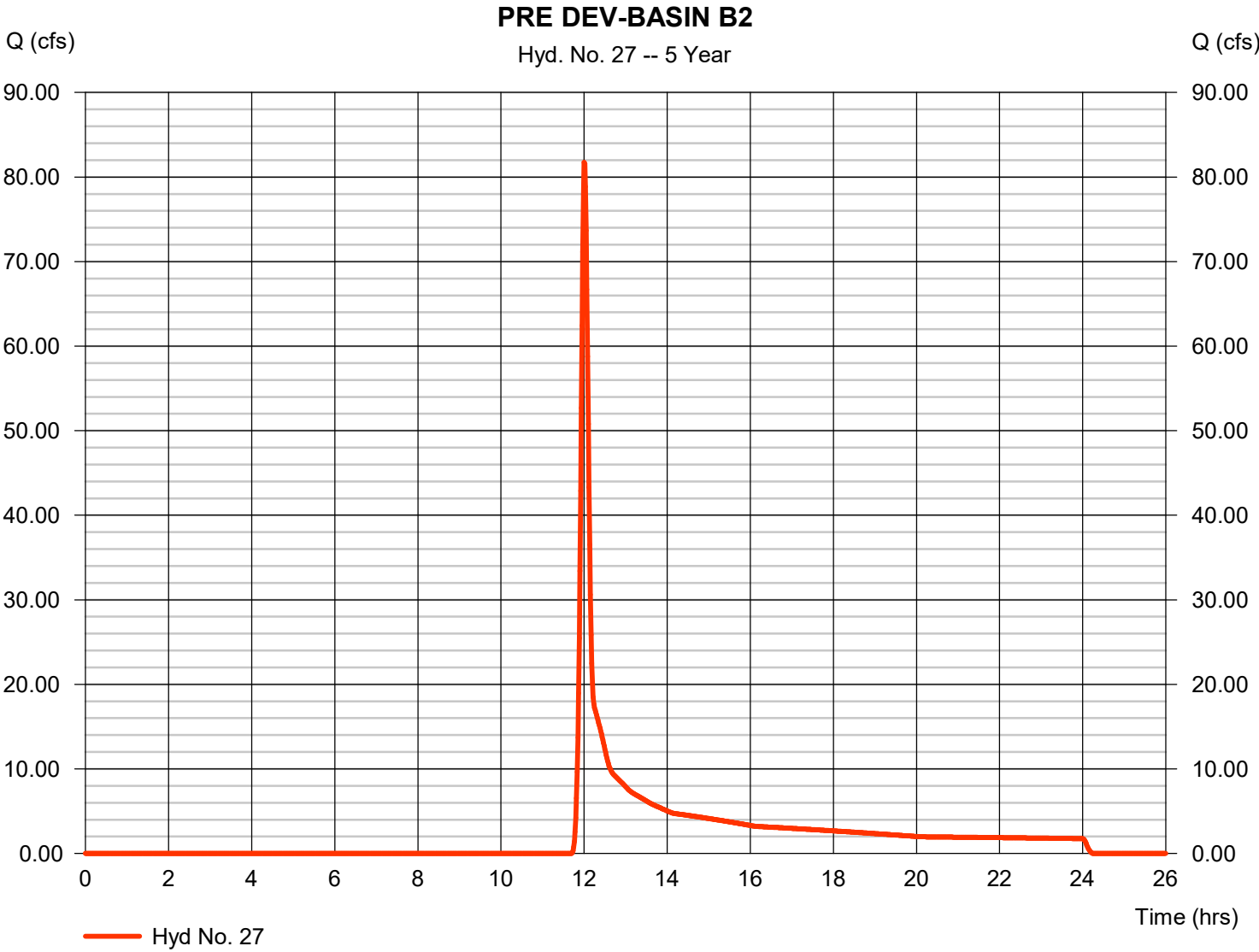


Hydrograph Report

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 81.73 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 12.00 hrs |
| Time interval | = 1 min | Hyd. volume | = 216,884 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 4.74 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

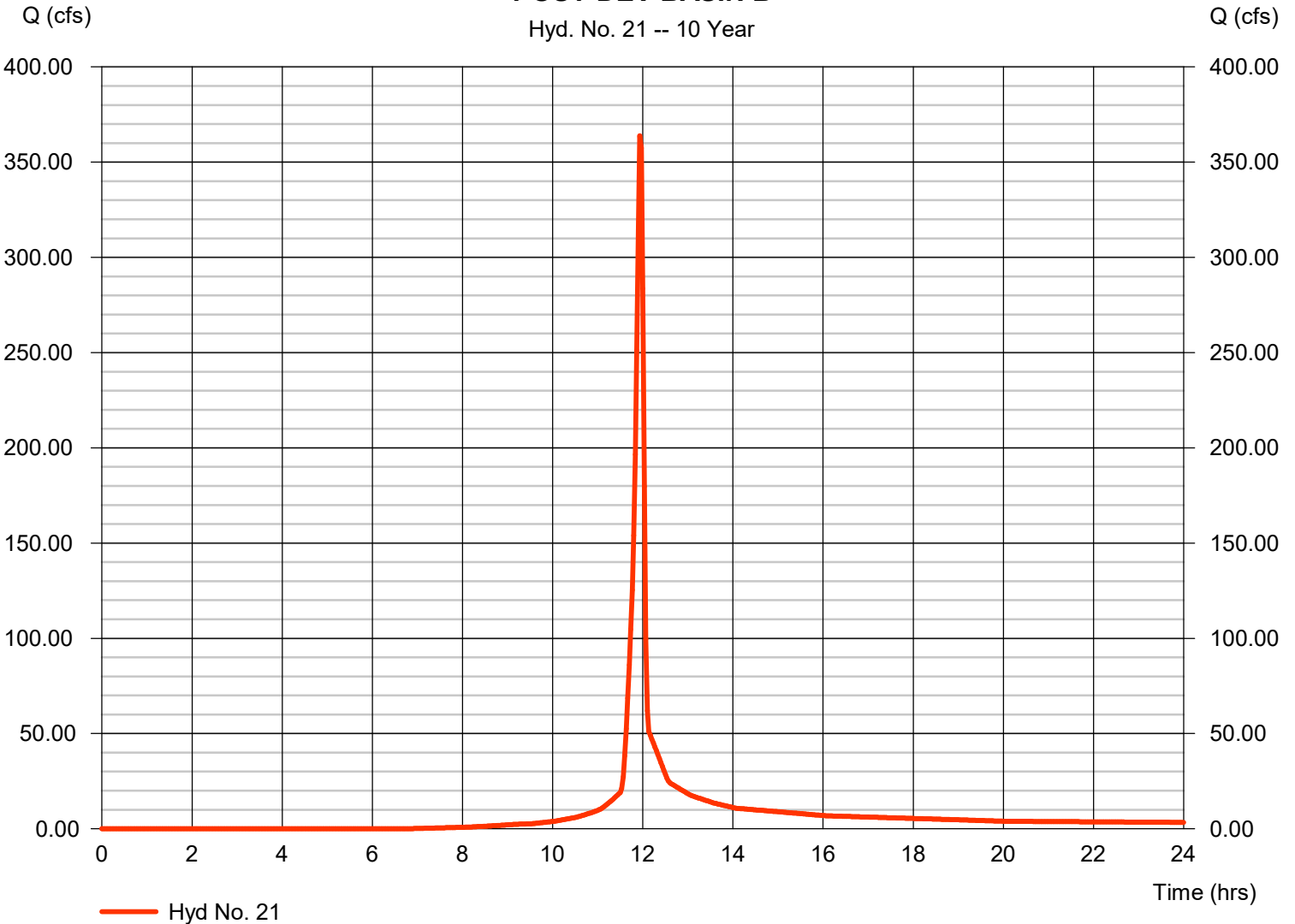
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 363.85 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 742,624 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 5.39 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 10 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

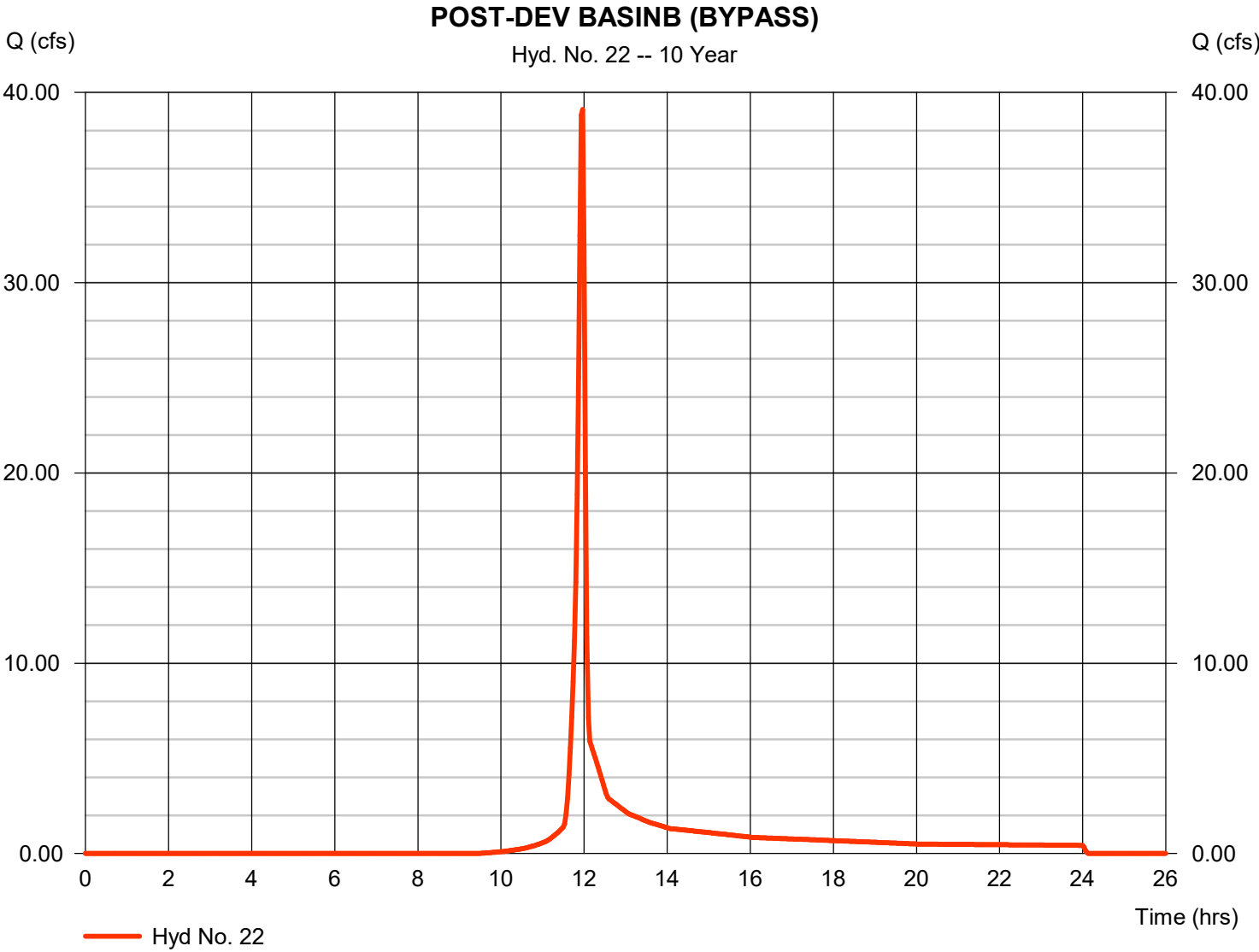
Wednesday, 02 / 28 / 2024

Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 39.11 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 78,498 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 5.39 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

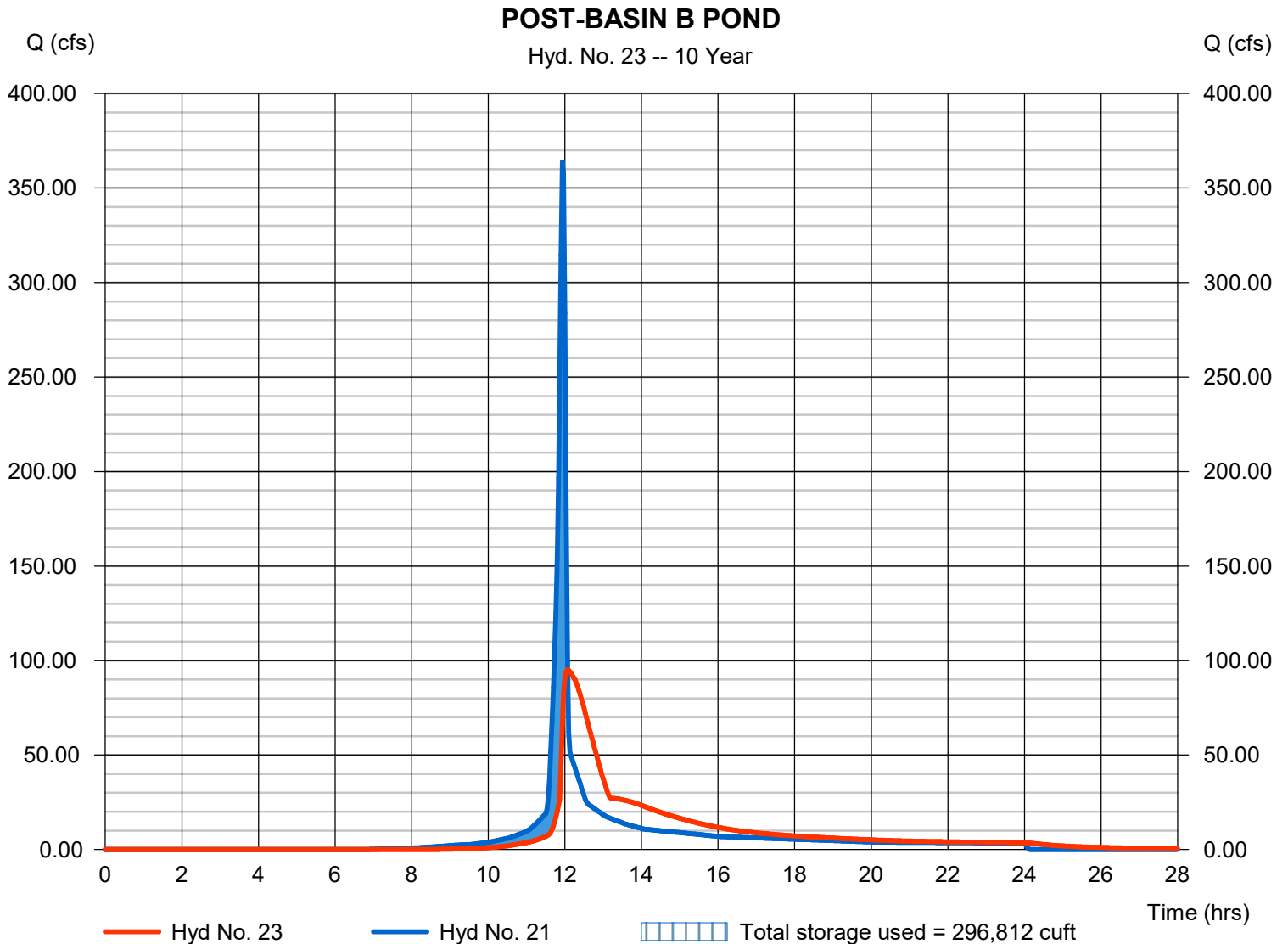
Wednesday, 02 / 28 / 2024

Hyd. No. 23

POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 95.20 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 742,573 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1085.97 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 296,812 cuft |

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 24

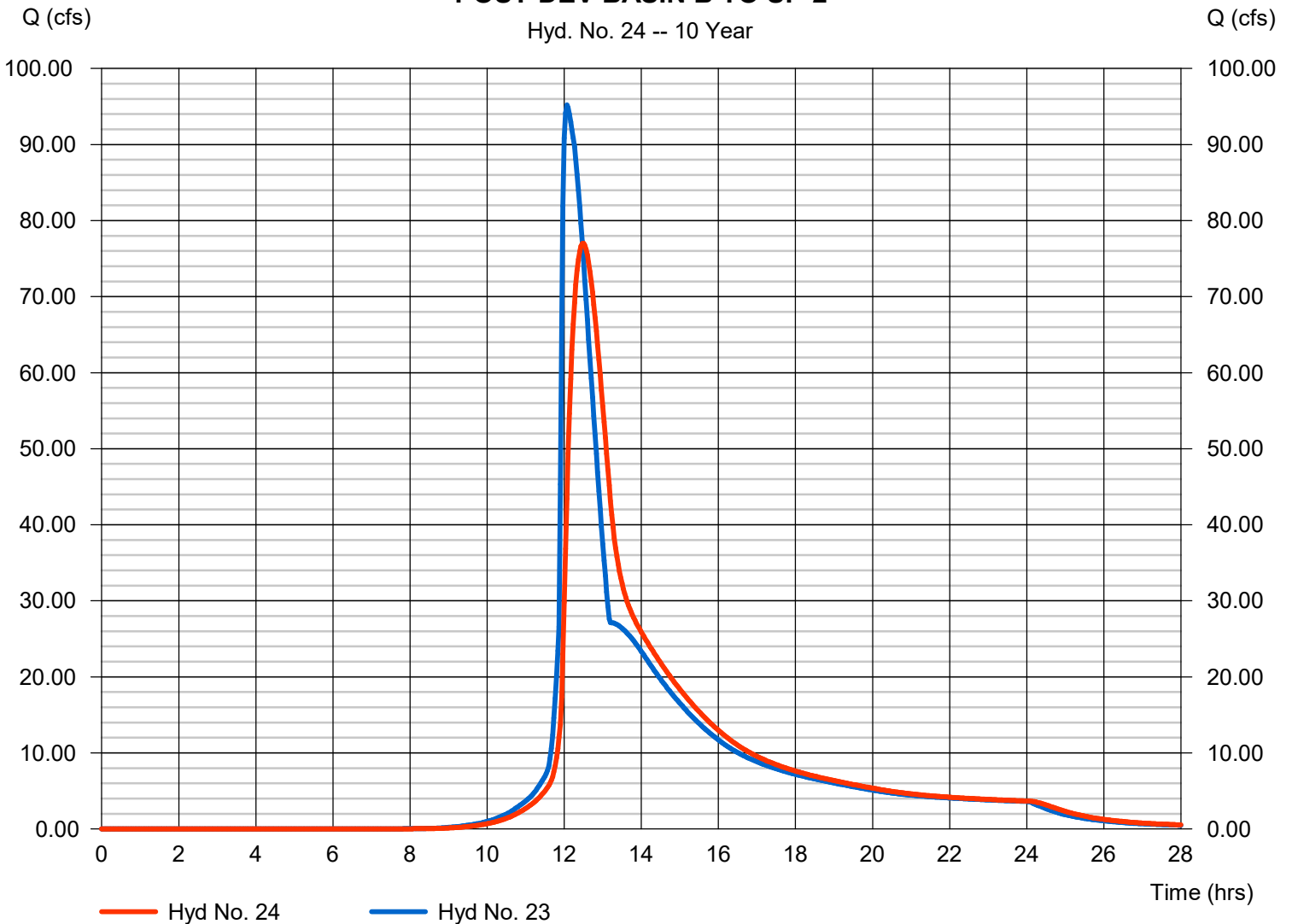
POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 77.02 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 12.50 hrs |
| Time interval | = 2 min | Hyd. volume | = 742,131 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.03 ft/s | Routing coeff. | = 0.1152 |

Modified Att-Kin routing method used.

POST-DEV BASIN B TO SP-2

Hyd. No. 24 -- 10 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

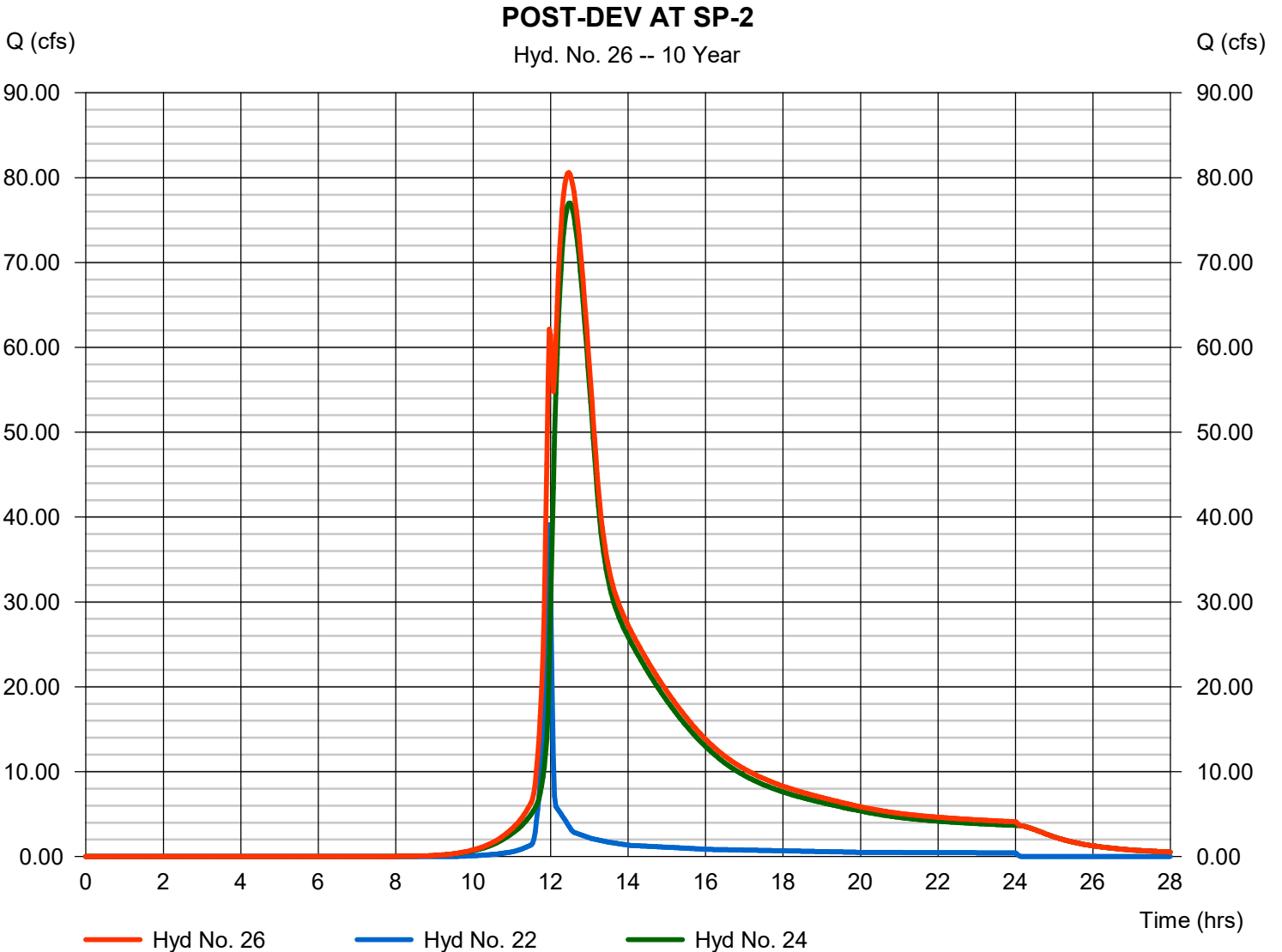
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 80.59 cfs
Time to peak = 12.47 hrs
Hyd. volume = 820,629 cuft
Contrib. drain. area = 9.900 ac



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

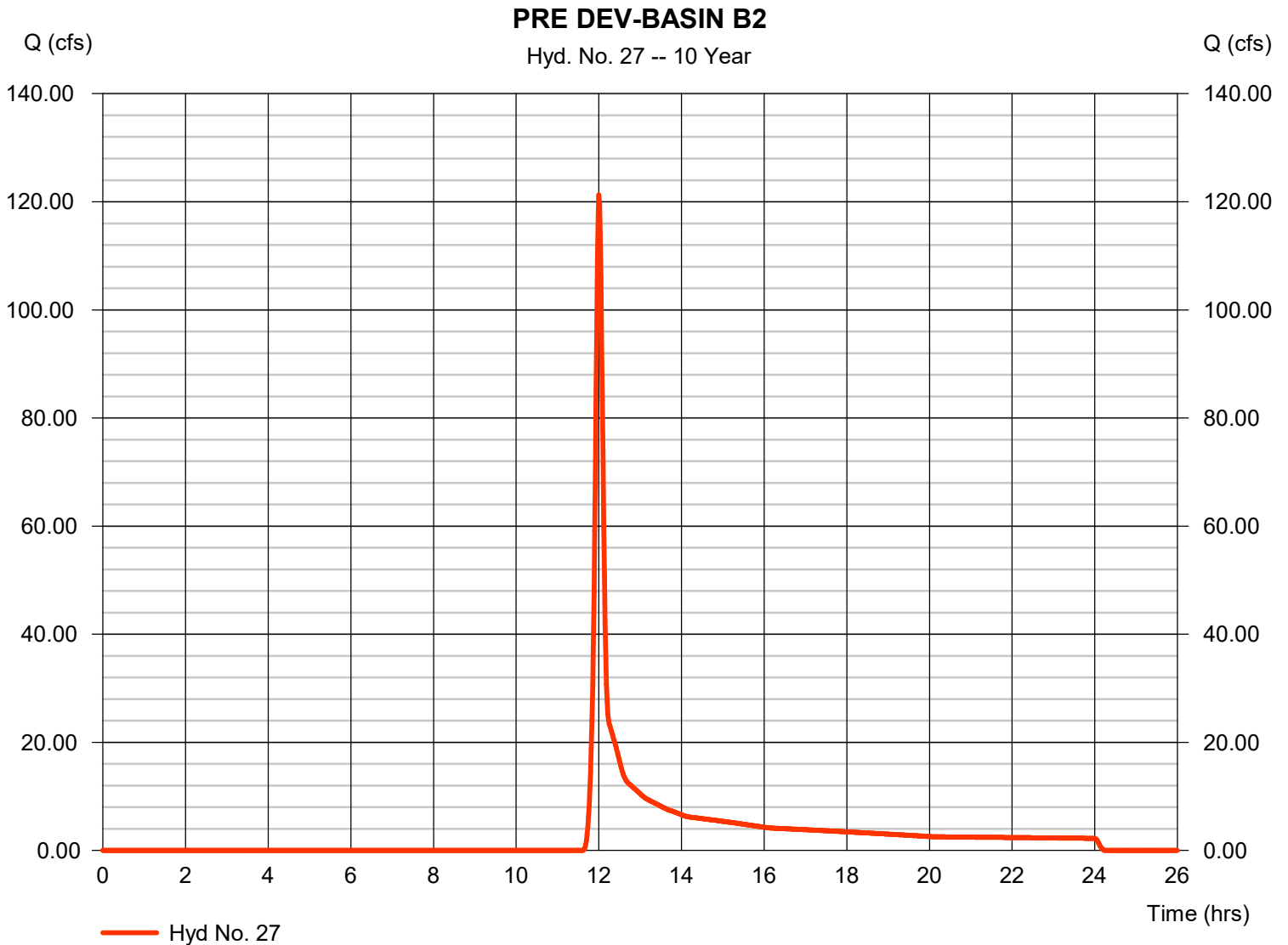
Wednesday, 02 / 28 / 2024

Hyd. No. 27

PRE DEV-BASIN B2

Hydrograph type = SCS Runoff
Storm frequency = 10 yrs
Time interval = 1 min
Drainage area = 70.000 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 5.39 in
Storm duration = 24 hrs

Peak discharge = 121.27 cfs
Time to peak = 12.00 hrs
Hyd. volume = 299,959 cuft
Curve number = 55
Hydraulic length = 0 ft
Time of conc. (Tc) = 10.00 min
Distribution = Type II
Shape factor = 484



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

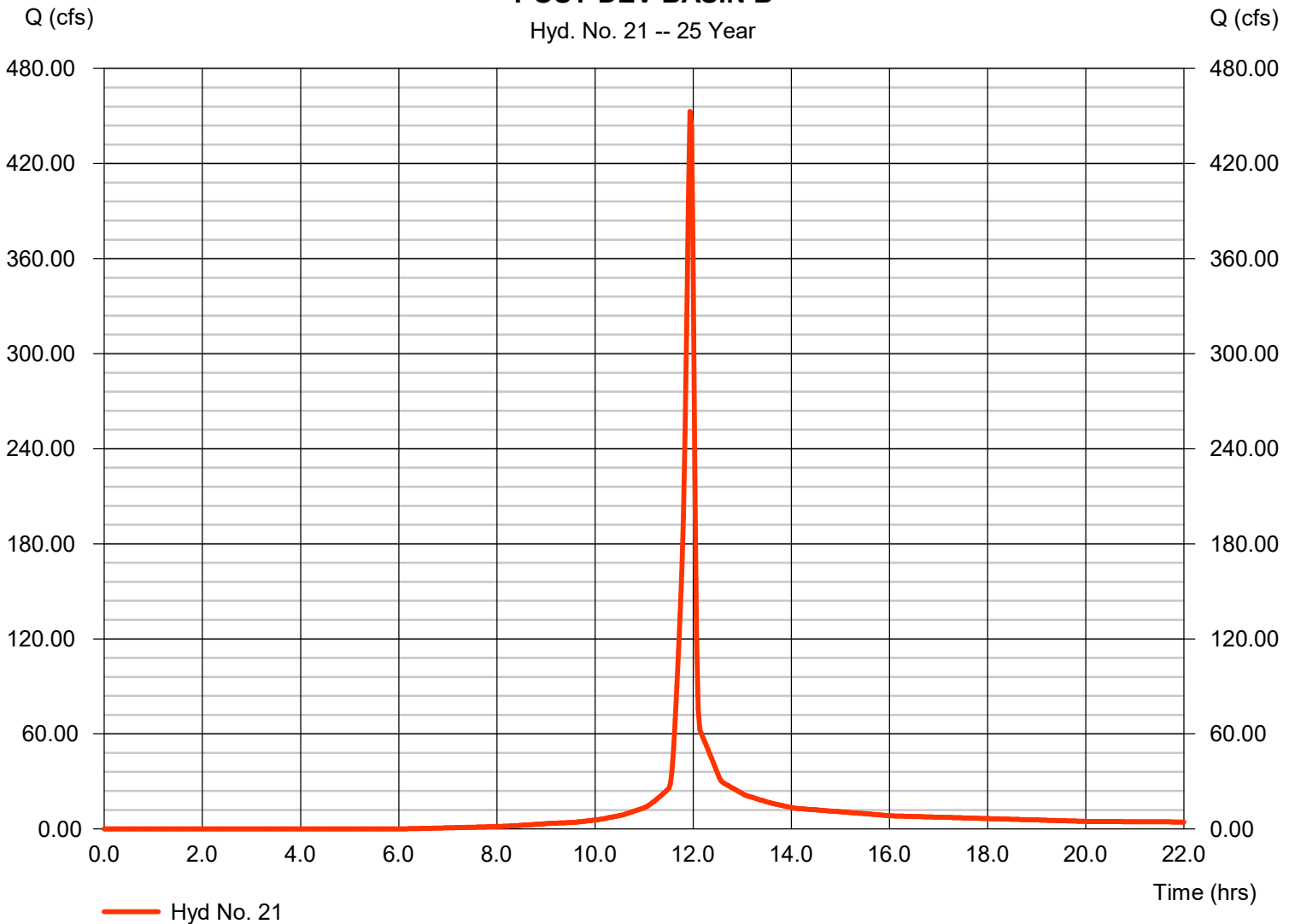
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 452.89 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 932,281 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 6.31 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 25 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

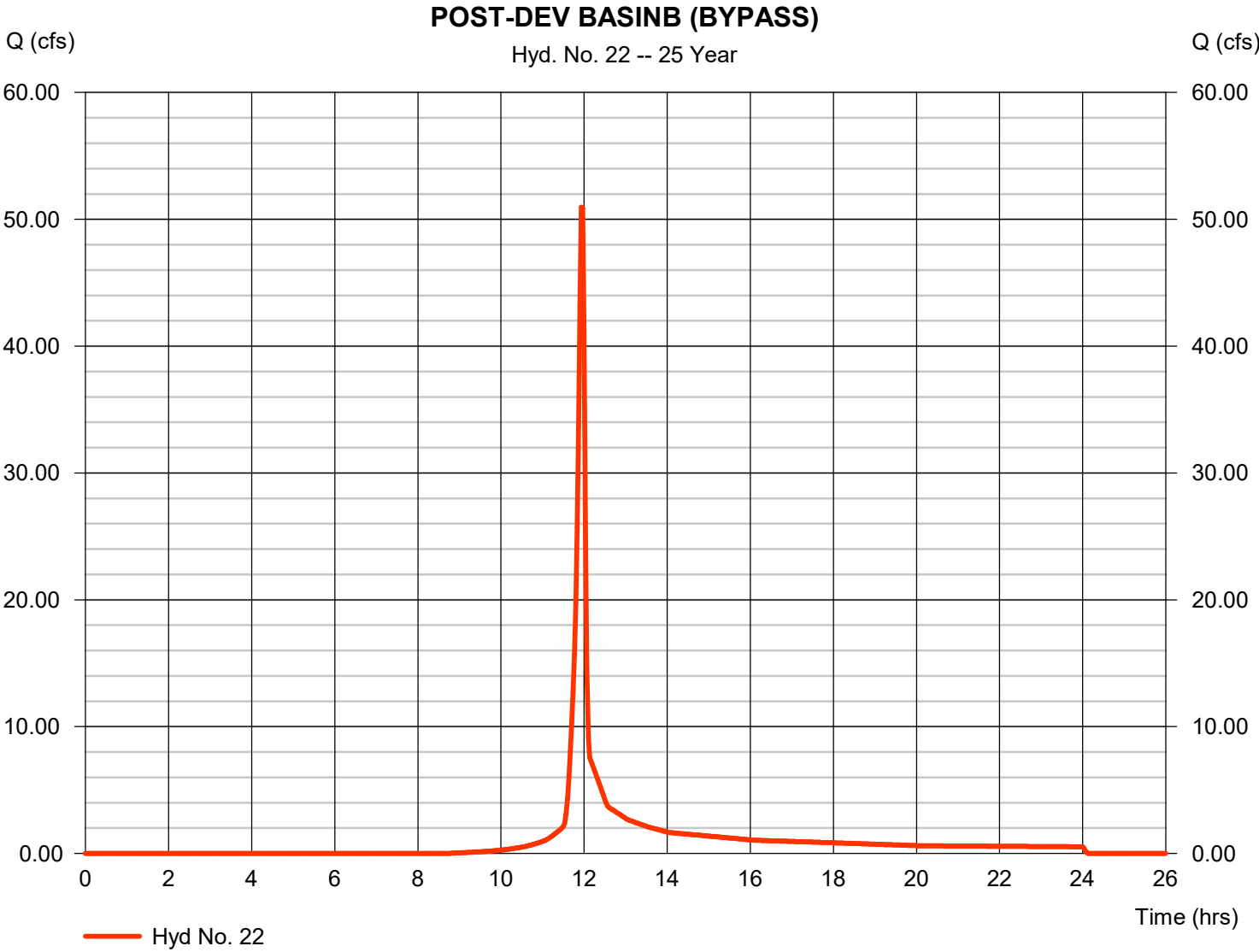
Wednesday, 02 / 28 / 2024

Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 50.95 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 102,865 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 6.31 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

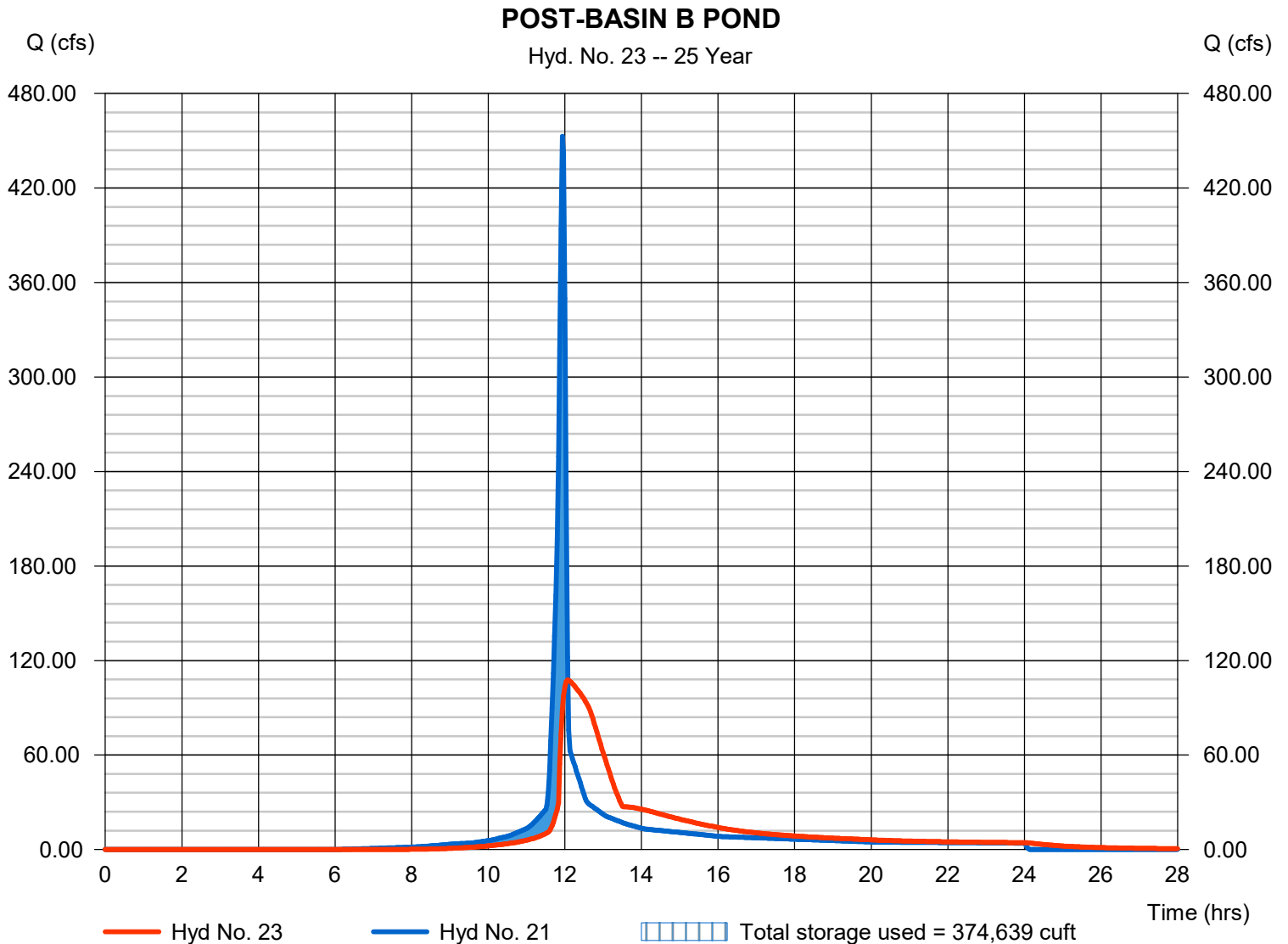
Wednesday, 02 / 28 / 2024

Hyd. No. 23

POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 107.63 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 932,231 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1087.15 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 374,639 cuft |

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

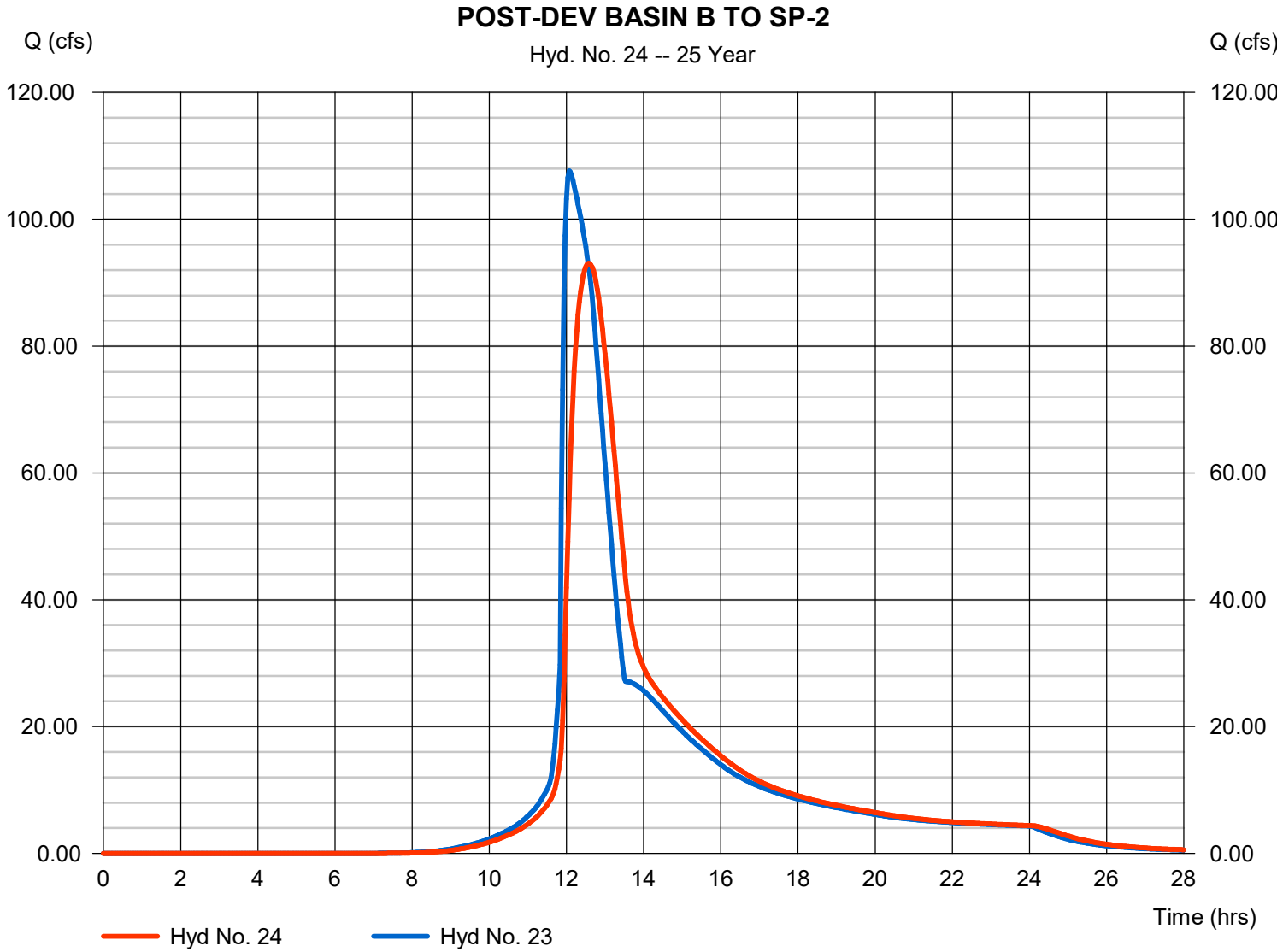
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 93.06 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 12.57 hrs |
| Time interval | = 2 min | Hyd. volume | = 931,788 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.06 ft/s | Routing coeff. | = 0.1181 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

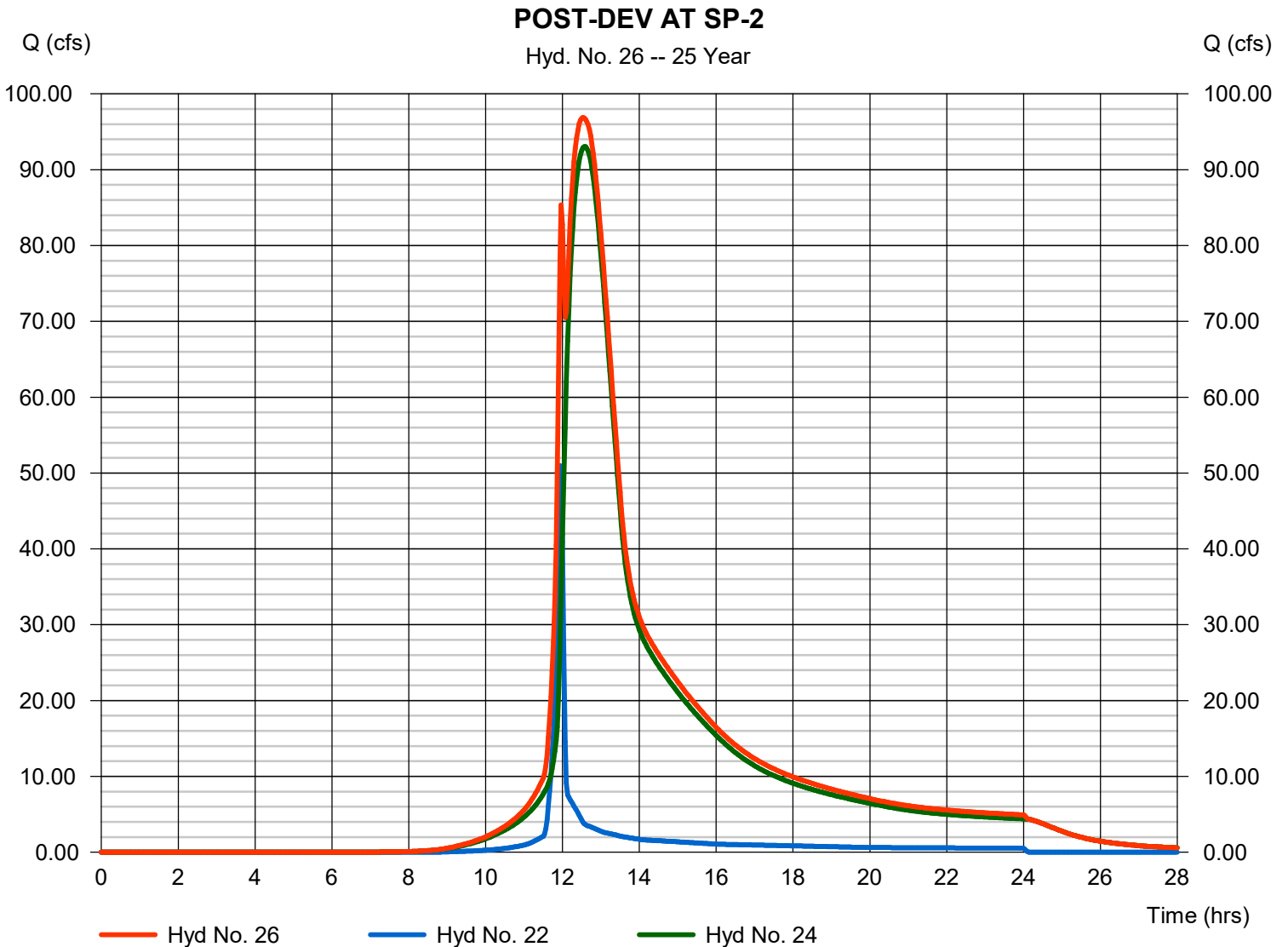
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 25 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 96.88 cfs
Time to peak = 12.53 hrs
Hyd. volume = 1,034,651 cuft
Contrib. drain. area = 9.900 ac

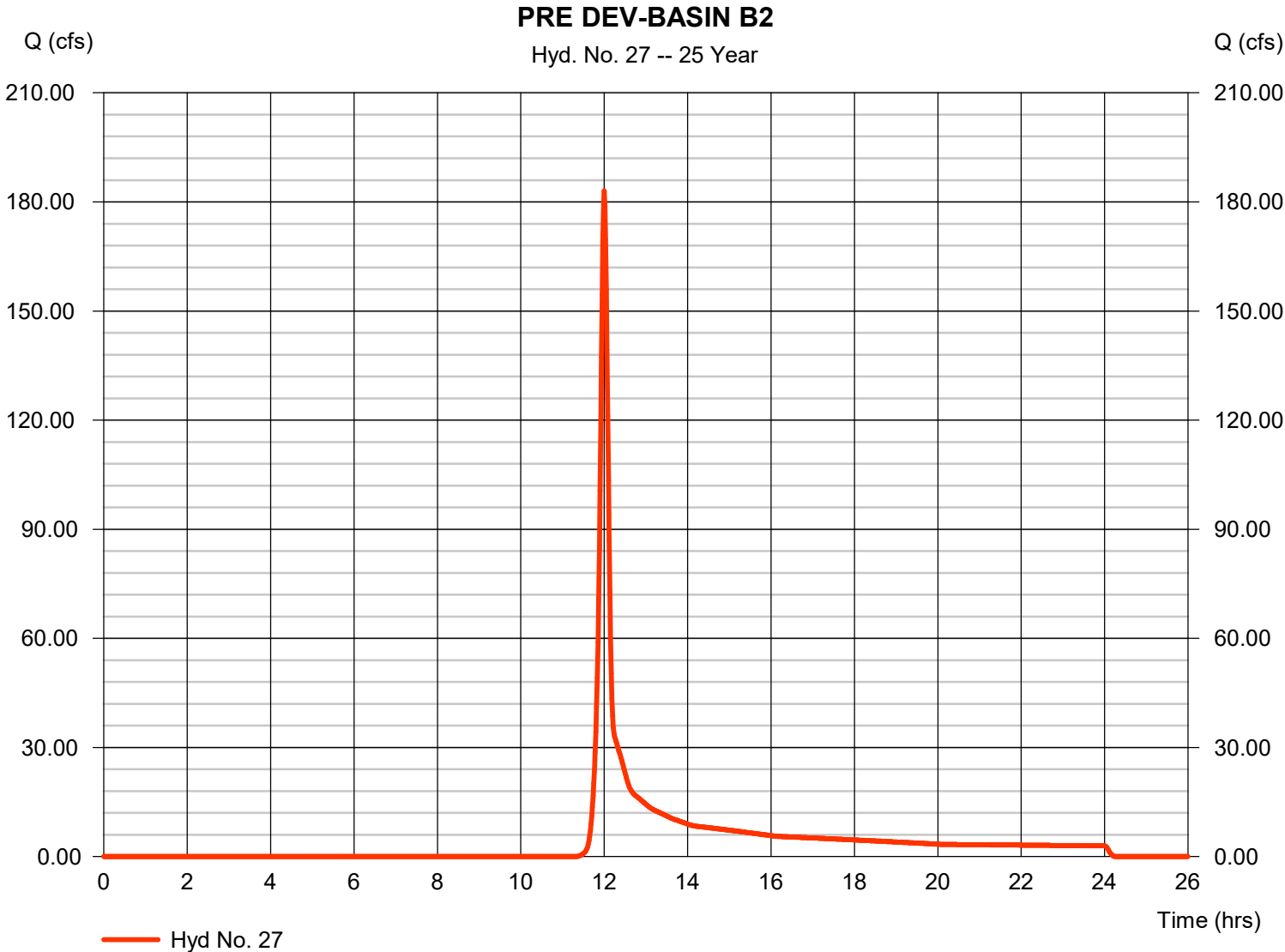


Hydrograph Report

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 183.04 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 12.00 hrs |
| Time interval | = 1 min | Hyd. volume | = 431,745 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 6.31 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

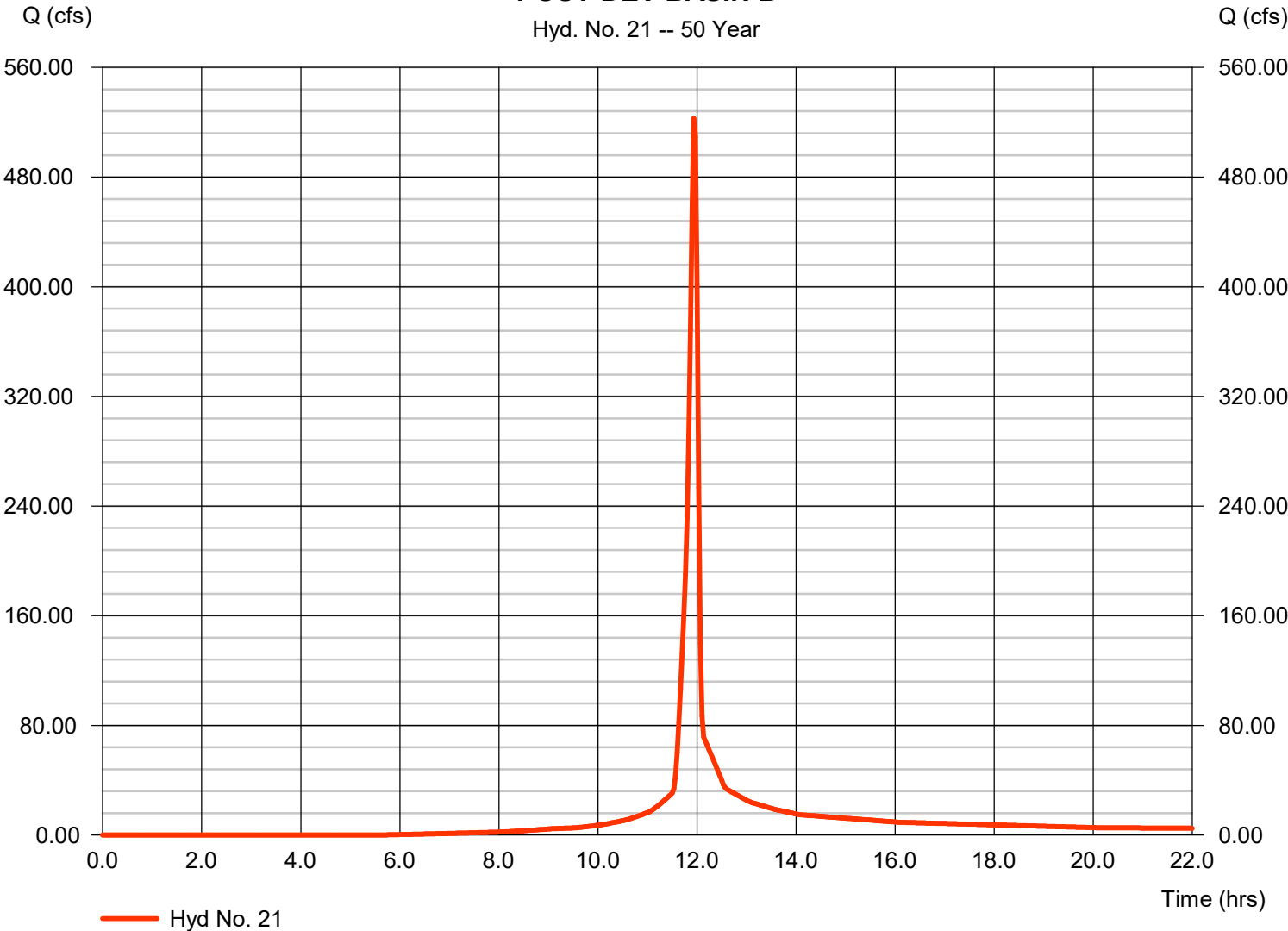
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|------------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 522.92 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,083,763 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 7.03 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 50 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

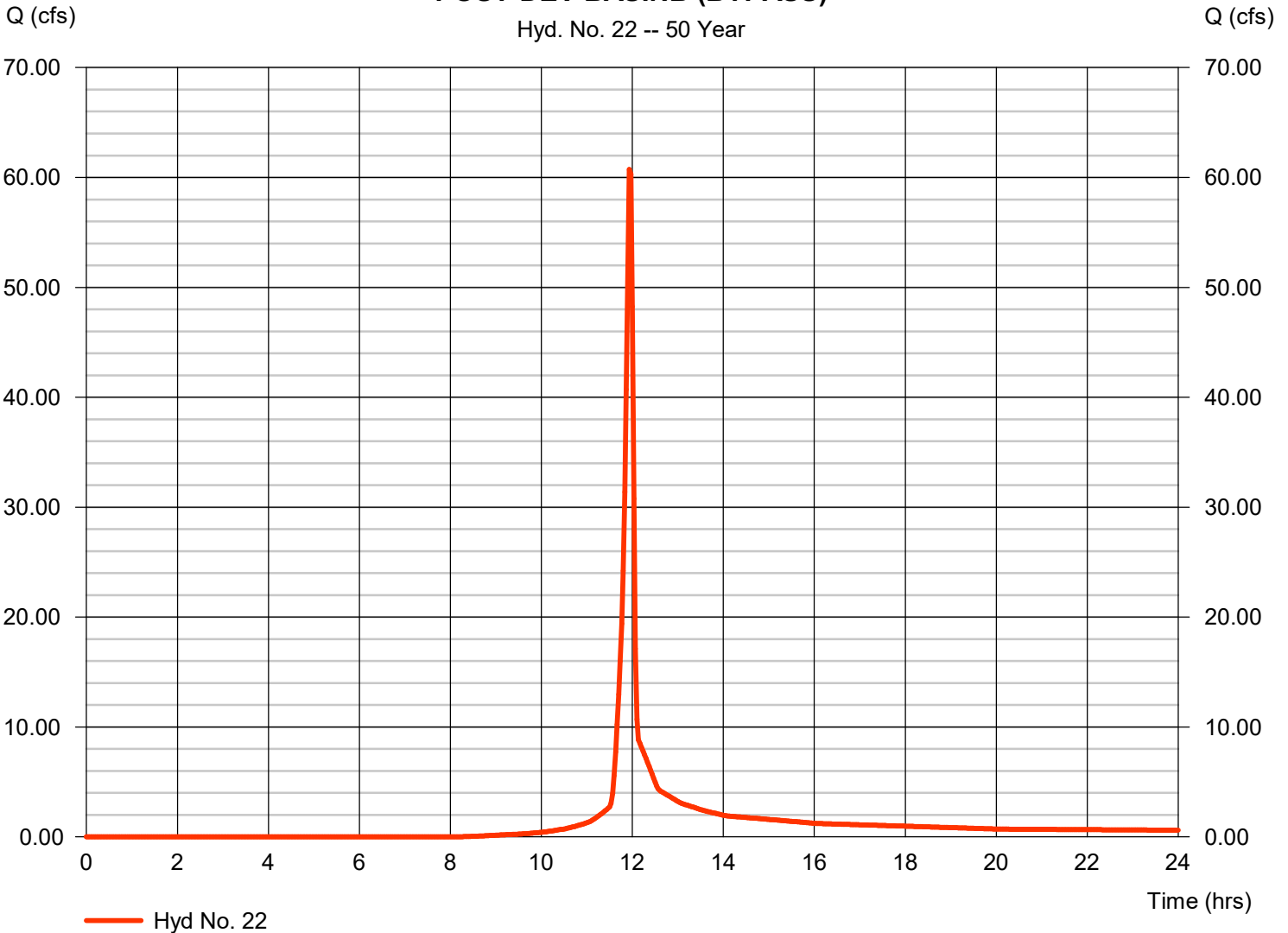
Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 60.72 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 122,748 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 7.03 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900

POST-DEV BASINB (BYPASS)



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

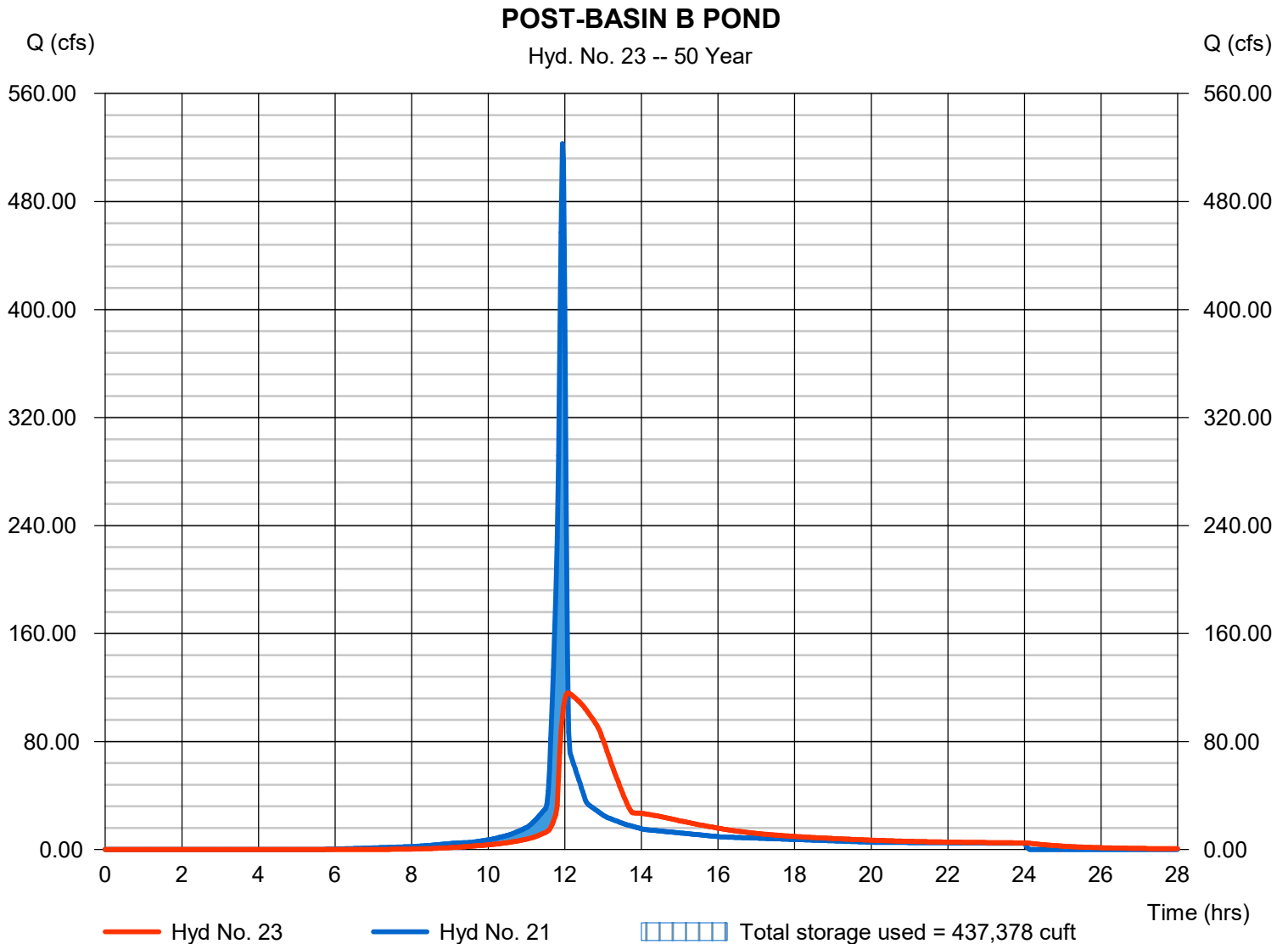
Wednesday, 02 / 28 / 2024

Hyd. No. 23

POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|------------------|
| Hydrograph type | = Reservoir | Peak discharge | = 115.94 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,083,709 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1088.02 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 437,378 cuft |

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 24

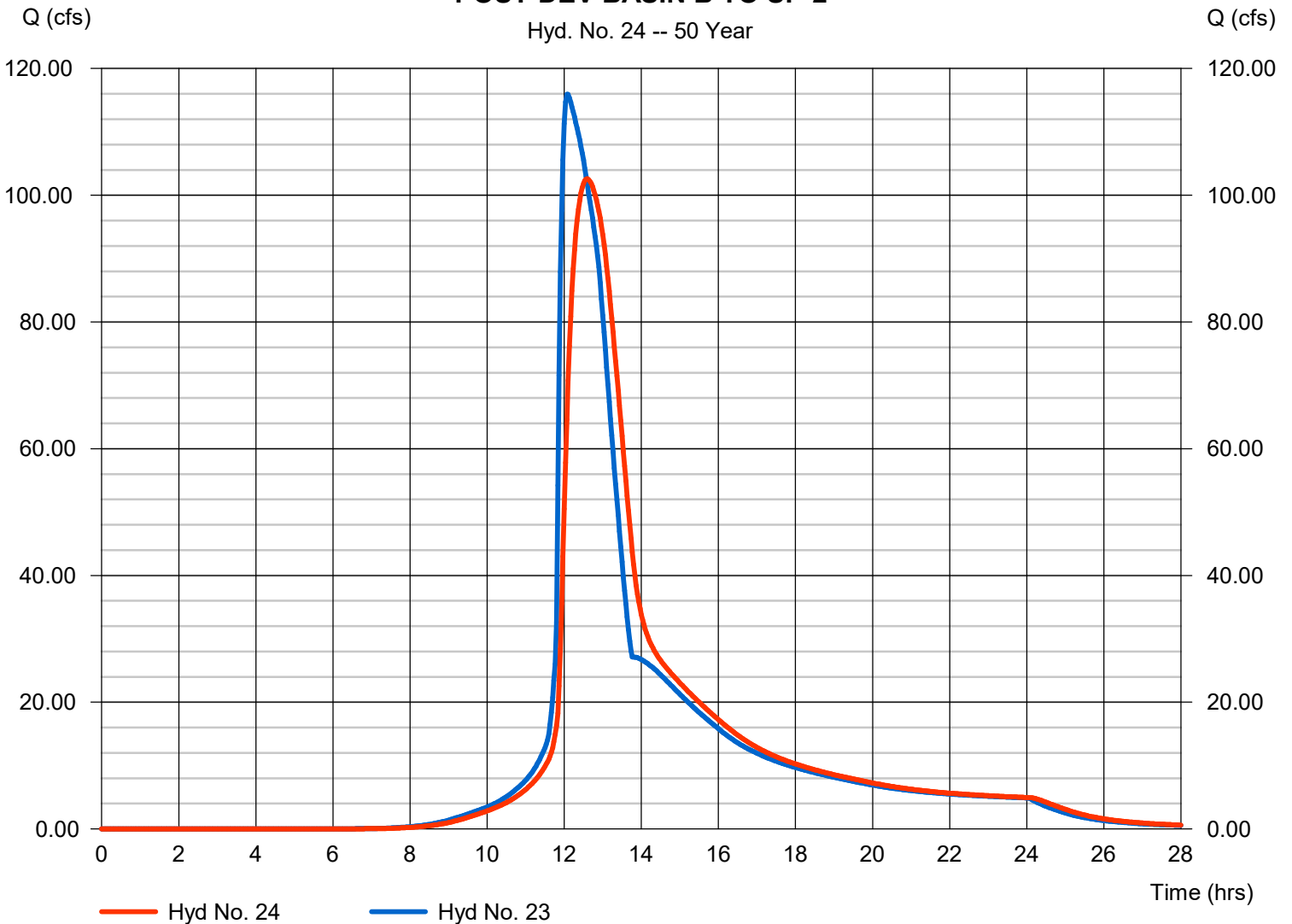
POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|------------------|
| Hydrograph type | = Reach | Peak discharge | = 102.60 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 12.60 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,083,271 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.08 ft/s | Routing coeff. | = 0.1199 |

Modified Att-Kin routing method used.

POST-DEV BASIN B TO SP-2

Hyd. No. 24 -- 50 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

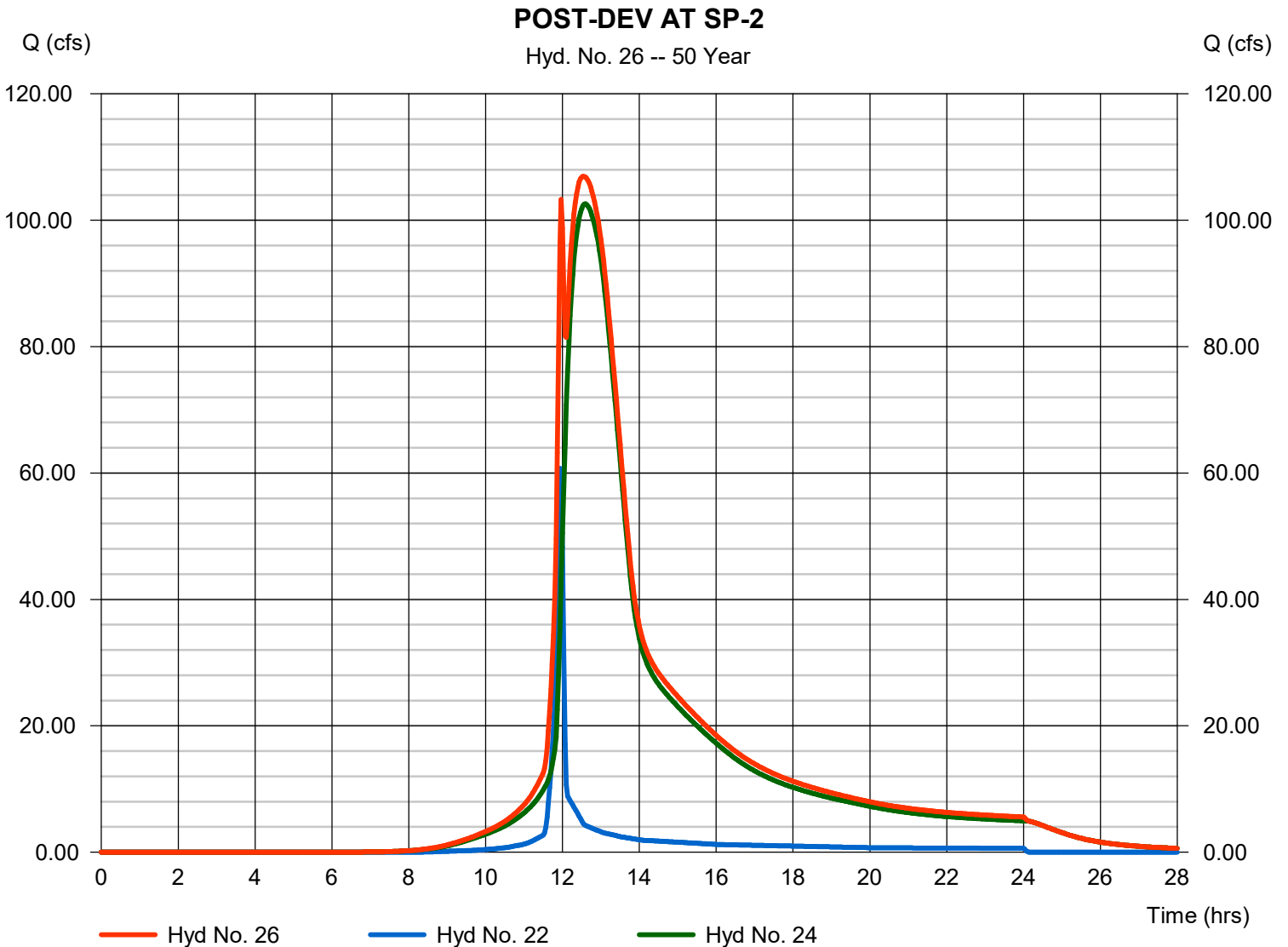
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 50 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 106.94 cfs
Time to peak = 12.53 hrs
Hyd. volume = 1,206,018 cuft
Contrib. drain. area = 9.900 ac



Hydrograph Report

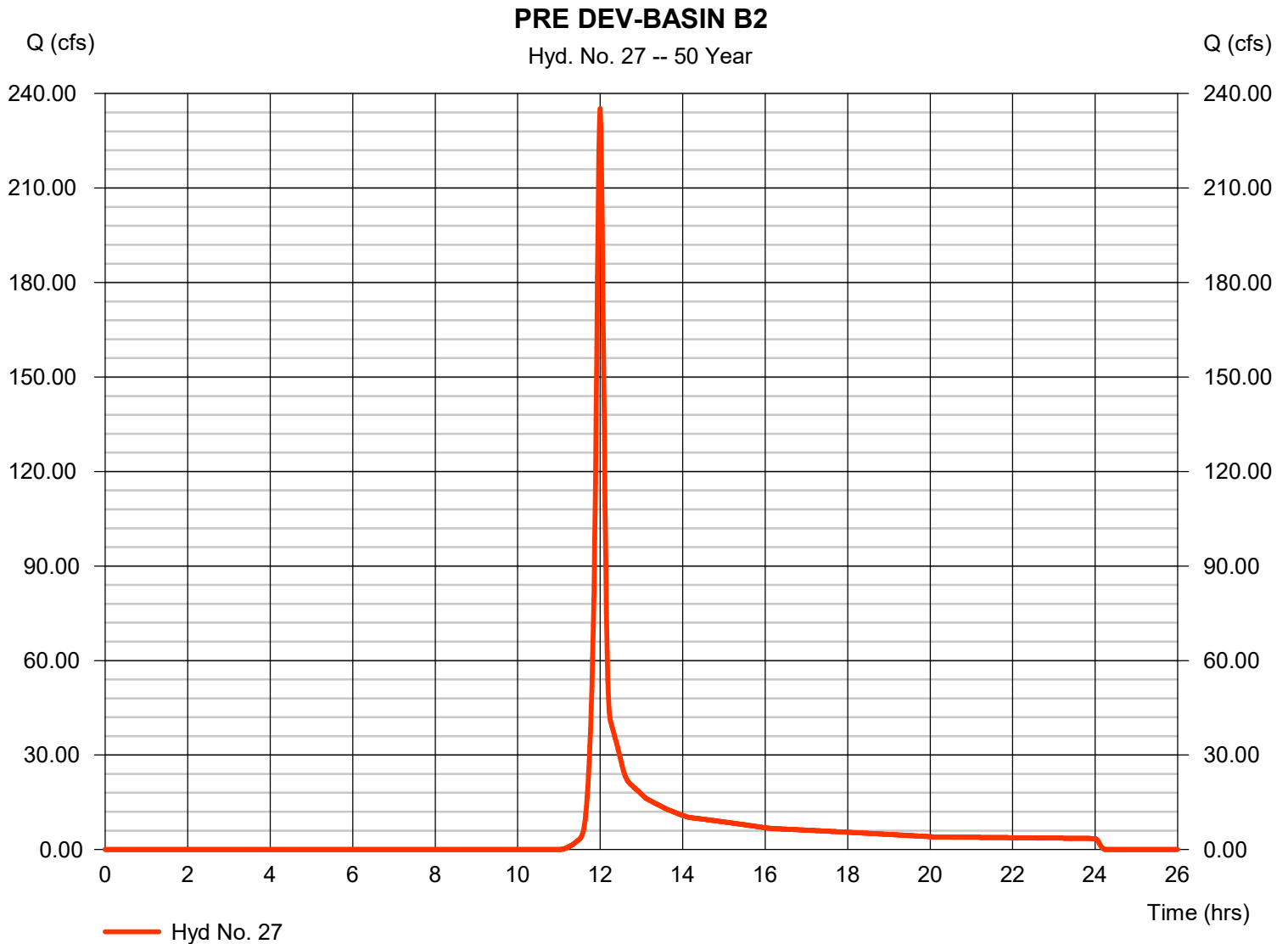
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 235.24 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 12.00 hrs |
| Time interval | = 1 min | Hyd. volume | = 544,520 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 7.03 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

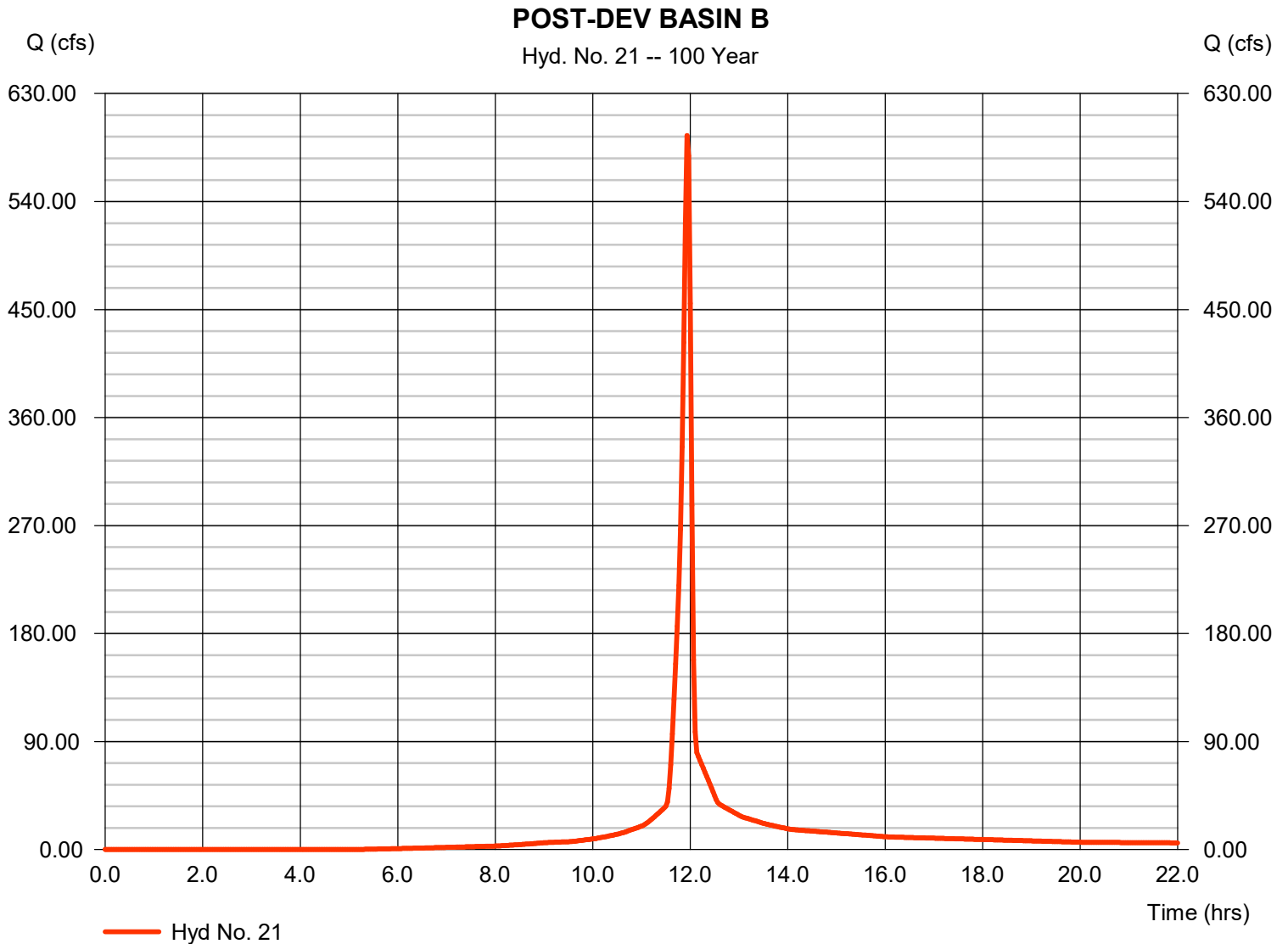
Wednesday, 02 / 28 / 2024

Hyd. No. 21

POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|------------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 595.01 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,241,564 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 7.77 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 22

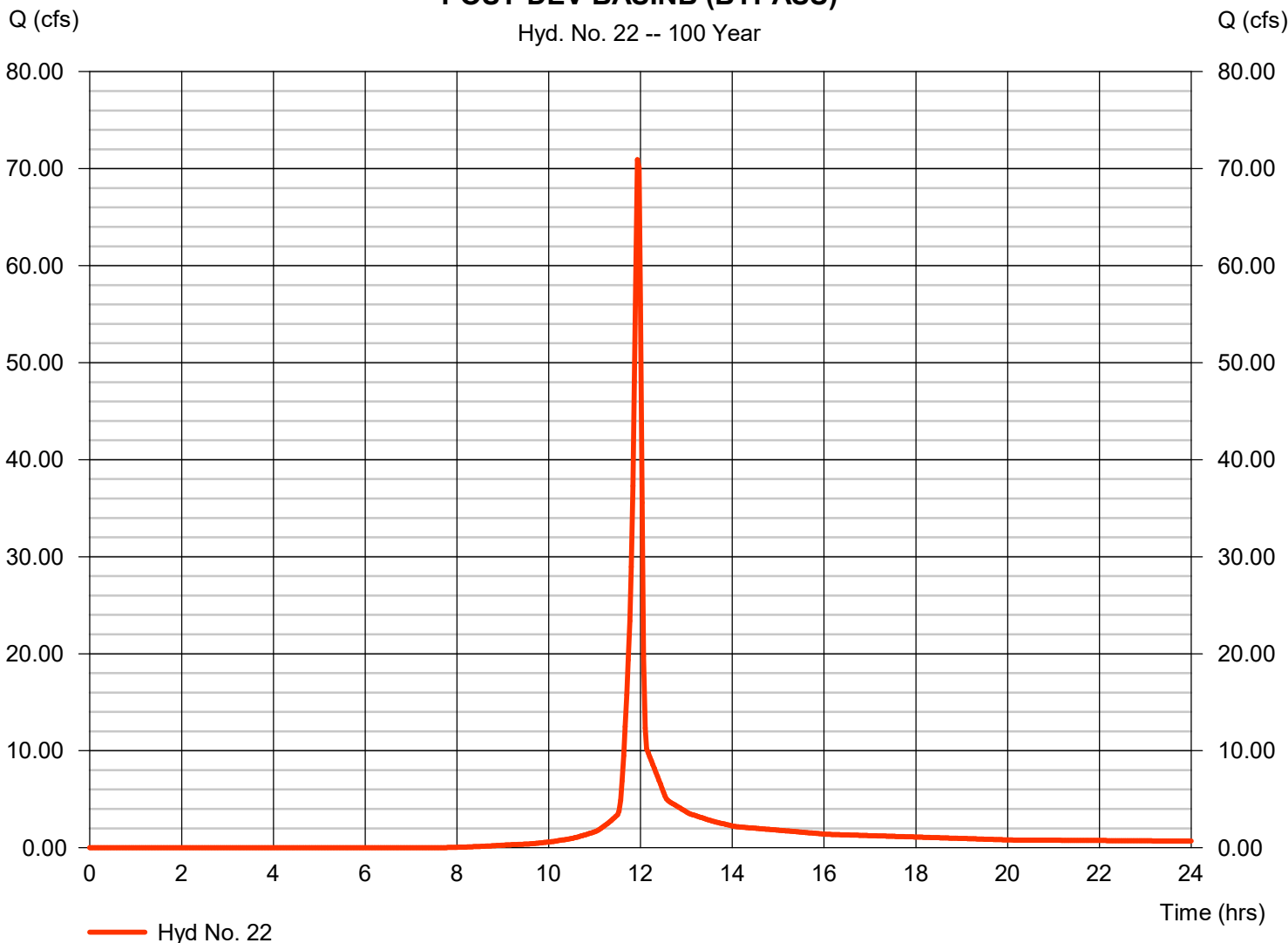
POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 70.93 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 143,769 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 7.77 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900

POST-DEV BASINB (BYPASS)

Hyd. No. 22 -- 100 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 23

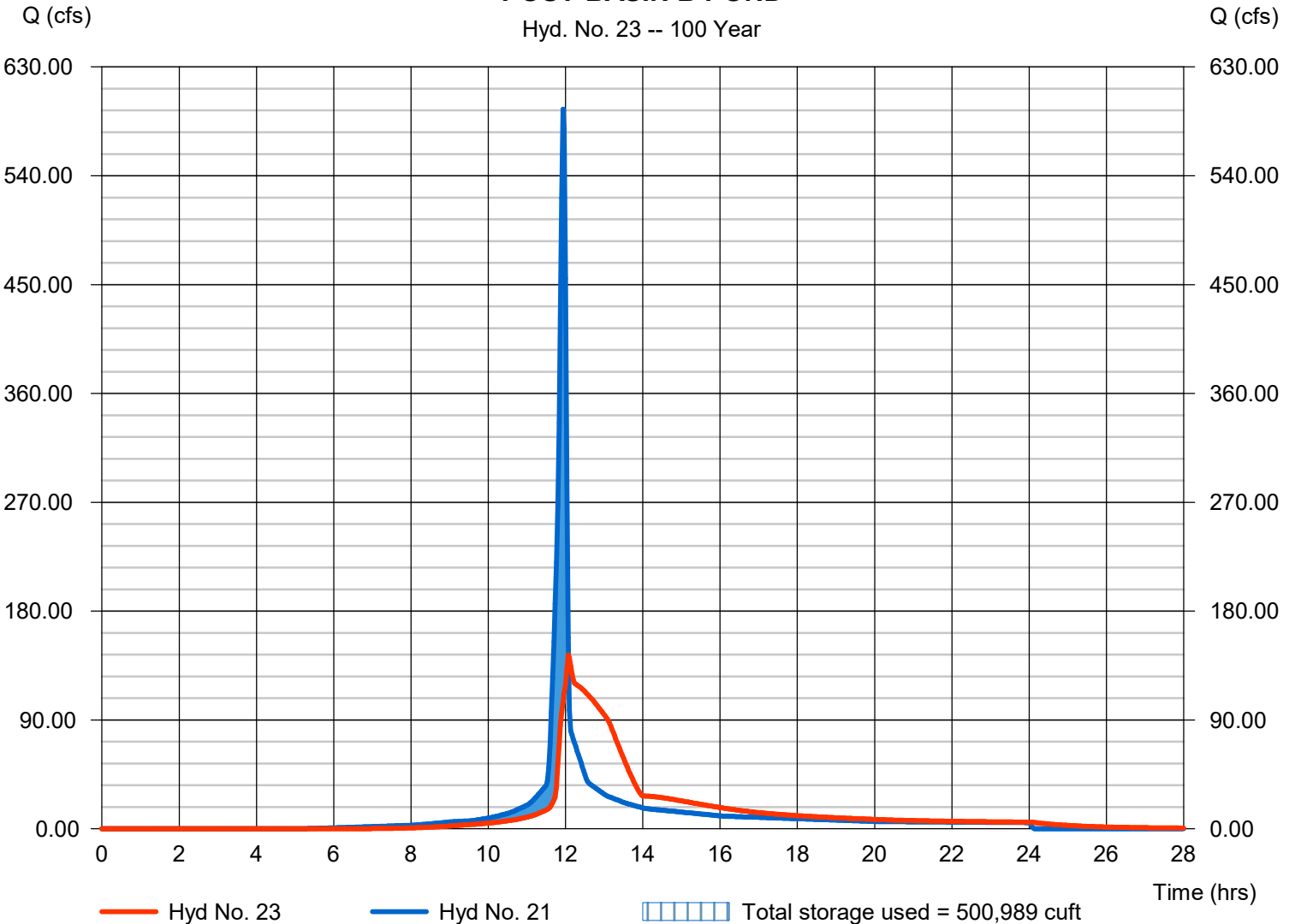
POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|------------------|
| Hydrograph type | = Reservoir | Peak discharge | = 143.86 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,241,510 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1088.82 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 500,989 cuft |

Storage Indication method used.

POST-BASIN B POND

Hyd. No. 23 -- 100 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

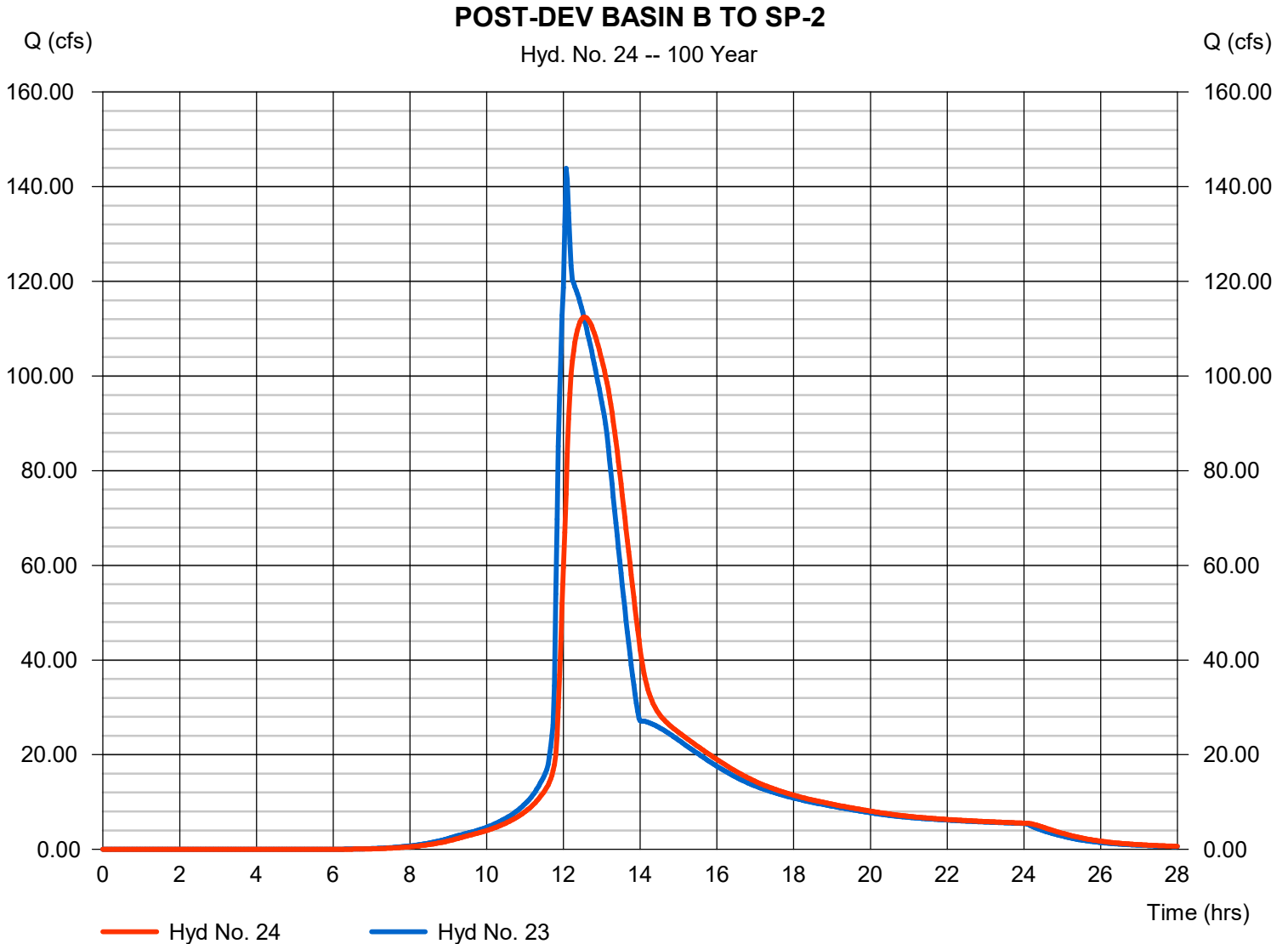
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|------------------|
| Hydrograph type | = Reach | Peak discharge | = 112.45 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 12.53 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,241,072 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.13 ft/s | Routing coeff. | = 0.1254 |

Modified Att-Kin routing method used.



Hydrograph Report

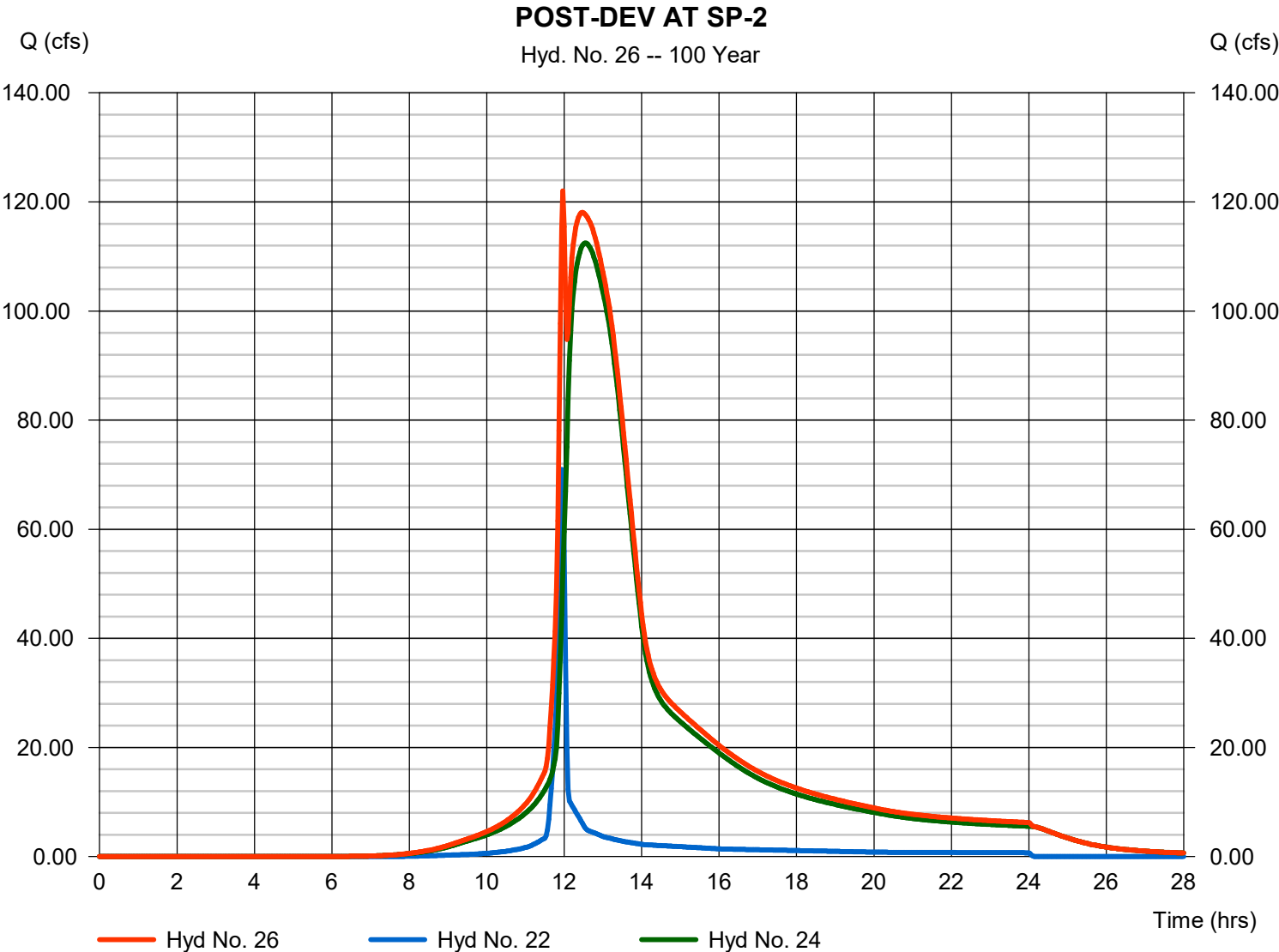
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

| | | | |
|-----------------|-----------|----------------------|------------------|
| Hydrograph type | = Combine | Peak discharge | = 122.02 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,384,841 cuft |
| Inflow hyds. | = 22, 24 | Contrib. drain. area | = 9.900 ac |

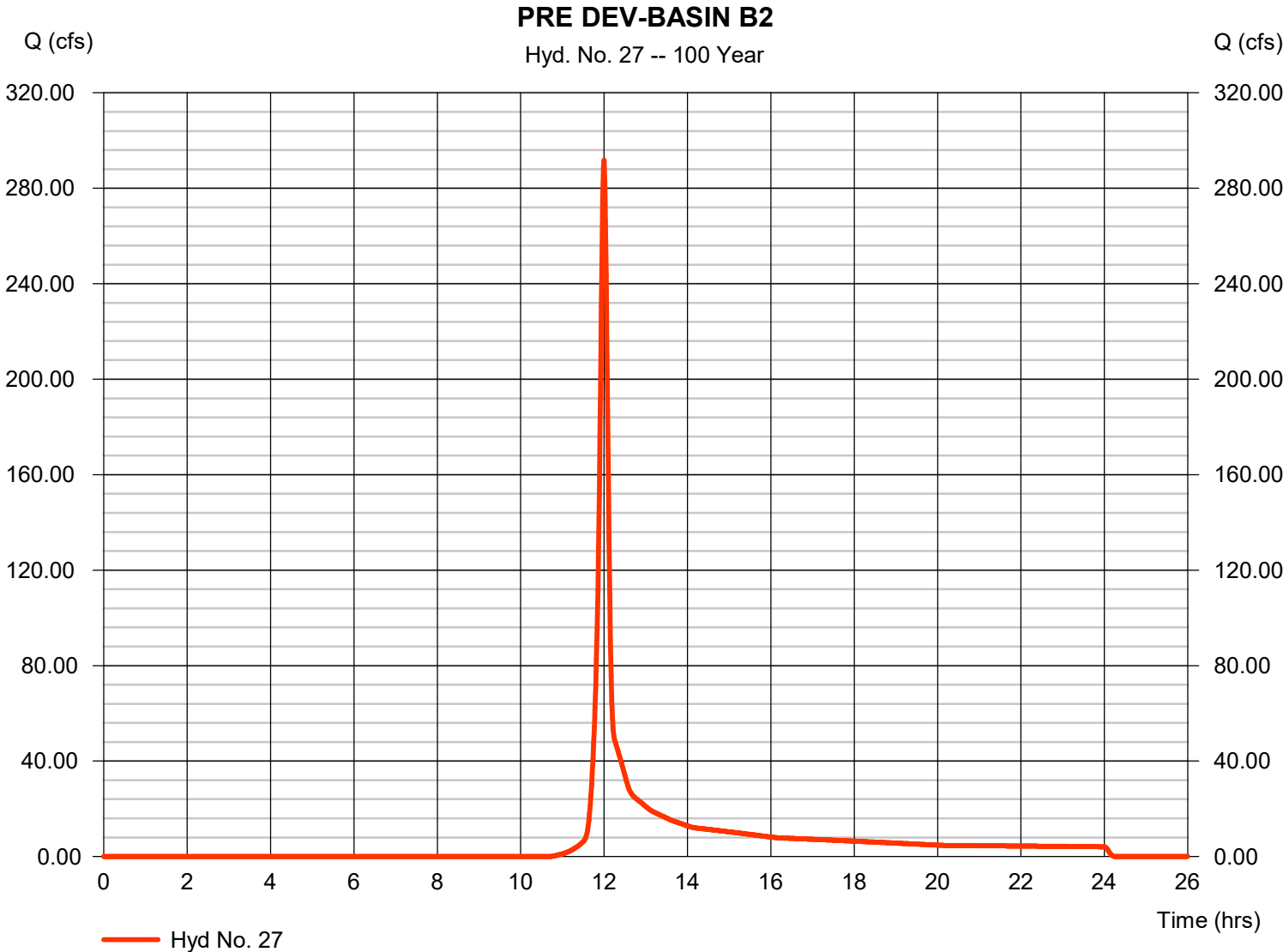


Hydrograph Report

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 291.72 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 12.00 hrs |
| Time interval | = 1 min | Hyd. volume | = 667,784 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 7.77 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Appendix F

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool

Version 2.2

General Information

| | | | |
|--------------------------|---------------------|-----------------------------|--|
| Name of Developer: | Audubon Development | Date Submitted: | |
| Development Name: | Cagle Mill | Permit Number: | |
| Site Location / Address: | 4745 Cagle Mill Rd | Developer Contact: | |
| | Lula, GA 30554 | Phone Number: | |
| Development Type: | | Name of Engineer(s): | |
| | | Maintenance Responsibility: | |

Site Summary

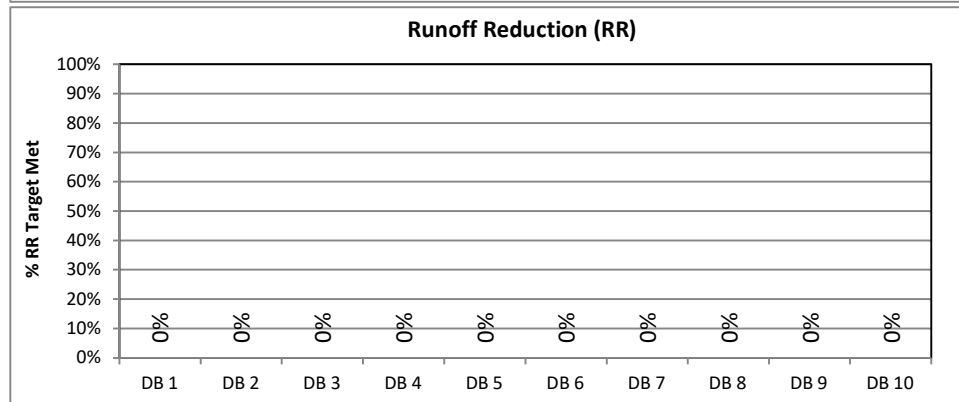
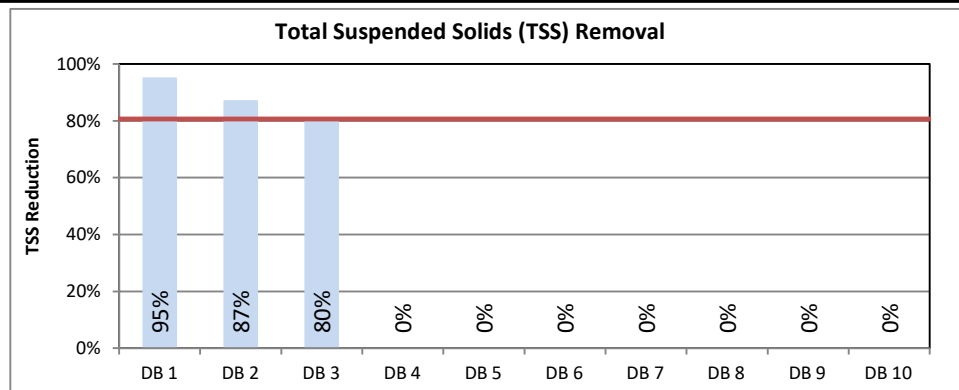
Total Pre-Development Area (ac): **129.38**
 Total Post-Development Area (ac): **140.62**
 Total Treated Area (ac): **137.31**
 Total Untreated Area (ac): **3.31**

| | | I (ac) | P (ac) | CA (ac) |
|--------------|-------------------|--------------|--------------|-------------|
| A | DB 1 | 31.06 | 39.30 | 0.00 |
| B | DB 2 | 38.23 | 29.21 | 0.00 |
| C | DB 3 | 1.52 | 1.30 | 0.00 |
| | Drainage Basin 4 | DB 4 | 0.00 | 0.00 |
| | Drainage Basin 5 | DB 5 | 0.00 | 0.00 |
| | Drainage Basin 6 | DB 6 | 0.00 | 0.00 |
| | Drainage Basin 7 | DB 7 | 0.00 | 0.00 |
| | Drainage Basin 8 | DB 8 | 0.00 | 0.00 |
| | Drainage Basin 9 | DB 9 | 0.00 | 0.00 |
| | Drainage Basin 10 | DB 10 | 0.00 | 0.00 |
| TOTAL | | 70.81 | 69.81 | 0.00 |

I = Impervious Area, P = Pervious Area, CA = Conservation Area

Target Runoff Reduction Volume Achieved? **No**
 Target TSS Removal Achieved? **Yes**

Total Target Runoff Reduction Volume (cf) 256,859
 Runoff Reduction Volume Achieved (cf) 0
 Total Target Water Quality Volume (cf) 308,231
 % TSS Removal Achieved 90%



Official Use Only

Tracking #: _____
 Reviewed By: _____
 Date Approved: _____

Conditions of Approval: _____

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name: **Cagle Mill**
 Drainage Basin Name: **A**

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG* A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|---|----------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Woods - Good Condition | | 30 | 53.31 | 55 | | 70 | | 77 | 53.31 | 100% |
| Impervious | | 98 | 0.00 | 98 | | 98 | | 98 | 0.00 | 0% |
| Open space - Good condition (grass cover > 75%) | | 39 | 0.00 | 61 | | 74 | | 80 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 53.31 | | 0.00 | | 0.00 | | 53.31 | 100% |

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|---|---------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Impervious | | 98 | 24.56 | 98 | | 98 | | 98 | 24.56 | 35% |
| Open space - Good condition (grass cover > 75%) | | 39 | 20.00 | 61 | | 74 | | 80 | 20.00 | 28% |
| Woods - Good Condition | | 30 | 19.30 | 55 | | 70 | | 77 | 19.30 | 27% |
| Impervious | | 98 | 6.50 | 98 | | 98 | | 98 | 6.50 | 9% |
| Open space - Good condition (grass cover > 75%) | | 39 | 0.00 | 61 | | 74 | | 80 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 70.36 | | 0.00 | | 0.00 | | 70.36 | 100% |

Impervious (ac) 31.06
 Rv 0.45
 Weighted CN 76
 Potential Max Soil Retention, S_{post} (in) 3.21

Conservation Area Credits

Scenario 1: Natural Conservation Area *See the GSMM Volume 2, Section 2.3.3.3 for more information.

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 2: Site Reforestation/Revegetation *See the GSMM Volume 2, Section 4.22 for more information.

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 3: Soil Restoration *See the GSMM Volume 2, Section 4.23 for more information.

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration *See the GSMM Volume 2, Section 4.22 and 4.23 for more information.

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name: **Cagle Mill**
 Drainage Basin Name: **A**

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in) **1.00**

| | |
|--|---------|
| Total Site Area for Water Quality Volume (acres) | 70.36 |
| Target Runoff Reduction Volume (cf) | 114,243 |
| Target Water Quality Volume (cf) | 137,092 |

Select BMPs for Runoff Reduction and Water Quality

| | | Area Draining to Each BMP | | | Storage Volume Provided by BMP (cf) | RR Conveyance Volume Provided by BMP (cf) | Down-stream BMP | Runoff Reduction Calculations | | | | | WQ Calculations | | |
|-------------------------------|-------------------------------------|-------------------------------|---------------------------------|----------------------|-------------------------------------|---|-----------------|-------------------------------------|--|--------------------------------------|--------------------|------------------|--------------------------|-------------------------------|-------------------------|
| | | On-site Pervious Area (acres) | On-site Impervious Area (acres) | Offsite Area (acres) | | | | RR Volume from Direct Drainage (cf) | RR Volume from Upstream Practices (cf) | Total RR Volume Received by BMP (cf) | Runoff Reduction % | RR Achieved (cf) | Remaining RR Volume (cf) | WQ, from Direct Drainage (cf) | Effective TSS Removal % |
| BMP 1 | Stormwater Pond | 20.00 | 24.56 | | 70,000 | | BMP 2 | 88,325 | 0 | 88,325 | 0% | 0 | 88,325 | 105,990 | 80% |
| BMP 2 | Stormwater Wetlands – Level 1 | | 0.00 | | | 88,325 | | 0 | 88,325 | 88,325 | 0% | 0 | 88,325 | 0 | 80% |
| BMP 3 | Bioretention Basin (w/o underdrain) | | 2.50 | | | | | 8,621 | 0 | 8,621 | 100% | 0 | 8,621 | 10,346 | 100% |
| BMP 4 | Bioretention Basin (w/o underdrain) | | 2.50 | | | | | 8,621 | 0 | 8,621 | 100% | 0 | 8,621 | 10,346 | 100% |
| BMP 5 | Regenerative Stormwater Conveyance | 19.30 | 1.50 | | | | | 8,676 | 0 | 8,676 | 0% | 0 | 8,676 | 10,411 | 80% |
| BMP 6 | Select a BMP... | | 0.00 | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 7 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 8 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 9 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 10 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| TOTAL | | 39.30 | 31.06 | 0.00 | | | | 114,243 | | | | 0 | | 137,092 | |
| UNTREATED AREA (acres) | | 0.00 | 0.00 | | | | | | | | | | | | |

| | |
|--|---------|
| Target Runoff Reduction Volume (cf) | 114,243 |
| Target Achieved? | No |
| Remaining Runoff Reduction Volume (cf) | 114,243 |

| | |
|----------------------------------|---------|
| Target Water Quality Volume (cf) | 137,092 |
| % TSS Removal Achieved | 95% |
| Target Achieved? | Yes! |
| Remaining TSS Removal % | 0% |

Channel and Flood Protection Calculations

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|----------------------------|-------------------|-------------------|--------------------|---------------------|
| Target Rainfall Event (in) | | | | |

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|--|-------------------|-------------------|--------------------|---------------------|
| Pre-Development Runoff Volume (in) | 0.00 | 0.00 | 0.00 | 0.00 |
| Post Development Runoff Volume (in) with no BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Post-Development Runoff Volume (in) with BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted CN | 0 | 0 | 0 | 0 |

*See Stormwater Management Standards to Determine Detention Requirements.

Comments

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG* A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|-----------------------------|----------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Woods - Good Condition | | 30 | 70.00 | 55 | | 70 | | 77 | 70.00 | 100% |
| Select a land cover type... | | 0 | 0.00 | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 70.00 | | 0.00 | | 0.00 | | 70.00 | 100% |

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|---|---------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Woods - Good Condition | | 30 | 13.21 | 55 | | 70 | | 77 | 13.21 | 20% |
| Open space - Good condition (grass cover > 75%) | | 39 | 16.00 | 61 | | 74 | | 80 | 16.00 | 24% |
| Impervious | | 98 | 38.23 | 98 | | 98 | | 98 | 38.23 | 57% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 67.44 | | 0.00 | | 0.00 | | 67.44 | 100% |

Impervious (ac) 38.23
 Rv 0.56
 Weighted CN 81
 Potential Max Soil Retention, S_{post} (in) 2.38

Conservation Area Credits

Scenario 1: Natural Conservation Area **See the GSMM Volume 2, Section 2.3.3.3 for more information.*

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 2: Site Reforestation/Revegetation **See the GSMM Volume 2, Section 4.22 for more information.*

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 3: Soil Restoration **See the GSMM Volume 2, Section 4.23 for more information.*

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration

**See the GSMM Volume 2, Section 4.22 and 4.23 for more information.*

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name: **Cagle Mill**
 Drainage Basin Name: **B**

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in) **1.00**

| | |
|--|---------|
| Total Site Area for Water Quality Volume (acres) | 67.44 |
| Target Runoff Reduction Volume (cf) | 137,138 |
| Target Water Quality Volume (cf) | 164,565 |

Select BMPs for Runoff Reduction and Water Quality

| | | Area Draining to Each BMP | | | Storage Volume Provided by BMP (cf) | RR Conveyance Volume Provided by BMP (cf) | Down-stream BMP | Runoff Reduction Calculations | | | | | WQ Calculations | | |
|------------------------|------------------------------------|-------------------------------|---------------------------------|----------------------|-------------------------------------|---|-----------------|-------------------------------------|--|--------------------------------------|--------------------|------------------|--------------------------|-------------------------------|-------------------------|
| | | On-site Pervious Area (acres) | On-site Impervious Area (acres) | Offsite Area (acres) | | | | RR Volume from Direct Drainage (cf) | RR Volume from Upstream Practices (cf) | Total RR Volume Received by BMP (cf) | Runoff Reduction % | RR Achieved (cf) | Remaining RR Volume (cf) | WQ, from Direct Drainage (cf) | Effective TSS Removal % |
| BMP 1 | Stormwater Pond | 16.00 | 38.23 | 13.21 | | | | 134,740 | 0 | 134,740 | 0% | 0 | 134,740 | 161,688 | 80% |
| BMP 2 | Regenerative Stormwater Conveyance | 6.15 | 3.75 | | | | | 14,048 | 0 | 14,048 | 0% | 0 | 14,048 | 16,858 | 80% |
| BMP 3 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 4 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 5 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 6 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 7 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 8 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 9 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 10 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| TOTAL | | 22.15 | 41.98 | 13.21 | | | | 148,788 | | | | 0 | | 178,546 | |
| UNTREATED AREA (acres) | | 7.06 | 0.00 | | | | | | | | | | | | |

| | |
|--|---------|
| Target Runoff Reduction Volume (cf) | 137,138 |
| Target Achieved? | No |
| Remaining Runoff Reduction Volume (cf) | 137,138 |

| | |
|----------------------------------|---------|
| Target Water Quality Volume (cf) | 164,565 |
| % TSS Removal Achieved | 87% |
| Target Achieved? | Yes! |
| Remaining TSS Removal % | 0% |

Channel and Flood Protection Calculations

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|----------------------------|-------------------|-------------------|--------------------|---------------------|
| Target Rainfall Event (in) | | | | |

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|--|-------------------|-------------------|--------------------|---------------------|
| Pre-Development Runoff Volume (in) | 0.00 | 0.00 | 0.00 | 0.00 |
| Post Development Runoff Volume (in) with no BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Post-Development Runoff Volume (in) with BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted CN | 0 | 0 | 0 | 0 |

*See Stormwater Management Standards to Determine Detention Requirements.

Comments

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG* A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|-----------------------------|----------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Woods - Good Condition | | 30 | 6.07 | 55 | | 70 | | 77 | 6.07 | 100% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 6.07 | | 0.00 | | 0.00 | | 6.07 | 100% |

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|--|---------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Impervious | | 98 | 1.52 | 98 | | 98 | | 98 | 1.52 | 54% |
| Open space - Fair condition (grass cover 50% to 75%) | | 49 | 1.30 | 69 | | 79 | | 84 | 1.30 | 46% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 2.82 | | 0.00 | | 0.00 | | 2.82 | 100% |

Impervious (ac) 1.52
 Rv 0.54
 Weighted CN 85
 Potential Max Soil Retention, S_{post} (in) 1.82

Conservation Area Credits

Scenario 1: Natural Conservation Area **See the GSMM Volume 2, Section 2.3.3.3 for more information.*

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 2: Site Reforestation/Revegetation **See the GSMM Volume 2, Section 4.22 for more information.*

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 3: Soil Restoration **See the GSMM Volume 2, Section 4.23 for more information.*

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration

**See the GSMM Volume 2, Section 4.22 and 4.23 for more information.*

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in)

| | |
|--|-------|
| Total Site Area for Water Quality Volume (acres) | 2.82 |
| Target Runoff Reduction Volume (cf) | 5,478 |
| Target Water Quality Volume (cf) | 6,573 |

Select BMPs for Runoff Reduction and Water Quality

| | | Area Draining to Each BMP | | | Storage Volume Provided by BMP (cf) | RR Conveyance Volume Provided by BMP (cf) | Down-stream BMP | Runoff Reduction Calculations | | | | | WQ Calculations | | |
|------------------------|-------------------------------|-------------------------------|---------------------------------|----------------------|-------------------------------------|---|-----------------|-------------------------------------|--|--------------------------------------|--------------------|------------------|--------------------------|-------------------------------|-------------------------|
| | | On-site Pervious Area (acres) | On-site Impervious Area (acres) | Offsite Area (acres) | | | | RR Volume from Direct Drainage (cf) | RR Volume from Upstream Practices (cf) | Total RR Volume Received by BMP (cf) | Runoff Reduction % | RR Achieved (cf) | Remaining RR Volume (cf) | WQ, from Direct Drainage (cf) | Effective TSS Removal % |
| BMP 1 | Stormwater Wetlands – Level 1 | 1.30 | 1.52 | | | 5,478 | | 5,478 | 0 | 5,478 | 0% | 0 | 5,478 | 6,573 | 80% |
| BMP 2 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 3 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 4 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 5 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 6 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 7 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 8 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 9 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 10 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| TOTAL | | 1.30 | 1.52 | 0.00 | | | | 5,478 | | | | 0 | | 6,573 | |
| UNTREATED AREA (acres) | | 0.00 | 0.00 | | | | | | | | | | | | |

| | |
|--|-------|
| Target Runoff Reduction Volume (cf) | 5,478 |
| Target Achieved? | No |
| Remaining Runoff Reduction Volume (cf) | 5,478 |

| | |
|----------------------------------|-------|
| Target Water Quality Volume (cf) | 6,573 |
| % TSS Removal Achieved | 80% |
| Target Achieved? | Yes! |
| Remaining TSS Removal % | 0% |

Channel and Flood Protection Calculations

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|----------------------------|-------------------|-------------------|--------------------|---------------------|
| Target Rainfall Event (in) | | | | |

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|--|-------------------|-------------------|--------------------|---------------------|
| Pre-Development Runoff Volume (in) | 0.00 | 0.00 | 0.00 | 0.00 |
| Post Development Runoff Volume (in) with no BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Post-Development Runoff Volume (in) with BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted CN | 0 | 0 | 0 | 0 |

*See Stormwater Management Standards to Determine Detention Requirements.

Comments



3500 Parkway Lane, Suite 500
Peachtree Corners, GA 30092
T: 678.336.7740

Jason Bach, P.E.
Project Manager
Pond and Company
678-631-9522
bachj@pondco.com

April 5, 2024

Hall County Department of Public Works & Utilities
Attn: Sewer Department
2875 Browns Bridge Road
Gainesville, GA 30504-5635

RE: Letter of Intent for sewer service – Shops and Residences at Cagle Mill Project

To Whom It May Concern,

Brightside homes is proposing the development of a mixed use community across two tracts in unincorporated Hall County. The site is located between Highway 365 and Cagle Mill Road, approximately 5,200 feet northeast of the intersection of 365 and Whitehall Road.

The proposed development will consist of 348 Residential units (single family attached and detached) and approximately 38,000 SF of industrial space. The residential and industrial tracts are intended to be zoned and permitted as separate developments by the same developer/builder.

It is our intent to serve the site with gravity sewer to a centrally located, privately maintained, pump station, where it will pump via forcemain to the gravity manhole located just outside of the hall county pump station located along the Highway 365 right-of-way.

We are requesting a letter of sewer availability from your department to assist in the rezoning process, currently underway.

Calculations and maps for anticipated stormwater flow and tie-in location are included as an attachment to this letter.

Please do not hesitate to contact me at 678-631-9522 or bachj@pondco.com if you have any questions.

Thank you for your time and consideration.

Sincerely,

Jason Bach, P.E.

Application for Sewer Availability Letter

Date: 2/22/2024

Name of Applicant: Josh Boling Contact Number: 770-893-8002

Address of Applicant: 6525 The Corners Parkway Suite 216

City: Peachtree Corners State: GA Zip: 30092 E-mail: jboling@acmpts.com

Name of Agent: Jason Bach, Pond & Company Contact Number: 678-631-9522

Address of Agent: 3500 Parkway Lane, Suite 500

City: Peachtree Corners State: GA Zip: 30092 E-mail: bachj@pondco.com

THE APPLICANT NAMED ABOVE AFFIRMS THAT THEY ARE THE OWNER OR AGENT FOR THE OWNER OF THE PROPERTY DESCRIBED BELOW AND REQUESTS: (Please check the purpose of letter request and fill in all applicable information legibly and completely.)

AVAILABILITY: [] General Availability [x] Rezoning [] Conditional Use Permit

Availability letters will require a minimum of one week from the date of application submittal.

Request from Agricultural Residential III (ARIII) to Planned Residential Development (PRD)
A5-Agricultural (AR-IV) (Present Zoning) (Requested Zoning)

For the Purpose of Residential Development (Type of Development)

Address of Property: 4745 Cagle Mill Road, Lula, GA

Nearest Intersection to Property: Whitehall and Cagle Mill Rd.

Size of Tract: 146.12 ac acre(s), Lane Lot Number(s): , District(s):

Development Estimate Average Daily Sewer Flow (GPD): 71,475

Property Tax Parcel Number: 15007000254 & 15019000043 Proposed number of Lots: 348 units + amenities

(Below: For properties within protected watershed districts only)

Gross Density: units per acre Net Density: units per acre

Estimated amount of impervious surface: Minimum Lot Size:

Nicole Lynn Manuel Notary

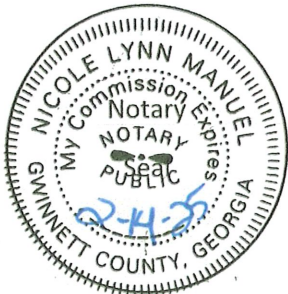
Signature of Owner(s)/Agent(s)

Jason Bach, Pond and Company

Printed Name of Owner(s)/Agent(s)

Civil Engineer of Record

Title of Agent



SEWER CAPACITY CALCULATIONS

The following sewer demand flows calculations are for the proposed single family and townhomes development located at 4745 Cagle Mill Road, Lula, GA 30554. These calculations are based on Georgia Department of Public Health On-Site Sewage Management Systems Manual – Section J. The proposed site will contain 297 single family units, 51 units townhomes, a 3,300 SF clubhouse, and a separate parcel with 38,000 SF of warehouse. An assumed peaking factor of 2.5 is used in instantaneous peak flow calculations.

1. Proposed Daily Flow

a. Single Family (assumed 3 bedrooms / unit)

$$297 \text{ Units} * \frac{200 \text{ GPD}}{\text{Units}} = 59,400 \text{ GPD}$$

b. Townhome (assumed 3 bedrooms / unit)

$$51 \text{ Units} * \frac{200 \text{ GPD}}{\text{Units}} = 10,200 \text{ GPD}$$

c. Clubhouse (assumed “Fitness Center/Spa” category per GA DPH) (assumed 25 people capacity)

$$25 \text{ Persons} * \frac{50 \text{ GPD}}{\text{Person}} = 1,250 \text{ GPD}$$

d. Warehouse (Combined 38,000 SF, approximately 25 workers, no showers or kitchen)

$$25 \text{ Persons} * \frac{25 \text{ GPD}}{\text{Person}} = 625 \text{ GPD}$$

2. Assumed Peak Factor of (2.5)

Proposed Total Usage = 71,475 GPD = 49.6 GPM

Instantaneous Peak Flow = 124.1 GPM

Consequently, this project will have an estimated daily flow of 71,475 gallons and an instantaneous peak flow of 124.1 gallons per minute.

Please do not hesitate to contact me with any questions or concerns.



Jason Bach, PE
Project Manager
Civil Engineer

POND
 3500 Peachtree Corners
 Suite 500
 Peachtree Corners
 Georgia 30092

CONTRACT SEAL

CLIENT INFORMATION



PROJECT NAME
**RESIDENCE AT
 CAGLE MILL**

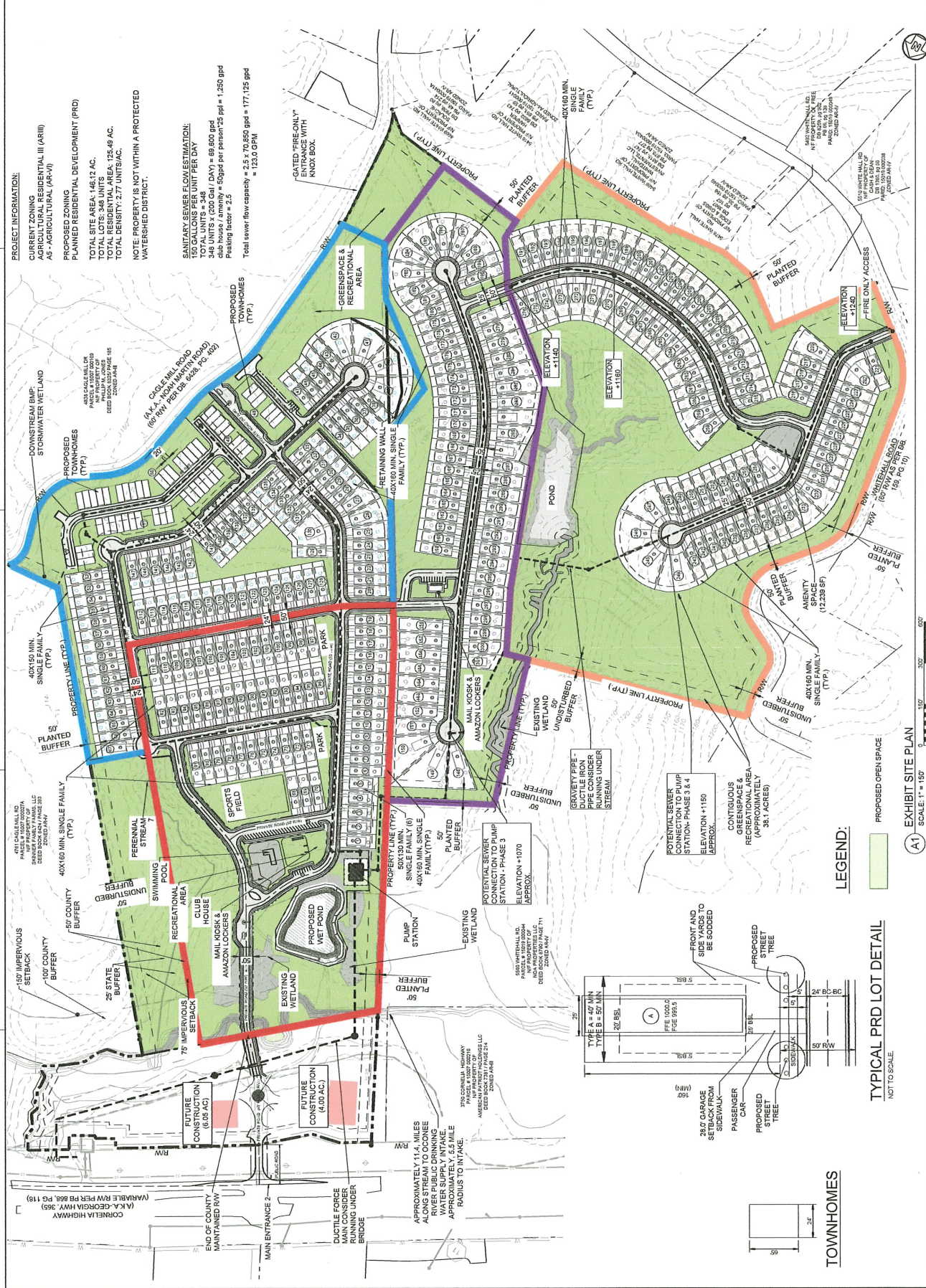
476 CAGLE MILL
 ROAD, LULA, GA

DESIGNED BY: KSH
 DRAWN BY: KSH/KMS
 CHECKED BY: JBA/CH
 SUBMITTED BY:
 DATE: 13 FEB 2024
 PROJECT #: 120203

SHEET TITLE
**ZONING
 SITE
 PLAN**

SHEET NUMBER
CS101

SHEET NUMBER
 ORIGINAL SHEET TITLE
 31' X 36'



PROJECT INFORMATION:
 CURRENT ZONING
 AGRICULTURAL RESIDENTIAL III (AR-III)
 AS - AGRICULTURAL (AR-VI)
 PROPOSED ZONING
 PLANNED RESIDENTIAL DEVELOPMENT (PRD)
 TOTAL SITE AREA: 146.17 AC.
 TOTAL RESIDENTIAL AREA: 123.49 AC.
 TOTAL DENSITY: 2.77 UNITS/AC.
 NOTE: PROPERTY IS NOT WITHIN A PROTECTED WATERSHED DISTRICT.

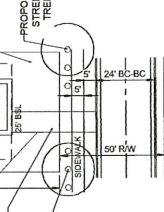
SANITARY SEWER FLOW ESTIMATION:
 348 UNITS x 1.5 GPD/UNIT PER DAY
 TOTAL UNITS = 548
 348 UNITS x (200 GPD / DAY) = 69,600 gpd
 club-house / amenity = 50gpd per person/25 ppl = 1,250 gpd
 Peeling factor = 2.5
 Total sewer flow capacity = 2.5 x 70,850 gpd = 177,125 gpd
 = 123.0 GPM

LEGEND:

- PROPOSED OPEN SPACE
- PROPOSED PRD LOT DETAIL

(A1) EXHIBIT SITE PLAN
 SCALE: 1" = 150'

NOT FOR CONSTRUCTION



TOWNHOMES

| PARKING SPACES | REQUIRED | PROVIDED |
|------------------|----------|----------|
| NORTH INDUSTRIAL | 29 | 29 |
| SOUTH INDUSTRIAL | 32 | 32 |

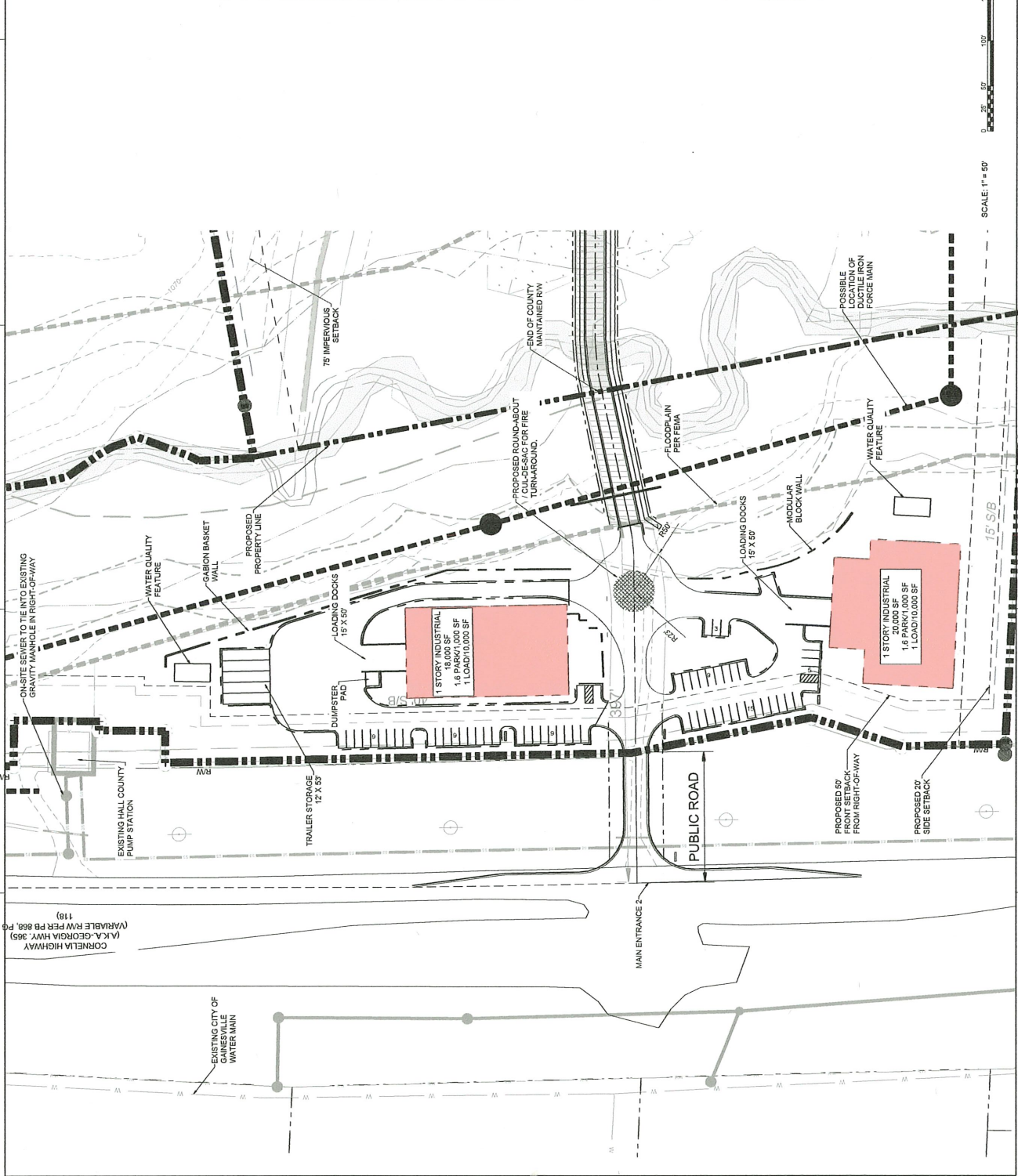
| LOADING DOCKS | REQUIRED | PROVIDED |
|------------------|----------|----------|
| NORTH INDUSTRIAL | 2 | 2 |
| SOUTH INDUSTRIAL | 2 | 2 |

TOTAL INDUSTRIAL ZONED AREA: 10.98 AC
 REQUIRED OPEN SPACE: 10.98 AC
 PROVIDED OPEN SPACE: 10.98 AC
 RATIO (OPEN SPACE / TOTAL AREA) = 75%
 REQUIRED CONTIGUOUS OPEN SPACE (100%) = 3.2 AC
 PROVIDED CONTIGUOUS OPEN SPACE (100%) = 4.3 AC
 (AS PER 17.450.120)

EXISTING ZONING: AGRICULTURAL RESIDENTIAL III (AR-III)
PROPOSED ZONING: PLANNED INDUSTRIAL DISTRICT (PID)
CHARACTERISTICS: (HALL COUNTY REF. CODE) - 17.180.090
 A PLANNED INDUSTRIAL DEVELOPMENT SHOULD CONSIST OF LAND WHICH HAS BEEN DESIGNATED FOR A PLANNED, ORGANIZED AND CONTROLLED INDUSTRIAL USE OR FOR PLANNED INDUSTRIAL PARK. THE STANDARDS EMPLOYED SHOULD BE DESIGNED TO ENCOURAGE THE FORMATION AND CONTINUANCE OF A COMPATIBLE ENVIRONMENT FOR THE PLANNED INDUSTRIAL USES AND THE SURROUNDING LAND USES. COMMERCIAL USES AND OTHER UNDESIRABLE COMMERCIAL USES MAY BE INCORPORATED AS PART OF A PLANNED INDUSTRIAL DEVELOPMENT.
PERMITTED USES:
 RETAIL INDUSTRIAL PARKS, OFFICES AND OFFICE BUILDINGS, RADIO AND TELEVISION STUDIOS, STORAGE YARDS, FAMILY DAY CARE HOME, AND GROUP DAY CARE HOME
REQUIRED PLANS: (HALL COUNTY REF. CODE) - 17.180.090

ALL OF THE GENERAL AND SPECIAL REQUIREMENTS FOR PLANNED DEVELOPMENTS SHALL BE PROVIDED. THE FOLLOWING SPECIFIC ITEMS SHALL ALSO BE ADDRESSED:
 1. A SITE PLAN INDICATING THE PROPOSED SITE PREPARATION AND GRADING, STREETS AND PARKING LAYOUT, UTILITIES, STORM DRAINAGE, WATER, GAS AND SEWAGE SYSTEMS AND ALL BUFFER AREAS.
 2. THE DEVELOPMENT CONTROLS FOR THE DISTRICT SHALL BE IDENTIFIED AND LISTED. THESE SHALL INCLUDE BUILDING HEIGHTS, LOT SIZES, ETC., IF STANDARDS ARE NOT SPECIFICALLY PROPOSED. THEN THE APPLICABLE STANDARDS IN THE LIGHT INDUSTRIAL DISTRICT SHALL APPLY TOGETHER WITH THE SCREENING AND BUFFER REQUIREMENTS, SHALL APPLY.
 3. IF OFFICE OR COMMERCIAL USES ARE PROPOSED IN CONJUNCTION WITH THE PLANNED INDUSTRIAL DEVELOPMENT, THE PLANNED INDUSTRIAL REQUIREMENTS IN THE PLANNED OFFICE DEVELOPMENT OR THE PLANNED COMMERCIAL DEVELOPMENT (DISTRICT) SHALL BE PROVIDED.
 4. A PROPOSED DEVELOPMENT SCHEDULE AND LISTING OF PROPOSED USES SHALL BE PROVIDED.

SANITARY SEWER, FL GAS ESTIMATION:
 WAREHOUSE (COMBINED 38,000 SF)
 APPROXIMATELY 25 WORKERS, NO SHOWERS OR KITCHEN
 25 PERSONS X (25 GPD) = 625 GPD TOTAL
 Parking factor = 2.5
 Total sewer flow capacity = 2.5 x 625 GPD = 1,562.5 GPD
 = 1.1 GPM



Know what's below. Call 811 before you dig.
 811
 Call 800-282-4411
 NOT FOR CONSTRUCTION



Hall County Government

PUBLIC WORKS AND UTILITIES

April 9, 2024

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

Jason Bach, Pond & Company
3500 Parkway Lane, Suite 500
Peachtree Corners, GA 30092

t: 770.531.6800 | f: 770.531.3945

Subject: Sanitary Sewer Letter of Availability
4745 Cagle Road
Parcel ID No: **15007 000254**
Lula, GA 30554

BILL NASH, P.E.

Director

Jorge Gomez

Assistant Director

Dear Mr. Bach,

In response to your request, this letter will serve as confirmation that Hall County has sufficient volume to serve the above development at Lula Road, (SR 52) at Cagle Road. The estimated average daily flow will be 71,475 GPD.

The existing sewer line is located near the property at Cornelia Hwy. An extension into the subject property is required to be performed by the developer at owner's cost.

Sanitary sewer capacity allocation is available on a first come, first serve basis by purchasing the sewer taps. As such, this "availability" letter does not guarantee capacity. Additionally, this letter is non-transferable. If the project design changes, this letter is void and a new "availability" letter must be obtained.

If you have any questions or need more information, please call the Hall County Public Works and Utilities Department at 770-531-6800.

Sincerely,

Bill Nash

Anael Dominguez (CDI: Planning)

From: Emily McGahee (Environmental Health)
Sent: Wednesday, April 17, 2024 9:51 AM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning); Katie L. Greenway (CDI: Planning); Kristie Turner (Planning)
Cc: Kelly Hairston (Environmental Health); Chad Harper (Environmental Health)
Subject: HCPC Tentative Agenda 5.20.24

Please find Environmental Health comments below:

Item 1, 3634 Oakland Lane, Parra: All proposed structures must meet all residential permitting requirements and/or required setbacks to existing septic system.

Item 2, 3001 Athens Hwy, Carroll Daniel: No comment.

Item 3, 4216 Winder Hwy, Johnson: No comment. Public sewer.

Item 4, 4610/4616 Winder Hwy; Georgia South: No comment. Public sewer.

Item 5, 4549 Clarks Bridge, Allen: No comment.

Item 6, 4745 Cagle Mill Road, Boling: No comment. Public sewer.

Item 7, 4745 Cagle Mill Road, Boling: No comment. Public sewer.

Item 8, 4151 Nopone Road, Hemphill: Must meet all Environmental Health commercial septic system permitting requirements. Further determination will be made during the civil plan review process. A detailed business plan must be submitted to Hall County Environmental Health for review. Additional items, including, but not limited to: recorded plat, soil evaluation, and septic system installation may be required after review of business plan.

Item 9, 5052 Cagle Road, Poole: No comment. Public sewer.

Item 10, 5079 Old Winder Hwy, Gilliam: No comment. Public sewer.

Emily McGahee
Hall County Environmental Health
Hall County Government Center
2875 Browns Bridge Road
Mailing: PO Box 5901
Gainesville, GA 30504
(770) 531-3973 (phone)
emcgahee@hallcounty.org

<http://dph.georgia.gov/environmental-health> (State Website)
<http://www.phdistrict2.org/HallCounty.htm> (District Website)
<https://www.hallcounty.org/192/Environmental-Health> (County Website & Forms)

Anael Dominguez (CDI: Planning)

From: Chavers, Veronica E <VChavers@dot.ga.gov>
Sent: Thursday, April 18, 2024 4:52 PM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning)
Subject: RE: Tentative Planning Agenda for May 20, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

See comments in red below.

From: Anael Dominguez (CDI: Planning) <adominguez@hallcounty.org>
Sent: Thursday, April 11, 2024 12:27 PM
Subject: Tentative Planning Agenda for May 20, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon –

Here is the Tentative Agenda and Maps for the **Monday, May 20, 2024** Hall County Planning Commission Meeting.

Please use the links to review the documents and respond with comments to Hall County Planning and Development. Failure to provide comments in a timely manner may result in the information not being included in the staff report.

When submitting comments, please include the name of the applicant along with the address of the property with the corresponding comment.

Comments are due by **Thursday, April 18th**. Email comments to Beth (bgarmon@hallcounty.org) and Ana (adominguez@hallcounty.org).

CALL TO ORDER

AGENDA REVIEW

APPROVAL OF MINUTES – May 6, 2024

NEW BUSINESS

1. [3634 Oakland Lane | Variance | 17.240.010. to reduce the rear yard setback | on a 0.30± acre tract located on the west side of Oakland Lane, approximately 340 feet from its intersection with Pleasant Hill Road | Zoned R-I; Tax Parcel 08032 000045 | Proposed Use: Residential addition | * Commission District 4 | Alexandra Parra, applicant](#) **GDOT coordination not required.**
2. [3001 Athens Highway | Variance | 17.420.050.F. to allow for an internally illuminated monument sign within GCOD | on an 80.79± acre tract located on the east side of Athens Highway \(GA-11\), at its intersection with Baker Road | Zoned I-I & AR-IV \(GCOD\); Tax Parcel 15023 000040 | Propose Use: Monument sign | * Commission District 3 | Carroll Daniel Construction Co. attn: Robert Tieman, applicant](#) **GDOT coordination not required**
3. [4216 Winder Highway | Variance | 17.420.060. to allow for two wall signs within GCOD | on a 3.93± acre tract located on the west side of Winder Highway \(GA-53\), approximately 490 feet from its intersection with Martin Road | Zoned H-B \(GCOD\); Tax Parcel 15044B000011 | Propose Use: Wall sign | * Commission District 1 | Serena Johnston/The Huxton Group, LLC, applicant](#) **GDOT coordination not required.**

4. [4610 & 4616 Winder Highway | Amend Conditions of Zoning](#) | on a combined 31.64± acre tract located on the south side of Winder Highway (GA-53); at its intersection with Plantation Drive | Zoned PRD; Tax Parcels 15037A000070 & 15037A000001 | **Proposed Use: 88-unit townhome development** | ** Commission District 1 | **Georgia South Development, LLC, applicant** **Will required GDOT coordination for driveway access to SR 53/ Winder Hwy**
5. [4549 Clarks Bridge Road | Use Subject to County Commission Approval](#) | on a 11.68± acre tract located on the west side of Clarks Bridge Road (GA-284), approximately 90 feet from North Browning Bridge Road | Zoned AR-IV; Tax Parcel 12071 000052 | **Proposed Use: Equestrian center with variances from the standards** | ** Commission District 3 | **Marie Allen, applicant** **Will required GDOT coordination to ensure that added traffic volumes do not adversely impact the state route intersection**
6. [4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone](#) | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Residential Development (PRD) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 (pt.), 15019 000043 & 15019 000114 | **Proposed Use: 349-unit residential development** | ** Commission District 3 | **Josh Boling, applicant** **Will required GDOT coordination for driveway access to SR 365/ Cornelia Hwy**
7. [4745 Cagle Mill Road | Rezone](#) | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) & Gateway Corridors Overlay District (GCOD) | on a 10.59± acre tract located on the east side of Cornelia Highway (GA-365), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 (pt.) | **Proposed Use: Industrial development** | ** Commission District 3 | **Josh Boling, applicant** **Will required GDOT coordination for driveway access to SR 365/ Cornelia Hwy**
8. [4151 Nopone Road | Rezone](#) | from Agricultural Residential IV (AR-IV) & Suburban Shopping (S-S) to Planned Industrial Development (PID) | on a 14.06± acre tract located on the north side of Nopone Road, approximately 623 feet from its intersection with Cleveland Highway (GA-11) | Zoned AR-IV & S-S; Tax Parcel 12026 000004 (pt.) | **Proposed Use: Self-storage facility** | ** Commission District 3 | **John Hemphill c/o Cloudwalker Investments, LLC, applicant** **GDOT coordination not required**
9. [5052 Cagle Road | Rezone](#) | from Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) & Gateway Corridors Overlay District (GCOD) | on a 20.98± acre tract located on the south side of Cagle Road, at its intersection with Lula Road (GA-52) | Zoned AR-IV; Tax Parcel 09084 000003 | **Proposed Use: Industrial development** | ** Commission District 3 | **Gregg Poole, applicant** **Will required GDOT coordination for driveway access to SR 52**
10. [5079 Old Winder Highway | Rezone](#) | from Residential I (R-I) to Planned Residential Development (PRD) | on a 20.02± acre tract located on the east side of Old Winder Highway, approximately 1,496 feet from its intersection with Daylily Drive | Zoned R-I; Tax Parcel 15038 000059 | **Proposed Use: 105-unit townhome development** | ** Commission District 1 | **Steven P. Gilliam, applicant** **Will required GDOT coordination for driveway access to state route**

*The Planning Commission's decision will be the final action taken unless appealed to the Board of Commissioners. To do so, file an application with the Planning Department within five working days of the Planning Commission's decision.

The Hall County Board of Commissioners will hear appeals at a public hearing **Thursday, June 27, 2024**, at 6:00 p.m. at the Hall County Government Center, 2nd Floor Meeting Room, 2875 Browns Bridge Road, Gainesville, Georgia.

The Planning Commission's recommendation will be forwarded to the Board of Commissioners for final action at a public hearing on **Thursday, June 27, 2024. The Board will meet at 6:00 p.m. at the Hall County Government Center, 2nd Floor Meeting Room, 2875 Browns Bridge Road, Gainesville, Georgia.

Thank you,
 Ana Dominguez
 Planning Commission Clerk
 Hall County Community Development and Infrastructure
 (770) 531-6810 | www.hallcounty.org



Russell R. McMurry, P.E., Commissioner
One Georgia Center
600 West Peachtree Street, NW
Atlanta, GA 30308
(404) 631-1000 Main Office

5/12/2022
Audubon
ATTN: Josh Boiling
6525 The Corner's Parkway
Suite 216
Peachtree Corners, GA 30092

Subject: Access to Property; Hall County; Commercial Driveway at SR 365, South of Cagle Road, MP 22.27.

To whom it may concern,

Dependent upon compliance with all Department of Transportation requirements in effect at the time a permit is requested and your compliance with any current or future authorizations under Georgia Code 32-6-111, we will approve any repair needed as well as permit a drive if applicant meets all requirements.

Please contact Parker Niebauer at (770) 533-8275 if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Jason Dykes', is written over a light blue horizontal line.

Jason Dykes, P.E.
District Traffic Engineer

JD/af
PuckettZ@pondco.com



Hall County Government
COMMUNITY DEVELOPMENT AND INFRASTRUCTURE
PUBLIC WORKS AND UTILITIES

MEMORANDUM

To: Randi Doveton, Director of Planning and Development

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

From: Bill Nash, Director of Public Works and Utilities

Date: April 18, 2024

t: 770.531.6800 | f: 770.531.3945

Subject: May 20, 2024 - Hall County Planning Commission Agenda

PUBLIC WORKS AND
UTILITIES DIRECTOR
Bill Nash, P.E.

Please be advised that our office has reviewed the Hall County Planning Commission agenda for the May 20, 2024 meeting. Upon review, we provide the following comments.

NEW BUSINESS

1. [3634 Oakland Lane | Variance | 17.240.010. to reduce the rear yard setback | on a 0.30± acre tract located on the west side of Oakland Lane, approximately 340 feet from its intersection with Pleasant Hill Road | Zoned R-I; Tax Parcel 08032 000045 | Proposed Use: Residential addition | * Commission District 4 | Alexandra Parra, applicant](#)
 - a. **Engineering:** No comment.
 - b. **Traffic:** No comment.
 - c. **Utilities:** No comment.

2. [3001 Athens Highway | Variance | 17.420.050.F. to allow for an internally illuminated monument sign within GCOD | on an 80.79± acre tract located on the east side of Athens Highway \(GA-11\), at its intersection with Baker Road | Zoned I-I & AR-IV \(GCOD\); Tax Parcel 15023 000040 | Propose Use: Monument sign | * Commission District 3 | Carroll Daniel Construction Co. attn: Robert Tieman, applicant](#)
 - a. **Engineering:** No comment
 - b. **Traffic:** No comment.
 - c. **Utilities:** No comment

3. [4216 Winder Highway | Variance | 17.420.060. to allow for two wall signs within GCOD | on a 3.93± acre tract located on the west side of Winder Highway \(GA-53\), approximately 490 feet from its intersection with Martin Road | Zoned H-B \(GCOD\); Tax Parcel 15044B000011 | Propose Use: Wall sign | * Commission District 1 | Serena Johnston/The Huxton Group, LLC, applicant](#)
 - a. **Engineering:** No comment.
 - b. **Traffic:** No comment
 - c. **Utilities:** No comment

4. [4610 & 4616 Winder Highway | Amend Conditions of Zoning | on a combined 31.64± acre tract located on the south side of Winder Highway \(GA-53\); at its intersection with Plantation Drive | Zoned PRD; Tax Parcels 15037A000070 & 15037A000001 | Proposed Use: 88-unit townhome development | ** Commission District 1 | Georgia South Development, LLC, applicant](#)
 - a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage.
Show FEMA and Hall County studied Flood plains that are present on site
Roads should be private
 - b. **Traffic:** GDOT access permit required
Recommend internal roadways be private and maintained by an HOA or property management company.
Unit driveways are shown as 22 feet in length to the sidewalk parked vehicles may protrude onto the right-of-way. Larger vehicles may protrude over the sidewalk. Recommend a minimum of 22 feet driveways to the proposed right-of-way and not to the sidewalk.
 - c. **Utilities:** Sanitary sewer located adjacent to site.

5. [4549 Clarks Bridge Road | Use Subject to County Commission Approval | on a 11.68± acre tract located on the west side of Clarks Bridge Road \(GA-284\), approximately 90 feet from North Browning Bridge Road | Zoned AR-IV; Tax Parcel 12071 000052 | Proposed Use: Equestrian center with variances from the standards | ** Commission District 3 | Marie Allen, applicant](#)
 - a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage.
 - b. **Traffic:** No comment
 - c. **Utilities:** No comment

6. [4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Residential Development \(PRD\) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 \(pt.\), 15019 000043 & 15019 000114 | Proposed Use: 349-unit residential development | ** Commission District 3 | Josh Boling, applicant](#)
 - a. **Engineering:** Property is in major flood area
Show FEMA and Hall County studied Flood plains that are present on site
Property is in north Oconee WPD
Show N. Oconee WPD buffers
No rise study required for construction in flood zone
Roads should be private
 - b. **Traffic:** Roadways are shown as private, however, this should be required.

Access from Cornelia Hwy (SR 365) is shown as private, however, Label indicates “end of county maintained right-of-way” internally. Clarify. Additional comments may be necessary after clarification.

Fire only access on White Hall Road must be gated and no ability for internal traffic to turn around is provided

Recommend the gravel section of Cagle Mill Road be improved to county paved standards to White Hall Road in order to facilitate site traffic to and from Old Cornelia Hwy.

Site plan indicates a fire only access on Cagle Mill Road labeled as “Gated fire only entrance with Knox Box” However no access is shown. Clarify.

GDOT permit required for Cornelia Hwy (SR 365) access.

- c. **Utilities:** Hall County lift station on GA 365

- 7. [4745 Cagle Mill Road | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Industrial Development \(PID\) & Gateway Corridors Overlay District \(GCOD\) | on a 10.59± acre tract located on the east side of Cornelia Highway \(GA-365\), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 \(pt.\) | Proposed Use: Industrial development | ** Commission District 3 | Josh Boling, applicant](#)

- a. **Engineering:** See #6 comments

- b. **Traffic:** GDOT permit required for Cornelia Hwy (SR365) access.

- Very short section of entrance is proposed to be county maintained but should be a private driveway.

- c. **Utilities:** Hall county lift station on GA 365

- 8. [4151 Nopone Road | Rezone | from Agricultural Residential IV \(AR-IV\) & Suburban Shopping \(S-S\) to Planned Industrial Development \(PID\) | on a 14.06± acre tract located on the north side of Nopone Road, approximately 623 feet from its intersection with Cleveland Highway \(GA-11\) | Zoned AR-IV & S-S; Tax Parcel 12026 000004 \(pt.\) | Proposed Use: Self-storage facility | ** Commission District 3 | John Hemphill c/o Cloudwalker Investments, LLC, applicant](#)

- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage..

- b. **Traffic:** Access must meet Hall County Commercial standards

- A trip generation report and turn lane analysis must be completed to determine if improvements to Nopone Road are warranted.

- c. **Utilities:** No gravity sewer lift station adjacent to site

- 9. [5052 Cagle Road | Rezone | from Agricultural Residential IV \(AR-IV\) to Planned Industrial Development \(PID\) & Gateway Corridors Overlay District \(GCOD\) | on a 20.98± acre tract located on the south side of Cagle Road, at its intersection with Lula Road \(GA-52\) | Zoned AR-IV; Tax Parcel 09084 000003 | Proposed Use: Industrial development | ** Commission District 3 | Gregg Poole, applicant](#)

- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage. Show stream buffer and impervious setback from wretched vegetation not centerline of stream.
- b. **Traffic:** GDOT permit required for access to Lula Road (SR 52) Internal road should be private and not County maintained. No access to Cagle Road is shown on the site plan, however, recommend a condition that access to Cagle Road is prohibited.
- c. **Utilities:** No sanitary sewer lines available.

10. [5079 Old Winder Highway | Rezone | from Residential I \(R-I\) to Planned Residential Development \(PRD\) | on a 20.02± acre tract located on the east side of Old Winder Highway, approximately 1,496 feet from its intersection with Daylily Drive | Zoned R-I; Tax Parcel 15038 000059 | Proposed Use: 105-unit townhome development | ** Commission District 1 | Steven P. Gilliam, applicant](#)

- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage. Show stream buffer and impervious setback from wretched vegetation not centerline of stream. Roads should be private
- b. **Traffic:** GDOT approval / permit required for Old Winder Hwy (SR211) Internal roadways shown on site plan will not meet county standards and no variances were requested. If approved as shown, recommend roadways be private and not county maintained. Unit driveways are shown as 22 feet in length to the sidewalk. Parked vehicles may protrude onto the right-of-way. Larger vehicles may protrude over the sidewalk. Recommend a minimum of 22 feet driveways to proposed right-of-way and not to the sidewalk.
- c. **Utilities:** No sanitary sewer adjacent to site

Anael Dominguez (CDI: Planning)

From: John Hornick (Fire Services)
Sent: Thursday, April 18, 2024 11:01 AM
To: Anael Dominguez (CDI: Planning)
Cc: Beth Garmon (CDI: Planning)
Subject: Fire Comments

Monday, May 20, 2024 Hall County Planning Commission Meeting.

[4745 Cagle Mill Road | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Industrial Development \(PID\) & Gateway Corridors Overlay District \(GCOD\) | on a 10.59± acre tract located on the east side of Cornelia Highway \(GA-365\), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 \(pt.\) | Proposed Use: Industrial development | ** Commission District 3 | Josh Boling, applicant](#)

The Hall County Fire Marshal's Office considers the plan conceptual in nature, and if approved may require modifications during the development review process.

Regards,

John Hornick, NPQ Fire Service Plans Examiner 1
Lieutenant, Hall County Fire Rescue
Hall County Government
Main: 770-531-6838 | Cell: 404-597-0083
Website: www.Hallcounty.org



ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT:

JOSH BOLING

REQUEST:

REZONE FROM AR-III & AR-IV TO PID FOR AN INDUSTRIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date: August 19, 2024

Time: 5:15 p.m.

&

COUNTY COMMISSION

Date: Sept. 24, 2024

Time: 6:00 p.m.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

Jul 16, 2024 11:52:55

3721 U.S. 23

Lula

Hall County

Georgia

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT:

JOSH BOLING

REQUEST:

REZONE FROM AR-III & AR-IV TO PID
FOR AN INDUSTRIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date: August 19, 2024

Time: 5:15 p.m.

COUNTY COMMISSION

Date: Sept. 24, 2024

Time: 6:00 p.m.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT:

JOSH BOLING

REQUEST:

REZONE FROM AR-III & AR-IV TO PRD
FOR A 349-UNIT RESIDENTIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date: August 19, 2024

Time: 5:15 p.m.

COUNTY COMMISSION

Date: Sept. 24, 2024

Time: 6:00 p.m.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809



Jul 16, 2024 12:10:30

5416 Whitehall Road

Lula

Hall County

Georgia



AGENDA ITEM

Planning & Zoning

REPORT TO: Work Session (09/23/24)

REPORT TO: Voting Meeting (09/24/24)

ITEM NO: 512/2024

SUBJECT: **4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone** | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Residential Development (PRD) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 (pt.), 15019 000043 & 15019 000114 | **Proposed Use: 349-unit residential development** | Commission District 3 | **Josh Boling, applicant**

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: BG
Recommendation:
Approve Withdrawal

Purpose of Request:
4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Residential Development (PRD) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 (pt.), 15019 000043 & 15019 000114 | **Proposed Use: 349-unit residential development** | Commission District 3 | **Josh Boling, applicant**

History:

Facts and Issues:

Options:

| | |
|--|---------|
| Funding Requested | \$ 0.00 |
| Are funds within current budget? | No |
| Source of Funds | |
| Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? | No |
| Has it been reviewed by the County Attorney? | Yes |

Is there a deadline for this item?

2024-09-24

Approvals:

| Submit | Approve | Attorney | Administration |
|---------------|----------------|-----------------|-----------------------|
| KE | BG | WLI | CR |
| Clerk | | | |
| JR | | | |

Attachments:

- Board Memo
- Recommendation Report
- Request to Withdraw
- Application
- Narrative
- Maps
- Renderings
- Deed
- Site Plan
- Traffic Impact Study
- Preliminary Stormwater Report
- Sewer Application
- Sewer Letter
- GDOT Letter
- Environmental Health Comments
- GDOT Comments
- Public Works Comments
- Notice Sign Photo



Hall County Government

COMMUNITY DEVELOPMENT & INFRASTRUCTURE
PLANNING AND ZONING

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6809 | f: 770.531.3902

PLANNING AND ZONING
DIRECTOR
Beth Garmon

To: Richard Higgins, Chairman
Kathy Cooper, District 1 Commissioner
Billy Powell, District 2 Commissioner
Gregg Poole, District 3 Commissioner
Jeff Stowe, District 4 Commissioner

From: Beth Garmon, Director of Planning & Zoning

Date: September 9, 2024

Subject: **4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive**
| Rezone | from Agricultural Residential III (AR-III) &
Agricultural Residential IV (AR-IV) to Planned Residential
Development (PRD) | on a combined 130.84± acre tract
| Proposed Use: 349-unit residential development |
Josh Boling, applicant

The request before you is the request of Josh Boling to withdraw an application to rezone from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Residential Development (PRD) to allow a 349-unit residential development. This item is located within Commission District 3.

At their August 19, 2024 meeting, the Hall County Planning Commission voted to recommend withdrawal **(5-0)**.

There were **no comments submitted** in advance of the Planning Commission meeting and **no one spoke during the public hearing**.

**HALL COUNTY PLANNING COMMISSION
RECOMMENDATION REPORT**

Applicant Josh Boling

Request Rezone from Agricultural Residential (AR-III, 17.110 and AR-IV, 17.120) to Planned Residential Development (PRD, 17.180.060)

Proposed Use 349-lot residential development

Size 130.84± acres

Zoning Current Agricultural Residential (AR-III, 17.110 and AR-IV, 17.120) | Proposed Planned Residential Development (PRD, 17.180.060)

Location **4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive** | 15007 000254 (pt.), 15019 000043 and 000114

Commission District Three

Planning Commission Date August 19, 2024

Staff Recommendation **Denial**, as the proposed use is inconsistent with the “Rural” future land use classification in the Comprehensive Plan.

Record Number HZON24-0006

Planning Commission Recommendation..... **Withdrawal**

Vote: 5-0

Excerpts from the minutes of the August 19, 2024 meeting

Applicant’s Presentation:

Katie Greenway, Planning and Zoning Administrator, stated the applicant has requested withdrawal.

Motion: A motion to withdraw was made by Mr. Hunt and seconded by Mr. Sosebee. Vote: 5-0

Staff recommends DENIAL of the applicant’s request. However, if the Planning Commission sees fit to approve this application, staff recommends the following conditions:

1. The property shall be developed in accordance with the site plan dated March 22, 2024, and as described in the project narrative dated March 22, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The development shall be limited to 297 single-family homes and 52 rear-entry townhomes.
3. The minimum heated floor area (HFA) shall be 2,000 square feet for all residential units.
4. Building elevations shall be composed of a mixture of cement siding, stone, and/or brick façade, with a minimum of brick or stone accents on the front of the homes. The balance of the home may be the same material or of fiber-cement material. Vinyl siding is prohibited. Homes shall be consistent with the submitted renderings.
5. The amenity area shall include a recreational area, sports field, swimming pool, mail kiosk, clubhouse, and parking and shall be completed before 50% of the final buildout of the entire project.
6. All residential driveways shall measure no less than 28 feet from the back of sidewalk to the garage door as shown on site plan submitted on March 22, 2024.
7. Front entry garage orientation may be semi-flush with the garage face positioned a minimum of 5 feet behind the front plane/porch or the residence as depicted on the renderings submitted April 29, 2024. Garage door width shall not exceed 55% of the width of the front façade.
8. The development shall feature internal sidewalks no less than five (5) feet in width constructed on both sides of all internal streets.
9. The development shall be served by public sewer, with the obtainment of all required easements and other construction costs such as a lift station and force main to be the responsibility of the developer.
10. The development shall be limited to a maximum of six (6) model homes prior to the recording of the final plat. Model home permits may be issued prior to Final Plat recording provided that hard surface (crusher run) access is provided and fire protection (functioning hydrant) is located within 500 feet of any structure under construction. No certificate of occupancy permits shall be issued prior to Final Plat recording.
11. There shall be a mandatory Homeowners' Association (HOA).
12. All designated open space within the development shall be commonly held, and not held by any individual homeowner(s).
13. All roadways within the development shall be privately maintained by the Homeowners' Association.
14. A 50-foot buffer (planted or undisturbed) should be maintained along all property lines excluding road frontage.

15. All stream buffers must be fully within Homeowners' Association common space and shall not encroach onto any individual residential building lot.
16. Vehicle parking for guests shall be provided at a ratio of 1 parking space per 2 units. These parking spaces may also serve the cluster mailbox unit. All roadway design and parking configurations shall meet Hall County Traffic standards.
17. County-maintained roads shall end at the edge of the right-of-way of Cornelia Highway (SR 365) and shall not include any portion of the roadway within the development.
18. Coordination and approval from both GDOT and Hall County Engineering shall be required for implementation of traffic study recommendations as part of the development process. Such improvements will be the financial responsibility of the developer.
19. No variances or development exceptions are granted as part of this request unless explicitly listed herein. The development shall be compliant with the Official Code of Hall County.
20. The following statement regarding the potential impacts of agricultural operation in the area shall be made a part of any plat recorded on the property:

"Owners, occupants, and users of property shown on this plat are hereby informed of the impacts associated with normal farming practices which may take place on adjacent and nearby property including, but not limited to, noise, odors, dust, the operation of machinery of any kind, the storage and disposal of manure, and the application of fertilizers, herbicides, and pesticides. Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices."
21. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.

The following should be considered as exceptions to the Official Code of Hall County, and shall warrant further determination by the Board should it choose to approve the submitted narrative and site plan:

12.20.070. - Developments with private roads.

- Any residential development or subdivision which includes private streets, either designated as such on the development plat or otherwise, and which seeks approval and permitting by the county must demonstrate the formation of a homeowners' association which will be responsible for the maintenance and upkeep of all private streets therein. The county shall not approve the plat for any residential subdivision or development containing private streets which does not sufficiently demonstrate to the county's administrative officials that a homeowners' association has been created and that the association has been given the full power and responsibility for future maintenance of all private streets within the development. All such private roads shall comply with the existing road standards adopted by Hall County.
 - The applicant is requesting a variance from the requirements of section 12.20.070. However, the narrative and site plan state that the roads and alleyways are proposed

to be privately-owned and maintained. Clarity is required from the applicant regarding this variance request.

16.60.070. - Street jogs.

- Street jogs or centerline offsets in the horizontal alignment of streets across intersections of less than 200 feet shall be prohibited.
 - The applicant is requesting a variance from the requirements of section 16.60.070. The narrative and site plan request a reduction from the standard and state that the reduction will reduce the total impervious area. The applicant did not provide specific dimensions.

16.60.200. - Design standards for streets. - A. *Design standard chart.*

- Minimum cul-de-sac length (feet) (centerline to center of turnaround) 150
 - The applicant is requesting a variance from the requirements of section 16.60.200. The narrative and site plan request the use of eyebrow cul-de-sacs as an alternative design and proposes internal alleyways.

17.180.060.B.2 – Dimensional Standards for Single Family Residences

- A) - Lot area. Minimum lot area standards of 8,000 square feet for lots served by sanitary sewer. The overall gross density not to exceed two units per acre. The minimum lot area for lots without access to sanitary sewer shall be determined by the requirements of the county environmental health department.
 - The applicant is requesting a variance from the requirements of sections 17.180.060.B.2.a. The narrative and site plan request a reduction of the minimum lot area from 8,000 square feet to 6,000 square feet and a density of 2.76 units per acre.
- B) - Lot width. Minimum lot width of 50 feet.
 - The applicant is requesting a variance from the requirements of sections 17.180.060.B.2.b. The narrative and site plan request a reduction of the minimum lot width from 50' to 40' for 241 lots.
- C) – Setbacks.
 - i. Minimum front yard setback from the property line of 25 feet.
 - ii. Minimum side yard setback from the property line of five feet.
 - iii. Minimum rear yard setback from the property line of 20 feet.
 - The applicant is proposing 0-foot lot lines to allow for condominium style ownership of the proposed townhomes. The single-family detached lots meet the listed setback standards.

17.180.060.B.5 - Buffers

- A minimum 50-foot planted buffer shall be established along the perimeter of all property boundaries adjacent to residential and/or non-residential zoning districts to ensure that the

planned residential development is appropriately screened. The planted buffers shall conform to the requirements as described in section 17.260.020 titled vegetation buffers and vision clearance. In conditions where required stream buffers exist along a perimeter property boundary, the planning director may grant exemptions from the 50-foot planted buffer if a stream buffer meets or exceeds the 50-foot planted buffer width. Semi-flush. Garage doors shall be oriented towards the street. Garage doors shall be positioned between 5 and 20 feet behind the front wall plane of the residence, extending no more than 40 percent of the width of the residence.

- The applicant proposes a combination of undisturbed and planted buffers surrounding the development; however, several sections within the development are deficient of this buffer. A 50-foot buffer (planted or undisturbed) should be maintained along all property lines excluding road frontage.

17.180.060.B.9.B - Architectural Standards

- Semi-flush. Garage doors shall be oriented towards the street. Garage doors shall be positioned between 5 and 20 feet behind the front wall plane of the residence, extending no more than 40 percent of the width of the residence.
 - For the single-family homes, the applicant proposes front-oriented garage placements, with renderings showing the garage doors positioned flush with the front wall plane and a maximum garage door width of 54% of the front façade. The applicant proposes a minimum 28' setback from sidewalk.

17.180.060.B.11.d - Cluster mailbox unit (CBU).

- Parking. Parking shall conform to requirements specified in chapter 17.250, in addition to any parking and loading requirements or accessibility guidelines pertaining to the Americans with Disabilities Act. On-street parking is prohibited in all planned residential developments. Off-street parking areas that make it necessary for vehicles to back out directly into a public road, street, or highway are prohibited in all planned residential developments. The following minimum parking ratios must be met for all CBU's
 - The applicant is requesting a variance from the requirements of sections 17.180.060.B.11.d. The narrative and site plan request perpendicular, angled, and parallel parking in the areas of the mail kiosk, amenity area, and townhomes.

Summary Analysis

The applicant is requesting to rezone a combined 130.84± acres zoned Agricultural Residential (AR-III, 17.110 & AR-IV, 17.120) to Planned Residential Development (PRD, 17.180.060) for the purpose of developing a 349-unit residential subdivision consisting of 297 detached homes and 52 rear-entry townhomes. The total density of the development would be 2.67 units per acre. Per the narrative, the property is currently developed with a manmade off-line pond and a small residential building. The applicant has also submitted a concurrent request to rezone a 10. 59± acre portion of tax parcel 15007 000254 to a Planned Industrial Development (HZON24-0006). This staff report will focus on the PRD zoning request.

Per the applicant’s narrative and the submitted site plan, the development will be constructed in a series of four phases. Phase 1 will be developed with 63 detached single-family residences, Phase 2 will be 80 detached single-family residences and 52 attached single-family townhomes, Phase 3 will be 68 detached single-family residences, and Phase 4 will be 86 detached single-family homes.

The development will provide a total of 59% open space, which will include stream buffers, planted and undisturbed exterior buffers, undisturbed areas, access/utility easements, and wetlands. The eastern portion of the parcel is within the North Oconee Reservoir Watershed Protection District and is bisected by the North Oconee River, which requires a 100-foot undisturbed buffer and a 150-foot impervious setback along the identified state waters (17.225.040). This area is also impacted by the County Studied Flood and FEMA Flood Zones.

The amenity area includes a recreational area, sports field, swimming pool, mail kiosk and clubhouse with adjacent parking, which will serve both the single-family detached homes and townhomes. The development will also include 5-foot-wide sidewalks on both sides of the street, ensuring pedestrian connectivity within the development.

The site plan indicated that the development will be served by two access points. The east access will be along Cagle Mill Road and the west access will be along Cornelia Highway (SR 365). There is an additional gated fire access proposed along Whitehall Road. The project narrative states that the subdivision roads will be gated on both the east and west sides and acknowledges that the roads and alleyways will be privately owned and maintained. Internal road widths will be designed with 50-foot right-of-ways.

A traffic impact study was prepared based on a proposed 297 detached single-family homes and 51 attached townhomes for a total of 348 homes. The study found the proposed subdivision is expected to generate 240 trips in the morning peak hour, 318 trips in the evening peak hour, and 3,149 daily trips. Recommendations were made for access improvements from Cornelia Highway (SR 365), Cagle Mill Road, and Whitehall Road. Coordination and approval from both GDOT and Hall County Engineering will be required for implementation of recommendations.

The development standards for the project are described in the table below and are compared with the PRD requirements, (17.180.060):

| Standard | PRD Requirement (17.180.060) | Proposed Development |
|----------------------|-------------------------------------|---|
| Site Area | 5 acre minimum | 130.84± acres |
| Number of Units | – | 349 detached and attached single-family residences |
| Density | 2 units per acre maximum | 2.67 units per acre* |
| Min. Lot Area | 8,000 sq. ft. | 6,000 sq. ft. * |
| Max. Building Height | – | 35 feet |
| Min. Open Space | 30% | 45.8% |
| Exterior Buffer | 50 feet | 50-foot planted buffer along a majority of the perimeter 50-foot undisturbed buffer along the stream buffers |

| | | |
|---|---|--|
| | | Some areas are deficient of the required buffer* |
| Front Setback (Internal) | 25 feet | 25 feet ** |
| Side Setback (Internal) | 5 feet | 5 feet ** |
| Rear Setback (Internal) | 20 feet | 20 feet** |
| Parking | 2 spaces for each dwelling unit single family (17.250.020) | 2 spaces for each dwelling unit |
| Min. Heated Floor Space | – | 2,000 square feet |
| Garage – % of front façade | 40% when recessed a minimum of 5 to 20 feet behind front wall plan of residence | Maximum of 54% * |
| Minimum Sidewalk Width | 5 feet | 5 feet |
| Cluster Mailbox Unit (CBU) | CBU with 14 short-term parking spaces | CBU with 44 short-term parking spaces |
| Note: Items marked with an asterisk (*) do not conform to 17.180.060. | | |

**Note: Although the site plan and building layout meet the PRD setbacks, the applicant states that the single-family lots and townhomes will be condominium-style ownership with the option to lot out units at the building line. The applicant has proposed selling the units with a 0-foot setback with the remaining property to be joint-owned by the individual property owners and maintained by the Homeowners’ Association.

Per the submitted narrative, the property will be served by Hall County sanitary sewer, and the developer will connect to utilities in the area via an onsite pump-station, with an existing force main located within the proposed industrial parcel frontage along Cornelia Highway (SR 365).

The narrative states that the subdivision will include freestanding residential signs along each frontage and will be limited to 25 square feet each and identify the name of the subdivision only.

Several variances have been identified as part of this request. Any deficiencies identified as part of the plan will be required to comply with the requirements of the PRD unless specially granted by the board in the conditions of approval.

Based on the future land-use plan, staff finds the *requested zoning designation is not consistent with the Hall County Comprehensive Plan future land use designation of Rural.* The Rural designation envisions low density single family residential uses. The development has proposed a density of 2.67 dwelling unit acre, exceeding the recommended maximum by less than 1 dwelling unit per 1.5 acres.

The Rural land use category is characterized by low-density residential development and neighborhoods. The intent of this land use category is to preserve the existing rural character, including agricultural uses and large-lot residential uses, as well as natural and historic features.

Zoning Analysis

When considering a zoning amendment to the zoning maps, the following items must be considered:

1. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property; **The zoning proposal may be suitable given the context of the surrounding area and the housing needs of the county, though the proposed development has an overall density of 2.67 dwelling units per acre. The surrounding area consists of vacant land and low-density residential and agricultural uses.**
2. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property; **The proposed zoning classification of Planned Residential Development (PRD, 17.180.060) will permit more intense uses than that of most adjacent or nearby parcels. This development will introduce more vehicular traffic onto Cagle Mill Road, which is a rural local road.**
3. Whether the property to be affected by the zoning proposal has reasonable economic use as currently zoned. **The property appears to have reasonable economic use as currently zoned.**
4. Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, or utilities; **Per the submitted traffic study, improvements are warranted to turn lanes on access points along Cornelia Highway (SR 365), Cagle Mill Road, and Whitehall Road. Coordination with GDOT and Hall County Engineering will be required for the implementation of the recommendations. Currently, Cagle Mill Road north of the intersection with Noah Martin Drive consists of a narrowly paved road and a portion south of Noah Martin Drive towards the intersection with Whitehall Road consists of unimproved gravel road.**
5. Whether the zoning proposal is in conformity with the policy and intent of the land use plan; **The proposed use is not consistent with the Comprehensive Plan and the "Rural" land use designation. The recommended density for this character area is one dwelling unit per 1.5 acres. The proposed development is proposing a density of 2.67 dwelling units per acre.**
6. The extent to which property values are diminished by the existing zoning restrictions; **Staff is unable to determine the extent to which property values are diminished by the existing zoning restrictions.**
7. The extent to which the destruction of the subject property's value under the existing zoning promotes the health, safety, morals or general welfare of the public; **Staff is unable to comment on the impact of property values without a full market analysis. Multiple factors impact property value including construction types, proposed uses, and maintenance. Often it is difficult to determine the effect of a development on adjacent properties until the development is completed.**
8. The relative gain to the public as compared to the hardship imposed upon the individual property owner; **Staff has not identified a hardship imposed on the property owner as the property is currently zoned.**
9. The length of time the property has been vacant as zoned considered in the context of land development in the area in the vicinity of the property; **The property is currently developed with a small manmade pond and small residential building.**

10. Whether there are other existing or changing conditions affecting the use or development of the property which give supporting grounds for either approval or disapproval of the zoning proposal; **The ongoing growth of industrial development in this area, most notably attributed to existing industrial uses such as Kubota as well as the upcoming Blue Ridge Connector, supports additional commercial and industrial development. This growth may also lead to an increased need for housing options.**
11. Whether the change would create an isolated district unrelated to the surrounding districts; **The proposed zoning is a Planned Residential Development (PRD, 17.180.060). Per the Official Code of Hall County, Planned Development Districts (17.180) are to be utilized as a "floating zone" which shall mean that areas will not be pre-designated as planned development districts but rather each such designation shall result from a specific and separate application for amendment. The proposed density is higher than that found on surrounding properties.**
12. Whether the present zoning district boundaries are illogically drawn in relation to existing conditions in the area; **There is no evidence that the present zoning district boundaries are illogically drawn.**
13. Whether the change requested is out of scale with the needs of the county as a whole or the immediate neighborhood; **The proposed density is higher than that found on immediately surrounding properties but in general the use does not appear to be out of scale with the needs of the County as a whole, as there is a need for additional housing.**
14. Whether it is impossible to find adequate sites for the proposed use in districts permitting such use and already appropriately zoned; **There are other properties within the County that support a moderate-density single-family residential uses based on the Future Land Use Map, though the development as proposed cannot be developed in any of the existing residential or multi-family districts without County Commission approval.**
15. Whether the need for rezoning could be handled instead by a variance request to the [Planning Commission]; **The request could not be handled alternatively as a variance.**
16. Whether there would be an ecological or pollution impact resulting from major modifications to the land if the request is granted; **Any land disturbance activities on the property shall be required to go through the land development permitting process and as a result are subject to local, state, and federal regulations. As a result, there should not be an ecological or pollution impact resulting from any modification to the land if the request is granted.**
17. Whether there is reasonable evidence based upon existing and anticipated land use that would indicate a mistake was made in the original zoning of the property; **There is no indication that a mistake was made in the original zoning.**

A Planned Residential Development (PRD, 17.180.060) allows for more flexibility in the design and development of the property. This provides for a mixture of housing types and encourages maximum use of natural features through proper site planning measures. The development should conform to the existing character and development pattern of the surrounding area.

17.380.050. - Submission requirements for a rezoning request

- A. Any person or persons requesting a change in the official zoning map or use subject to approval of the county commission shall file an application with a plat or map of the property attached thereto, together with payment of such fees set forth in chapter 17.30 to cover administrative and advertising costs, in the planning department office. Such person or persons or their authorized agent shall appear in person at the public hearing held to consider the district change. **The proposal meets the requirement. The applicant has paid the appropriate fees and understands that someone must be present at both the Hall County Planning Commission meeting and the voting meeting of the Hall County Board of Commissioners.**
- B. All applications for a change of zoning classification or use subject to approval of the county commission shall include:
 - 1. A narrative statement identifying the existing and proposed use of the property and addressing each of the criteria set forth in section 17.380.060.C of this section [chapter]. **Proposal does provide a narrative outlining the intent of the development; however, the applicant has not prepared a response to each of the criteria listed in 17.380.060.C.**
 - 2. A site plan drawn to scale designating the area covered by the application and identifying existing and proposed buildings and uses, adjacent existing land uses, zoning on contiguous parcels, including those across an abutting public right-of-way, and any other significant site improvements proposed to accommodate the proposed use or buffer adjacent uses, etc., or a plat of the subject property where no specific land use is proposed. In cases where only a plat or map is provided and no land use is proposed, the planning commission and county commission shall evaluate the application based on the most intense possible land use permitted in the proposed district. **Proposal meets this requirement.**
- C. For any application for a slow rate land treatment system (see chapter 17.20), the following additional requirements apply. **The proposed development will utilize public water and public sewer system.**
- D. For any application proposing the development of 100 or more residential dwelling units, a traffic impact study shall be submitted prior to consideration of the application by the planning commission. At the applicant's expense, the traffic impact study shall be prepared by a professional engineer in accordance with requirements established by the Hall County Engineering Department. The engineering department shall review the traffic impact study and forward any comments to the Hall County Planning Commission. **The proposal does meet the requirement. A traffic study has been conducted. Improvements are recommended but require the coordination of GDOT and Hall County Engineering.**

Development Support and Constraints – Departmental / Agency Comments

Hall County Environmental Health

In an email dated April 17, 2024, Emily McGahee stated “No comment. Public sewer.”

Hall County Fire Marshal

In an email dated April 18, 2024, John Hornick, NPQ Fire Inspector 1, Plans Review Lieutenant stated “The Hall County Fire Marshal’s Office considers the plan conceptual in nature, and if approved may require modifications during the development review process.”

Hall County Public Works and Utilities

In a memorandum from Public Works and Utilities dated April 18, 2024, Bill Nash, Director, stated the following:

Engineering:

Property is in major flood area
Show FEMA and Hall County studied Flood plains that are present on site
Property is in north Oconee WPD
Show N. Oconee WPD buffers
No rise study required for construction in flood zone
Roads should be private

Traffic:

Roadways are shown as private; however, this should be required.
Access from Cornelia Hwy (SR 365) is shown as private, however, Label indicates “end of county-maintained right-of-way” internally. Clarify. Additional comments may be necessary after clarification.
Fire only access on White Hall Road must be gated and no ability for internal traffic to turn around is provided.
Recommend the gravel section of Cagle Mill Road be improved to county paved standards to White Hall Road in order to facilitate site traffic to and from Old Cornelia Hwy.
Site plan indicates a fire only access on Cagle Mill Road labeled as “Gated fire only entrance with Knox Box” However no access is shown. Clarify.
GDOT permit required for Cornelia Hwy (SR 365) access.

Utilities:

Hall County lift station on GA 365

Hall County Tax Assessor

No Comments

Georgia Department of Transportation

In an email dated April 18, 2024, Veronica Chavers, D1TO Civil Engineer 3, stated that this project will require GDOT coordination for driveway access to SR 365/ Cornelia Hwy.

FW: Cagle Mill Rezoning Projects

Kristie Turner (Planning) <kturner@hallcounty.org>

Thu 8/1/2024 5:18 PM

To: Liliana Cortez (CDI: Building Inspection) <lcortez@hallcounty.org>

Lali,

Please add the email below to the Accela case as record of withdraw request. Thanks.

Regards,

Kristie Turner
Principal Planner
Hall County Community Development and Infrastructure
(direct office) 770-297-6853
kturner@hallcounty.org



From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>

Sent: Tuesday, July 30, 2024 10:09 AM

To: Josh Boling <jboling@acmpts.com>; Kristie Turner (Planning) <kturner@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; bachj@pondco.com

Subject: Re: Cagle Mill Rezoning Projects

Good morning, Josh.

Thank you for following up. Yes, we did receive your email and will notify the board of your request to withdraw. There is nothing else needed from you at this point.

When you are ready to resubmit, just reach out to any or all of us and we can get the project going again.

Please let me know if you have any other questions.

Thank you,
Beth Garmon

From: Josh Boling <jboling@acmpts.com>

Sent: Tuesday, July 30, 2024 9:57 AM

To: Kristie Turner (Planning) <kturner@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; bachj@pondco.com

<bachj@pondco.com>

Subject: RE: Cagle Mill Rezoning Projects

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Wanted to make sure you all received the email below! Thanks so much.

From: Josh Boling

Sent: Monday, July 29, 2024 7:49 AM

To: Kristie Turner (Planning) <kturner@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; bachj@pondco.com

Subject: RE: Cagle Mill Rezoning Projects

Hi Kristie,

Thanks for the follow-up. We need to withdraw for now. I hope to have a revised application in within the next month.

Thanks,

Josh

From: Kristie Turner (Planning) <kturner@hallcounty.org>

Sent: Tuesday, July 23, 2024 2:35 PM

To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Josh Boling <jboling@acmpts.com>; bachj@pondco.com

Subject: RE: Cagle Mill Rezoning Projects

Josh,

I am following up on the below email regarding your project on Cagle Mill Road. Per our conversation below, updates for the project were due July 22nd. At this point, you have the option to proceed with the application as is at the August 19th Planning Commission meeting or withdraw the application. As we have not received any updates and this case has been tabled repeatedly, it is staff's recommendation that you withdraw this application until the project is ready to proceed. Opting to withdraw allows you to resubmit the application at a later date after staff has had a chance to review the changes.

A response as to how you wish to proceed is needed by this **Friday, July 26th**.

Regards,

Kristie Turner

Principal Planner

Hall County Community Development and Infrastructure

(direct office) 770-297-6853

kturner@hallcounty.org



From: Kristie Turner (Planning)

Sent: Tuesday, June 11, 2024 12:27 PM

To: Josh Boling <jboling@acmpts.com>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>

Subject: RE: Cagle Mill Rezoning Projects

Josh,

Thank you for the confirmation. We will present your request to **table to Aug 19th at the June 17th** Planning meeting. We look forward to seeing updated information for the project by **July 22nd**.

Please let me know if you have any questions.

Regards,

Kristie Turner

Principal Planner

Hall County Community Development and Infrastructure

(direct office) 770-297-6853

kturner@hallcounty.org



From: Josh Boling <jboling@acmpts.com>

Sent: Tuesday, June 11, 2024 12:19 PM

To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>

Subject: RE: Cagle Mill Rezoning Projects

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Lets do August 19th just so we have enough time to get everything done by then. Thanks!

From: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Sent: Wednesday, June 5, 2024 10:28 AM
To: Josh Boling <jboling@acmpts.com>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

Josh,

Thank you for your response. Would you like to table to August 5th? If so, all items will need to be submitted to staff by July 8th.

We also have an August 19th Planning Commission meeting which would require all items submitted by July 22nd.

Thank you,

Katie Greenway
Planning and Zoning Administrator
Hall County Community Development and Infrastructure
(direct office) 770-297-2649
klgreenway@hallcounty.org



From: Josh Boling <jboling@acmpts.com>
Sent: Tuesday, June 4, 2024 5:04 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

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My guess is we will have our revised plans and memo by the first week in July. Which I assume puts us on the August 8 meeting?

From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Sent: Monday, June 3, 2024 2:45 PM
To: Josh Boling <jboling@acmpts.com>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>
Subject: Re: Cagle Mill Rezoning Projects

Hi Josh.

This email is sufficient. We would prefer to table to a specific date - it helps us keep track of items and ensure nothing falls through the cracks. Could we list the second meeting in July as our target date?

I am copying Katie and Kristie in so they can notify the board tonight.

Thanks,
Beth

Beth Garmon

Assistant Director of Planning and Development
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

All **ZONING, PLAT**, and **BUILDING PERMIT** submittals may be submitted online through [Accela](#). Plat inquiries may be submitted to plats@hallcounty.org. Zoning and general inquiries may be submitted to planning@hallcounty.org.

From: Josh Boling <jboling@acmpts.com>
Sent: Monday, June 3, 2024 2:30 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

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Hi Beth,

I hate to do this again, but we want to indefinitely postpone our application while we work through a few more design changes. I would expect to resubmit our application sometime in July. What do you need from me to do this?

Thanks!

Josh

From: Josh Boling
Sent: Friday, May 24, 2024 12:33 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

Beth,

Per my voicemail, we would like to table to the June 17th planning / July 25th Board meeting. Is that possible and when would we need the revised plans/data to you?

Thanks,

Josh

From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Sent: Friday, May 10, 2024 2:28 PM
To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Josh Boling <jboling@acmpts.com>; Stephen Lovett (<slovett@nortoncommercial.com>) <slovett@nortoncommercial.com>
Subject: RE: Cagle Mill Rezoning Projects

Thank you for letting us know, Josh.

Please note, if you plan to make any revisions, it would be helpful for staff to receive those by next Friday, May 17th in order to update the staff reports. If you think one week is not enough time to accomplish this, please let us know.

Thank you,
Beth

Beth Garmon

Assistant Director of Planning and Development
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

All **ZONING, PLAT**, and **BUILDING PERMIT** submittals may be submitted online through [Accela](#). Plat inquiries may be submitted to plats@hallcounty.org. Zoning and general inquiries may be submitted to planning@hallcounty.org.



From: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Sent: Friday, May 10, 2024 2:17 PM
To: Josh Boling <jboling@acmpts.com>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (<slovett@nortoncommercial.com>) <slovett@nortoncommercial.com>
Subject: RE: Cagle Mill Rezoning Projects

Thank you for the clarity!

Katie Greenway
Planning and Zoning Administrator
Hall County Community Development and Infrastructure
(direct office) 770-297-2649
klgreenway@hallcounty.org



From: Josh Boling <jboling@acmpts.com>
Sent: Friday, May 10, 2024 2:15 PM
To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>
Subject: RE: Cagle Mill Rezoning Projects

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Lets table both please. Thank you.

From: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Sent: Friday, May 10, 2024 2:06 PM
To: Josh Boling <jboling@acmpts.com>; Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>
Subject: RE: Cagle Mill Rezoning Projects

Good afternoon Josh,

Could you please clarify which request you would like to table? The PID, PRD, or both.

Thank you,

Katie Greenway
Planning and Zoning Administrator
Hall County Community Development and Infrastructure
(direct office) 770-297-2649
klgreenway@hallcounty.org



From: Josh Boling <jboling@acmpts.com>
Sent: Friday, May 10, 2024 1:36 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (slovett@nortoncommercial.com)

<slovett@nortoncommercial.com>

Cc: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>

Subject: RE: Cagle Mill Rezoning Projects

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Beth,

Could we request to table this to application the June 3rd meeting?

Thanks,

Josh

From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>

Sent: Thursday, May 9, 2024 3:49 PM

To: Josh Boling <jboling@acmpts.com>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>

Cc: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>

Subject: RE: Cagle Mill Rezoning Projects

Good afternoon,

I am finalizing our staff reports for the May 20th Planning Commission meeting and noticed that there have been no changes to the PID requested zoning for 4745 Cagle Mill. At our last meeting, it seemed likely that we might receive an updated narrative for this project – should we proceed with the PID zoning as originally submitted?

Thank you,
Beth

Beth Garmon

Assistant Director of Planning and Development
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

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From: Josh Boling <jboling@acmpts.com>
Sent: Friday, April 26, 2024 12:19 PM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>
Cc: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Subject: RE: Cagle Mill Rezoning Projects

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ok great. Thank you for the clarification.

From: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Sent: Friday, April 26, 2024 12:11 PM
To: Josh Boling <jboling@acmpts.com>; Stephen Lovett (slovett@nortoncommercial.com) <slovett@nortoncommercial.com>
Cc: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Subject: Cagle Mill Rezoning Projects

Good afternoon,

Just wanted to reach out and let you know that we looked at the stream closer going through the middle of the project site, and determined that it is classified as an intermittent stream which is not subject to the double-buffer requirements of the North Oconee Watershed.

Thank you,
Beth

Beth Garmon
Assistant Director of Planning and Development
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

All **ZONING**, **PLAT**, and **BUILDING PERMIT** submittals may be submitted online through [Accela](#). Plat inquiries may be submitted to plats@hallcounty.org. Zoning and general inquiries may be submitted to planning@hallcounty.org.





ZONING APPLICATION

Applicant (Name & Mailing Address)

Josh Boling
 6525 The Corners Parkway
 Peachtree Corners, GA 30092
 Phone 678-894-3990
 Email Address jboling@acmapts.com
 Proposed Use PRD

Property Owner (Name & Mailing Address)

Josh Boling
 6525 The Corners Parkway
 Peachtree Corners, GA 30092
 Phone 678-894-3990
 Email Address jboling@acmapts.com

Contact Person (Name & Mailing Address)

Josh Boling
 6525 The Corners Parkway
 Peachtree Corners, GA 30092
 Phone 678-894-3990
 Email Address jboling@acmapts.com
 Tax Parcel Number 15007000254 & 1501900043
 Location Address 4745 Cagle Mill Rd & 4691 Noah Martin Dr

Status of Applicant

- Owner
- Option to Purchase
- Area Resident
- Other

Requested Action

Existing Zoning: AR-III
 Rezone to: _____
 Fee:\$ _____
 Receipt #: _____
 Check #: _____

Acreage 130.84

I hereby certify that the above information and all attached information are true and correct.

Sign _____ Date: _____

Applicant must complete all information above. Failure to complete this section will result in the refusal of the application. The Planning Department has 15 days to review all applications and will set the dates for each application. If the application is found insufficient, an agenda date will not be set until the required information is submitted. Please note that the Planning Commission and County Commission dates are tentative.

Application Withdrawal: I hereby **withdraw** the application.

Sign _____ Date: _____

Staff Use Only

Application Date: _____ Taken by: _____
 Tentative Planning Commission Date: _____ Tentative County Commission Date: _____
 County Commission District: _____

AUTHORIZATION OF PROPERTY OWNERS

Note: If the applicant is the property owner, please disregard this form.

Name of owner(s) John Davenport for CBD Investments, LLC

Address TWO RAVINIA DR, SUITE 850
ATLANTA, GA 30346

Phone Number _____

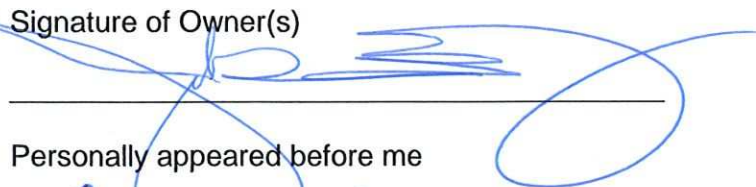
Name of applicant(s) Josh Boling

Address 6525 The Corners Parkway, Suite 216
Peachtree Corners, GA 30092

Phone Number 678-894-3990

I swear that I am the owner of the property which is the subject matter of the attached applications as shown in the records of Hall County, Georgia.

I authorize the person named above to act as applicant in the pursuit of a rezoning, permissive use, or variance of this property.

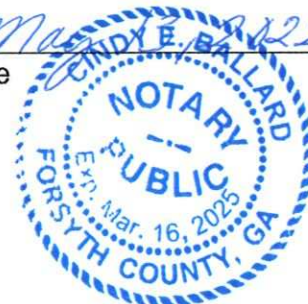
Signature of Owner(s)


Personally appeared before me
Cindy E. Ballard

who swears that the information contained in this authorization is true and correct to the best of his/her knowledge and belief.

Cindy E. Ballard
Notary Public

Mandy E. Ballard
Date



CAMPAIGN CONTRIBUTIONS DISCLOSURE FORM

This form must be completed by the applicant and property owner, or person representing the property owner, for all zoning actions.

OCGA § 36-67A-3[C] Disclosure of campaign contributions:

(b) When any applicant for zoning action has made, within two years immediately preceding the filing of the applicant's application for the zoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

(3) The name and official position of the local government official to whom the campaign contribution was made; and

(4) The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution.

(b) The disclosures required by subsection (a) of this Code section shall be filed within ten days after the application for the zoning action is first filed. (Code 1981, Section OCGA § 36-67A-3[C], enacted by GA L. 1986, page 1269, Section 1, GA L. 1991, page 1365, Section 1).

I hereby certify that I have read the above and that:

I have** _____ I have not _____

within the two years immediately preceding this date, made any contribution(s) aggregating \$250.00 or more to any local government official involved in the review or consideration of this application.

****If you have made such contributions, you must provide the data required below within ten (10) days of filing this application.**

Name of Official(s): _____

Office: _____

Dollar Amount: _____

Date of Contribution: _____

Applicant's/Owner's Signature: Josh Boling

Date: 5/16/2022

Applicant's/Owner's Name (Printed): Josh Boling

REZONING ANALYSIS REPORT FOR:

Residence at Cagle Mill
4745 Cagle Mill Road &
4691 Noah Martin Drive
Hall County, Georgia
(Residential Area)

Prepared By:

POND

3500 Parkway Lane, Suite 500
Peachtree Corners, Georgia 30092
678.336.7740
www.pondco.com
Project No. 1220263

March 22, 2024

TABLE OF CONTENTS

| | |
|--|---|
| PROPOSED USE | 2 |
| PROPOSED STANDARDS FOR DEVELOPMENT | 2 |
| LANDSCAPING..... | 3 |
| OPEN SPACE | 3 |
| PROPOSED SIGNS AND SPECIFICATIONS..... | 3 |
| PROPOSED LIGHTING..... | 3 |
| PROVISIONS FOR WATER AND WASTE-WATER DISPOSAL..... | 3 |
| PLANS FOR PROTECTING ABUTTING PROPERTIES | 4 |
| REQUESTED ZONING EXEMPTIONS AND REASONING..... | 4 |
| RESIDENTIAL BUILDING’S LOCATION..... | 6 |

PROJECT SUMMARY

There is a 72.67 Acre lot (Parcel Number 15007 000254) and a 68.76 Acre lot (Parcel Number 15019 000043) in unincorporated Hall County, currently zoned AR-III and AR-IV, located at addresses 4745 Cagle Mill Road and 4691 Noah Martin Drive respectively. The 72.67 Acre site is bounded to the north-west by GDOT Highway 365, to the south-west and north-east by privately owned properties zoned AR-IV, and to the south-east by Cagle Mill Road. The 68.76 Acre site is bounded to the north and north-west by privately owned property zoned AR-IV, to the west and south-west by Whitehall Road, to the south and south-east by privately owned properties zoned AR-IV, and to the east by Cagle Mill Road.

The 72.67 Acre lot is subdivided by the North Oconee River and is primarily undeveloped woods with moderately sloping terrain of Madison sandy loam soil with existing wetlands. A portion of the lot is located in flood zone designated zone 'a' according to FEMA Firm Map 13139C0225G effective 12/01/2022. The existing lot also features a man-made off-line pond and a small residential building located within a clearing to the south-east of the river. 10.57 acres of the 72.67 Acre lot between Highway 365 and the North Oconee River (existing zoning AR-III) is proposed to be rezoned and developed as light industrial under a separate application, and the while the remaining 62.10 acres of the lot between North Oconee River and Cagle Mill Road (existing zoning AR-IV) is proposed to be combined, rezoned and developed with the 68.76 Acre lot as a planned residential development.

The 68.76 Acre lot is primarily undeveloped woods with moderately sloping terrain of Madison sandy loam soil with existing wetlands. The existing lot also features a small residential building at the end of Noah Martin Drive as well as an existing pond and stream. A portion of the lot is located in flood zone designated zone 'a' according to FEMA Firm Map 13139C0225G effective 12/01/2022. The 68.76 Acre lot is proposed to be combined, rezoned, and developed with a portion of the 72.67 Acre lot as a planned residential development.

Refer to the attached map below which provides detailed information regarding the locations and proposed use.

PROPOSED USE

±130.84 acres is proposed to be developed for residential use. This area is currently zoned as AR-IV. The residential development will include a mix of approximately 297 single family homes and 52 rear-entry townhomes. Active amenity space for the benefit of homeowners will include a clubhouse and pool area. Passive amenity includes walking trails around the existing river, two mail kiosks, as well as three pocket parks and multiple recreational fields spread out between the phases.

Roads inside the residential area are to be privately owned and maintained.

General access to the residential development is from the North-East of Cagle Mill Road and from the proposed private bridge on the North-West side with an additional fire access road along Whitehall Road.

PROPOSED STANDARDS FOR DEVELOPMENT

The proposed zoning for this property is a Planned Residential Development (PRD).

The total number of residential units is 349. The proposed density within the residential space is 2.67 units per acre, exclusive of the commercial out-parcels. Single family lots and townhomes will be condominium-style ownership with the option to lot out units at the building line. As such, the proposed building setbacks are '0' to allow the houses to be sold, while the remaining property will be joint-owned by the individual property owners and maintained by the homeowner's association. All units will maintain a minimum 28' from the back of curb, or back of sidewalk if provided, to the face of garage. A minimum of 10' will be provided between structures.

The proposed development will be gated at both general entrances as well as the fire access only entrance. The western gate has been moved to the eastern end of the entrance bridge in order to ensure adequate room to allow the rejection of vehicles. With the gate, the roads are proposed to be privately owned and maintained, however, they will be designed to meet Hall County standards including profile, cross section requirements, and right-of-way width. The alleyways behind the townhomes are proposed to be privately owned and maintained as

well but feature ribbon curbs and a reverse crown. In order to provide additional parking while minimizing the impervious percentage and keeping vehicles from parking in travel lanes and impeding traffic flow, perpendicular and angled parking is proposed along the side of the road in several places. Most notably at the townhomes and amenity area. A vehicular crossing bridge is proposed that connects the internal private roads to the proposed public road along highway 365.

LANDSCAPING

Landscaping will comply with the County requirements. While the individual homes will not be on separate lots, a minimum of 2 trees per unit will be provided or preserved in the front, side, or rear of each unit. Pursuant to these same standards, a minimum of 15 tree density units (TDU) shall be retained on site within the proposed tree save areas.

OPEN SPACE

The total residential area is approximately 130.84 Acres. According to Hall County code 40% of this area, approximately 52.3 Acres, is required to be open space. Due to the condominium-style ownership, the intent of the open space code was followed as if the property was developed with individual lots. A minimum area of 40' by 160' or 50' by 160' was 'assigned' to each single family unit and an area of 24' by 65' was 'assigned' to each townhouse unit. The private right-of-way, proposed stormwater detention areas, proposed pump station area, as well as each residential 'area', and parking areas were then subtracted from the open space area delineated on the plans. The total open space provided is approximately 59.9 Ac. Another requirement of the provided space is that 75% be contiguous. The open space meeting this definition around the exterior of the site and continuously connected, including the stream buffers, planted exterior buffers, undisturbed area, access/utility easements and wetlands were delineated and measured. This area totaled 39.4 Acres, or approximately 75% of the total open space requirement.

PROPOSED SIGNS AND SPECIFICATIONS

The Subdivision will include free-standing residential signs along each frontage, located outside of the right-of-way. Each sign will be limited to 25 square feet and will serve to identify the name of the subdivision only.

The industrial parcel will include one free-standing pedestal sign for each tract, located outside of the right-of-way, and limited to the size allowable by the use, to be determined at a later date.

PROPOSED LIGHTING

Street lighting is proposed within the subdivision, as well as minimum lighting at visitor and residence parking lots.

PROVISIONS FOR WATER AND WASTE-WATER DISPOSAL

Water is available on the north-west side of highway 365. Water is provided by the City of Gainesville via a 12" water main. This development proposes to bore under the highway to tie into the existing main.

Sanitary sewer is available in the form of an existing Hall County lift station located within the industrial parcel frontage along Highway 365. Gravity sanitary sewer lines are proposed throughout the residential development to service all 348 proposed units and associated amenity areas. All gravity sanitary sewer lines converge at a proposed private lift station located to the south-west of the clubhouse. The proposed private lift station then

pumps the effluent via a private force main that crosses the industrial parcel and ties into the existing Hall County lift station.

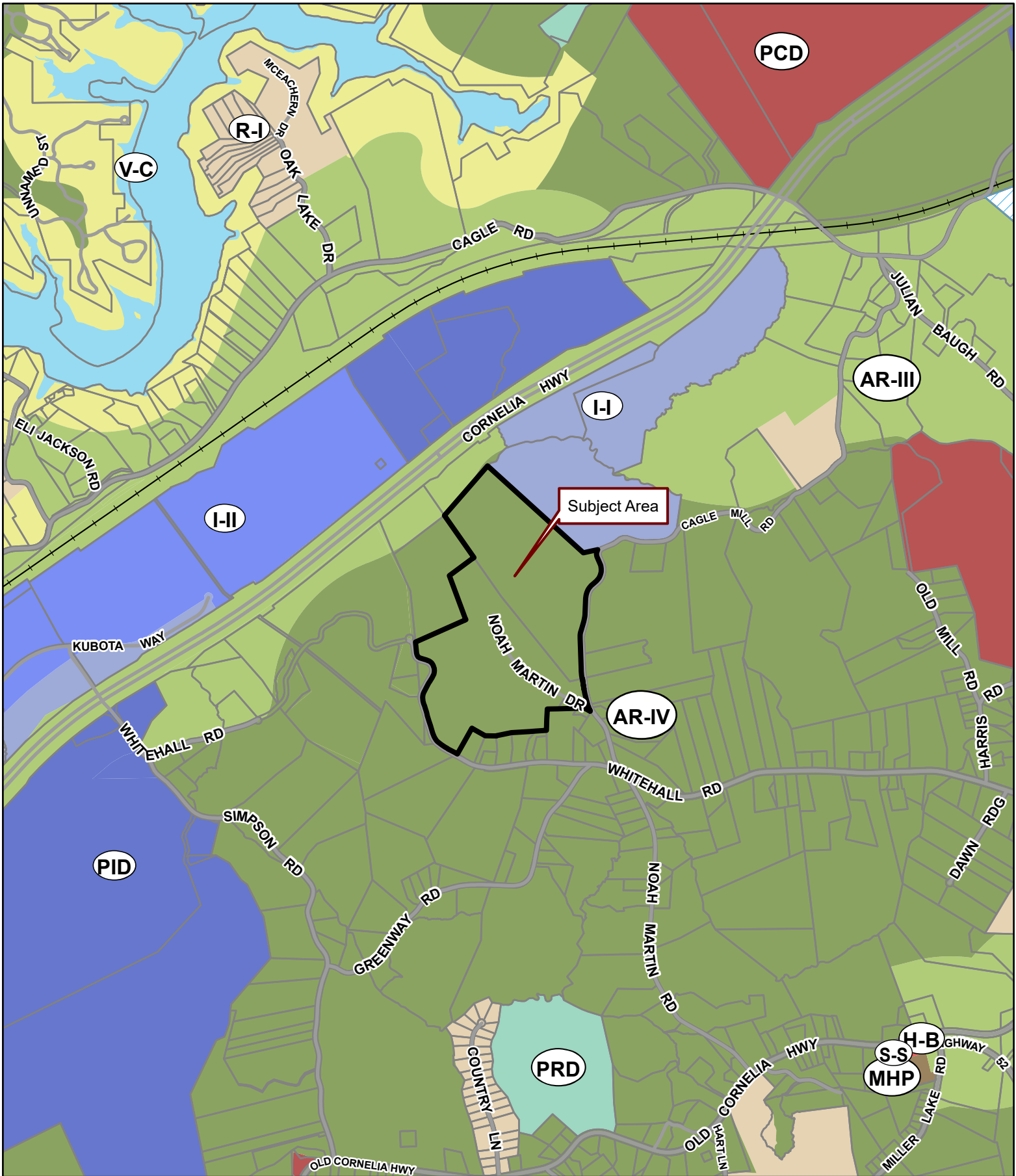
PLANS FOR PROTECTING ABUTTING PROPERTIES

The north-east and south-west property lines will be protected by a 50’ planted and/or undisturbed buffer. Along both property lines, the topography falls away, providing additional protection in the event of future development. To separate the industrial out-parcels from the residential use, the stream buffers of the North Oconee River will ensure that a minimum of 200’ is provided between any uses other than walking trails that may be constructed within the floodplain. As such, no additional planted or zoning buffer is proposed within the industrial development.

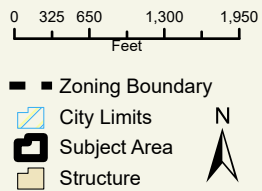
REQUESTED ZONING EXEMPTIONS AND REASONING

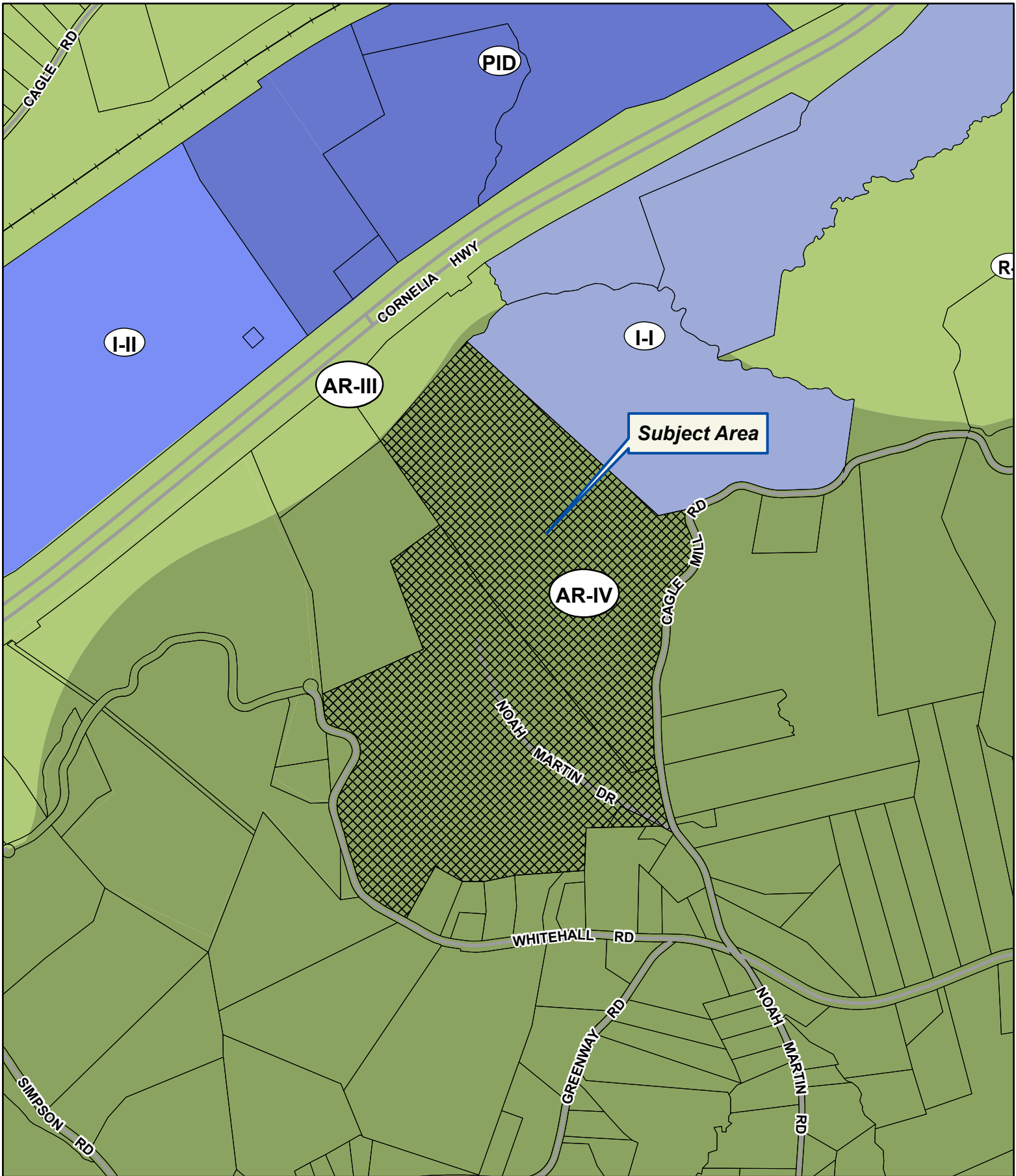
| Hall County Ord. | Requirement | Exemption | Reason |
|---------------------------|---|-------------------------|---|
| 12.20.070 | “Any residential development or subdivision which includes private streets, either designated as such on the development plat or otherwise, and which seeks approval and permitting by the county must demonstrate the formation of a homeowners’ association which will be responsible for the maintenance and upkeep of all private streets therein. The county shall not approve the plat for any residential subdivision or development containing private streets which does not sufficiently demonstrate to the county’s administrative officials that a homeowners’ association has been created and that the association has been given the full power and responsibility for future maintenance of all private streets within the development. All such private roads shall comply with the existing road standards adopted by Hall County.” | Use of private roadways | Providing gate access to Residential area |

| | | | |
|------------------------------------|--|---|--|
| 16.60.070 | “Street jogs or centerline offsets in the horizontal alignment of streets across intersections of less than 200 feet shall be prohibited.” | Reducing alleyway & mail kiosk street jog | Reducing total impervious area |
| 16.60.200 | “Minimum cul-de-sac length (feet) (centerline to center of turnaround): 150” | Use of eye-brow cul-de-sacs within the private roadways | Maximizing accessibility for fire trucks around intersecting roads |
| 17.180.060.B.2(a) | “Lot area. Minimum lot area standards of 8,000 square feet for lots served by sanitary sewer.” | Reduction in minimum lot area from 8,000 sf to 6,000 sf | Minimizing the total impervious area and providing additional open space |
| 17.180.060.B.2(b) | “Lot width. Minimum lot width of 50 feet” | Reduction in minimum lot width from 50’ to 40’ | Minimizing the total impervious area and providing additional open space |
| 17.180.060.B.11(d) | “On-street parking is prohibited in all planned residential developments.” | Providing perpendicular and angled parking along the edge of the private roadways | Prevention of vehicles from parking on-street & Minimizing the total impervious area |

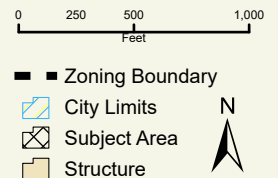


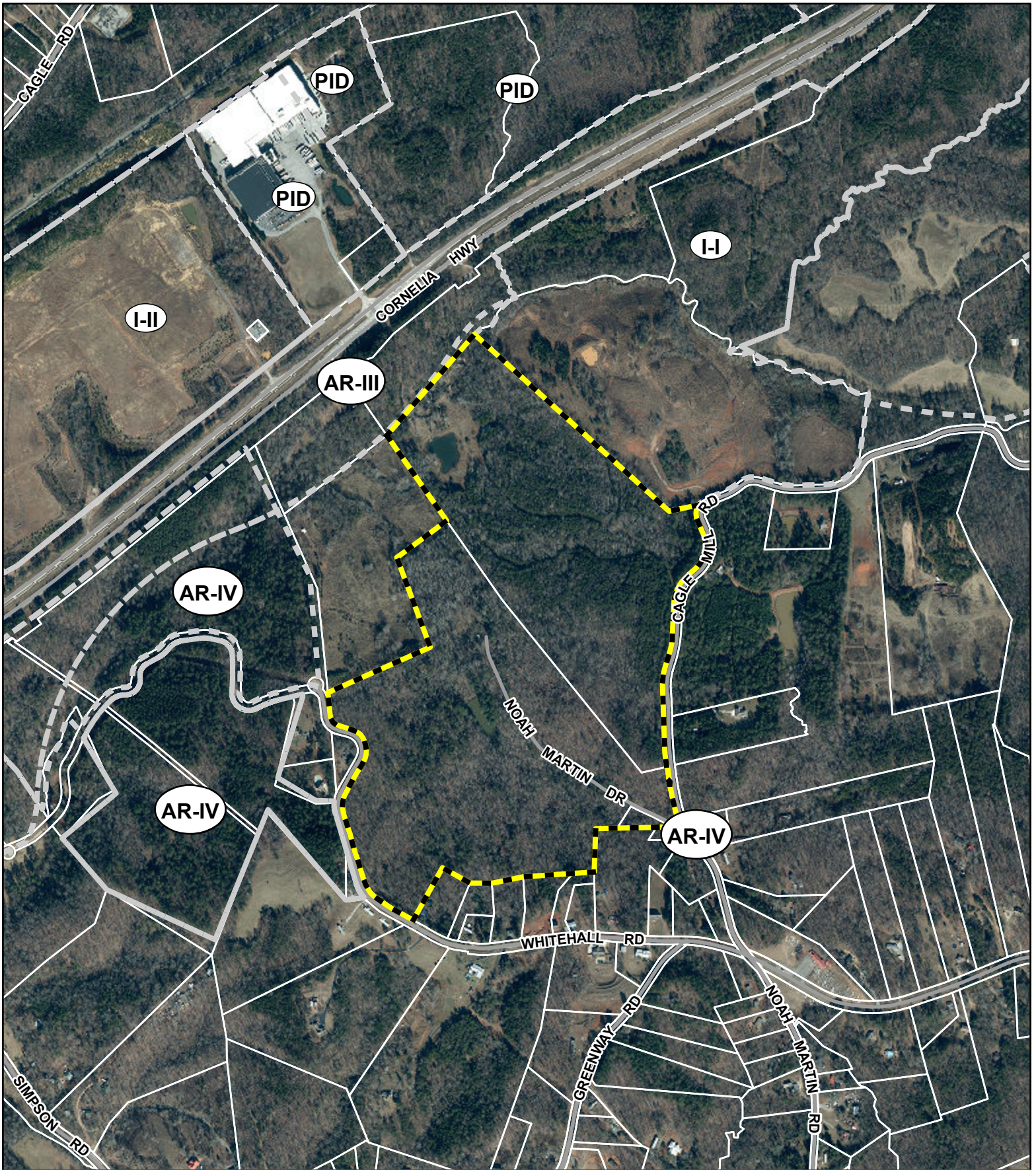
Applicant: JOSH BOLING
Tax Parcel #: 15007 000254 (PT.), 15019 000043, & 000114
Location: 4745 CAGLE MILL ROAD, 4673 &
 4691 NOAH MARTIN DRIVE, LULA, GA 30554
Commission District 3 **PC Mtg. Date: 05/20/24**



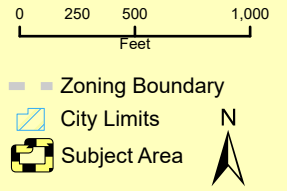


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Location: 4745 CAGLE MILL ROAD, 4673 &
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Commission District 3 **PC Mtg. Date: 05/20/24**





Applicant: JOSH BOLING
Tax Parcel #: 15007 000254 (PT.), 15019 000043, & 000114
Location: 4745 CAGLE MILL ROAD, 4673 &
 4691 NOAH MARTIN DRIVE, LULA, GA 30554
Commission District 3 **PC Mtg. Date: 05/20/24**





GENERAL NOTES:

24' Wide, 3 Story Townhome
+/- 1850 Square Feet
3 Bedroom / 2.5 Bath
2 Car, Rear Entry Garage

3-UNIT TOWNHOUSE
FRONT ELEVATION

Brightside
Homes

AN AUDUBON COMPANY



Cagle Mill
March 20, 2024

MAIN STREET
Designs



GENERAL NOTES:

30' Wide, 2 Story Single Family Dwelling
+/- 2100 Square Feet
3 Bedroom / 2.5 Bath
2 Car, Front Entry Garage

Garage face to be positioned 5' min. behind
the front plane/porch of the residence to
meet Hall County requirements

30' - ELEVATION A
FRONT ELEVATION

Brightside
Homes

AN AUDUBON COMPANY



Cagle Mill
March 20, 2024





GENERAL NOTES:

30' Wide, 2 Story Single Family Dwelling
+/- 2100 Square Feet
3 Bedroom / 2.5 Bath
2 Car, Front Entry Garage

Garage face to be positioned 5' min. behind
the front plane/porch of the residence to
meet Hall County requirements

30' - ELEVATION B
FRONT ELEVATION

Brightside
Homes

AN AUDUBON COMPANY



Cagle Mill
March 20, 2024

MAIN STREET
Designs



GENERAL NOTES:

30' Wide, 2 Story Single Family Dwelling
+/- 2100 Square Feet
3 Bedroom / 2.5 Bath
2 Car, Front Entry Garage

Garage face to be positioned 5' min. behind
the front plane/porch of the residence to
meet Hall County requirements

30' - ELEVATION C
FRONT ELEVATION

Brightside
Homes

AN AUDUBON COMPANY



Cagle Mill
March 20, 2024





GENERAL NOTES:

40' Wide, Ranch Single Family Dwelling
+/- 2000 Square Feet
3 Bedroom / 2.5 Bath
2 Car, Front Entry Garage

Garage face to be positioned 5' min. behind
the front plane/porch of the residence to
meet Hall County requirements

40' - ELEVATION A
FRONT ELEVATION

Brightside
Homes

AN AUDUBON COMPANY



Cagle Mill
March 20, 2024

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Designs



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FRONT ELEVATION

Brightside
Homes

AN AUDUBON COMPANY



Cagle Mill
March 20, 2024

MAIN STREET
Designs



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40' Wide, Ranch Single Family Dwelling
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Garage face to be positioned 5' min. behind
the front plane/porch of the residence to
meet Hall County requirements

40' - ELEVATION C
FRONT ELEVATION

Brightside
Homes

AN AUDUBON COMPANY

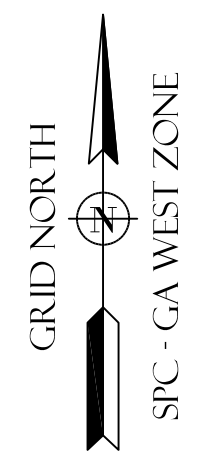
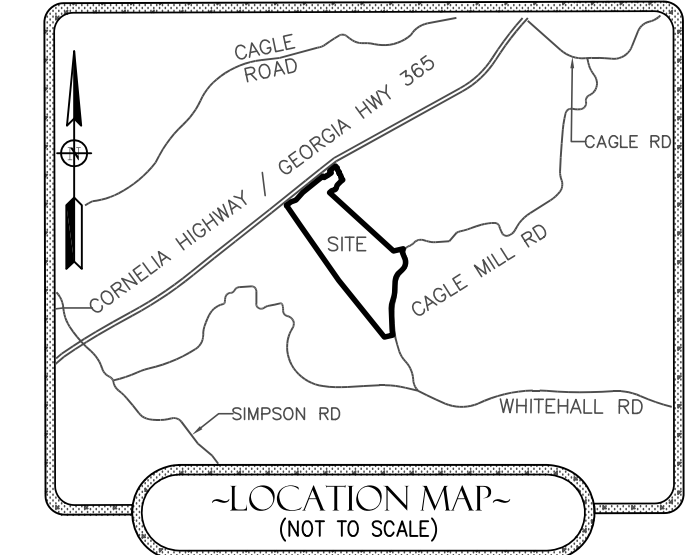


Cagle Mill
March 20, 2024

 MAIN STREET
Designs

ALTANSPS SURVEY FOR: CHICAGO TITLE INSURANCE COMPANY & ACM VENTURES, LLC

PREPARED BY
DES DAVIS
ENGINEERING & SURVEYING
133 PROMINENCE COURT
SUITE 210
DAWSONVILLE, GA 30534
PHONE: (706) 265-1234
DAVISENGINEERS.COM



THIS BLOCK RESERVED FOR THE CLERK OF THE SUPERIOR COURT

-LEGEND-

- CALCULATED POSITION
- IRON PIN FOUND/SET (IPF/IPS)
- MONUMENT
- C/L CENTERLINE
- CTP CRIMPED TOP PIPE
- DB LEGID BOOK
- N/F NOW OR FORMERLY
- OIP OPEN TOP PIPE
- FB PLAT BOOK
- PG PAGE
- P/L PROPERTY LINE
- ☒ TELEPHONE FED. (TP) (ALL IPS ARE 1/2" RB "CAPPED" UNLESS OTHERWISE LABELED)
- ☒ FIRE HYDRANT (FH)
- WATER METER (WM)
- ☒ POWER BOX (PB)
- ☒ WATER VALVE (WV)
- ☒ POWER POLE (PP)
- RB REBAR
- SR SOLID ROAD
- OCS OUTLET CONTROL STRUCTURE
- CPP CORRUGATED PLASTIC PIPE
- DI DRAIN INLET
- DI DROP INLET
- SM SANITARY MANHOLE (SEWER)
- LX LIGHTPOLE
- CLEANOUT
- ADJ ADJONER
- LAND LOT LINE (L.L.L.)
- RIGHT OF WAY (R/W)
- CHP OVERHEAD POWER

-ZONING INFORMATION-

COUNTY: HALL
ZONE: AR-III & AR-IV
SETBACK REQUIREMENTS:
FRONT: 40'
REAR: 25'
SIDE: 15'

-ALTA NOTES-

NO CEMETERIES WERE OBSERVED ON SITE AT TIME OF SURVEY.
ACTIVE EARTHWORK WAS OBSERVED ON SITE AT TIME OF SURVEY.
NO STATE WATERS OR WETLANDS WERE OBSERVED ON SITE AT TIME OF SURVEY.
SITE ADDRESS: 8324 MAIN STREET

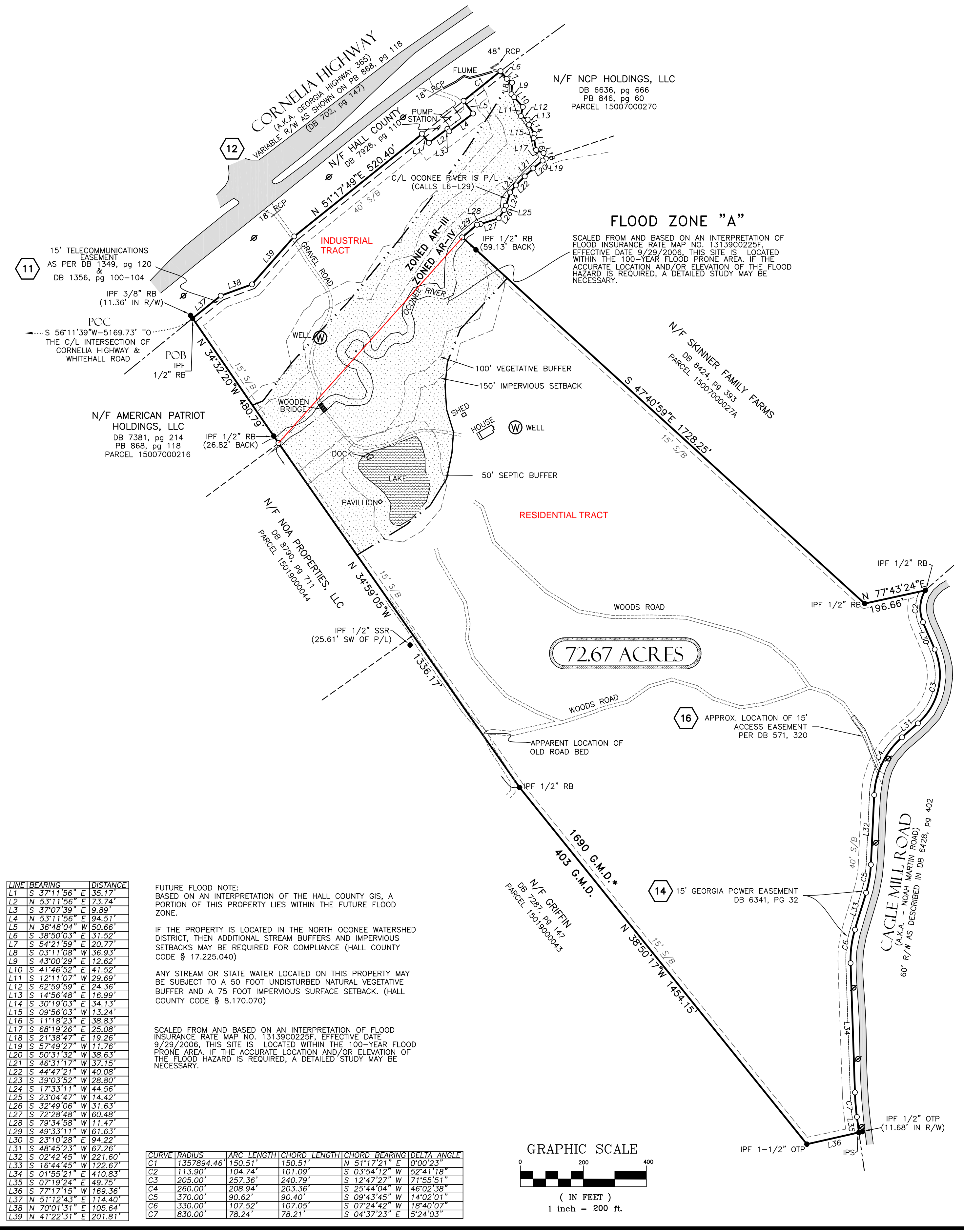
PER MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS (EFFECTIVE 2/23/2021) 6.B.VI: BOUNDARY DEFINED BY WATER BOUNDARY IS SUBJECT TO CHANGE DUE TO NATURAL CAUSES AND MAY OR MAY NOT REPRESENT THE ACTUAL LOCATION OF THE LIMIT OF TITLE. PROPERTY HAS DIRECT ROAD ACCESS TO CAGLE MILL ROAD, AND CORNELIA HIGHWAY, HOWEVER ADDITIONAL PERMITTING MAY BE REQUIRED TO ALTER OR ADD ACCESS POINTS.

**-AS-SURVEYED-
LEGAL DESCRIPTION**

All that tract or parcel of land lying and being in the Lula* District, 1690th G.M.D.*, Hall County, Georgia and being more particularly described as follows:

COMMENCING at a point at the center line intersection of Cornelia Highway (A.K.A. -Georgia Highway 365 with a variable right-of-way) & Whitehall Road;
THENCE, N56°11'39"E a distance of 5169.73' to a 1/2" rebar found at the southeasterly right-of-way of Cornelia Highway; said 1/2" rebar found being the POINT OF BEGINNING;
THENCE, along the southeasterly right-of-way of Cornelia Highway, N51°2'43"E a distance of 114.40' to a point; THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N70°11'31"E a distance of 105.64' to a point at the centerline of a stream;
THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N41°22'31"E a distance of 201.81' to a point;
THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N51°17'49"E a distance of 520.40' to a point;
THENCE, leaving the southeasterly right-of-way of Cornelia Highway, S37°11'56"E a distance of 35.17' to a point;
THENCE, N63°15'6"E a distance of 73.74' to a point;
THENCE, S37°07'39"E a distance of 9.89' to a point;
THENCE, N53°11'56"E a distance of 94.51' to a point;
THENCE, N36°48'04"W a distance of 50.66' to a point at the southeasterly right-of-way of Cornelia Highway;
THENCE, along the southeasterly right-of-way of Cornelia Highway, with a curve to the left, having an arc length of 150.51' and a radius of 1357894.46', with a chord bearing of N51°17'21"E and a chord length of 150.51' to a point at the centerline of a stream;
THENCE, leaving the southeasterly right-of-way of Cornelia Highway and along the centerline of the stream, the following courses and distances:
S38°50'03"E a distance of 31.52' to a point; S54°21'59"E a distance of 20.77' to a point; S03°11'08"W a distance of 36.93' to a point; S43°00'29"E a distance of 12.62' to a point; S41°46'52"E a distance of 41.52' to a point; S12°11'07"W a distance of 29.69' to a point; S22°39'59"E a distance of 24.36' to a point; S14°56'48"E a distance of 16.99' to a point; S30°19'03"E a distance of 34.13' to a point; S09°56'03"W a distance of 13.24' to a point; S11°18'23"E a distance of 38.83' to a point; S68°19'26"E a distance of 25.08' to a point; S21°38'47"E a distance of 19.26' to a point; S57°49'27"W a distance of 11.76' to a point; S50°31'32"W a distance of 38.63' to a point; S46°31'17"W a distance of 37.15' to a point; S44°47'21"W a distance of 40.08' to a point; S39°03'52"W a distance of 28.80' to a point; S17°33'11"W a distance of 44.56' to a point; S23°04'47"W a distance of 14.42' to a point; S32°49'06"W a distance of 31.63' to a point; S7°22'48"W a distance of 60.48' to a point; S79°34'58"W a distance of 11.47' to a point; S49°33'11"W a distance of 61.63' to a point;
THENCE, leaving the centerline of stream, S47°40'59"E a distance of 1728.25' to a 1/2" rebar found;
THENCE, N77°43'24"E a distance of 196.66' to a 1/2" rebar found at the westerly right-of-way of Cagle Mill Road (60' right-of-way);
THENCE, along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 104.74' and a radius of 113.90', with a chord bearing of S03°54'12"W and a chord length of 101.09' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S23°10'28"E a distance of 94.22' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the right, having an arc length of 257.36' and a radius of 205.00', with a chord bearing of S12°47'27"W and a chord length of 240.79' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S48°45'23"W a distance of 67.26' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 208.94' and a radius of 260.00', with a chord bearing of S25°44'04"W and a chord length of 203.36' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S02°42'45"W a distance of 221.90' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the right, having an arc length of 90.62' and a radius of 370.00', with a chord bearing of S09°43'45"W and a chord length of 90.40' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S16°44'45"W a distance of 122.67' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 107.52' and a radius of 330.00', with a chord bearing of S07°24'42"W and a chord length of 107.05' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S01°55'21"E a distance of 410.83' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 78.24' and a radius of 830.00', with a chord bearing of S04°37'23"E and a chord length of 78.21' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S07°19'24"E a distance of 49.75' to a 1/2" rebar set;
THENCE, leaving the westerly right-of-way of Cagle Mill Road, S77°17'15"W a distance of 169.36' to a 1/2" rebar set;
THENCE, N38°50'17"W a distance of 1454.15' to a 1/2" rebar found;
THENCE, N34°59'05"W a distance of 1336.17' to a point;
THENCE, N34°52'07"W a distance of 480.79' to a 1/2" rebar found; said 1/2" rebar found and being the POINT OF BEGINNING.

Said property containing 72.67 acres.



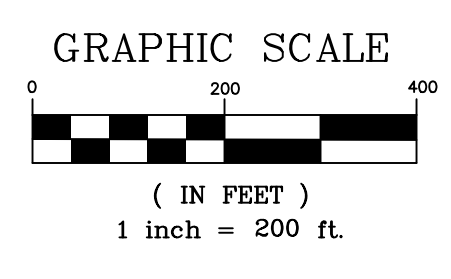
| LINE | BEARING | DISTANCE |
|------|--------------|----------|
| L1 | S 37°11'56"E | 35.17' |
| L2 | N 53°11'56"E | 94.51' |
| L3 | S 37°07'39"E | 9.89' |
| L4 | N 53°11'56"E | 94.51' |
| L5 | N 36°48'04"W | 50.66' |
| L6 | S 38°50'03"E | 31.52' |
| L7 | S 54°21'59"E | 20.77' |
| L8 | S 03°11'08"W | 36.93' |
| L9 | N 43°00'29"E | 12.62' |
| L10 | S 41°46'52"E | 41.52' |
| L11 | S 12°11'07"W | 29.69' |
| L12 | S 22°39'59"E | 24.36' |
| L13 | S 30°19'03"E | 34.13' |
| L14 | S 09°56'03"W | 13.24' |
| L15 | S 11°18'23"E | 38.83' |
| L16 | S 68°19'26"E | 25.08' |
| L17 | S 21°38'47"E | 19.26' |
| L18 | S 50°31'32"W | 38.63' |
| L19 | S 46°31'17"W | 37.15' |
| L20 | S 44°47'21"W | 40.08' |
| L21 | S 39°03'52"W | 28.80' |
| L22 | S 17°33'11"W | 44.56' |
| L23 | S 23°04'47"W | 14.42' |
| L24 | S 32°49'06"W | 31.63' |
| L25 | S 79°34'58"W | 11.47' |
| L26 | S 49°33'11"W | 61.63' |
| L27 | N 77°43'24"E | 196.66' |
| L28 | S 02°42'45"W | 221.90' |
| L29 | S 01°55'21"E | 410.83' |
| L30 | S 23°10'28"E | 94.22' |
| L31 | S 12°47'27"W | 240.79' |
| L32 | S 07°24'42"W | 107.05' |
| L33 | S 04°37'23"E | 78.21' |
| L34 | S 07°19'24"E | 49.75' |
| L35 | S 07°19'24"E | 49.75' |
| L36 | S 77°17'15"W | 169.36' |
| L37 | S 51°12'43"W | 14.40' |
| L38 | N 70°01'31"E | 105.64' |
| L39 | N 41°22'31"E | 201.81' |

VERTICAL FLOOD NOTE:
BASED ON AN INTERPRETATION OF THE HALL COUNTY GIS, A PORTION OF THIS PROPERTY LIES WITHIN THE FUTURE FLOOD ZONE.

IF THE PROPERTY IS LOCATED IN THE NORTH OCONEE WATERSHED DISTRICT, THEN ADDITIONAL STREAM BUFFERS AND IMPERVIOUS SETBACKS MAY BE REQUIRED FOR COMPLIANCE (HALL COUNTY CODE § 17.225.040)

ANY STREAM OR STATE WATER LOCATED ON THIS PROPERTY MAY BE SUBJECT TO A 50 FOOT UNDISTURBED NATURAL VEGETATIVE BUFFER AND A 75 FOOT IMPERVIOUS SURFACE SETBACK. (HALL COUNTY CODE § 8.170.070)

SCALED FROM AND BASED ON AN INTERPRETATION OF FLOOD INSURANCE RATE MAP NO. 13139C0225F, EFFECTIVE DATE 9/29/2006, THIS SITE IS LOCATED WITHIN THE 100-YEAR FLOOD PRONE AREA. IF THE ACCURATE LOCATION AND/OR ELEVATION OF THE FLOOD HAZARD IS REQUIRED, A DETAILED STUDY MAY BE NECESSARY.



-SURVEY NOTES-

FIELD MEASUREMENTS WERE TAKEN WITH A TRIMBLE S6 ROBOTIC INSTRUMENT.
FIELD DATA FOUND TO HAVE A CLOSURE PRECISION OF 1 FOOT IN 15,310 FEET, AND AN ANGULAR ERROR OF 6 SECOND PER ANGLE.
FIELD DATA ADJUSTED USING THE LEAST SQUARES METHOD.
THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND FOUND TO HAVE A PRECISION OF 1 FOOT IN 554,049 FEET.
THIS PLAT DOES NOT CONSTITUTE AND SHALL NOT BE CONSTRUED AS A TITLE SEARCH OR REPORT, AND THIS MAY BE SUBJECT TO ANY EASEMENTS, RIGHT OF WAY OR RESTRICTIONS ONE MAY FIND.
THIS PLAT WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS OR ENTITY NAMED ON THIS PLAT.
THIS DOES NOT EXTEND TO ANY UNNAMED THIRD PARTY WITHOUT AN EXPRESSED RESTATEMENT BY THE SURVEYOR.
TYPE OF SURVEY: ALTA/NSPS
SOURCE OF TITLE DESCRIPTION FOR PROPERTY SHOWN HEREON:
PROPERTY OWNERS AS OF SURVEY DATE: CBD INVESTMENTS, LLC
PARCEL NUMBER: 15007 000254
SITE ADDRESS: 4745 CAGLE MILL ROAD LULA, GEORGIA

-TITLE EXCEPTIONS-
AS PER ISSUING OFFICE NO. 66584

SURVEY MATTERS PERTAINING TO CHICAGO TITLE INSURANCE COMPANY COMMITMENT FOR THE ISSUING OFFICE NUMBER: 66584.
COMMITMENT DATE: APRIL 25, 2022

All matters as shown on plat of survey for Roy Sweet dated November 5, 1973, last revised November 15, 1985, recorded in Plat Book 108, Page 78, Hall County, Georgia Records. (AFFECTS- AS SHOWN)

Judgment in favor of Southern Bell Telephone and Telegraph Company dated June 7, 1989, recorded in Deed Book 1356, Pages 100-104, Hall County, Georgia Deed Records. (AFFECTS- AS SHOWN)

Right of Way Deed to Department of Transportation dated March 2, 1979, recorded in Deed Book 702, Page 147, Hall County, Georgia Deed Records. (AFFECTS- AS SHOWN)

Rights of upper and lower riparian owners in and to the waters of creeks crossing or adjoining the property, and the natural flow thereof, free from diminution or pollution.

Easement to Georgia Power Company dated February 26, 2008, recorded in Deed Book 6341, Pages 32-35, Hall County, Georgia Deed Records. (AFFECTS- AS SHOWN)

Right of Way Deed to Hall County dated September 3, 1999, recorded in Deed Book 3556, Page 317, Hall County, Georgia Deed Records. (DOES NOT AFFECT)

PROPERTY OWNERS AS OF SURVEY DATE: CBD INVESTMENTS, LLC

Subject to Easement described in Indenture from Georgia Kraft Company to Arthur F. Rees, IV dated April 1, 1975, recorded in Deed Book 571, Pages 319-320, Hall County Georgia Deed Records. (AFFECTS- AS SHOWN)

Affidavit of Possession executed by Robert L. Campbell, as Manager of Inland-Rome, Inc., and recorded in Deed Book 1414, Pages 133-138, Hall County, Georgia Deed Records. (NOT A SURVEY MATTER)

Certificate of Merger from Rome Kraft Company to Georgia Kraft Company, dated December 6, 1973, recorded in Deed Book 548, Page 432, Hall County, Georgia Deed Records. (NOT A SURVEY MATTER)

All matters shown on plat of survey for Roy W. Sweet dated August 26, 2021, as prepared by Davis Engineering & Surveying, Plat reveals the following:
A) A portion of the property is located within the 100-year flood zone area;
B) A portion of the property is located within a 25' state waters buffer;
C) A portion of the property is located within a 50' vegetative buffer;
D) A portion of the property is located with a 75' impervious setback
E) Setbacks
F) The Oconee River forms the northeast property line
G) 15' telecommunication easement running across northwest portion of subject property.
(AFFECTS-AS SHOWN)

*DEEDS AND PLATS RECOVERED DURING THE COURSE OF THIS SURVEY DESCRIBE THE SUBJECT PROPERTY TO LIE WITHIN MULTIPLE GEORGIA MILITIA DISTRICTS. LISTED BELOW ARE DOCUMENTS FOUND AND THE CORRESPONDING G.M.D. THE PROPERTY IS CITED TO LIE WITHIN. THIS LIST SHOULD NOT BE CONSIDERED CONCLUSIVE, NOR DOES IT CONSTITUTE A TITLE SEARCH:

- DB 3714, PGS 73-75 ~ GLADE DISTRICT, G.M.D. 403
- DB 3714, PGS 70-72 ~ GLADE DISTRICT, G.M.D. 403
- DB 3723, PGS 82-84 ~ GLADE DISTRICT, G.M.D. 403
- DB 6428, PGS 399-403 ~ LULA DISTRICT, G.M.D. 1690
- DB 702, PG 147 LULA DISTRICT, G.M.D. 1690
- PB 57, PG 54 ~ GLADE DISTRICT, G.M.D. 403
- PB 108, PG 78 ~ G.M. 1680
- PB 872, PG 237 ~ LULA DISTRICT G.M.D. 1690

G.D.O.T. RIGHT-OF-WAY PLANS FOR PROJECT F-013-(129) AND SUPPLEMENTAL RIGHT-OF-WAY DEEDS SHOW THE PROPERTY TO LIE WITHIN G.M.D. 1690. ADDITIONALLY, U.S. CENSUS DATA FOR HALL COUNTY FROM 1940 MAKES REFERENCE ONLY TO A DISTRICT 1690, LULA, AND DISTRICT 403, GLADE, WHEREAS THERE IS NO MENTION OF A 1680 DISTRICT.

TO: CHICAGO TITLE INSURANCE COMPANY AND ACM VENTURES, LLC

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 8, & 13 OF TABLE A THEREOF.

FIELD WORK WAS COMPLETED ON 8/27/2021. DATE OF PLAT OR MAP: 16TH DAY OF MAY, 2022

ALTA/NSPS-
SURVEYORS CERTIFICATE

DUSTY L. LOWMAN PLS# 3216

AS REQUIRED BY SUBSECTION (d) OF O.C.G.A. SECTION 15-6-67, THIS PLAT HAS BEEN PREPARED BY A LAND SURVEYOR AND APPROVED BY ALL APPLICABLE LOCAL JURISDICTIONS AS EVIDENCED BY APPROVED CERTIFICATES, SIGNATURES, STAMPS OR STATEMENTS HEREON. SUCH APPROVALS OR AFFIRMATIONS SHOULD BE CONFIRMED WITH THE APPROPRIATE GOVERNMENTAL BODIES BY ANY PURCHASER OR USER OF THIS PLAT AS TO INTENDED USE OF ANY PARCEL. FURTHERMORE, THE UNDERSIGNED LAND SURVEYOR CERTIFIES THAT THIS PLAT COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN THE RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67.

SURVEYOR CERTIFICATION

DUSTY L. LOWMAN PLS# 3216

SHEET NO.
1 of 1
PROJECT NO.
21-239

ALTA/NSPS LAND TITLE SURVEY FOR
 CHICAGO TITLE INSURANCE COMPANY AND ACM VENTURES, LLC
 LULA DISTRICT*
 1690th G.M.D.
 HALL COUNTY, GEORGIA

REVISIONS BY: FA
REVISION DATE: 05/16/22
REVISIONS BY: DS/MS
REVISION DATE: 1/18/2022

DRAWN BY: DS
FIELD CREW: AM
PLAT DATE: 8/26/2021
FIELD DATE: 7/30/2021

eFiled and eRecorded
DATE: 09/02/2021
TIME: 4:12 PM
DEED BOOK: 8919
PAGE: 632 - 640
FILING FEES: \$25.00
TRANSFER TAX: \$995.00
PARTICIPANT ID: 6515028652
PT61: 069-2021-008810
RECORDED BY: CH
CLERK: Charles Baker, C.S.C
Hall County, GA

After recording return to:
T. Wesley Robinson
Hulsey, Oliver & Mahar, LLP
P.O. Box 1457
Gainesville, GA 30503

LIMITED WARRANTY DEED

STATE OF GEORGIA
COUNTY OF HALL.

THIS INDENTURE is made as of August 31, 2021, between Matthew H. Sweat, Tecla B. Sweat, Dr. Roy W. Sweat, Whitney Sweat Colvert, James David Colvert, Warren R. Sweat, and Carol G. Sweat (hereinafter referred to as "Grantor") and CBD Investments, LLC, (hereinafter referred to as "Grantee") ("Grantor" and "Grantee" to include their respective successors, legal representatives and assigns where the context requires or permits).

WITNESSETH

GRANTOR, in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and does hereby grant, bargain, sell, alien, convey and confirm unto Grantee all that tract or parcel of land lying and being in Hall County, Georgia (hereinafter referred to as the "Land") as more particularly described in the attached Exhibit "A", which Exhibit is incorporated herein.

TO HAVE AND TO HOLD the Land, together with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of Grantee forever in **FEE SIMPLE**; subject only to the matters (hereinafter referred to as "Permitted Exceptions") set out in the attached Exhibit "B", which Exhibit is incorporated herein.

AND GRANTOR WILL WARRANT and forever defend the right and title to the Land unto Grantee against the claims of any persons owning, holding or claiming by, through or under Grantor, except for claims arising under or by virtue of the Permitted Exceptions.

EXECUTED under seal as of the date above.

SELLER:

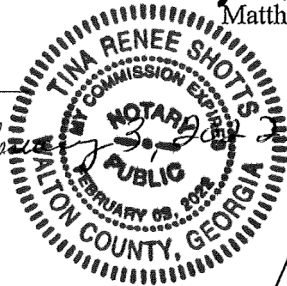
Signed, sealed and delivered
in the presence of:

[Signature]
Unofficial Witness

[Signature]
Notary Public

My Commission Expires: [Date]

[Signature] (SEAL)
Matthew H. Sweat



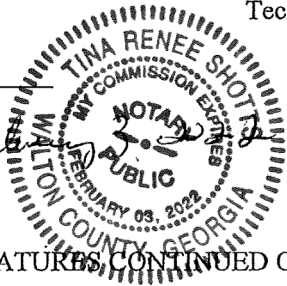
Signed, sealed and delivered
in the presence of:

[Signature]
Unofficial Witness

[Signature]
Notary Public

My Commission Expires: [Date]

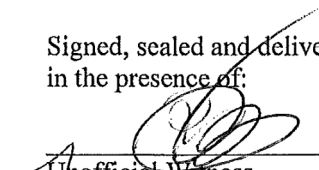
[Signature] (SEAL)
Tecla B. Sweat

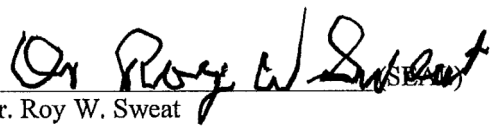


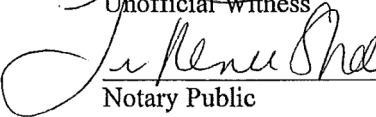
SIGNATURES CONTINUED ON NEXT PAGE


Signed, sealed and delivered
in the presence of:

SELLER:


Unofficial Witness


Dr. Roy W. Sweat


Notary Public

My Commission Expires: 



SIGNATURE CONTINUED ON NEXT PAGE

Signed, sealed and delivered
in the presence of:

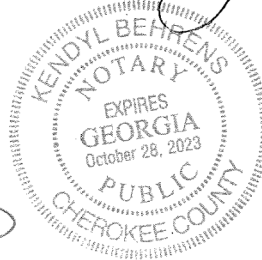
[Signature]
Unofficial Witness

[Signature]
Notary Public

My Commission Expires: 10/28/2023

SELLER:

Whitney Sweet Colvert (SEAL)
Whitney Sweet Colvert



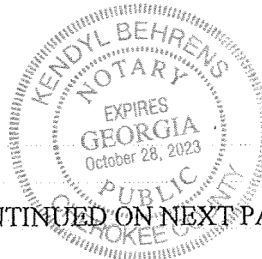
Signed, sealed and delivered
in the presence of:

[Signature]
Unofficial Witness

[Signature]
Notary Public

My Commission Expires: 10/28/2023

James David Colvert (SEAL)
James David Colvert



SIGNATURES CONTINUED ON NEXT PAGE

SELLER:

Signed, sealed and delivered
in the presence of:

Ammy Ankle

Unofficial Witness

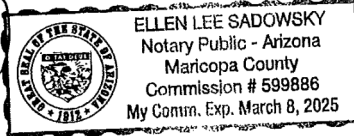
Warren R. Sweat (SEAL)

Warren R. Sweat

Ellen Lee Sadowsky

Notary Public

My Commission Expires:



Signed, sealed and delivered
in the presence of:

Ammy Ankle

Unofficial Witness

Carol G. Sweat (SEAL)

Carol G. Sweat

Ellen Lee Sadowsky

Notary Public

My Commission Expires:

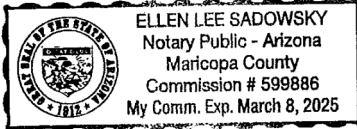


Exhibit "A"

All that tract or parcel of land lying and being in the Glade District, 1680th G.M.D., Hall County, Georgia, as shown on a plat of survey for Roy W. Sweat, dated August 26, 2021, prepared by Davis Engineering and Surveying, which plat is incorporated herein by reference as part of this description, and being more particularly described as follows:

COMMENCING at a point at the center line intersection of Cornelia Highway (A.K.A – Georgia Highway 365 with a variable right-of-way) & Whitehall Road;
THENCE, N56°11'39"E a distance of 5169.73' to a 1/2" rebar found at the southeasterly right-of-way of Cornelia Highway; said 1/2" rebar found being the POINT OF BEGINNING;
THENCE, along the southeasterly right-of-way of Cornelia Highway, N51°12'43"E a distance of 114.40' to a point;
THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N70°01'31"E a distance of 105.64' to a point;
THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N41°22'31"E a distance of 201.81' to a point;
THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N51°17'49"E a distance of 520.40' to a point;
THENCE, leaving the southeasterly right-of-way of Cornelia Highway, S37°11'56"E a distance of 35.17' to a point;
THENCE, N53°11'56"E a distance of 73.74' to a point;
THENCE, S37°07'39"E a distance of 9.89' to a point;
THENCE, N53°11'56"E a distance of 94.51' to a point;
THENCE, N36°48'04"W a distance of 50.66' to a point at the southeasterly right-of-way of Cornelia Highway;
THENCE, along the southeasterly right-of-way of Cornelia Highway, with a curve to the left, having an arc length of 150.51' and a radius of 1357894.46', with a chord bearing of N51°17'21"E and a chord length of 150.51' to a point at the centerline of a stream;
THENCE, leaving the southeasterly right-of-way of Cornelia Highway and along the centerline of the stream, the following courses and distances: S38°50'03"E a distance of 31.52' to a point; S54°21'59"E a distance of 20.77' to a point; S03°11'08"W a distance of 36.93' to a point; S43°00'29"E a distance of 12.62' to a point; S41°46'52"E a distance of 41.52' to a point; S12°11'07"W a distance of 29.69' to a point; S62°59'59"E a distance of 24.36' to a point; S14°56'48"E a distance of 16.99' to a point; S30°19'03"E a distance of 34.13' to a point; S09°56'03"W a distance of 13.24' to a point; S11°18'23"E a distance of 38.83' to a point;
S68°19'26"E a distance of 25.08' to a point; S21°38'47"E a distance of 19.26' to a point; S57°49'27"W a distance of 11.76' to a point; S50°31'32"W a distance of 38.63' to a point; S46°31'17"W a distance of 37.15' to a point; S44°47'21"W a distance of 40.08' to a point; S39°03'52"W a distance of 28.80' to a point; S17°33'11"W a distance of 44.56' to a point; S23°04'47"W a distance of 14.42' to a point; S32°49'06"W a distance of 31.63' to a point; S72°28'48"W a distance of 60.48' to a point; S79°34'58"W a distance of 11.47' to a point;

S49°33'11"W a distance of 61.63' to a point;
THENCE, leaving the centerline of stream, S47°40'59"E a distance of 1728.25' to a 1/2" rebar found;
THENCE, N77°43'24"E a distance of 196.66' to a 1/2" rebar found at the westerly right-of-way of Cagle Mill Road (60' right-of-way);
THENCE, along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 104.74' and a radius of 113.90', with a chord bearing of S03°54'12"W and a chord length of 101.09' to a point,
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S23°10'28"E a distance of 94.22' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the right, having an arc length of 257.36' and a radius of 205.00', with a chord bearing of S12°47'27"W and a chord length of 240.79' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S48°45'23"W a distance of 67.26' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 208.94' and a radius of 260.00', with a chord bearing of S25°44'04"W and a chord length of 203.36' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S02°42'45"W a distance of 221.60' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the right, having an arc length of 90.62' and a radius of 370.00', with a chord bearing of S09°43'45"W and a chord length of 90.40' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S16°44'45"W a distance of 122.67' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 107.52' and a radius of 330.00', with a chord bearing of S07°24'42"W and a chord length of 107.05' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S01°55'21"E a distance of 410.83' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 78.24' and a radius of 830.00', with a chord bearing of S04°37'23"E and a chord length of 78.21' to a point;
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S07°19'24"E a distance of 49.75' to a 1/2" rebar set;
THENCE, leaving the westerly right-of-way of Cagle Mill Road, S77°17'15"W a distance of 169.36' to a 1-1/2" open top pipe found;
THENCE, N38°50'17"W a distance of 1454.15' to a 1/2" rebar found;
THENCE, N34°59'05"W a distance of 1336.17' to a point;
THENCE, N34°32'20"W a distance of 480.79' to a 1/2" rebar found; said 1/2" rebar found being the POINT OF BEGINNING.
Said property containing 72.67 acres.

Exhibit "B"
Permitted Exceptions

- (a) All matters as shown on plat of survey for Roy Sweat dated November 5, 1973, last revised November 15, 1985, recorded in Plat Book 108, Page 78, Hall County, Georgia Records;
- (b) Judgment in favor of Southern Bell Telephone and Telegraph Company dated June 7, 1989, recorded in Deed Book 1356, Pages 100-104, Hall County, Georgia Deed Records;
- (c) Easement Agreement by and between Dr. Roy W. Sweat and Hall County, Georgia, dated September 12, 2000, recorded in Deed Book 3750, Pages 134-136, Hall County, Georgia Deed Records;
- (d) Right of Way Deed to Department of Transportation dated March 2, 1979, recorded in Deed Book 702, Pages 147-148, Hall County, Georgia Deed Records;
- (e) Rights of upper and lower riparian owners in and to the waters of creeks crossing or adjoining the property, and the natural flow thereof, free from diminution or pollution;
- (f) Easement to Georgia Power Company dated February 26, 2008, recorded in Deed Book 6341, Pages 32-35, Hall County, Georgia Deed Records;
- (g) Right of Way Deed to Hall County dated September 3, 1999, recorded in Deed Book 3556, Page 317, Hall County, Georgia Deed Records.
- (h) Right of Way and Easement Agreement to Southern Bell Telephone and Telegraph Company dated May 2, 1989, recorded in Deed Book 1349, Pages 120-141, Hall County, Georgia Deed Records;
- (i) Subject to Easement described in Indenture from Georgia Kraft Company to Arthur F. Rees, IV, dated April 1, 1975, recorded in Deed Book 57, Pages 319-320, Hall County, Georgia Deed Records;
- (j) Easement to Atlanta Gas Light Company dated December 18, 1968, recorded in Deed Book 389, Pages 250-253, Hall County, Georgia Deed Records;
- (k) Affidavit of Possession executed by Robert L. Campbell, as Manager of Inland-Rome, Inc., and recorded in Deed Book 1414, Pages 133-138, Hall County, Georgia Deed Records;
- (l) Certificate of Merger from Rome Kraft Company to Georgia Kraft Company dated December 6, 1973, recorded in Deed Book 548, Page 432, Hall County, Georgia Deed Records;

- (m) All matters as shown on plat of survey for Roy W. Sweat dated August 26, 2021, as prepared by Davis Engineering & Surveying. Plat reveals the following:
 - (i) A portion of the property is located within the 100-year flood zone area;
 - (ii) A portion of the property is located within a 25' state waters buffer;
 - (iii) A portion of the property is located within a 50' vegetative buffer;
 - (iv) A portion of the property is located with a 75' impervious setback
 - (v) Setbacks
 - (vi) The Oconee River forms the northeast property line
 - (vii) 15' telecommunications easement running across northwest portion of subject property.

- (n) Subject to 2021 Hall County taxes, and subsequent years not yet due and payable.

| PARKING SPACES | REQUIRED | PROVIDED |
|--------------------------|----------|------------------|
| SINGLE FAMILY | 298 | 298 |
| TOWN HOME | 75 | 75 + 26 VISITORS |
| CLUB HOUSE | 21 | |
| MAIL BOXES | 14 | 35 |
| MAIL BOXES (PHASE 3 & 4) | 7 | 9 |

| TYPE | TOTAL |
|-------------------|-----------|
| SINGLE FAMILY "A" | 241 UNITS |
| SINGLE FAMILY "B" | 56 UNITS |
| TOWN HOME | 52 UNITS |
| TOTAL | 349 UNITS |

| TYPE | TOTAL |
|-------------------------|--|
| CLUB HOUSE & MAIL KIOSK | 3,130 SF + 1,000 SF (TWO MAILBOX KIOSKS) |

TOTAL RESIDENTIAL AREA: 130.84 AC.
 REQUIRED OPEN SPACE (40%): 52.3 AC.
 PROVIDED OPEN SPACE AREA: 59.9 AC.
 RATIO (OPEN SPACE / TOTAL AREA) = 46%

CONTIGUOUS OPEN SPACE: ±39.4 AC
 REQUIRED (CONTIGUOUS SPACE / REQUIRED OPEN SPACE) = 75%
 PROVIDED = 75% (AS PER 17.430.120)

HOUSES ON OPEN SPACE
 SINGLE FAMILY: 257
 TOWNHOME: 52

LOTS TOUCHING OPEN SPACE: 308
 RATIO: 308/348 = 88%

SANITARY SEWER FLOW ESTIMATION:
 150 GALLONS PER UNIT PER DAY

TOTAL UNITS = 349
 349 UNITS X (150 GPU / DAY) = 52,350 GPD

CLUB HOUSE / AMENITY = 50GPD PER 1000 SQ FT = 1,500 GPD

PEAK FLOW = 4 (SEWAGE FLOW RATIO CURVE)

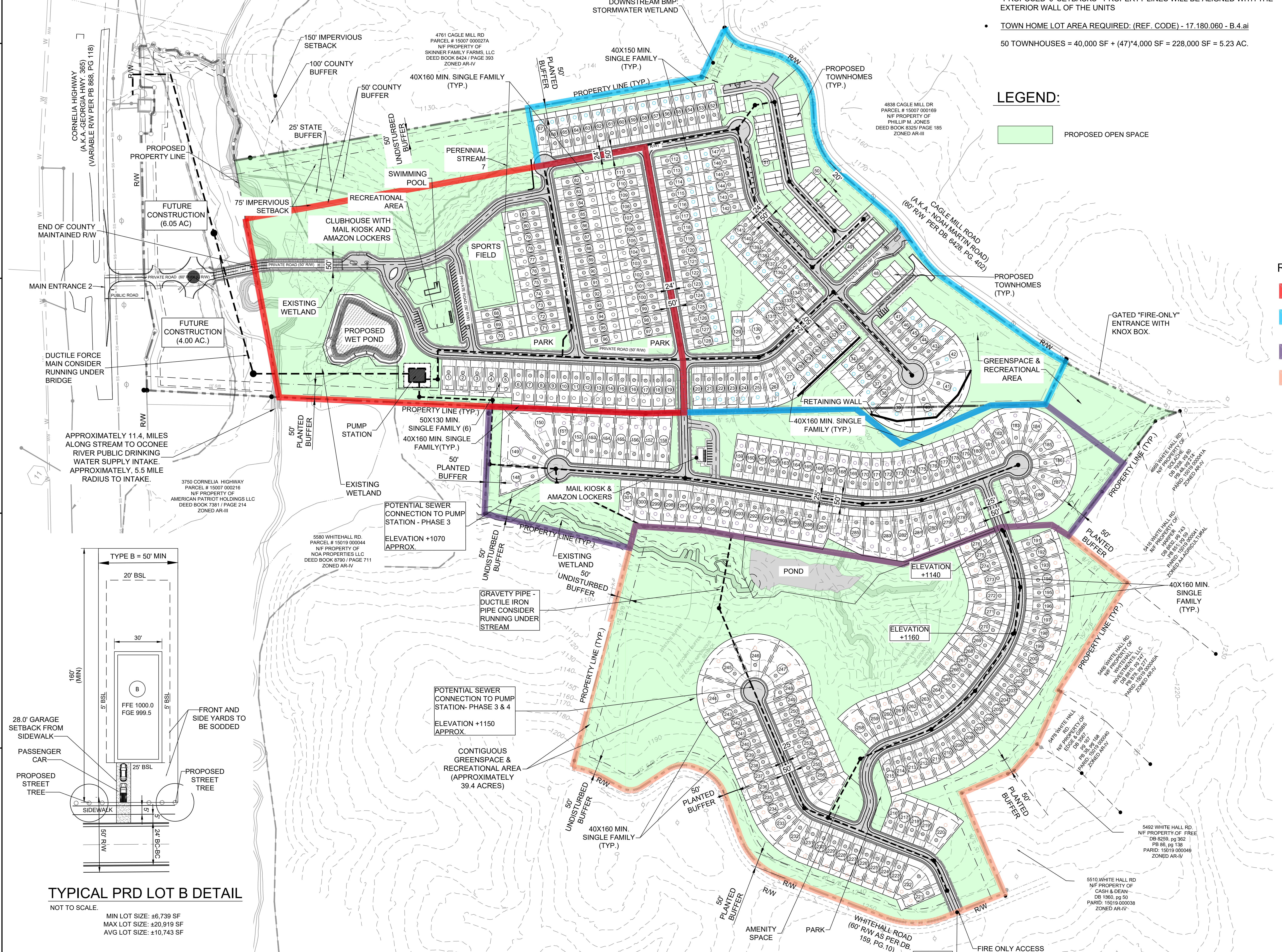
TOTAL SEWER FLOW CAPACITY = 4 X 52,350 GPD = 209,400 GPD

EXISTING ZONING: AGRICULTURAL RESIDENTIAL IV (AR-IV)
 PROPOSED ZONING: PLANNED RESIDENTIAL DEVELOPMENT (PRD)

LOT OWNERSHIP
 THE COMMERCIAL PARCEL WILL BE SUBDIVIDED AT APPROXIMATELY THE RE-ZONING LINE SHOWN. EXACT LOCATION OF SUBDIVISION LINE IS TO BE DETERMINED. THE RESIDENTIAL PARCEL WILL BE SUBDIVIDED AS "FEE-SIMPLE" OWNERSHIP FOR ALL SINGLE-FAMILY LOTS AND AS "JOINT OWNERSHIP" FOR TOWNHOMES. TOWNHOMES WILL BE PLATTED WITH LOT-LINES AT THE BUILDING EXTENT AND MAY BE SOLD AS "0' LOT LINE SETBACK" LOTS.

- **BUFFERS (REF. CODE) - 17.180.060 - B.5**
 A MIN. 50 FT PLANTED BUFFER SHALL BE ESTABLISHED ALONG THE PERIMETER OF ALL PROPERTY BOUNDARIES
- **LANDSCAPE (REF. CODE) - 17.180.060 - B.6.a**
 A MIN. OF TWO TREES PER LOT SHALL BE PROVIDED IN THE FRONT, SIDE, OR NEAR YARD.
- **PERMITTED USES - 17.225.110**
 THE SITE CONTAINS WETLANDS. TOTAL AREA: 62,204 SF.
 A WETLAND ALTERATION PERMIT FROM THE CORPS OF ENGINEERS MUST BE OBTAINED PRIOR ANY ALTERATIONS.
- **COMMERCIAL USES - 17.180.060 - 13**
 COMMERCIAL USE IS LIMITED TO A TOTAL OF 10,000 SF OF FLOOR AREA FOR THE ENTIRE PLANNED RESIDENTIAL DEVELOPMENT.
- **LIGHTING**
 SUBDIVISION WILL COMPLY WITH COUNTY STREET LIGHTING REQUIREMENTS PER CODE OF ORDINANCES - PART I - TITLE 16, CHAPTER 16.90 STREET LIGHTING POLICY (SEC. 16.90.070 AND 16.90.090).

POND
 3500 Parkway Lane
 Suite 500
 Peachtree Corners
 Georgia 30092

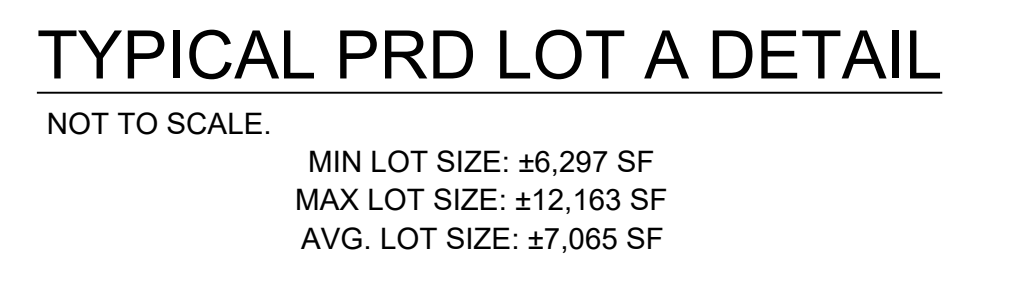
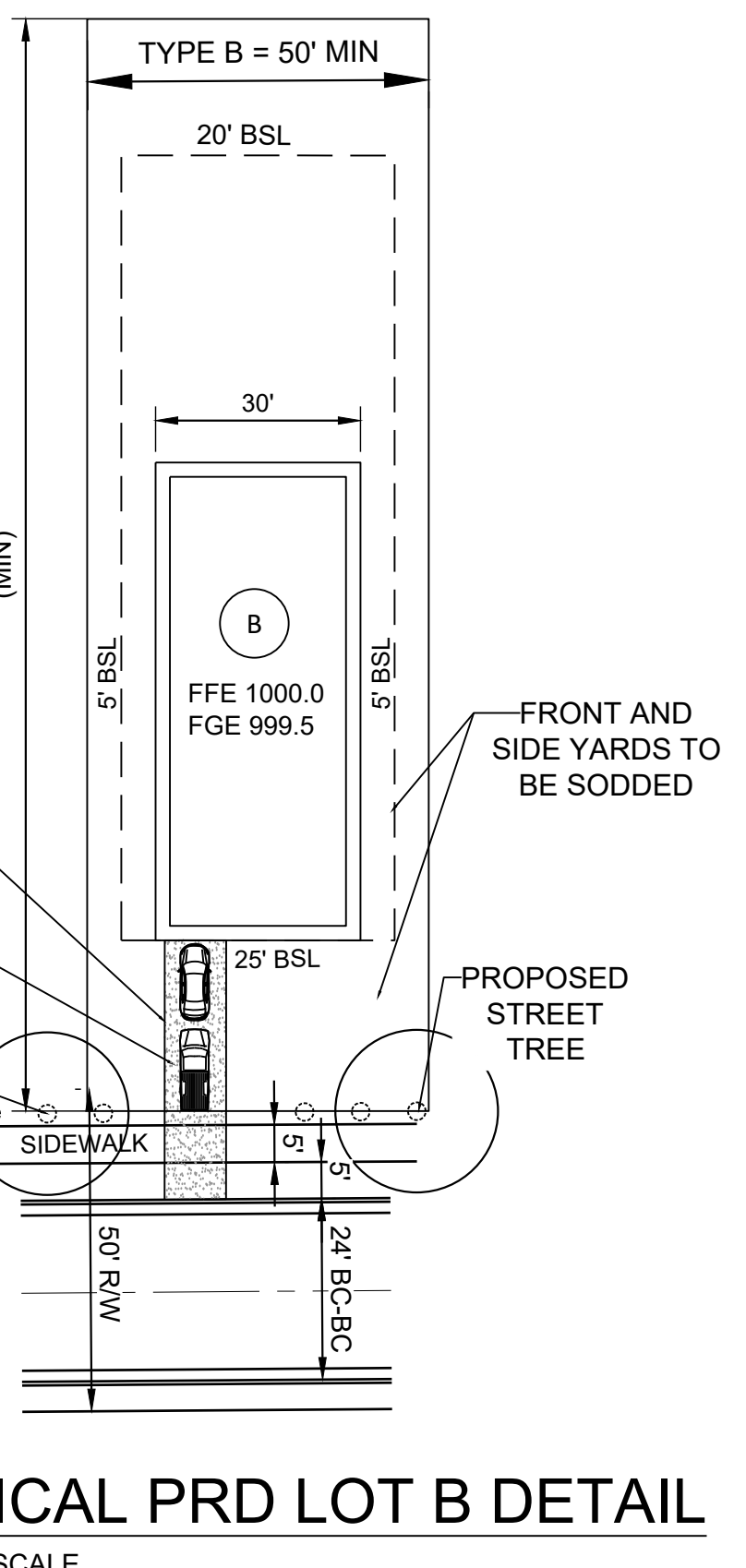
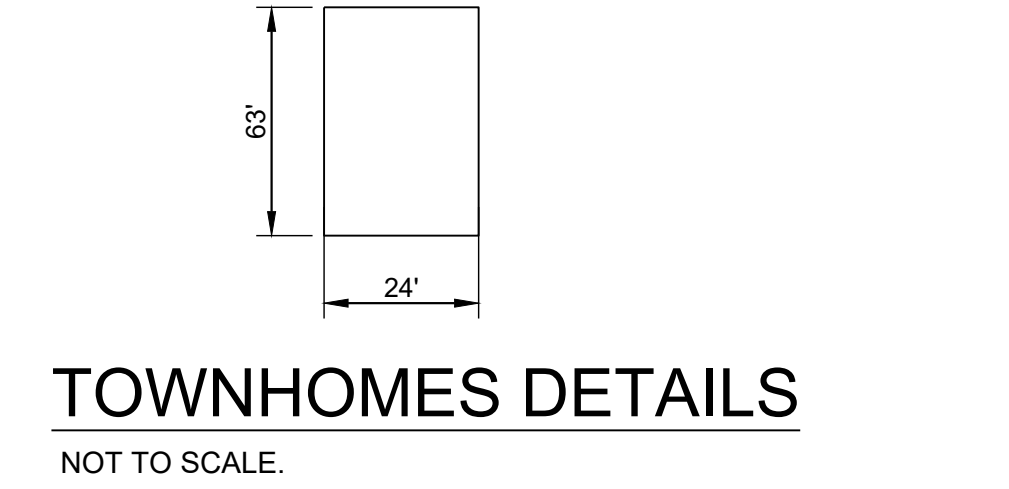


LEGEND:

PROPOSED OPEN SPACE

PROPOSED TOWNHOMES (TYP.)

- RECOMMENDED CONSTRUCTION PHASING**
- PHASE 1 (Red line)
 - SINGLE-FAMILY "A": 58 UNITS
 - SINGLE-FAMILY "B": 5 UNITS
 - PHASE 2 (Blue line)
 - SINGLE-FAMILY "A": 72 UNITS
 - SINGLE-FAMILY "B": 8 UNITS
 - TOWNHOMES: 52 UNITS
 - PHASE 3 (Purple line)
 - SINGLE-FAMILY "A": 32 UNITS
 - SINGLE-FAMILY "B": 36 UNITS
 - PHASE 4 (Orange line)
 - SINGLE-FAMILY "A": 79 UNITS
 - SINGLE-FAMILY "B": 7 UNITS



RESIDENTIAL EXHIBIT SITE PLAN
 SCALE: 1" = 150'

EOR/AOR SEAL

Brightside Homes
 6525 The Corners Parkway
 Suite 216
 Peachtree Corners
 Georgia 30092

RESIDENCE AT CAGLE MILL

4745 CAGLE MILL ROAD, LULA, GEORGIA

| DRAWING ISSUE | DATE | DESCRIPTION | MARK |
|---------------|------------|-------------|------|
| DESIGNED BY: | WM | | |
| DRAWN BY: | ABC | | |
| CHECKED BY: | JBB | | |
| SUBMITTED BY: | JBB | | |
| DATE: | 03/22/2024 | | |
| PROJECT # | 1220263 | | |
| SHEET TITLE | | | |

ZONING SITE PLAN

SHEET NUMBER
EX 01

ORIGINAL SHEET SIZE:
 30" X 42"

811 Know what's below.
 Call before you dig.
 Dial 811
 Or Call 800-282-7411

REZONING PLAN

1

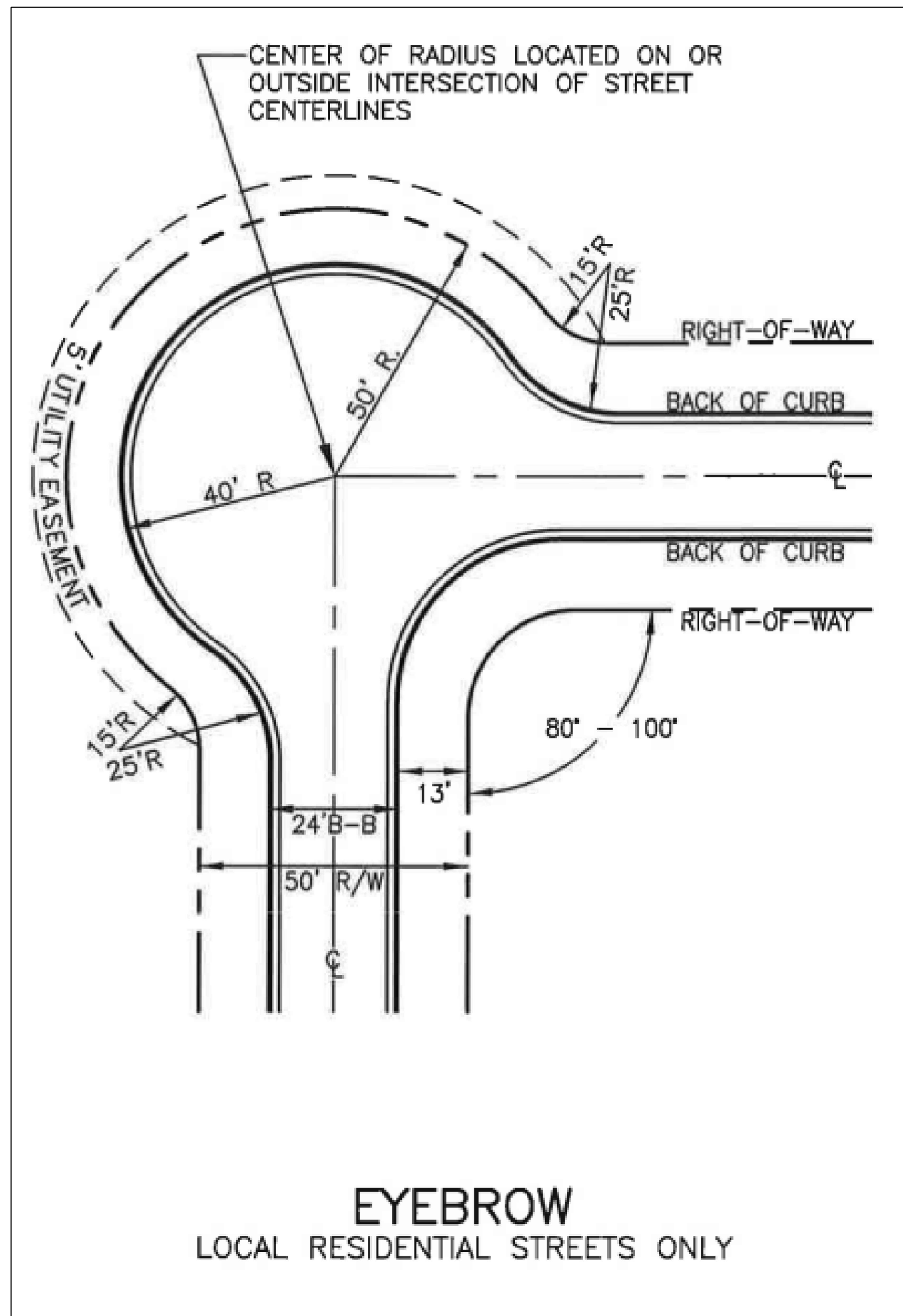
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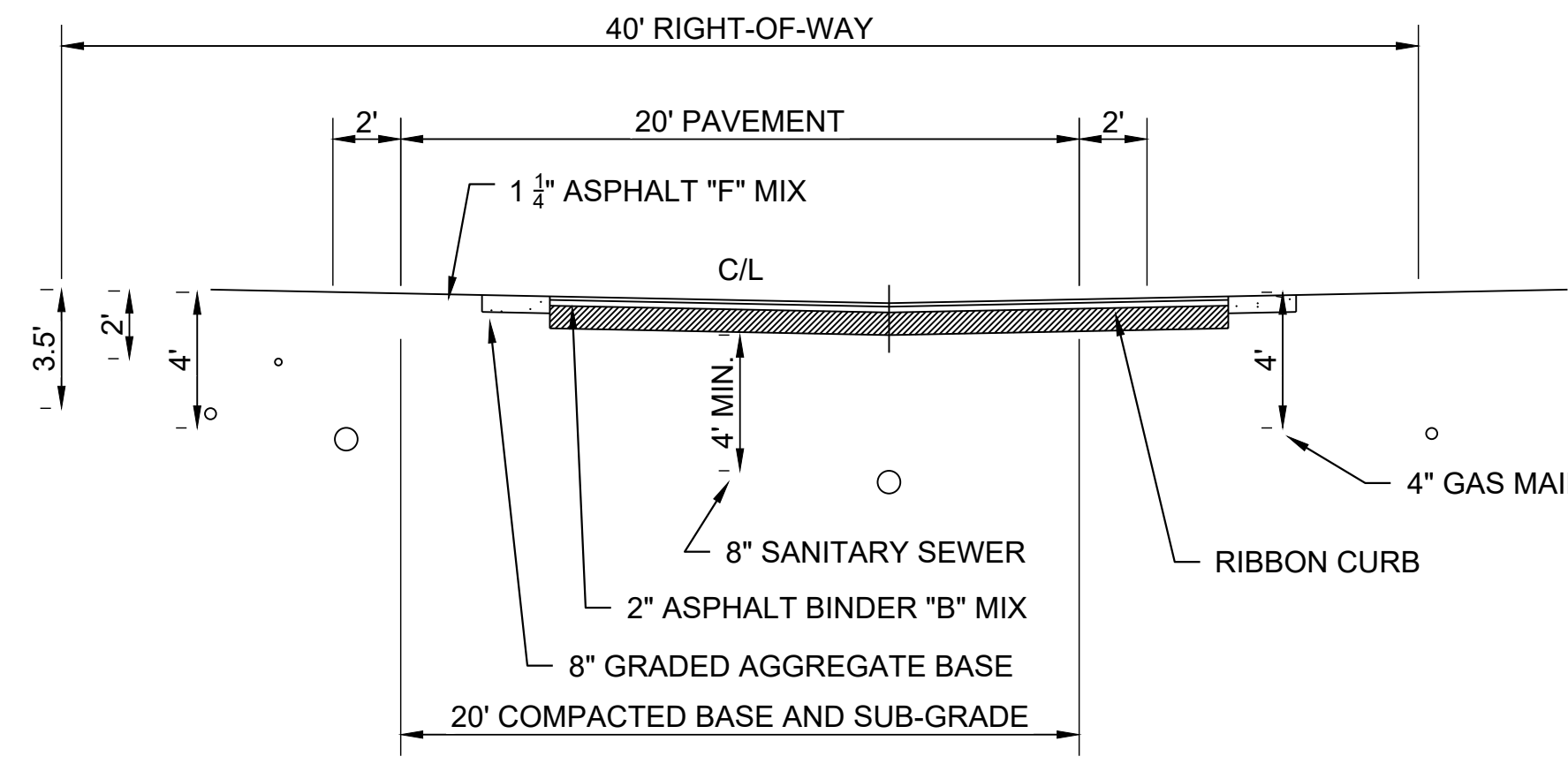
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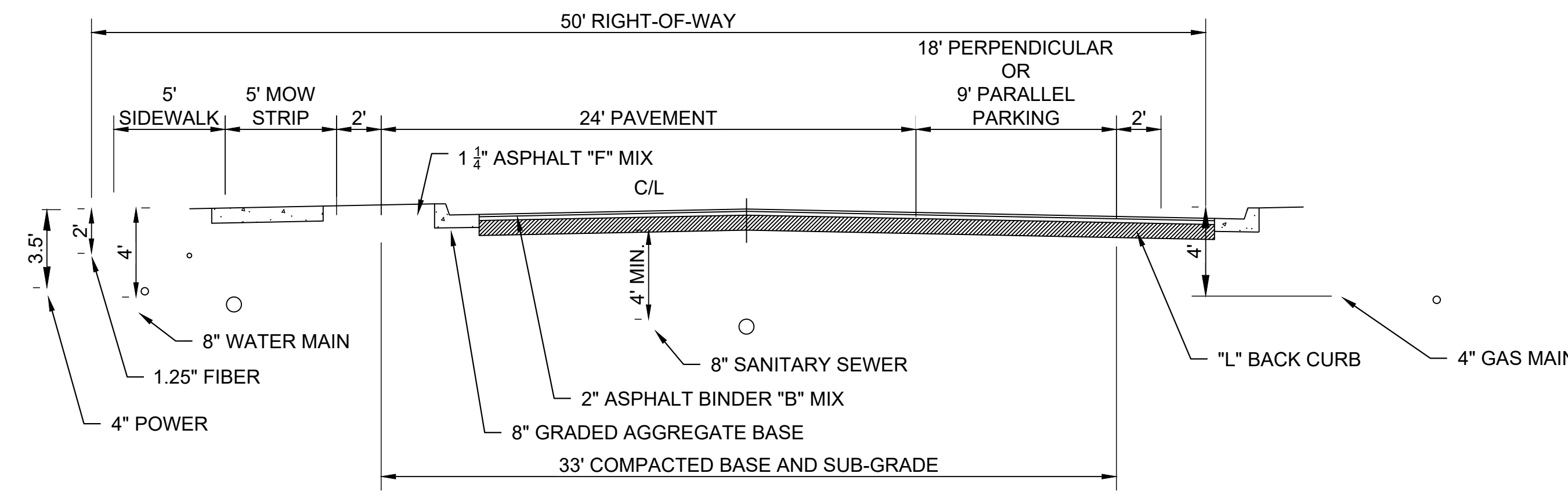
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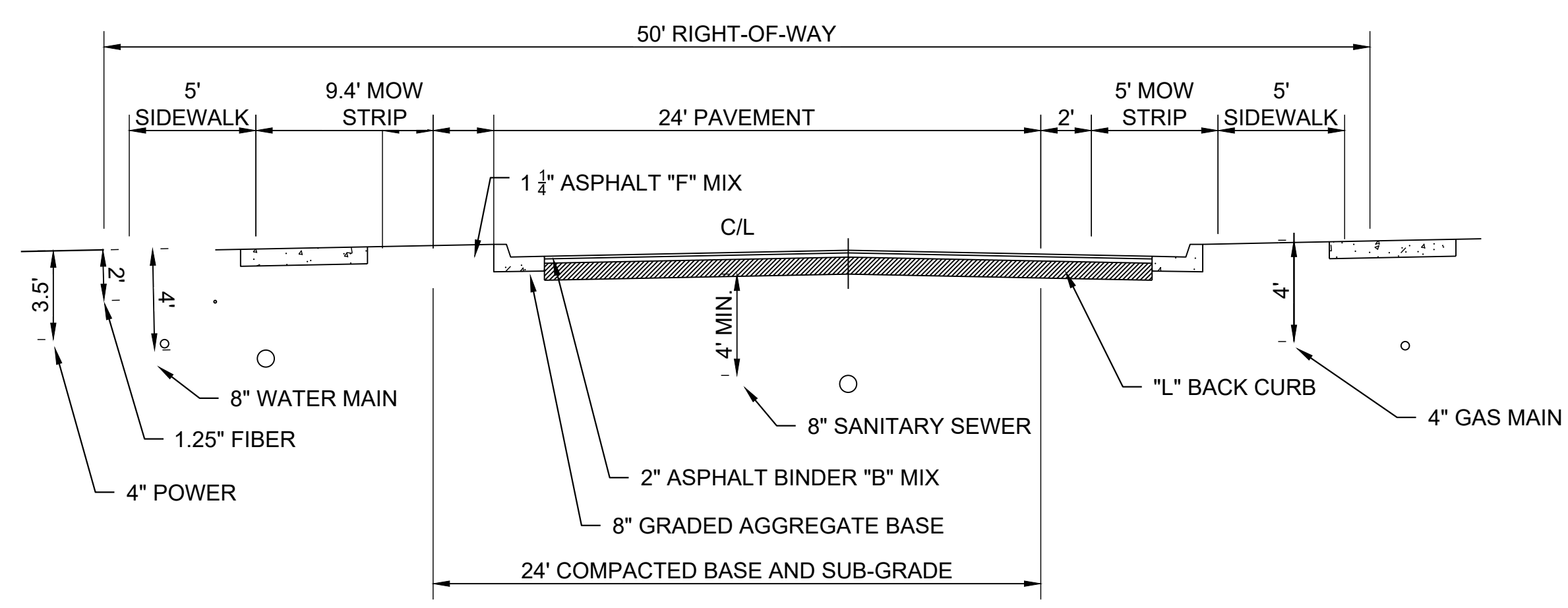
ALLEYWAY ROAD



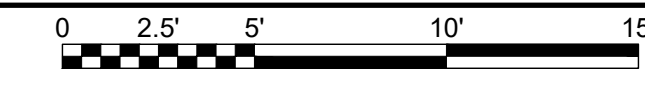
PRIMARY ROAD W/ PARKING



PRIMARY ROAD



A1 ROADWAY CROSS SECTIONS
SCALE: 1" = 5'



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CLIENT INFORMATION

Brightside Homes
AN ALLIANCE COMPANY
6525 The Corners Parkway
Suite 216
Peachtree Corners
Georgia 30092

PROJECT NAME

RESIDENCE AT CAGLE MILL

4745 CAGLE MILL ROAD, LULA, GEORGIA

DRAWING ISSUE

DATE

DESCRIPTION

MARK

DESIGNED BY: LES
DRAWN BY: LES
CHECKED BY: JBB
SUBMITTED BY: JBB
DATE: 03/22/2024
PROJECT #: 1220263

SHEET TITLE

ROADWAY CROSS SECTIONS

SHEET NUMBER

EX 02

ORIGINAL SHEET SIZE: 30" X 42"

FILE PATH: X:\FY22\1220263\04_CAD_BIM\04_02_CAD\CAD-501 PLOTTED BY: BONNO, ANDRES DATE: 5/19/24

1

2

3

4

5

6

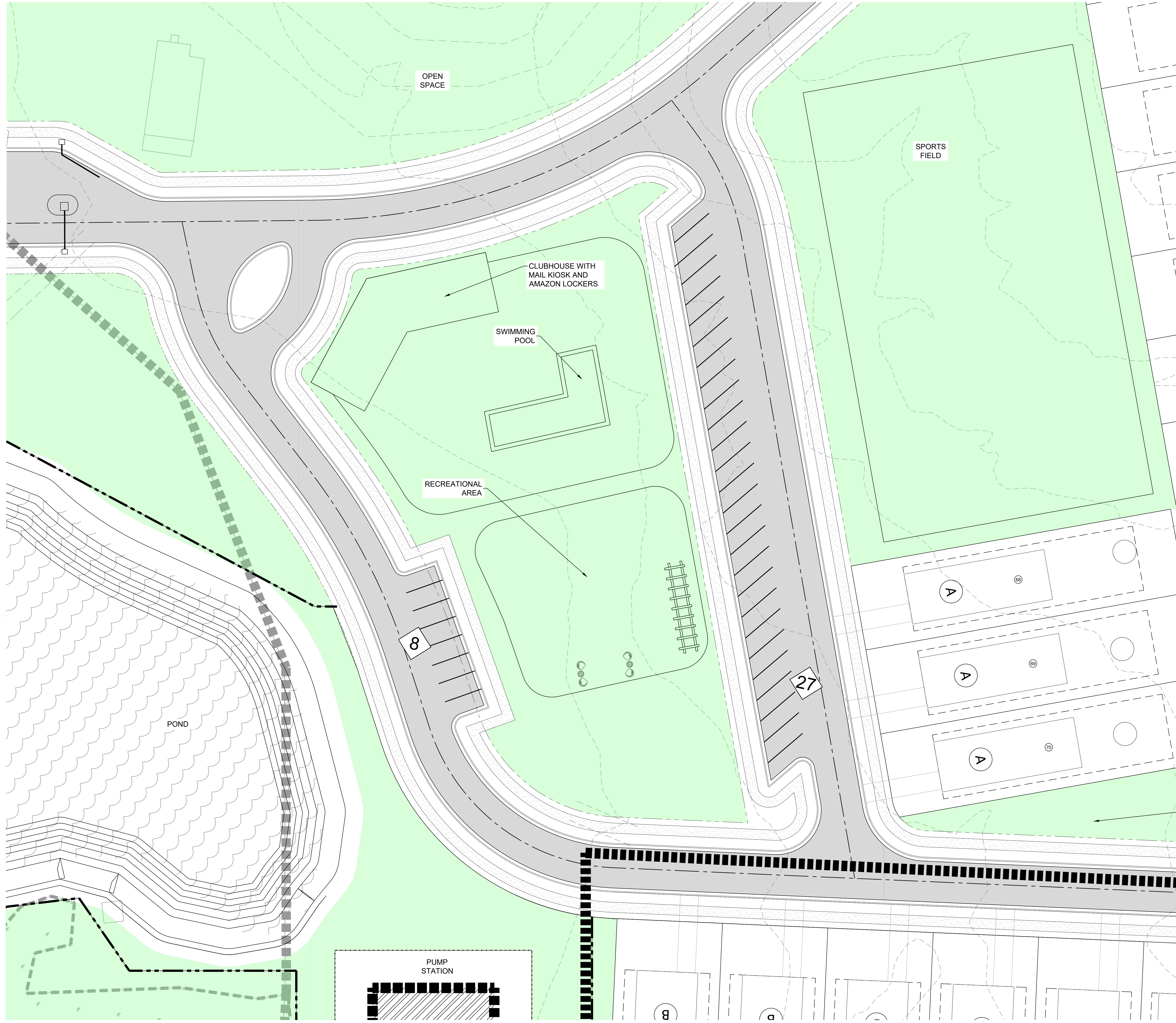
E

D

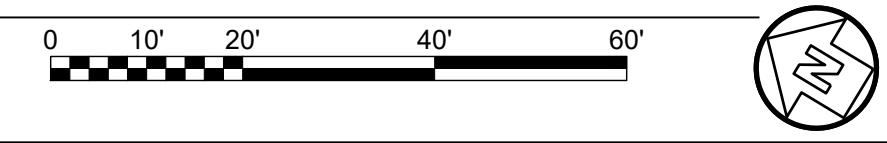
C

B

A



A1 CLUBHOUSE EXHIBIT
SCALE: 1" = 20'



LEGEND:
 PROPOSED OPEN SPACE

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 Peachtree Corners
 Georgia 30092
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 EOR/AGOR SEAL

 CLIENT INFORMATION

Brightside Homes
AN ABERDEEN COMPANY
 6525 The Corners Parkway
 Suite 216
 Peachtree Corners
 Georgia 30092

 PROJECT NAME
RESIDENCE AT CAGLE MILL
 4745 CAGLE MILL ROAD, LULA, GEORGIA

 DRAWING ISSUE

 DATE

 DESCRIPTION

 MARK

DESIGNED BY: WM
 DRAWN BY: ABC
 CHECKED BY: JBB
 SUBMITTED BY: JBB
 DATE: 03/22/2024
 PROJECT #: 1220263

 SHEET TITLE

CLUBHOUSE EXHIBIT

 SHEET NUMBER

EX 03

 ORIGINAL SHEET SIZE:
 30" X 42"

811 Know what's below.
 Call before you dig.
 Dial 811
 Or Call 800-282-7411

REZONING PLAN

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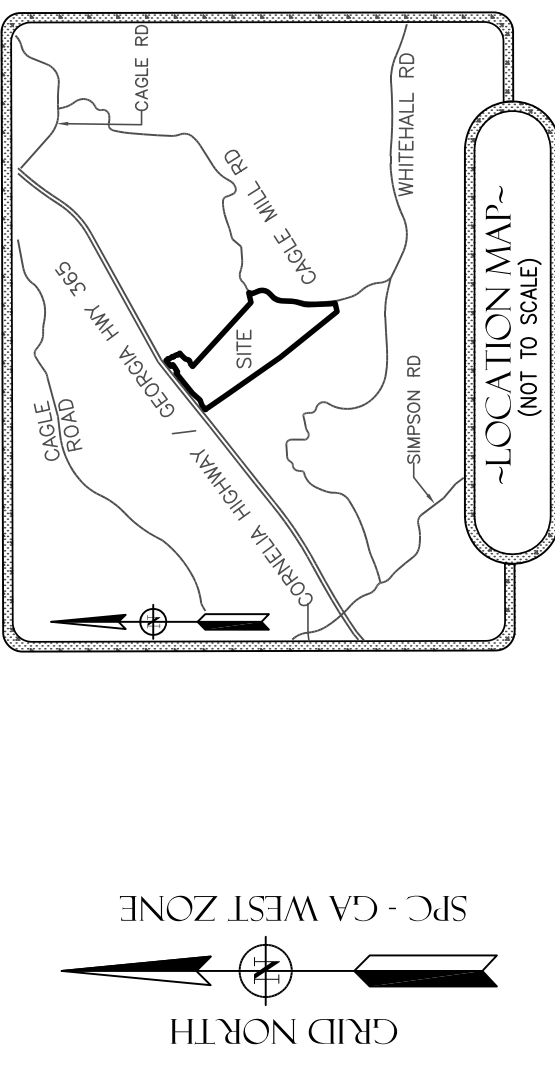
ALTA/NSPS SURVEY FOR: CHICAGO TITLE INSURANCE COMPANY & ACM VENTURES, LLC

PREPARED BY
IDES DAVIS
ENGINEERING & SURVEYING
133 PROMINENCE COURT
SUITE 210
DAWSONVILLE, GA 30534
PHONE: (706) 265-1234
DAVISENGINEERS.COM

ALTA/NSPS LAND TITLE SURVEY FOR
CHICAGO TITLE INSURANCE COMPANY AND ACM VENTURES, LLC
LULA DISTRICT*
1690th G.M.D.*
HALL COUNTY, GEORGIA

REVISIONS BY: FA
REVISION DATE: 05/16/22
FIELD CREW: DS/MS
REVISIONS BY: DS/MS
REVISION DATE: 1/18/2022
DRAWN BY: DS
FIELD DATE: 8/26/2021
PLAT DATE: 7/30/2021

SHEET NO.
1 of 1
PROJECT NO.
21-239



~TITLE EXCEPTIONS~
AS PER ISSUING OFFICE NO. 66584

- 10 SURVEY MATTERS PERTAINING TO CHICAGO TITLE INSURANCE COMPANY COMMITMENT FOR THE ISSUING OFFICE NUMBER: 66584. COMMITMENT DATE: APRIL 25, 2022.
- 11 All matters shown on plot of survey for Row, Sweet dated November 5, 1973, last revised November 15, 1985, recorded in Plat Book 106, Page 78, Hall County, Georgia Deed Records. (AFFECTS: AS SHOWN)
- 12 Judgment in favor of Southern Bell Telephone and Telegraph Company, dated June 7, 1989, recorded in Deed Book 1356, Page 106, Hall County, Georgia Deed Records. (AFFECTS: AS SHOWN)
- 13 Right of Way Deed to Department of Transportation, dated March 2, 1978, recorded in Deed Book 702, Page 147, Hall County, Georgia Deed Records. (AFFECTS: AS SHOWN)
- 14 Rights of upper and lower riparian owners in and to the waters of creeks crossing or adjoining the property, and the natural flow thereof, free from diminution of pollution.
- 15 Easement to Georgia Power Company dated February 26, 2008, recorded in Deed Book 634, Pages 32-33, Hall County, Georgia Deed Records. (AFFECTS: AS SHOWN)
- 16 Right of Way Deed to Hall County dated September 3, 1989, recorded in Deed Book 356, Page 317, Hall County, Georgia Deed Records. (DOES NOT AFFECT)
- 17 Subject to Easement described in Indenture from Georgia Kraft Company to Arthur F. Rees, IV dated April 1, 1975, recorded in Deed Book 571, Pages 319-320, Hall County Georgia Deed Records. (AFFECTS: AS SHOWN)
- 18 Affidavit of Possession executed by Robert L. Campbell, as Manager of Inland-Rome, Inc., and recorded in Deed Book 571, Page 320, Hall County, Georgia Deed Records. (NOT A SURVEY MATTER)
- 19 Certificate of Merger from Burns, Kraft Company to Georgia Kraft Company dated December 6, 1973, recorded in Deed Book 548, Page 432, Hall County, Georgia Deed Records. (NOT A SURVEY MATTER)

~SURVEY NOTES~

FIELD MEASUREMENTS WERE TAKEN WITH A TRIMBLE S6 ROBOTIC INSTRUMENT. FIELD DATA FOUND TO HAVE A CLOSURE PRECISION OF 1 FOOT IN 15,310 FEET, AND AN ANGULAR ERROR OF 6 SECONDS PER ANGLE. FIELD DATA ADJUSTED USING THE LEAST SQUARES METHOD.

THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND FOUND TO HAVE A PRECISION OF 1 FOOT IN 55,049 FEET.

THIS PLAT DOES NOT CONSTITUTE AND SHALL BE CONSIDERED AS A SEARCH OR RECOVERY OF RECORDS. IT IS NOT INTENDED TO ESTABLISH LOCATION AND/OR ELEVATION OF THE FLOOD HAZARD. IF NECESSARY, A DETAILED STUDY MAY BE NECESSARY.

THIS PLAT WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS OR ENTITY NAMED ON THIS PLAT.

THIS DOES NOT EXTEND TO ANY UNNAMED THIRD PARTY WITHOUT AN EXPRESSED REPRESENTATION BY THE SURVEYOR.

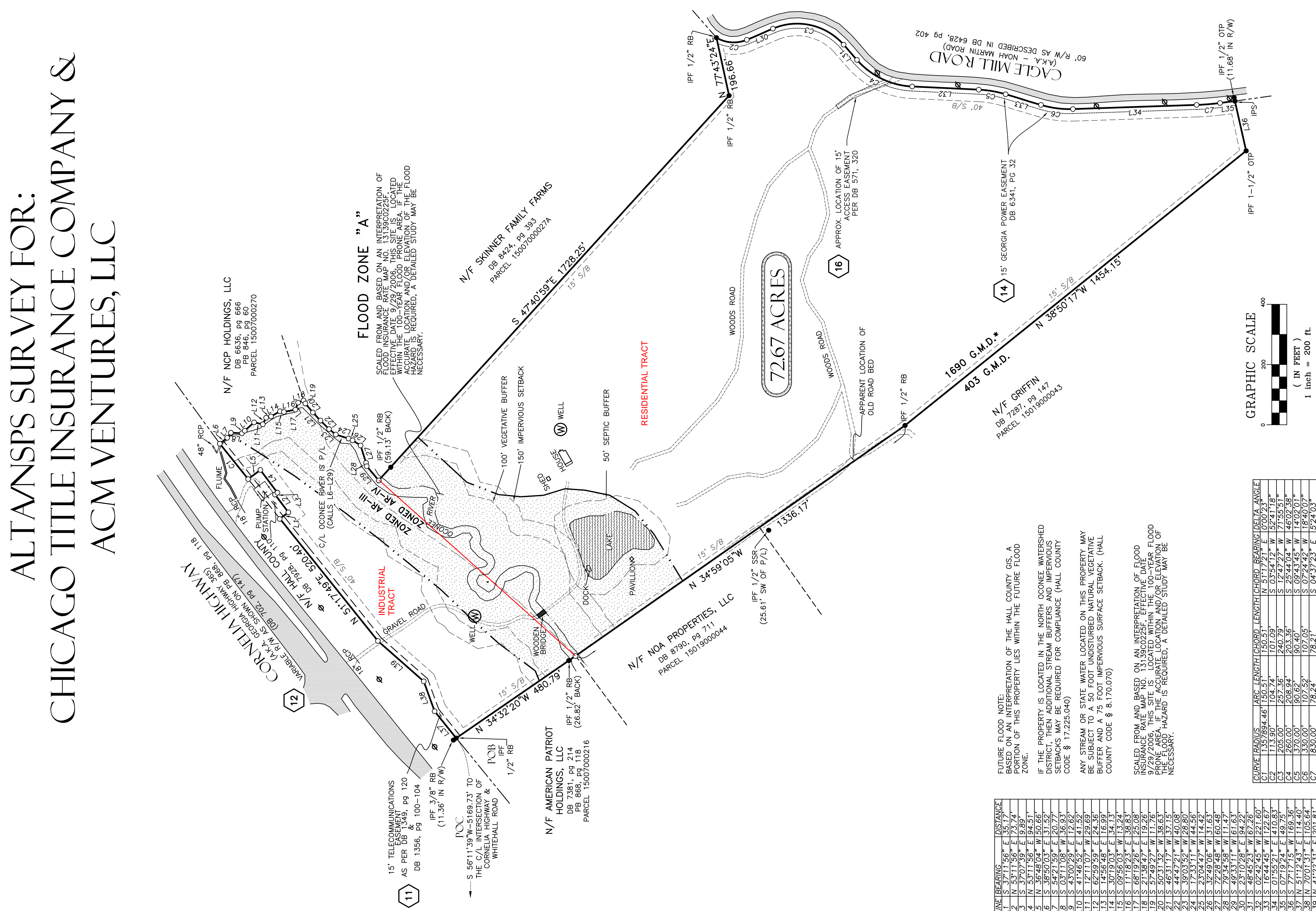
TYPE OF SURVEY: ALTA/NSPS

SOURCE OF TITLE DESCRIPTION FOR PROPERTY SHOWN HEREON: DB 8919, pg 632

PROPERTY OWNERS AS OF SURVEY DATE: CBD INVESTMENTS, LLC

PARCEL NUMBER: 15007 000254

SITE ADDRESS: 4745 CAGLE MILL ROAD LULA, GEORGIA



~LEGEND~

- CALCULATED POSITION
- IRON (I.P.S.)
- G.I. CONTROL
- C.P.P. CONCRETE PLASTIC
- C.P.P. COMPRESSED PIPE
- PIPE INLET
- PIPE MANHOLE
- PLAT BOUNDARY
- LIGHTHOUSE
- TELEPHONE POLE (TP) (ALL IPS ARE 1/2" RB "CAPPED" UNLESS OTHERWISE LABELED)
- WATER METER (WM)
- WATER VALVE (WV)
- POWER POLE (PP)
- POWER POLE (PP)

~ZONING INFORMATION~

COUNTY: HALL
ZONE: AR-III & AR-IV
SETBACK REQUIREMENTS:
FRONT: 40'
REAR: 20'
SIDE: 15'

~ALTA NOTES~

NO CEMETERIES WERE OBSERVED ON SITE AT TIME OF SURVEY.

ACTIVE EARTHWORK WAS OBSERVED ON SITE AT TIME OF SURVEY.

NO STATE WATERS OR WETLANDS WERE OBSERVED ON SITE AT TIME OF SURVEY.

SITE ADDRESS: 8324 MAIN STREET

PER ANTIKAM STANDARDS, DETAILED REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS (EFFECTIVE 2/23/2021) 5.6(V): BOUNDARY DEFINED BY WATER BOUNDARY IS SUBJECT TO CHANGE DUE TO NATURAL CAUSES AND MAY OR MAY NOT REPRESENT THE ACTUAL LOCATION OF THE LIMIT OF TITLE. PROPERTY HAS DIRECT ROAD ACCESS TO CAGLE MILL ROAD AND CORNELIA HIGHWAY, HOWEVER ADDITIONAL PERMITTING MAY BE REQUIRED TO ALTER OR ADD ACCESS POINTS.

~AS-SURVEYED~ LEGAL DESCRIPTION

All that tract or parcel of land lying and being in the Lula* District, 1690th G.M.D.* Hall County, Georgia and being more particularly described as follows:

COMMENCING at a point at the center line intersection of Cornelia Highway (A.K.A. Georgia Highway 385 with a variable right-of-way) and Whitehall Road;

THENCE, N56°11'39"E a distance of 5168.73; to a 1/2" rebar found at the POINT OF BEGINNING; right-of-way of Cornelia Highway; said 1/2" rebar found being the POINT OF BEGINNING;

THENCE, along the southeasterly right-of-way of Cornelia Highway, N51°24'3"E a distance of 114.40' to a point;

THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, continuing along the southeasterly right-of-way of Cornelia Highway, N41°22'31"E a distance of 201.81' to a point;

THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N51°17'49"E a distance of 520.49' to a point;

THENCE, leaving the southeasterly right-of-way of Cornelia Highway, S37°11'56"E a distance of 351.16' to a point;

THENCE, N53°11'56"E a distance of 73.74' to a point;

THENCE, S37°07'39"E a distance of 94.51' to a point;

THENCE, along the southeasterly right-of-way of Cornelia Highway, with a curve to the left, having an arc length of 150.51' and a radius of 135784.48', with a chord bearing of 104.74' and a radius of 113.90', with a chord length of 101.09' to a point;

THENCE, leaving the southeasterly right-of-way of Cornelia Highway and along the centerline of the stream, the following courses and distances:

S38°50'03"E a distance of 31.52' to a point; S44°21'59"E a distance of 20.77' to a point; S03°11'08"W a distance of 36.93' to a point; S43°00'29"E a distance of 12.62' to a point; S2°49'59"E a distance of 41.52' to a point; S57°45'24"W a distance of 23.69' to a point; S30°19'03"E a distance of 54.13' to a point; S09°56'03"W a distance of 13.24' to a point; S11°18'23"E a distance of 38.83' to a point; S68°19'26"E a distance of 25.08' to a point; S50°31'32"W a distance of 38.63' to a point; S46°51'17"W a distance of 37.15' to a point; S44°47'21"W a distance of 40.08' to a point; S39°03'52"W a distance of 28.80' to a point; S32°49'08"W a distance of 44.53' to a point; S27°28'44"W a distance of 60.44' to a point; S79°24'58"W a distance of 11.47' to a point; S46°33'11"W a distance of 61.63' to a point; S46°33'11"W a distance of 11.47' to a point; S47°40'59"E a distance of 1728.25' to a 1/2" rebar found;

THENCE, N77°43'24"E a distance of 196.66' to a 1/2" rebar found at the westerly right-of-way of Cagle Mill Road (60' right-of-way);

THENCE, along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 101.09' to a point;

THENCE, along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 104.74' and a radius of 113.90', with a chord bearing of 50°54'12"W and a chord length of 94.22' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S23°10'28"E a distance of 94.22' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 251.94' and a radius of 205.00', with a chord bearing of 52°27'27"W and a chord length of 171.76' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S48°45'23"W a distance of 67.26' to a point;

THENCE, along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 208.94' and a radius of 280.00', with a chord bearing of S25°44'04"W and a chord length of 203.36' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S02°42'45"W a distance of 221.60' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the right, having an arc length of 90.62' and a radius of 370.00', with a chord bearing of 122.87' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S16°44'45"W a distance of 122.87' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 107.52' and a radius of 330.00', with a chord bearing of 107°24'42"W and a chord length of 107.05' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S07°19'24"E a distance of 49.75' to a 1/2" rebar found;

THENCE, leaving the westerly right-of-way of Cagle Mill Road, S37°17'15"W a distance of 1454.15' to a point;

THENCE, N43°50'17"W a distance of 138.17' to a point;

THENCE, N43°50'17"W a distance of 138.17' to a 1/2" rebar found; said 1/2" rebar found and being the POINT OF BEGINNING.

Sold property containing 72.67 acres.

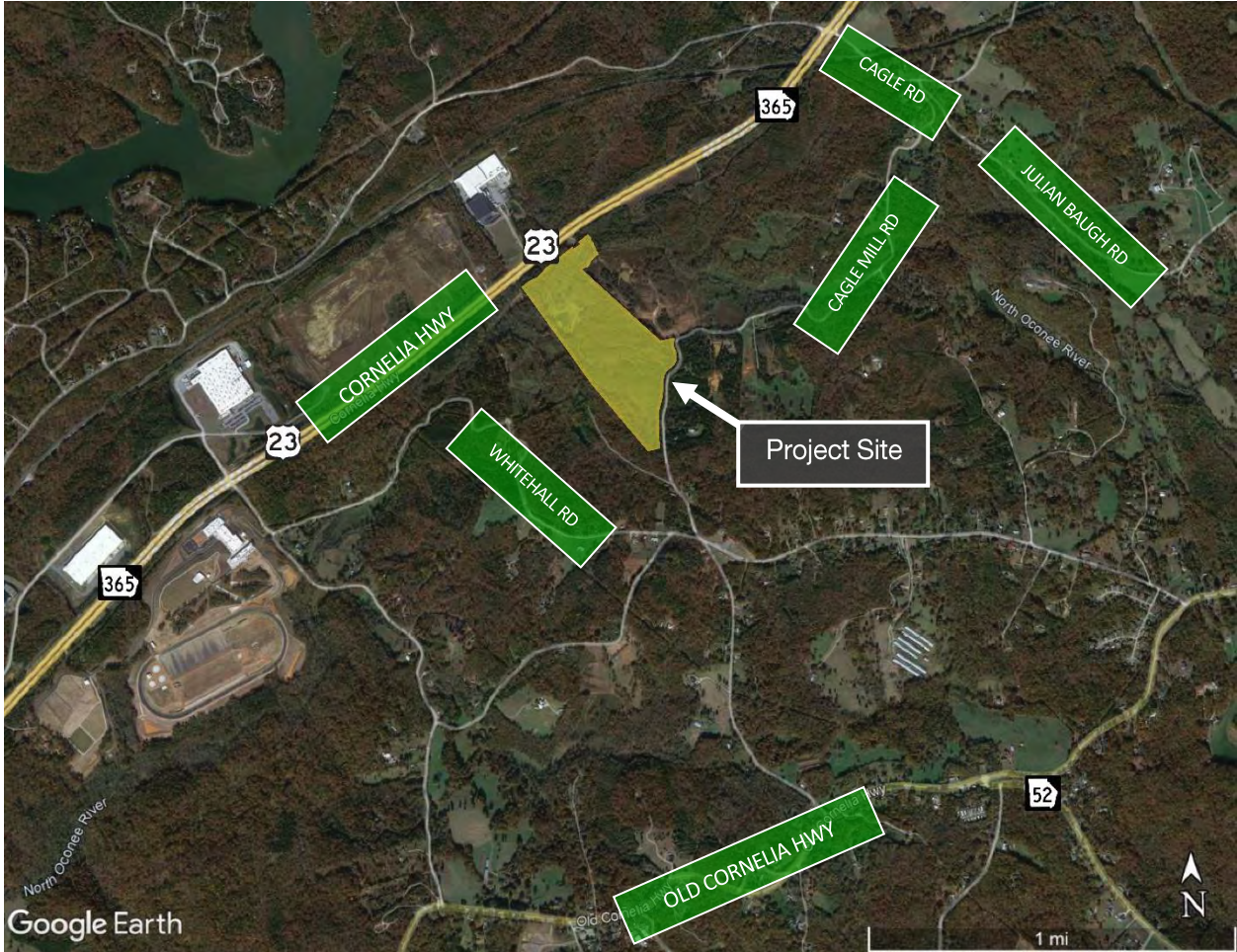
GRAPHIC SCALE
1 inch = 200 ft.

| CURVE BEARING | ARC LENGTH | CHORD LENGTH | CHORD BEARING | CHORD BEARING |
|---------------|------------|--------------|---------------|---------------|
| C1 | 113.90' | 101.09' | S 09°54'12"W | S 52°41'18" |
| C2 | 104.74' | 94.22' | S 02°42'45"W | S 07°24'42" |
| C3 | 205.00' | 171.76' | S 52°27'27"W | S 14°02'36" |
| C4 | 280.00' | 203.36' | S 09°44'04"W | S 14°02'36" |
| C5 | 370.00' | 90.62' | S 09°44'04"W | S 14°02'36" |
| C6 | 330.00' | 107.52' | S 07°19'24"W | S 16°40'07" |
| C7 | 850.00' | 78.24' | S 08°37'29"E | S 17°24'03" |

SCALED FROM AND BASED ON AN INTERPRETATION OF FLOOD HAZARD DATA FOR CHICAGO TITLE INSURANCE COMPANY, 9/29/2006. THIS SITE IS LOCATED WITHIN THE 100-YEAR FLOOD HAZARD ZONE. THE LOCATION AND GRADE ELEVATION OF THIS SITE IS NOT GUARANTEED. A DETAILED STUDY MAY BE NECESSARY.

TRAFFIC IMPACT STUDY

For Proposed Residence at Cagle Mill Development
Hall County, GA



Report Prepared For:
Audubon Communities

Report Prepared By:
Pond & Company
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3500 Parkway Lane, Suite 500
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AUDUBON

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Date Report Prepared: February 2024

POND

1. INTRODUCTION

The purpose of this study is to evaluate the traffic-related impacts associated with the proposed residential development to be located between Cagle Mill Road and US 23/SR 365/Cornelia Highway in unincorporated Hall County, Georgia. This study presents and documents Pond’s data collection, summarizes the analysis of the current and projected future traffic operations, and evaluates the impacts of the traffic generated by the development. This report will compare conditions with and without the proposed development to address the potential impact of site-generated traffic on the adjacent roadway network. The report will also identify improvements needed to mitigate any identified deficiencies. This study will analyze opening and design years of 2023 and 2028, respectively.

The proposed development is expected to consist of 348 lots, including 297 single-family residential units and 51 townhomes. The study utilizes standard procedures based on the Institute of Transportation Engineers (ITE) to determine the additional amount of traffic that will be generated by the proposed development. A summary of the proposed land-uses and intensities can be found below in **Table 1-1**.

Table 1-1: Proposed Land Uses and Intensities

| Land Use | ITE Land Use Code | Intensity |
|--------------------------------|--------------------------------------|-----------|
| Single Family Type “A (35x60)” | 210 – Single-Family Detached Housing | 297 units |
| Single Family Type “B” | | |
| Townhome (35x40) | 220 – Multifamily Housing (Low-Rise) | 51 units |
| Cluster home | | |
| Clubhouse | - | 4,130 SF |

This report summarizes the analyses of the following (5) scenarios:

1. COVID-19 Adjusted 2022 Existing Traffic Conditions
2. Projected 2023 No-Build Traffic Conditions*
3. Projected 2023 Build Traffic Conditions
4. Projected 2028 No-Build Traffic Conditions*
5. Projected 2028 Build Traffic Conditions

*excludes trips associated with proposed development

2. PROJECT BACKGROUND AND EXISTING CONDITIONS

2.1 Project Location

As is illustrated in **Figure 2-1**, the project is located between Cagle Mill Road and US 23/SR 365/Cornelia Highway in Hall County, Georgia. The proposed residential development is to be located on property consisting of multiple parcels with an area of approximately 125 acres. The site is by SR 365 to the west and Cagle Mill Road to the east. The site plan is presented in **Figure 2-2**.

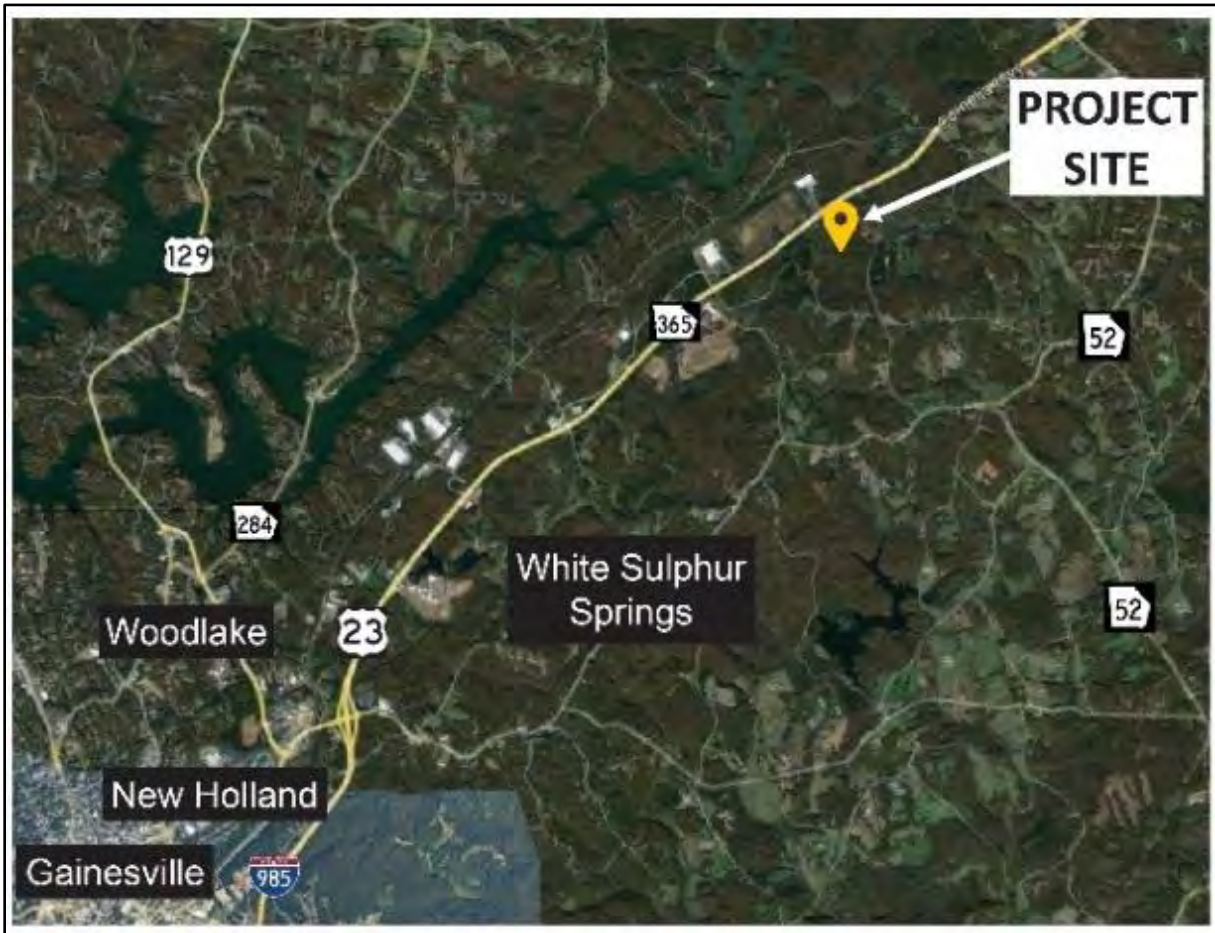


Figure 2-1. Project Location

2.2 Site Access

The development proposes three access points at the following locations.

- Proposed limited access driveway on Cornelia Highway/SR 365.
 - The development will convert the existing full access driveway to a Restricted Crossing U-turn (RCUT) configuration upon build-out of the development.
- Proposed full access driveway on Cagle Mill Road.
- Proposed full access driveway on Whitehall Road.

2.3 Bicycle and Pedestrian Facilities

Neither pedestrian facilities nor bicycle facilities are provided along US 23/SR 365/Cornelia Highway or Cagle Mill Road in the vicinity of the study area.

2.4 Existing Transportation Facilities

This section provides a description of the existing roadways within the study area.

- **US 23/SR 365/Cornelia Highway**
US 23/SR 365/Cornelia Highway is a two-way, four-lane roadway providing north-south mobility between Gwinnett County and Hall County. GDOT classifies this roadway as a Principal Arterial. The road has a posted speed limit of 65 mph. Collected traffic count data determined the Average Daily Traffic (ADT) along this roadway to be 38,014 vehicles per day.
- **Cagle Mill Road**
Cagle Mill Road is a north-south roadway within the study area. It originates at Whitehall Road and traverses north through the study area and terminates at the intersection of Cagle Road and Julian Baugh Road. Adjacent to the proposed site, Cagle Mill Road is a two-lane, undivided roadway with a posted speed limit of 30 mph. GDOT classifies Old Alabama Road as a Local Road. Collected traffic count data determined the Average Daily Traffic (ADT) along this roadway to be 134 vehicles per day.
- **Cagle Road**
Cagle Road is a two-lane, east-west roadway within the study area. GDOT classifies this roadway as a Local Road. The road has a posted speed limit of 35 mph.
- **Whitehall Road**
Whitehall Road is a two-lane, east-west roadway within the study area. GDOT classifies this roadway as a Local Road. The road has a posted speed limit of 40 mph.
- **Noah Martin Road**
Noah Martin Road is a two-lane, north-south roadway within the study area. GDOT classifies this roadway as a Local Road. The road has a posted speed limit of 40 mph.
- **Old Cornelia Highway**
Old Cornelia Highway is a two-lane, east-west roadway within the study area. GDOT classifies this roadway as a Major Collector. The road has a posted speed limit of 55 mph. Collected traffic count data determined the Average Daily Traffic (ADT) along this roadway to be 4,506 vehicles per day.

2.5 Study Network Determination

The study area consists of the following existing intersections:

1. US 23/SR 365/Cornelia Highway at Americold Logistics/Proposed Driveway (Minor Street Stop Control, Full Access)
2. Cagle Road at Cagle Mill Road/Julian Baugh Road (Minor Street Stop Control, Full Access)
3. Cagle Mill Road at Julian Baugh Road (Minor Street Stop Control, Full Access)
4. Cagle Mill Road/Noah Martin Road at Whitehall Road (Minor Street Stop Control, Full Access)
5. Old Cornelia Highway at Noah Martin Road (Minor Street Stop Control, Full Access)
6. US 23/SR 365/Cornelia Highway at Cagle Road (Minor Street Stop Control, Full Access)

2.6 Traffic Volumes

Traffic counts were performed on Wednesday, March 30, 2022. These counts were collected at the study area intersections when local schools were in session and outside of holiday periods. The traffic counts included (6) 6-hr turning movement count (TMC) including bicycle, pedestrian, and heavy vehicles (7:00-10:00AM, 10:00AM-2:00PM, 2:00-7:00PM) and (3) 24-hr Average Daily Traffic (ADT) counts with vehicle speeds and classification counts. 12-hr TMCs will be used to evaluate signal warrant analyses included in this study. The AM and PM peak hours for each intersection are shown in **Figure 2-3** below. These peak hours were determined by calculating the highest four consecutive 15-minute interval volumes at each intersection. Traffic count data is included in **Appendix C**.

2.7 Available Non-GDOT Historical Traffic Counts

No available historical traffic counts that were performed within the past three years were identified. Because every roadway segment and significant intersection in the project area will be counted, the proposed count locations are sufficient so that non-GDOT historical counts may be included in the COVID-19 adjustment methodology if any are identified in the future.

2.8 Available GDOT Historical Traffic Count Data

In order to determine 2022 volumes based on these counts, a compound annual growth rate of 3.25% was calculated based on GDOT historical traffic counts using an exponential regression model of best fit. This growth rate was then applied to the most recent year of GDOT historical counts in the area to estimate the 2022 AADT without the effects of COVID-19. Available GDOT Historical Count locations near the project area that will be used in the adjustment process are presented in **Figure 2-3**.

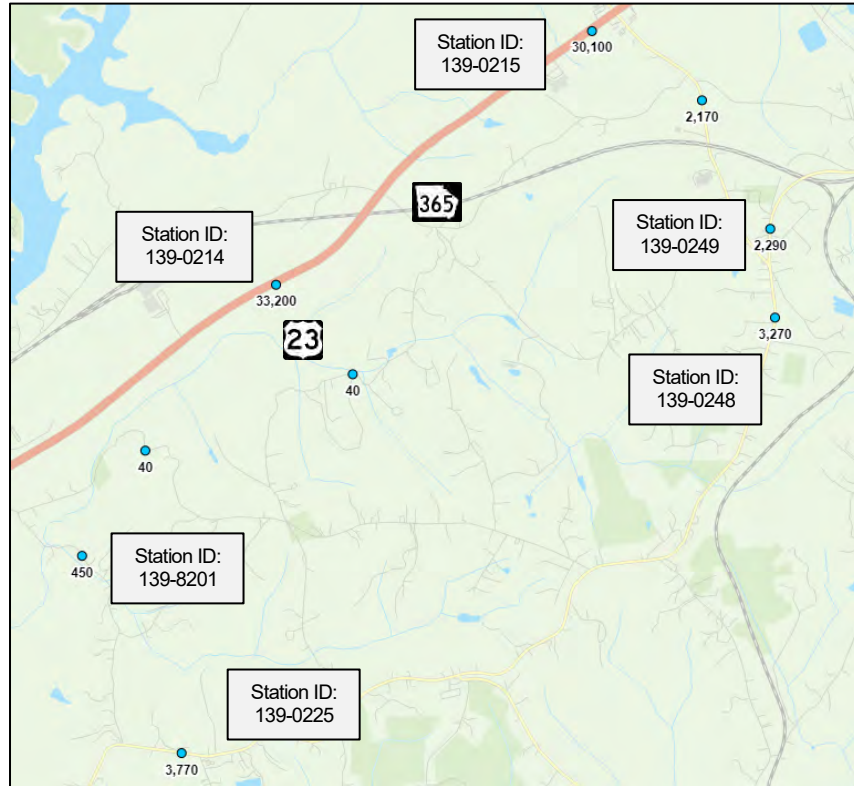


Figure 2-3. Location of GDOT Historical Traffic Count Stations in the Project Area

3. TRAFFIC ANALYSES METHODOLOGY AND ASSUMPTIONS

3.1 COVID-19 Factor Development

Due to altered traffic patterns resulting from the COVID-19 pandemic, collected traffic counts will need to be adjusted in order to reflect typical conditions. In order to account for the effects of the pandemic, a factor was developed and applied to the analyzed traffic volumes. The COVID-19 adjustment factor used in this study was developed by comparing historical traffic count data from GDOT’s TADA database with the ADT count data collected for this study at a shared location. The locations used are US 23/SR 365/Cornelia Highway south of Cagle Road, Cagle Mill Road south of Cagle Road, and Old Cornelia Highway east of Greenway Road. These locations are shown in **Figure 3-1**. The most recent pre-pandemic historical data available at these locations are from 2018 and 2019. The 2018 and 2019 count volumes were adjusted using a growth rate of 3.25%, calculated from GDOT historical data, to estimate a theoretical 2022 volume without the effects of COVID-19. The percentage difference between the theoretical 2022 daily volume and the collected 2022 daily volume, calculated to be 5%, was determined to be the COVID-19 adjustment factor and applied to all respective traffic volumes. The calculation of the COVID-19 adjustment factor is summarized in **Table 3-1**. Additional information regarding GDOT historical growth is included in the “Traffic Forecasting” section of this report. Existing COVID-19 adjusted volumes are included in the **Appendix**.

Table 3-1: Calculation of COVID-19 Factors

| TC Station | Location | Year of Most Recent GDOT Count | GDOT Historical ADT | Growth Rate | Theoretical 2022 ADT | Collected 2022 ADT | COVID-19 Factor |
|-------------------------|--|--------------------------------|---------------------|-------------|----------------------|--------------------|-----------------|
| 139-0214 | US 23/SR 365/Cornelia Hwy S/O Cagle Rd | 2018 | 35,216 | 3.25% | 40,022 | 38,014 | 1.05 |
| 139-8204 | Cagle Mill Rd S/O Cagle Rd | 2019 | 38 | 3.25% | 42 | 134 | 0.31 |
| 139-0225 | Old Cornelia Hwy S/O Country Lane | 2018 | 4,260 | 3.25% | 4,841 | 4,506 | 1.07 |
| Weighted Average | | | | | | | 1.05 |



Figure 3-1. GDOT Count Locations to be Used in COVID-19 Factor Development

3.2 Traffic Forecasting

GDOT provides historical count data which is used in analyzing historical volume trends and can be an indication of future growth. As presented in the COVID-19 Adjustment Methodology section of this memo, a compound annual growth rate was calculated using GDOT historical AADT data over the past 10 years at locations within the study area. This compound annual growth rate was calculated using an exponential regression model of best fit. 2020 data was excluded from this analysis due to the effects of the COVID-19 pandemic. This rate was calculated to be 3.25% and is included in **Table 3-2** below.

Table 3-2: GDOT Historical Traffic Count Data, CAGR Calculation, and Estimated 2022 Volumes

| TC | Location | AADT | | | | | | | | | | CAGR | |
|----------|---|-------|-------|-------|-------|-------|-------|------|-------|------|--------------------------|--------------|-------|
| | | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020* | | |
| 139-0214 | US 23/SR 365/Cornelia Hwy N/O Americold Logistics | | 26636 | | 28406 | | 31740 | | 35500 | | | | 5.0% |
| 139-0225 | Old Cornelia Hwy S/O County Lane | | | | 3850 | | | | 3930 | | | | 0.5% |
| 139-8201 | Simpson Rd S/O Whitehall Rd | | | | | | 400 | | | | 470 | | 5.5% |
| 139-0215 | US 23/SR 365/Cornelia Hwy S/O SR 52/Lula Rd | 27200 | | 27300 | | 30000 | | | | | 31700 | | 2.1% |
| 139-0249 | SR 52/Lula Rd E/O US 23/SR 365/Cornelia Hwy | | 2200 | | 2430 | | 2700 | | 2380 | | | | 1.7% |
| 139-0248 | SR 52/Old Cornelia Hwy S/O SR 52/Lula Rd | 3630 | | 3210 | | 3230 | | | | | 3450 | | -0.3% |
| | | | | | | | | | | | Weighted Average: | 3.25% | |

For the purposes of this study, the proposed development was assumed to be completed and generating traffic by 2023. Therefore, an opening year of 2023 and design year of 2028 were used to evaluate future traffic conditions at all study intersections. Based on the GDOT historical counts, a 3.25% growth rate was applied to the 2022 existing volumes to estimate future No-Build traffic volumes. The 2023 and 2028 No-Build traffic volumes are included in the **Appendix**.

4. TRIP GENERATION

As stated earlier, the proposed development will consist of 348 residential units. These include 297 single-family residential units and 51 townhomes. Anticipated trip generation for the developments was calculated using rates and equations contained in the Institute of Transportation Engineers’ (ITE) Trip Generation Manual, 11th Edition. The land use types that best represent the developments are Single-Family Detached Housing (ITE Code 210), and Low-Rise Multifamily Housing (ITE Code 220). The density and anticipated trip generation for the proposed development are displayed below in **Table 4-1**.

Table 4-1: Trip Generation

| ITE Code | Land Use | Units | Generated Trips | | |
|----------|--------------------------------|-------|-----------------|-----|-------|
| | | | AM | PM | Daily |
| 210 | Single-Family Detached Housing | 297 | 201 | 276 | 2747 |
| 220 | Multifamily Housing (Low-Rise) | 51 | 39 | 42 | 402 |

5. TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution was developed based on existing traffic count information and existing traffic patterns. **Table 5-1** shows the trip distribution of the trips generated by the proposed development through US 23/SR 365/Cornelia Highway and Cagle Mill Road. As described earlier, all analysis was prepared for 2028 conditions.

Table 5-1: Directional Distribution

| ITE Code | Trip Generation | | | | | | | | |
|----------|-----------------|-------|------|--------------------------|-------|------|--------------------------|-------|------|
| | Daily Traffic | | | AM Peak Hour of Adjacent | | | PM Peak Hour of Adjacent | | |
| | Total | Enter | Exit | Total | Enter | Exit | Total | Enter | Exit |
| 210 | 2747 | 1373 | 1374 | 201 | 52 | 149 | 276 | 174 | 102 |
| 220 | 402 | 201 | 201 | 39 | 9 | 30 | 42 | 26 | 16 |

Once directional trip distributions were determined, project trips (trips generated by the proposed development) were then assigned to the study area intersections based on these trip distributions. These project trips were first assigned to the study intersections at the access points prior to being carried through the study network. The trips were assigned to these three intersections according to the trip distributions for each land use and existing traffic volume counts. Similarly, trips were distributed at intersections downstream of the access points based on existing turning movement counts. **Table 5-2** shows the trip distribution of the trips from the development through the intersection of US 23/SR365/Cornelia Highway at Americold Logistics/development driveway/median break, while **Table 5-3** shows the trip distribution of the trips from the development through the intersection of Cagle Mill Road at the second development driveway, and Table 5-4 presents the distribution of development trips at the Whitehall Road driveway. Full trip distribution tables are included in the **Appendix**.

Table 5-2: Trip Distribution Along US 23/SR 365/Cornelia Highway

| Scenario | Trip Distribution Along US 23/SR 365/Cornelia Hwy | | | | |
|----------|---|--------------|----------------|--------------|----------------|
| | Total | To the North | From the North | To the South | From the South |
| AM | 135 | 35 | 12 | 66 | 22 |
| PM | 173 | 24 | 41 | 39 | 68 |

Table 5-3: Trip Distribution Along Cagle Mill Road

| Scenario | Trip Distribution Along Cagle Mill Rd | | | | |
|----------|---------------------------------------|--------------|----------------|--------------|----------------|
| | Total | To the North | From the North | To the South | From the South |
| AM | 16 | 4 | 1 | 8 | 3 |
| PM | 21 | 3 | 5 | 5 | 8 |

Table 5-3: Trip Distribution Along Cagle Mill Road

| Scenario | Trip Distribution Along Whitehall Rd | | | | |
|----------|--------------------------------------|-------------|---------------|-------------|---------------|
| | Total | To the East | From the East | To the West | From the West |
| AM | 2 | 1 | 1 | 0 | 0 |
| PM | 3 | 1 | 2 | 0 | 0 |

6. SIGNAL WARRANT ANALYSIS

The consideration of a traffic signal as an intersection control alternative at this currently unsignalized intersection required an analysis of turning movement volumes over the course of a 12-hour period to determine if any of the MUTCD signal warrants were met.

Note the side-street right-turn volumes were not included. Additionally, per GDOT policy, 100% volume levels were utilized in the analysis (no reductions were utilized). The warrant analysis was performed using the 12 HR TMC data collected for this study. COVID-19 adjusted volumes, in addition to volumes generated by the development, were analyzed for signal warrants.

6.1 Warrant 1, Eight-Hour Vehicular Volumes

Warrant 1 provides three separate conditions that can be met which indicate that the intersection being studied is suitable for a traffic signal. Condition A, the Minimum Vehicular Volume, is intended for locations where a large volume of intersecting traffic is the principal reason to consider a traffic signal. Condition B, the Interruption of Continuous Traffic, is intended for locations where Condition A is not satisfied, and where the traffic volume on the major street is so heavy that the traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. If neither condition is met for a full eight hours of the day, then the volume thresholds for each condition can be reduced by 20% and the intersection can be reevaluated with these reduced volumes. **Figure 6-1** is an illustration from the MUTCD of the volume thresholds used with each Condition.

| Condition A—Minimum Vehicular Volume | | | | | | | | | |
|---|--------------|--|------------------|------------------|------------------|---|------------------|------------------|------------------|
| Number of lanes for moving traffic on each approach | | Vehicles per hour on major street (total of both approaches) | | | | Vehicles per hour on higher-volume minor-street approach (one direction only) | | | |
| Major Street | Minor Street | 100% ^a | 80% ^b | 70% ^c | 56% ^d | 100% ^a | 80% ^b | 70% ^c | 56% ^d |
| 1 | 1 | 500 | 400 | 350 | 280 | 150 | 120 | 105 | 84 |
| 2 or more | 1 | 600 | 480 | 420 | 336 | 150 | 120 | 105 | 84 |
| 2 or more | 2 or more | 600 | 480 | 420 | 336 | 200 | 160 | 140 | 112 |
| 1 | 2 or more | 500 | 400 | 350 | 280 | 200 | 160 | 140 | 112 |

| Condition B—Interruption of Continuous Traffic | | | | | | | | | |
|---|--------------|--|------------------|------------------|------------------|---|------------------|------------------|------------------|
| Number of lanes for moving traffic on each approach | | Vehicles per hour on major street (total of both approaches) | | | | Vehicles per hour on higher-volume minor-street approach (one direction only) | | | |
| Major Street | Minor Street | 100% ^a | 80% ^b | 70% ^c | 56% ^d | 100% ^a | 80% ^b | 70% ^c | 56% ^d |
| 1 | 1 | 750 | 600 | 525 | 420 | 75 | 60 | 53 | 42 |
| 2 or more | 1 | 900 | 720 | 630 | 504 | 75 | 60 | 53 | 42 |
| 2 or more | 2 or more | 900 | 720 | 630 | 504 | 100 | 80 | 70 | 56 |
| 1 | 2 or more | 750 | 600 | 525 | 420 | 100 | 80 | 70 | 56 |

^a Basic minimum hourly volume
^b Used for combination of Conditions A and B after adequate trial of other remedial measures
^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000
^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Figure 6-1: MUTCD Warrant 1 Volume Thresholds

This warrant was utilized as a screening tool, as its volume thresholds are the lowest of the three warrants. In the screening process, the AM and PM peak hour minor street volumes were compared with the minimum threshold for these movements. As the minor streets have a single lane provided for through/left turning vehicles, the threshold of 75 vehicles per hour was utilized. **Since this intersection does not meet the minimum threshold in the peak hour, Warrant 1 is not met. Therefore, it was determined that a signal is not warranted at this location.**

7. ICE POLICY

In accordance with GDOT Policy 4A-5, an Intersection Control Evaluation (ICE) review was performed for the intersection of US 23/SR 365/Cornelia Highway at the proposed driveway. The ICE tool is used to evaluate GDOT intersection control alternatives and identify a solution that both meets the project purpose and reflects the overall best value in terms of specific performance-based criteria. ICE assesses various factors – traffic, safety, cost, environmental impact, and stakeholder pressure – prior to providing scores. This is accomplished in two stages: the first stage is a screening effort to eliminate options that are not feasible and identify alternatives for further consideration; the second step is a detailed evaluation of the feasible alternatives identified in the first stage and is used to support the selection of the preferred alternative. Only one alternative, the RCUT configuration, was deemed to be appropriate from the ICE Stage 1. Therefore, according to guidance from the ICE tool, a waiver is appropriate and submitted in lieu of completing ICE Stage 2. ICE Stage 1 and a Waiver Request Form are included in the **Appendix**.

8. CAPACITY ANALYSIS

Capacity analysis in this study was performed utilizing methodologies contained in the Highway Capacity Manual (HCM), 6th Edition in Synchro. Capacity is defined as the maximum number of vehicles that can pass over a particular road segment or through a particular intersection within a specified period under prevailing roadway, traffic, and control conditions. Level of Service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists’ perceptions. The Highway Capacity Manual defines six levels of service, LOS A through LOS F. Level of service A indicates excellent operations with little delay to motorists, while level of service F indicates extremely long delay.

Level of service for unsignalized intersections is calculated for the average controlled delay incurred for vehicles on the stop-controlled approaches. Controlled delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the controlled delay for unsignalized intersections, including the availability of gaps in the cross-street traffic, and acceptable gap time to make the movement from the stop position. The level-of-service criteria for unsignalized intersections is presented in **Table 8-1**. For stop-controlled intersections, LOS E and F exist when there are insufficient gaps in traffic, resulting in long delays. Low level of service for stop-controlled approaches are not uncommon at major cross-streets.

Table 8-1: Level of Service Thresholds

| | Unsignalized Intersections | Signalized Intersections |
|-----|----------------------------|--------------------------|
| LOS | Average Delay (seconds) | Average Delay (seconds) |
| A | <= 10 | <= 10 |
| B | > 10 and <= 15 | > 10 and <= 20 |
| C | > 15 and <= 25 | > 20 and <= 35 |
| D | > 25 and <= 35 | > 35 and <= 55 |
| E | > 35 and <= 50 | > 55 and <= 80 |
| F | > 50 | > 80 |

Source: 2010 Highway Capacity Manual

The capacity analysis utilized existing peak hour factors and existing heavy vehicle percentage from the collected traffic count data. The analyses are based on the existing lane designations since no programmed roadway improvements were assumed in this study. However, for the intersection of US 23/SR 365/Cornelia Highway at the site access point/median break, the build conditions analysis is based on the proposed RCUT intersection configuration selected in the ICE process. **Table 8-2** summarizes the results of the capacity analyses. No-Build conditions reflect existing roadway conditions with future forecasted traffic volumes minus the trips associated with the proposed development. Build conditions reflect the traffic control detailed within Table 8-2 with future forecasted traffic volumes and the trips associated with the proposed development added to the surrounding roadway network. Synchro outputs for all capacity analysis performed in this study are included in the **Appendix**.

Table 8-2: HCM Capacity Analysis Results

| Intersection | Existing Control | Build Condition Control | 2022 Existing | | 2023 | | | | 2028 | | | |
|---|--------------------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | | | AM LOS (Delay) | PM LOS (Delay) | No Build | | Build | | No Build | | Build | |
| | | | | | AM LOS (Delay) | PM LOS (Delay) | AM LOS (Delay) | PM LOS (Delay) | AM LOS (Delay) | PM LOS (Delay) | AM LOS (Delay) | PM LOS (Delay) |
| 1 US 23/SR 365/Cornelia Hwy at Americold Logistics Dwy/Proposed Dwy | Side Street Stop Control | RCUT | *F | F (264.6) | *F | F (351.4) | E (44.3) | F (120.0) | *F | F (470.7) | F (75.3) | F (281.1) |
| 2 Cagle Mill Rd at Cagle Rd | Side Street Stop | Side Street Stop | A (8.7) | A (8.7) | A (8.7) | A (8.7) | A (8.7) | A (8.7) | A (8.7) | A (8.7) | A (8.7) | A (8.7) |
| 3 Julian Baugh Rd at Cagle Rd | Side Street Stop | Side Street Stop | A (8.7) | A (9.0) | A (8.7) | A (9.1) | A (8.7) | A (8.9) | A (8.8) | A (9.2) | A (8.7) | A (9.0) |
| 4 Cagle Mill Rd/Noah Martin Rd at Whitehall Rd | Side Street Stop | Side Street Stop | A (9.2) | A (9.2) | A (9.2) | A (9.2) | A (9.2) | A (9.4) | A (9.2) | A (9.3) | A (9.3) | A (9.4) |
| 5 Noah Martin Rd at Old Cornelia Hwy | Side Street Stop | Side Street Stop | B (11.2) | B (11.3) | B (11.3) | B (11.4) | B (11.4) | B (11.6) | B (12.0) | B (12.0) | B (12.1) | B (12.4) |
| 6 US 23/SR 365/Cornelia Hwy at Cagle Rd | Side Street Stop | Side Street Stop | *F | *F | *F | *F | *F | *F | *F | *F | *F | *F |
| 7 Cagle Mill Rd at Proposed Driveway | Side Street Stop | Side Street Stop | N/A | N/A | N/A | N/A | A (8.5) | A (8.5) | N/A | N/A | A (8.5) | A (8.5) |
| 8 US 23/SR 365/Cornelia Hwy at Median U turn | N/A | Side Street Stop | N/A | N/A | N/A | N/A | B (10.6) | E (41.2) | N/A | N/A | B (11.6) | F (72.3) |
| 9 US 23/SR 365/Cornelia Hwy at Median U turn | N/A | Side Street Stop | N/A | N/A | N/A | N/A | F (66.9) | B (13.0) | N/A | N/A | F (170.0) | B (15.0) |
| 8 Whitehall Rd at Proposed Driveway | N/A | Side Street Stop | N/A | N/A | N/A | N/A | A (8.7) | A (8.4) | N/A | N/A | A (8.7) | A (8.4) |

*Indicates delay greater than 500 seconds.

The results show that all intersections are operating effectively, at LOS B or better, with the exception of four intersections. US 23/SR 365/Cornelia Highway at Americold Logistics Driveway/Proposed Driveway and US 23/SR 365/Cornelia Highway at Cagle Road operate at LOS F in the existing and future no-build and build scenarios. The proposed median U-turn to be located north of the US 23/SR 365/Cornelia Highway at Americold Logistics Driveway/Proposed Driveway intersection will operate at a LOS F in the AM peak hour of the 2023/2028 built-out year scenarios. Meanwhile, the proposed median U-turn to be located south of the US 23/SR 365/Cornelia Highway at Americold Logistics Driveway/Proposed Driveway intersection will operate at a LOS F in the PM peak hour of the 2028 built-out year scenario.

Although the build condition results in a LOS F in the built-out year, the Restricted Crossing U-turn (RCUT) alternative US 23/SR 365/Cornelia Highway at Americold Logistics Driveway/Proposed Driveway the proposed intersection of US 23/SR 365/Cornelia Highway at Americold Logistics Driveway/Proposed Driveway significantly reduces vehicle delay at the intersection. In addition, this alternative enhances safety especially for drivers on the minor street approaches making a left turn movement. Since the left turn movements out of the minor street would be restricted, the RCUT alternative presents reduced opportunities for crashes.

9. CONCLUSION AND RECOMMENDATIONS

9.1 Conclusions

This traffic impact study evaluated the impact of Residence at Cagle Mill development in Hall County developing approximately 297 single-family houses and 86 low-rise multifamily residential units, which include 61 townhomes and 51 cluster homes. The proposed development is expected to generate 240 trips in AM peak hour and 318 trips in the PM peak hour.

This traffic impact study evaluated existing and future traffic conditions at study area intersections, both with and without further development at the project location. The findings of this analysis indicate that the development will not have a detrimental effect on adjacent intersections.

- The intersections of US 23/SR 365/Cornelia Highway at Americold Logistics Driveway/Proposed Driveway and US 23/SR 365/Cornelia Highway at Cagle Road are currently experiencing significant delay in both the AM and PM hours and have a failing LOS without any additional development. Due to the intersections failing without additional project traffic, the addition of traffic from the development does not pose significant impacts on the intersections.
- The intersection of US 23/SR 365/Cornelia Highway at Americold Logistics Driveway/Proposed Driveway is recommended to be modified to a RCUT, restricting vehicles exiting the cold storage facility and the proposed development from making left turn movements onto US 23/SR 365/Cornelia Highway. This recommendation would make the intersection safer by removing the conflict points associated with a left turning vehicle having to cross four lanes of traffic. Furthermore, this intersection modification would also significantly reduce delay at this intersection.
- The proposed site access on Cagle Mill Road is proposed to be a full access driveway with a shared left turn/right turn lane on the eastbound approach. The northbound approach is proposed to be a shared through/left turn lane while the southbound approach is proposed to be a shared through/right turn lane. This configuration operates at a LOS A in the 2023 opening year and 2028 design year.
- The proposed site access on Whitehall Road is proposed to be a full access driveway with a shared left turn/right turn lane on the southbound approach. The eastbound approach is proposed to be a shared through/left turn lane while the westbound approach is proposed to be a shared through/right turn lane. This configuration operates at a LOS A in the 2023 opening year and 2028 design year.

There are two additional outparcels shown on the development site plan in which commercial businesses such as retail or fast-food chain might be considered. These commercial businesses would generate trips that would utilize the main access road, increasing traffic volumes and impacting the intersection of US 23/SR 365/Cornelia Highway at Americold Logistics Driveway/Proposed Driveway. Because of this, the installation of a traffic signal in the future may be considered.

9.2 Recommendations

- Install a site access point on the east leg of the existing US 23/SR 365/Cornelia Highway at Americold Logistics. Convert the intersection to a Restricted Crossing U-Turn Configuration with the build out of the proposed development, maintaining existing left and right turn lanes along US 23/SR 365/Cornelia Highway.
- Install a site access point along Cagle Mill Road with full access operating under minor street stop control. The recommended intersection geometry is a shared left turn/right turn lane on the eastbound approach, a shared through/left turn lane on the northbound approach, and a shared through/right turn lane on the southbound approach.
- Install a site access point along Whitehall Road with full access operating under minor street stop control. The recommended intersection geometry is a shared left turn/right turn lane on the southbound approach, a shared through/left turn lane on the eastbound approach, and a shared through/right turn lane on the westbound approach.

Appendix

A. Project Location

B. Proposed Development Site Plan

C. Traffic Count Map

D. Collected Traffic Counts

E. Historic Traffic Counts

F. Existing Year and Future Year Build and No-Build Volumes

G. Truck Percentage Calculation Chart

H. COVID-19 Factor Calculation

I. Trip Generation

J. Trip Distribution

K. Capacity Analysis

L. ICE Analysis

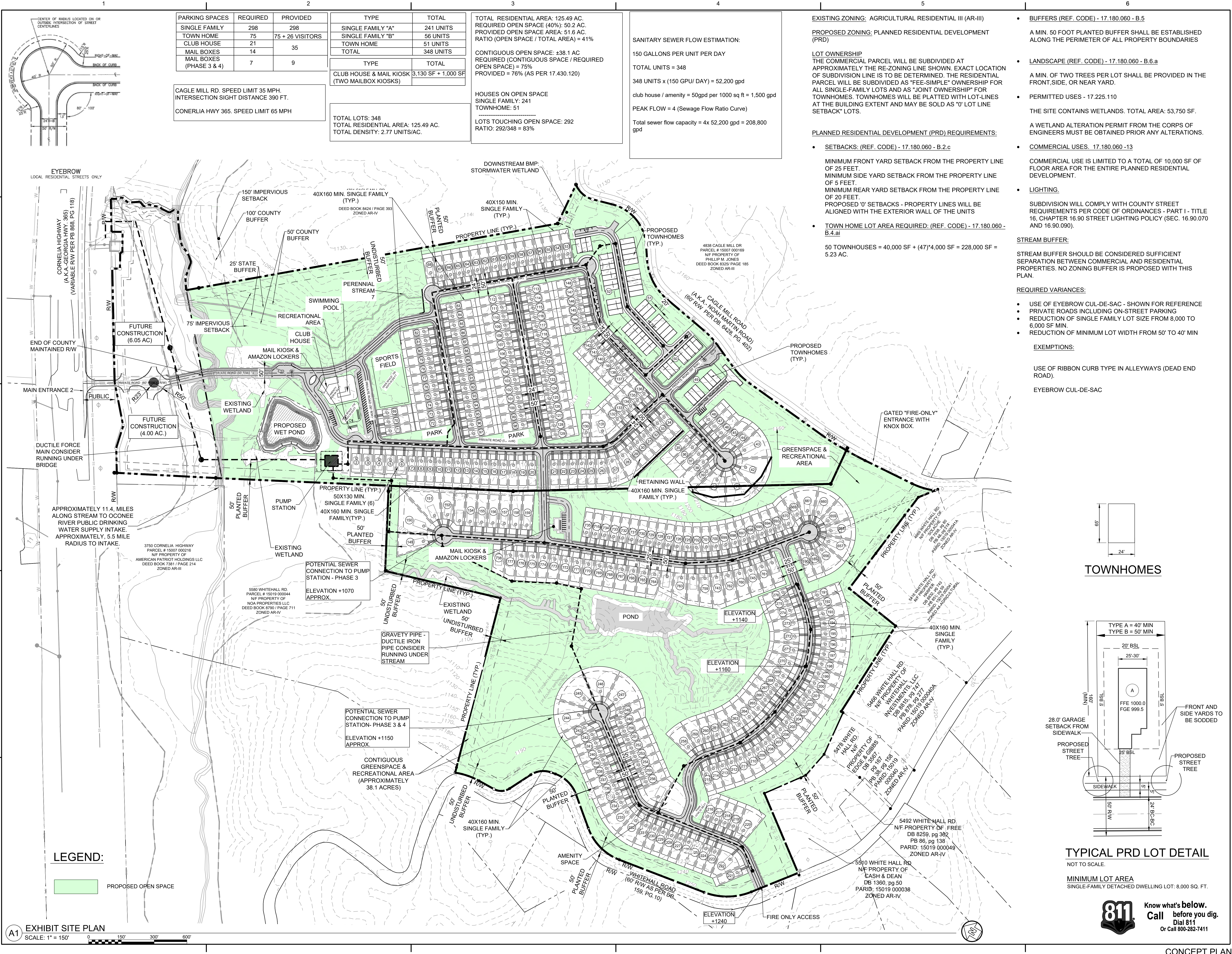
APPENDIX

Appendix A: Project Location



Appendix B:

Proposed Development Site Plan



| PARKING SPACES | REQUIRED | PROVIDED |
|--------------------------|----------|------------------|
| SINGLE FAMILY | 298 | 298 |
| TOWN HOME | 75 | 75 + 26 VISITORS |
| CLUB HOUSE | 21 | |
| MAIL BOXES | 14 | 35 |
| MAIL BOXES (PHASE 3 & 4) | 7 | 9 |

| TYPE | TOTAL |
|-------------------|-----------|
| SINGLE FAMILY "A" | 241 UNITS |
| SINGLE FAMILY "B" | 56 UNITS |
| TOWN HOME | 51 UNITS |
| TOTAL | 348 UNITS |

| TYPE | TOTAL |
|--|---------------------|
| CLUB HOUSE & MAIL KIOSK (TWO MAILBOX KIOSKS) | 3,130 SF + 1,000 SF |

CAGLE MILL RD. SPEED LIMIT 35 MPH.
INTERSECTION SIGHT DISTANCE 390 FT.
CONERLIA HWY 365. SPEED LIMIT 65 MPH

TOTAL LOTS: 348
TOTAL RESIDENTIAL AREA: 125.49 AC.
TOTAL DENSITY: 2.77 UNITS/AC.

CONTIGUOUS OPEN SPACE: ±38.1 AC
REQUIRED (CONTIGUOUS SPACE / REQUIRED OPEN SPACE) = 75%
PROVIDED = 76% (AS PER 17.430.120)

HOUSES ON OPEN SPACE
SINGLE FAMILY: 241
TOWNHOME: 51

LOTS TOUCHING OPEN SPACE: 292
RATIO: 292/348 = 83%

SANITARY SEWER FLOW ESTIMATION:
150 GALLONS PER UNIT PER DAY
TOTAL UNITS = 348
348 UNITS x (150 GPM/DAY) = 52,200 gpd
club house / amenity = 50gpd per 1000 sq ft = 1,500 gpd
PEAK FLOW = 4 (Sewage Flow Ratio Curve)
Total sewer flow capacity = 4x 52,200 gpd = 208,800 gpd

EXISTING ZONING: AGRICULTURAL RESIDENTIAL III (AR-III)
PROPOSED ZONING: PLANNED RESIDENTIAL DEVELOPMENT (PRD)

LOT OWNERSHIP
THE COMMERCIAL PARCEL WILL BE SUBDIVIDED AT APPROXIMATELY THE RE-ZONING LINE SHOWN. EXACT LOCATION OF SUBDIVISION LINE IS TO BE DETERMINED. THE RESIDENTIAL PARCEL WILL BE SUBDIVIDED AS "FEE-SIMPLE" OWNERSHIP FOR ALL SINGLE-FAMILY LOTS AND AS "JOINT OWNERSHIP" FOR TOWNHOMES. TOWNHOMES WILL BE PLATTED WITH LOT-LINES AT THE BUILDING EXTENT AND MAY BE SOLD AS "0' LOT LINE SETBACK" LOTS.

PLANNED RESIDENTIAL DEVELOPMENT (PRD) REQUIREMENTS:

- SETBACKS: (REF. CODE) - 17.180.060 - B.2.c
- MINIMUM FRONT YARD SETBACK FROM THE PROPERTY LINE OF 25 FEET.
MINIMUM SIDE YARD SETBACK FROM THE PROPERTY LINE OF 5 FEET.
MINIMUM REAR YARD SETBACK FROM THE PROPERTY LINE OF 20 FEET.
PROPOSED '0' SETBACKS - PROPERTY LINES WILL BE ALIGNED WITH THE EXTERIOR WALL OF THE UNITS
- TOWN HOME LOT AREA REQUIRED: (REF. CODE) - 17.180.060 - B.4.ai

50 TOWNHOUSES = 40,000 SF + (47)*4,000 SF = 228,000 SF = 5.23 AC.

- BUFFERS (REF. CODE) - 17.180.060 - B.5
A MIN. 50 FOOT PLANTED BUFFER SHALL BE ESTABLISHED ALONG THE PERIMETER OF ALL PROPERTY BOUNDARIES
- LANDSCAPE (REF. CODE) - 17.180.060 - B.6.a
A MIN. OF TWO TREES PER LOT SHALL BE PROVIDED IN THE FRONT, SIDE, OR REAR YARD.
- PERMITTED USES - 17.225.110
THE SITE CONTAINS WETLANDS. TOTAL AREA: 53,750 SF.
A WETLAND ALTERATION PERMIT FROM THE CORPS OF ENGINEERS MUST BE OBTAINED PRIOR ANY ALTERATIONS.
- COMMERCIAL USES. 17.180.060 -13
COMMERCIAL USE IS LIMITED TO A TOTAL OF 10,000 SF OF FLOOR AREA FOR THE ENTIRE PLANNED RESIDENTIAL DEVELOPMENT.
- LIGHTING.
SUBDIVISION WILL COMPLY WITH COUNTY STREET REQUIREMENTS PER CODE OF ORDINANCES - PART 1 - TITLE 16, CHAPTER 16.90 STREET LIGHTING POLICY (SEC. 16.90.070 AND 16.90.090).
- STREAM BUFFER:
STREAM BUFFER SHOULD BE CONSIDERED SUFFICIENT SEPARATION BETWEEN COMMERCIAL AND RESIDENTIAL PROPERTIES. NO ZONING BUFFER IS PROPOSED WITH THIS PLAN.
- REQUIRED VARIANCES:
USE OF EYEBROW CUL-DE-SAC - SHOWN FOR REFERENCE
PRIVATE ROADS INCLUDING ON-STREET PARKING
REDUCTION OF SINGLE FAMILY LOT SIZE FROM 8,000 TO 6,000 SF MIN.
REDUCTION OF MINIMUM LOT WIDTH FROM 50' TO 40' MIN
- EXEMPTIONS:
USE OF RIBBON CURB TYPE IN ALLEYS (DEAD END ROAD).
EYEBROW CUL-DE-SAC

POND
3500 Parkway Lane
Suite 500
Peachtree Corners
Georgia 30092
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EOR/AOR SEAL

CLIENT INFORMATION



6525 The Corners Parkway
Suite 216
Peachtree Corners
Georgia 30092

PROJECT NAME

RESIDENCE AT
CAGLE MILL

4745 CAGLE MILL
ROAD, LULA,
GEORGIA

DRAWING ISSUE

DATE

DESCRIPTION

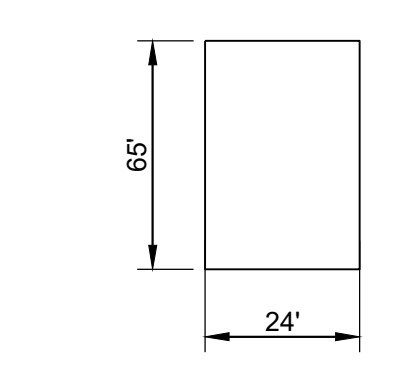
MARK

DESIGNED BY: WM
DRAWN BY: ABC
CHECKED BY: JBB
SUBMITTED BY: JBB
DATE: 12/12/23
PROJECT #: 1220263
SHEET TITLE

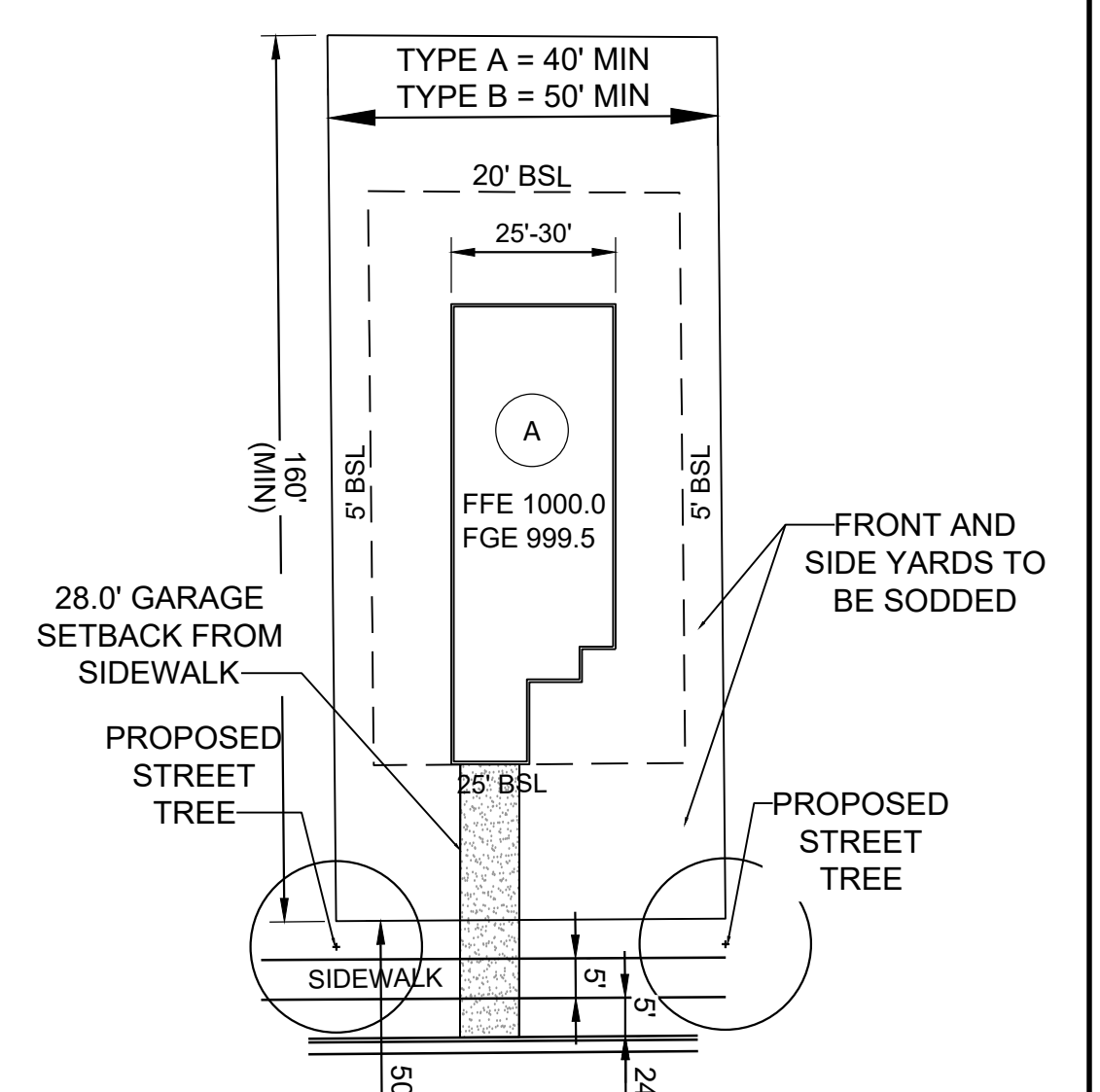
ZONING
SITE PLAN

SHEET NUMBER
CS-101

ORIGINAL SHEET SIZE:
30" X 42"



TOWNHOMES



TYPICAL PRD LOT DETAIL
NOT TO SCALE.

MINIMUM LOT AREA
SINGLE-FAMILY DETACHED DWELLING LOT: 8,000 SQ. FT.



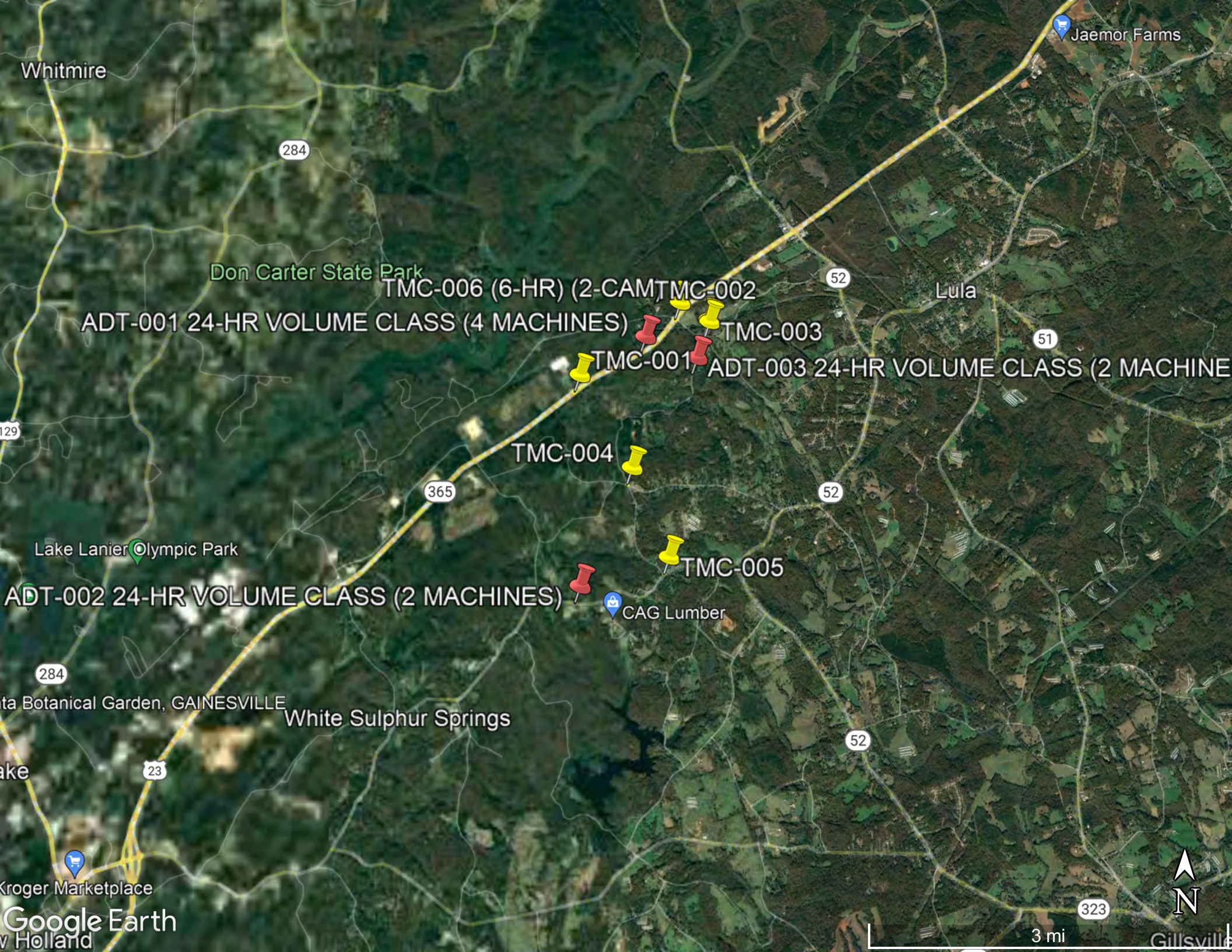
Know what's below.
Call before you dig.
Dial 811
Or Call 800-282-7411

A1 EXHIBIT SITE PLAN
SCALE: 1" = 150'

CONCEPT PLAN

FILE PATH: X:\FY22\1220263\04_CAD_BIM\04.02_CAD\CS101_PLOTTED BY: HU, KAI SHUN, DATE: 5/19/21

Appendix C: Traffic Count Map



Whitmire

Jaemor Farms

284

Don Carter State Park

52

Lula

TMC-006 (6-HR) (2-CAM) TMC-002

ADT-001 24-HR VOLUME CLASS (4 MACHINES)

TMC-003

51

TMC-001

ADT-003 24-HR VOLUME CLASS (2 MACHINE

129

TMC-004

365

52

Lake Lanier Olympic Park

TMC-005

ADT-002 24-HR VOLUME CLASS (2 MACHINES)

CAG Lumber

284

ta Botanical Garden, GAINESVILLE

White Sulphur Springs

52

lake

23

Kroger Marketplace

Google Earth

v Holland

3 mi

Gillsville



323

Appendix D: Collected Traffic Counts

National Data & Surveying Services Intersection Turning Movement Count

Location: US 23/SR 365/Cornelia Hwy & Americold Logistics Access Dwy
 City: Lula
 Control: 1-Way Stop (EB)

Project ID: 22-180056-001
 Date: 3/30/2022

Data - Total

| NS/EW Streets: | US 23/SR 365/Cornelia Hwy | | | | US 23/SR 365/Cornelia Hwy | | | | Americold Logistics Access Dwy | | | | Americold Logistics Access Dwy | | | | |
|-----------------|---------------------------|---------|---------|---------|---------------------------|---------|---------|---------|--------------------------------|---------|---------|---------|--------------------------------|---------|---------|---------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | |
| 7:00 AM | 7 | 149 | 0 | 1 | 0 | 417 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 AM | 9 | 203 | 0 | 0 | 0 | 562 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 AM | 17 | 232 | 0 | 0 | 0 | 606 | 11 | 1 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 AM | 20 | 183 | 0 | 0 | 0 | 473 | 9 | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 AM | 8 | 205 | 0 | 0 | 0 | 423 | 9 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 AM | 5 | 228 | 0 | 0 | 0 | 378 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 AM | 3 | 168 | 0 | 0 | 0 | 342 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 AM | 7 | 220 | 0 | 1 | 0 | 305 | 3 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 AM | 4 | 196 | 0 | 0 | 0 | 295 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 AM | 1 | 193 | 0 | 2 | 0 | 273 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 AM | 0 | 206 | 0 | 0 | 0 | 251 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 AM | 4 | 173 | 0 | 0 | 0 | 274 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| APPROACH %'s: | 85 | 2356 | 0 | 4 | 0 | 4599 | 39 | 2 | 14 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | |
| | 3.48% | 96.36% | 0.00% | 0.16% | 0.00% | 99.12% | 0.84% | 0.04% | 31.82% | 0.00% | 68.18% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR: | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 54 | 823 | 0 | 0 | 0 | 2064 | 31 | 1 | 6 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | |
| PEAK HR FACTOR: | 0.675 | 0.887 | 0.000 | 0.000 | 0.000 | 0.851 | 0.705 | 0.250 | 0.375 | 0.000 | 0.531 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| | 0.881 | | | | 0.848 | | | | 0.639 | | | | 0.859 | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| 10:00 AM | 0 | 182 | 0 | 0 | 0 | 269 | 1 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 10:15 AM | 5 | 218 | 0 | 0 | 0 | 269 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 10:30 AM | 1 | 226 | 0 | 0 | 0 | 290 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 10:45 AM | 2 | 222 | 0 | 0 | 0 | 265 | 2 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 11:00 AM | 2 | 213 | 0 | 2 | 0 | 260 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15 AM | 6 | 257 | 0 | 0 | 0 | 237 | 3 | 0 | 2 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | |
| 11:30 AM | 0 | 273 | 0 | 1 | 0 | 249 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 11:45 AM | 4 | 255 | 0 | 0 | 0 | 224 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 12:00 PM | 3 | 248 | 0 | 2 | 0 | 264 | 1 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 12:15 PM | 2 | 259 | 0 | 1 | 0 | 260 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | |
| 12:30 PM | 1 | 241 | 0 | 1 | 0 | 239 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 12:45 PM | 3 | 280 | 0 | 3 | 0 | 268 | 0 | 1 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 1:00 PM | 2 | 307 | 0 | 0 | 0 | 256 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 1:15 PM | 2 | 285 | 0 | 0 | 0 | 279 | 1 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 1:30 PM | 7 | 297 | 0 | 1 | 0 | 257 | 0 | 0 | 1 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | |
| 1:45 PM | 3 | 314 | 0 | 0 | 0 | 252 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| APPROACH %'s: | 43 | 4077 | 0 | 11 | 0 | 4138 | 13 | 2 | 14 | 0 | 57 | 0 | 0 | 0 | 0 | 0 | |
| | 1.04% | 98.69% | 0.00% | 0.27% | 0.00% | 99.64% | 0.31% | 0.05% | 19.72% | 0.00% | 80.28% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR: | 01:00 PM - 02:00 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 14 | 1203 | 0 | 1 | 0 | 1044 | 5 | 1 | 3 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | |
| PEAK HR FACTOR: | 0.500 | 0.958 | 0.000 | 0.250 | 0.000 | 0.935 | 0.313 | 0.250 | 0.375 | 0.000 | 0.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| | 0.961 | | | | 0.938 | | | | 0.531 | | | | 0.995 | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| 2:00 PM | 2 | 286 | 0 | 1 | 0 | 246 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 2:15 PM | 4 | 346 | 0 | 0 | 0 | 264 | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 2:30 PM | 0 | 369 | 0 | 0 | 0 | 261 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 2:45 PM | 3 | 370 | 0 | 0 | 0 | 239 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 3:00 PM | 2 | 405 | 0 | 0 | 0 | 243 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 3:15 PM | 2 | 426 | 0 | 1 | 0 | 261 | 3 | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | |
| 3:30 PM | 6 | 475 | 0 | 0 | 0 | 216 | 2 | 0 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | |
| 3:45 PM | 11 | 514 | 0 | 0 | 0 | 253 | 6 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 4:00 PM | 7 | 451 | 0 | 0 | 0 | 231 | 3 | 0 | 6 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 PM | 6 | 569 | 0 | 0 | 0 | 261 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 PM | 2 | 486 | 0 | 0 | 0 | 249 | 2 | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 PM | 3 | 571 | 0 | 0 | 0 | 252 | 3 | 0 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 PM | 1 | 559 | 0 | 0 | 0 | 219 | 3 | 0 | 6 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 PM | 1 | 605 | 0 | 0 | 0 | 278 | 1 | 1 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 PM | 1 | 622 | 0 | 0 | 0 | 237 | 1 | 1 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 PM | 4 | 517 | 0 | 0 | 0 | 231 | 0 | 0 | 3 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 6:00 PM | 0 | 405 | 0 | 0 | 0 | 221 | 1 | 0 | 4 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 6:15 PM | 1 | 333 | 0 | 1 | 0 | 213 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 PM | 2 | 320 | 0 | 0 | 0 | 215 | 1 | 0 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 PM | 5 | 273 | 0 | 1 | 0 | 160 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| APPROACH %'s: | 63 | 8902 | 0 | 4 | 0 | 4770 | 34 | 2 | 46 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | |
| | 0.70% | 99.25% | 0.00% | 0.04% | 0.00% | 99.25% | 0.71% | 0.04% | 30.87% | 0.00% | 69.13% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR: | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 6 | 2357 | 0 | 0 | 0 | 986 | 8 | 2 | 18 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | |
| PEAK HR FACTOR: | 0.500 | 0.947 | 0.000 | 0.000 | 0.000 | 0.887 | 0.667 | 0.500 | 0.750 | 0.000 | 0.600 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| | 0.948 | | | | 0.889 | | | | 0.656 | | | | 0.948 | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: US 23/SR 365/Cornelia Hwy & Americold Logistics Access Dwy
 City: Lula
 Control: 1-Way Stop (EB)

Project ID: 22-180056-001
 Date: 3/30/2022

Data - Cars

| NS/EW Streets: | US 23/SR 365/Cornelia Hwy | | | | US 23/SR 365/Cornelia Hwy | | | | Americold Logistics Access Dwy | | | | Americold Logistics Access Dwy | | | | |
|-----------------|---------------------------|---------|---------|---------|---------------------------|---------|---------|---------|--------------------------------|---------|---------|---------|--------------------------------|---------|---------|---------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | |
| 7:00 AM | 7 | 131 | 0 | 1 | 0 | 401 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 AM | 9 | 179 | 0 | 0 | 0 | 542 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 AM | 15 | 216 | 0 | 0 | 0 | 583 | 11 | 1 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 AM | 19 | 168 | 0 | 0 | 0 | 446 | 9 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 AM | 5 | 172 | 0 | 0 | 0 | 403 | 8 | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 AM | 4 | 197 | 0 | 0 | 0 | 345 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 AM | 2 | 143 | 0 | 0 | 0 | 320 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 AM | 2 | 189 | 0 | 1 | 0 | 277 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 AM | 1 | 174 | 0 | 0 | 0 | 272 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 AM | 0 | 164 | 0 | 2 | 0 | 257 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 AM | 0 | 176 | 0 | 0 | 0 | 231 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 AM | 3 | 149 | 0 | 0 | 0 | 241 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 67 | 2058 | 0 | 4 | 0 | 4318 | 33 | 2 | 12 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 6511 |
| | 3.15% | 96.67% | 0.00% | 0.19% | 0.00% | 99.20% | 0.76% | 0.05% | 41.38% | 0.00% | 58.62% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR: | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 48 | 735 | 0 | 0 | 0 | 1974 | 30 | 1 | 6 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 2807 |
| PEAK HR FACTOR: | 0.632 | 0.851 | 0.000 | 0.000 | 0.000 | 0.846 | 0.682 | 0.250 | 0.375 | 0.000 | 0.542 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.844 |
| | | | | | | | 0.842 | | | | 0.679 | | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | TOTAL |
| 10:00 AM | 0 | 150 | 0 | 0 | 0 | 242 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 395 |
| 10:15 AM | 1 | 191 | 0 | 0 | 0 | 240 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 434 |
| 10:30 AM | 0 | 191 | 0 | 0 | 0 | 268 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 461 |
| 10:45 AM | 1 | 199 | 0 | 0 | 0 | 244 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 448 |
| 11:00 AM | 1 | 196 | 0 | 2 | 0 | 229 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 428 |
| 11:15 AM | 2 | 223 | 0 | 0 | 0 | 209 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 440 |
| 11:30 AM | 0 | 246 | 0 | 1 | 0 | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 466 |
| 11:45 AM | 1 | 226 | 0 | 0 | 0 | 201 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 430 |
| 12:00 PM | 1 | 218 | 0 | 2 | 0 | 235 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 460 |
| 12:15 PM | 1 | 238 | 0 | 1 | 0 | 237 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 481 |
| 12:30 PM | 1 | 216 | 0 | 1 | 0 | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 437 |
| 12:45 PM | 2 | 256 | 0 | 3 | 0 | 243 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 508 |
| 1:00 PM | 1 | 278 | 0 | 0 | 0 | 226 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 508 |
| 1:15 PM | 0 | 263 | 0 | 0 | 0 | 249 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 515 |
| 1:30 PM | 5 | 268 | 0 | 1 | 0 | 240 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 517 |
| 1:45 PM | 1 | 290 | 0 | 0 | 0 | 232 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 526 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 18 | 3649 | 0 | 11 | 0 | 3733 | 7 | 2 | 6 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 7454 |
| | 0.49% | 99.21% | 0.00% | 0.30% | 0.00% | 99.76% | 0.19% | 0.05% | 17.65% | 0.00% | 82.35% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR: | 01:00 PM - 02:00 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 7 | 1099 | 0 | 1 | 0 | 947 | 3 | 1 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 2066 |
| PEAK HR FACTOR: | 0.350 | 0.947 | 0.000 | 0.250 | 0.000 | 0.951 | 0.250 | 0.250 | 0.375 | 0.000 | 0.625 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.982 |
| | | | | | | | 0.955 | | | | 0.667 | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | TOTAL |
| 2:00 PM | 1 | 270 | 0 | 1 | 0 | 218 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 491 |
| 2:15 PM | 1 | 320 | 0 | 0 | 0 | 241 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 566 |
| 2:30 PM | 0 | 350 | 0 | 0 | 0 | 253 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 606 |
| 2:45 PM | 2 | 337 | 0 | 0 | 0 | 223 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 564 |
| 3:00 PM | 0 | 379 | 0 | 0 | 0 | 216 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 597 |
| 3:15 PM | 1 | 400 | 0 | 1 | 0 | 231 | 3 | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 641 |
| 3:30 PM | 6 | 455 | 0 | 0 | 0 | 198 | 2 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 667 |
| 3:45 PM | 8 | 485 | 0 | 0 | 0 | 228 | 5 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 728 |
| 4:00 PM | 5 | 426 | 0 | 0 | 0 | 212 | 3 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 658 |
| 4:15 PM | 5 | 545 | 0 | 0 | 0 | 235 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 787 |
| 4:30 PM | 2 | 474 | 0 | 0 | 0 | 227 | 2 | 0 | 4 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 718 |
| 4:45 PM | 3 | 540 | 0 | 0 | 0 | 228 | 3 | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 781 |
| 5:00 PM | 1 | 535 | 0 | 0 | 0 | 198 | 2 | 0 | 4 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 748 |
| 5:15 PM | 1 | 581 | 0 | 0 | 0 | 261 | 1 | 1 | 6 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 855 |
| 5:30 PM | 0 | 603 | 0 | 0 | 0 | 222 | 1 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 832 |
| 5:45 PM | 1 | 505 | 0 | 0 | 0 | 213 | 0 | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 726 |
| 6:00 PM | 0 | 392 | 0 | 0 | 0 | 200 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 597 |
| 6:15 PM | 0 | 327 | 0 | 1 | 0 | 196 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 533 |
| 6:30 PM | 2 | 310 | 0 | 0 | 0 | 200 | 0 | 0 | 2 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 523 |
| 6:45 PM | 3 | 265 | 0 | 1 | 0 | 144 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 414 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 42 | 8499 | 0 | 4 | 0 | 4344 | 25 | 2 | 42 | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 13032 |
| | 0.49% | 99.46% | 0.00% | 0.05% | 0.00% | 99.38% | 0.57% | 0.05% | 36.21% | 0.00% | 63.79% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR: | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 5 | 2259 | 0 | 0 | 0 | 909 | 7 | 2 | 16 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 3216 |
| PEAK HR FACTOR: | 0.417 | 0.937 | 0.000 | 0.000 | 0.000 | 0.871 | 0.583 | 0.500 | 0.667 | 0.000 | 0.563 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.940 |
| | | | | | | | 0.873 | | | | 0.708 | | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: US 23/SR 365/Cornelia Hwy & Americold Logistics Access Dwy
 City: Lula
 Control: 1-Way Stop (EB)

Project ID: 22-180056-001
 Date: 3/30/2022

Data - HT

| NS/EW Streets: | US 23/SR 365/Cornelia Hwy | | | | US 23/SR 365/Cornelia Hwy | | | | Americold Logistics Access Dwy | | | | Americold Logistics Access Dwy | | | | |
|------------------|---------------------------|---------|---------|---------|---------------------------|---------|---------|---------|--------------------------------|---------|---------|---------|--------------------------------|---------|---------|---------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | |
| 7:00 AM | 0 | 18 | 0 | 0 | 0 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| 7:15 AM | 0 | 24 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| 7:30 AM | 2 | 16 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| 7:45 AM | 1 | 15 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 45 |
| 8:00 AM | 3 | 33 | 0 | 0 | 0 | 20 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 59 |
| 8:15 AM | 1 | 31 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| 8:30 AM | 1 | 25 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 50 |
| 8:45 AM | 5 | 31 | 0 | 0 | 0 | 28 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 68 |
| 9:00 AM | 3 | 22 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 50 |
| 9:15 AM | 1 | 29 | 0 | 0 | 0 | 16 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 48 |
| 9:30 AM | 0 | 30 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 52 |
| 9:45 AM | 1 | 24 | 0 | 0 | 0 | 33 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 18 | 298 | 0 | 0 | 0 | 281 | 6 | 0 | 2 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 618 |
| | 5.70% | 94.30% | 0.00% | 0.00% | 0.00% | 97.91% | 2.09% | 0.00% | 13.33% | 0.00% | 86.67% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 6 | 88 | 0 | 0 | 0 | 90 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 189 |
| PEAK HR FACTOR : | 0.500 | 0.667 | 0.000 | 0.000 | 0.000 | 0.833 | 0.250 | 0.000 | 0.000 | 0.000 | 0.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.801 |
| | | | 0.653 | | | | 0.843 | | | | 0.500 | | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | |
| 10:00 AM | 0 | 32 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 61 |
| 10:15 AM | 4 | 27 | 0 | 0 | 0 | 29 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 63 |
| 10:30 AM | 1 | 35 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 59 |
| 10:45 AM | 1 | 23 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 49 |
| 11:00 AM | 1 | 17 | 0 | 0 | 0 | 31 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| 11:15 AM | 4 | 34 | 0 | 0 | 0 | 28 | 3 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 72 |
| 11:30 AM | 0 | 27 | 0 | 0 | 0 | 30 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 59 |
| 11:45 AM | 3 | 29 | 0 | 0 | 0 | 23 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 |
| 12:00 PM | 2 | 30 | 0 | 0 | 0 | 29 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 64 |
| 12:15 PM | 1 | 21 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 48 |
| 12:30 PM | 0 | 25 | 0 | 0 | 0 | 20 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 49 |
| 12:45 PM | 1 | 24 | 0 | 0 | 0 | 25 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 52 |
| 1:00 PM | 1 | 29 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 61 |
| 1:15 PM | 2 | 22 | 0 | 0 | 0 | 30 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 57 |
| 1:30 PM | 2 | 29 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 53 |
| 1:45 PM | 2 | 24 | 0 | 0 | 0 | 20 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 48 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 25 | 428 | 0 | 0 | 0 | 405 | 6 | 0 | 8 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 901 |
| | 5.52% | 94.48% | 0.00% | 0.00% | 0.00% | 98.54% | 1.46% | 0.00% | 21.62% | 0.00% | 78.38% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR : | 01:00 PM - 02:00 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 7 | 104 | 0 | 0 | 0 | 97 | 2 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 219 |
| PEAK HR FACTOR : | 0.875 | 0.897 | 0.000 | 0.000 | 0.000 | 0.808 | 0.500 | 0.000 | 0.000 | 0.000 | 0.450 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.898 |
| | | | 0.895 | | | | 0.798 | | | | 0.450 | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | |
| 2:00 PM | 1 | 16 | 0 | 0 | 0 | 28 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 48 |
| 2:15 PM | 3 | 26 | 0 | 0 | 0 | 23 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54 |
| 2:30 PM | 0 | 19 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 48 |
| 2:45 PM | 1 | 33 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 51 |
| 3:00 PM | 2 | 26 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |
| 3:15 PM | 1 | 26 | 0 | 0 | 0 | 30 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 61 |
| 3:30 PM | 0 | 20 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 40 |
| 3:45 PM | 3 | 29 | 0 | 0 | 0 | 25 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 |
| 4:00 PM | 2 | 25 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 47 |
| 4:15 PM | 1 | 24 | 0 | 0 | 0 | 26 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 53 |
| 4:30 PM | 0 | 12 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 36 |
| 4:45 PM | 0 | 31 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 56 |
| 5:00 PM | 0 | 24 | 0 | 0 | 0 | 21 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 50 |
| 5:15 PM | 0 | 24 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 42 |
| 5:30 PM | 1 | 19 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 37 |
| 5:45 PM | 3 | 12 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 35 |
| 6:00 PM | 0 | 13 | 0 | 0 | 0 | 21 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 40 |
| 6:15 PM | 1 | 6 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 26 |
| 6:30 PM | 0 | 10 | 0 | 0 | 0 | 15 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 27 |
| 6:45 PM | 2 | 8 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 27 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 21 | 403 | 0 | 0 | 0 | 426 | 9 | 0 | 4 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 892 |
| | 4.95% | 95.05% | 0.00% | 0.00% | 0.00% | 97.93% | 2.07% | 0.00% | 12.12% | 0.00% | 87.88% | 0.00% | 0 | 0 | 0 | 0 | |
| PEAK HR : | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 1 | 98 | 0 | 0 | 0 | 77 | 1 | 0 | 2 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 185 |
| PEAK HR FACTOR : | 0.250 | 0.790 | 0.000 | 0.000 | 0.000 | 0.802 | 0.250 | 0.000 | 0.250 | 0.000 | 0.750 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.826 |
| | | | 0.798 | | | | 0.813 | | | | 0.500 | | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: US 23/SR 365/Cornelia Hwy & Americold Logistics Access Dwy
 City: Lula
 Control: 1-Way Stop (EB)

Project ID: 22-180056-001
 Date: 3/30/2022

Data - Bikes

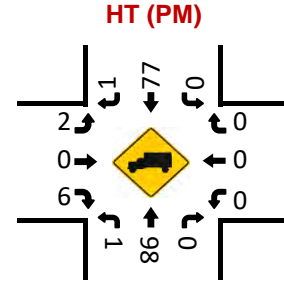
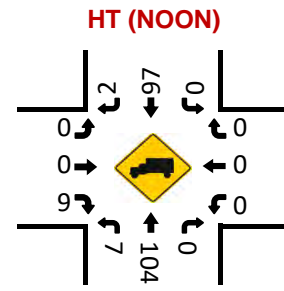
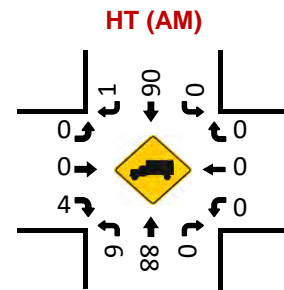
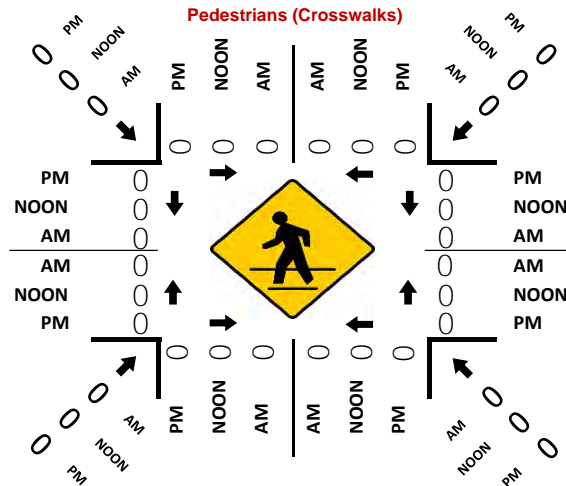
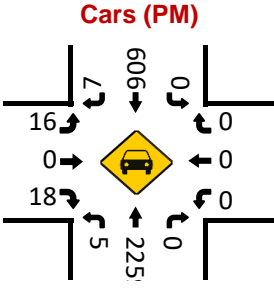
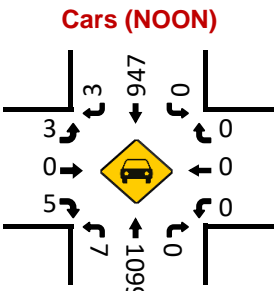
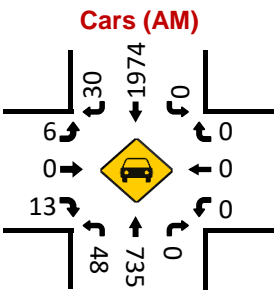
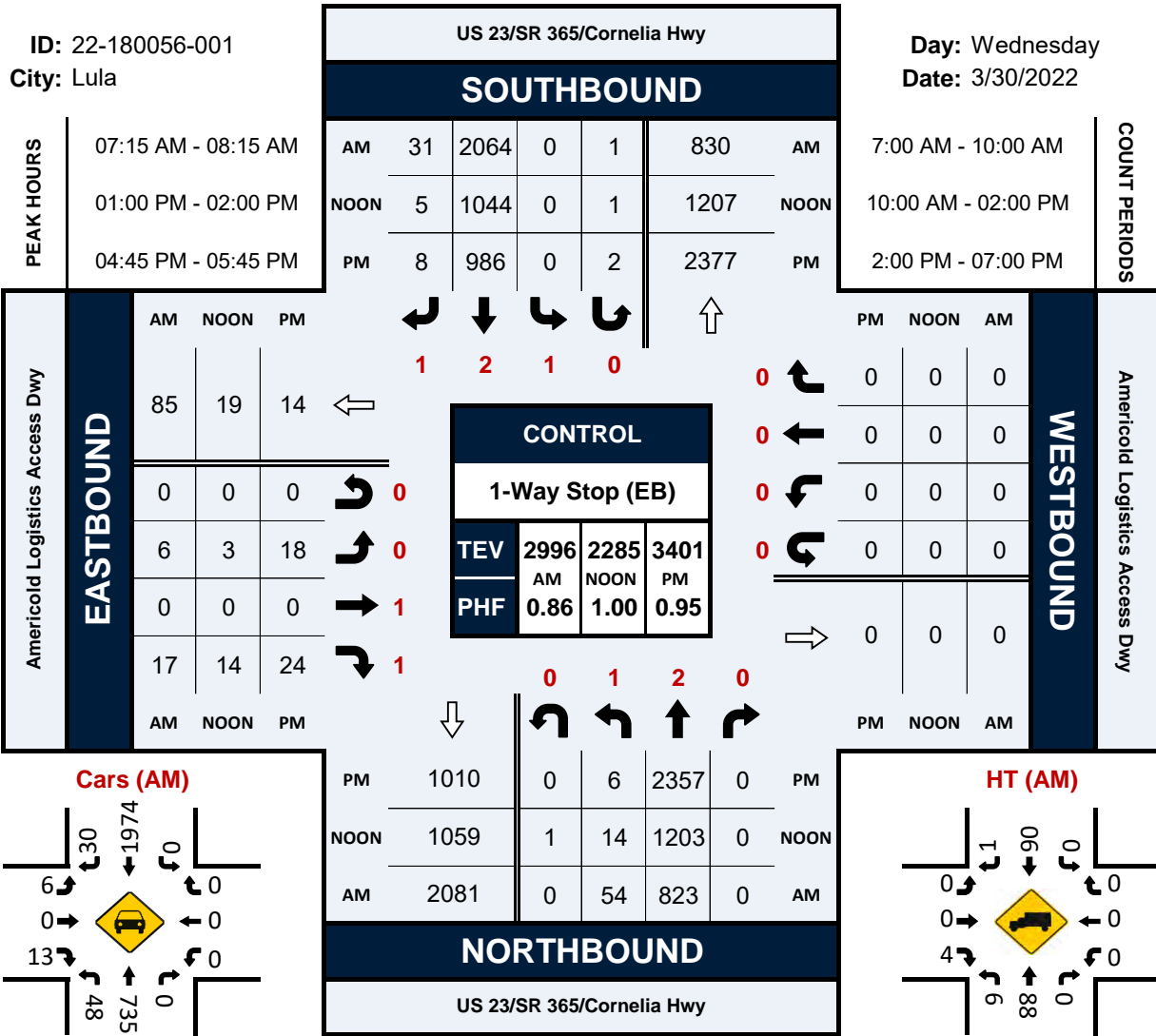
| NS/EW Streets: | US 23/SR 365/Cornelia Hwy | | | | US 23/SR 365/Cornelia Hwy | | | | Americold Logistics Access Dwy | | | | Americold Logistics Access Dwy | | | | |
|-----------------------------------|---------------------------|---------|---------|---------|---------------------------|---------|---------|---------|--------------------------------|---------|---------|---------|--------------------------------|---------|---------|---------|------------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL 0 | NT 0 | NR 0 | NU 0 | SL 0 | ST 0 | SR 0 | SU 0 | EL 0 | ET 0 | ER 0 | EU 0 | WL 0 | WT 0 | WR 0 | WU 0 | TOTAL 0 |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL 0 | NT 0 | NR 0 | NU 0 | SL 0 | ST 0 | SR 0 | SU 0 | EL 0 | ET 0 | ER 0 | EU 0 | WL 0 | WT 0 | WR 0 | WU 0 | TOTAL 0 |
| PEAK HR : | 01:00 PM - 02:00 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 0 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 0 WT | 0 WR | 0 WU | |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL 0 | NT 0 | NR 0 | NU 0 | SL 0 | ST 0 | SR 0 | SU 0 | EL 0 | ET 0 | ER 0 | EU 0 | WL 0 | WT 0 | WR 0 | WU 0 | TOTAL 0 |
| PEAK HR : | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

US 23/SR 365/Cornelia Hwy & Americold Logistics Access Dwy

Peak Hour Turning Movement Count

ID: 22-180056-001
City: Lula

Day: Wednesday
Date: 3/30/2022



Project ID: 22-180056-001

Location: US 23/SR 365/Cornelia Hwy & Americold Logistics Access Dwy

City: Lula

Day: Wednesday

Date: 3/30/2022

Groups Printed - Cars, PU, Vans - Heavy Trucks

| Start Time | US 23/SR 365/Cornelia Hwy Northbound | | | | | | US 23/SR 365/Cornelia Hwy Southbound | | | | | | Americold Logistics Access Dwy Eastbound | | | | | | Americold Logistics Access Dwy Westbound | | | | | | Int. Total | | |
|-------------|--------------------------------------|------|-----|------|------|------------|--------------------------------------|------|-----|------|------|------------|--|------|-----|------|------|------------|--|------|-----|------|------|------------|------------|------|------|
| | Left | Thru | Rgt | Utum | Peds | App. Total | Left | Thru | Rgt | Utum | Peds | App. Total | Left | Thru | Rgt | Utum | Peds | App. Total | Left | Thru | Rgt | Utum | Peds | App. Total | | | |
| 7:00 AM | 7 | 149 | 0 | 1 | 0 | 157 | 0 | 417 | 3 | 0 | 0 | 420 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 579 | |
| 7:15 AM | 9 | 203 | 0 | 0 | 0 | 212 | 0 | 562 | 2 | 0 | 0 | 564 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 777 | |
| 7:30 AM | 17 | 232 | 0 | 0 | 0 | 249 | 0 | 606 | 11 | 1 | 0 | 618 | 1 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 872 | |
| 7:45 AM | 20 | 183 | 0 | 0 | 0 | 203 | 0 | 473 | 9 | 0 | 0 | 482 | 1 | 0 | 8 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 694 | |
| Total | 53 | 767 | 0 | 1 | 0 | 821 | 0 | 2058 | 25 | 1 | 0 | 2084 | 2 | 0 | 15 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2922 | |
| 8:00 AM | 8 | 205 | 0 | 0 | 0 | 213 | 0 | 423 | 9 | 0 | 0 | 432 | 4 | 0 | 4 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 653 | |
| 8:15 AM | 5 | 228 | 0 | 0 | 0 | 233 | 0 | 378 | 0 | 0 | 0 | 378 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 615 | |
| 8:30 AM | 3 | 168 | 0 | 0 | 0 | 171 | 0 | 342 | 0 | 0 | 0 | 342 | 1 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 516 | |
| 8:45 AM | 7 | 220 | 0 | 1 | 0 | 228 | 0 | 305 | 3 | 0 | 0 | 308 | 1 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 540 | |
| Total | 23 | 821 | 0 | 1 | 0 | 845 | 0 | 1448 | 12 | 0 | 0 | 1460 | 10 | 0 | 9 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2324 | |
| 9:00 AM | 4 | 196 | 0 | 0 | 0 | 200 | 0 | 295 | 0 | 0 | 0 | 295 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 497 | |
| 9:15 AM | 1 | 193 | 0 | 2 | 0 | 196 | 0 | 273 | 0 | 0 | 0 | 273 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 471 | |
| 9:30 AM | 0 | 206 | 0 | 0 | 0 | 206 | 0 | 251 | 0 | 1 | 0 | 252 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 461 | |
| 9:45 AM | 4 | 173 | 0 | 0 | 0 | 177 | 0 | 274 | 2 | 0 | 0 | 276 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 454 | |
| Total | 9 | 768 | 0 | 2 | 0 | 779 | 0 | 1093 | 2 | 1 | 0 | 1096 | 2 | 0 | 6 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1883 | |
| ***BREAK*** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10:00 AM | 0 | 182 | 0 | 0 | 0 | 182 | 0 | 269 | 1 | 0 | 0 | 270 | 1 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 456 |
| 10:15 AM | 5 | 218 | 0 | 0 | 0 | 223 | 0 | 269 | 1 | 0 | 0 | 270 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 497 |
| 10:30 AM | 1 | 226 | 0 | 0 | 0 | 227 | 0 | 290 | 0 | 0 | 0 | 290 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 520 |
| 10:45 AM | 2 | 222 | 0 | 0 | 0 | 224 | 0 | 265 | 2 | 0 | 0 | 267 | 0 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 497 |
| Total | 8 | 848 | 0 | 0 | 0 | 856 | 0 | 1093 | 4 | 0 | 0 | 1097 | 1 | 0 | 16 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1970 |
| 11:00 AM | 2 | 213 | 0 | 2 | 0 | 217 | 0 | 260 | 0 | 0 | 0 | 260 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 478 |
| 11:15 AM | 6 | 257 | 0 | 0 | 0 | 263 | 0 | 237 | 3 | 0 | 0 | 240 | 2 | 0 | 7 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 512 |
| 11:30 AM | 0 | 273 | 0 | 1 | 0 | 274 | 0 | 249 | 0 | 0 | 0 | 249 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 525 |
| 11:45 AM | 4 | 255 | 0 | 0 | 0 | 259 | 0 | 224 | 0 | 0 | 0 | 224 | 2 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 486 |
| Total | 12 | 998 | 0 | 3 | 0 | 1013 | 0 | 970 | 3 | 0 | 0 | 973 | 6 | 0 | 9 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2001 |
| 12:00 PM | 3 | 248 | 0 | 2 | 0 | 253 | 0 | 264 | 1 | 0 | 0 | 265 | 2 | 0 | 4 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 524 |
| 12:15 PM | 2 | 259 | 0 | 1 | 0 | 262 | 0 | 260 | 0 | 0 | 0 | 260 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 529 |
| 12:30 PM | 1 | 241 | 0 | 1 | 0 | 243 | 0 | 239 | 0 | 0 | 0 | 239 | 1 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 486 |
| 12:45 PM | 3 | 280 | 0 | 3 | 0 | 286 | 0 | 268 | 0 | 1 | 0 | 269 | 1 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 560 |
| Total | 9 | 1028 | 0 | 7 | 0 | 1044 | 0 | 1031 | 1 | 1 | 0 | 1033 | 4 | 0 | 18 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2099 |
| 1:00 PM | 2 | 307 | 0 | 0 | 0 | 309 | 0 | 256 | 0 | 1 | 0 | 257 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 569 |
| 1:15 PM | 2 | 285 | 0 | 0 | 0 | 287 | 0 | 279 | 1 | 0 | 0 | 280 | 2 | 0 | 3 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 572 |
| 1:30 PM | 7 | 297 | 0 | 1 | 0 | 305 | 0 | 257 | 0 | 0 | 0 | 257 | 1 | 0 | 7 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 570 |
| 1:45 PM | 3 | 314 | 0 | 0 | 0 | 317 | 0 | 252 | 4 | 0 | 0 | 257 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 574 |
| Total | 14 | 1203 | 0 | 1 | 0 | 1218 | 0 | 1044 | 5 | 1 | 0 | 1050 | 3 | 0 | 14 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2285 |
| ***BREAK*** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2:00 PM | 2 | 286 | 0 | 1 | 0 | 289 | 0 | 246 | 2 | 0 | 0 | 248 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 539 |
| 2:15 PM | 4 | 346 | 0 | 0 | 0 | 350 | 0 | 264 | 4 | 0 | 0 | 268 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 620 |
| 2:30 PM | 0 | 369 | 0 | 0 | 0 | 369 | 0 | 281 | 1 | 0 | 0 | 282 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 654 |
| 2:45 PM | 3 | 370 | 0 | 0 | 0 | 373 | 0 | 239 | 0 | 0 | 0 | 239 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 615 |
| Total | 9 | 1371 | 0 | 1 | 0 | 1381 | 0 | 1030 | 7 | 0 | 0 | 1037 | 1 | 0 | 9 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2428 |
| 3:00 PM | 2 | 405 | 0 | 0 | 0 | 407 | 0 | 243 | 0 | 0 | 0 | 243 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 652 |
| 3:15 PM | 2 | 426 | 0 | 1 | 0 | 429 | 0 | 261 | 3 | 0 | 0 | 264 | 4 | 0 | 5 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 702 |
| 3:30 PM | 6 | 475 | 0 | 0 | 0 | 481 | 0 | 216 | 2 | 0 | 0 | 218 | 3 | 0 | 5 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 707 |
| 3:45 PM | 11 | 514 | 0 | 0 | 0 | 525 | 0 | 253 | 6 | 0 | 0 | 259 | 1 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 787 |
| Total | 21 | 1820 | 0 | 1 | 0 | 1842 | 0 | 973 | 11 | 0 | 0 | 984 | 8 | 0 | 14 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2848 |
| 4:00 PM | 7 | 451 | 0 | 0 | 0 | 458 | 0 | 231 | 3 | 0 | 0 | 234 | 6 | 0 | 7 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 705 |
| 4:15 PM | 6 | 569 | 0 | 0 | 0 | 575 | 0 | 261 | 1 | 0 | 0 | 262 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 840 |
| 4:30 PM | 2 | 486 | 0 | 0 | 0 | 488 | 0 | 249 | 2 | 0 | 0 | 251 | 4 | 0 | 11 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 754 |
| 4:45 PM | 3 | 571 | 0 | 0 | 0 | 574 | 0 | 252 | 3 | 0 | 0 | 255 | 3 | 0 | 5 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 837 |
| Total | 18 | 2077 | 0 | 0 | 0 | 2095 | 0 | 993 | 9 | 0 | 0 | 1002 | 13 | 0 | 26 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3136 |
| 5:00 PM | 1 | 559 | 0 | 0 | 0 | 560 | 0 | 219 | 3 | 0 | 0 | 222 | 6 | 0 | 10 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 798 |
| 5:15 PM | 1 | 605 | 0 | 0 | 0 | 606 | 0 | 278 | 1 | 1 | 0 | 280 | 6 | 0 | 5 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 897 |
| 5:30 PM | 1 | 622 | 0 | 0 | 0 | 623 | 0 | 237 | 1 | 1 | 0 | 239 | 3 | 0 | 4 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 869 |
| 5:45 PM | 4 | 517 | 0 | 0 | 0 | 521 | 0 | 231 | 0 | 0 | 0 | 231 | 3 | 0 | 6 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 761 |
| Total | 7 | 2303 | 0 | 0 | 0 | 2310 | | | | | | | | | | | | | | | | | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Cagle Mill Rd & Cagle Rd
 City: Lula
 Control: 1-Way Stop (NB)

Project ID: 22-180056-002
 Date: 3/30/2022

Data - Total

| NS/EW Streets: | Cagle Mill Rd | | | | Cagle Mill Rd | | | | Cagle Rd | | | | Cagle Rd | | | | | |
|-----------------|---------------------|-------|-------|-------|---------------|-------|-------|-------|-----------|--------|--------|-------|-----------|--------|-------|-------|-------|----|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL | |
| | 7:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| | 7:15 AM | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| | 7:30 AM | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 10 |
| | 7:45 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 6 |
| | 8:00 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 6 |
| | 8:15 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 7 |
| | 8:30 AM | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 3 | 0 | 0 | 13 |
| | 8:45 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | |
| 9:15 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 4 | 0 | 0 | 7 | |
| 9:30 AM | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 8 | |
| 9:45 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 | |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL | |
| APPROACH %'s: | 34 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0.00% | 31.82% | 68.18% | 0.00% | 17.65% | 82.35% | 0.00% | 0.00% | 77 | |
| PEAK HR: | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | TOTAL | |
| PEAK HR VOL: | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 0 | 2 | 7 | 0 | 0 | 32 | |
| PEAK HR FACTOR: | 0.813 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.375 | 0.500 | 0.000 | 0.250 | 0.583 | 0.000 | 0.000 | 0.615 | |
| | 0.700 | | | | | | | | 0.450 | | | | 0.750 | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL | |
| | 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 4 |
| | 10:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 5 |
| | 10:30 AM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 10:45 AM | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 10 |
| | 11:00 AM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 5 |
| | 11:15 AM | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 14 |
| | 11:30 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 11:45 AM | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:00 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 1 | 0 | 0 | 8 | |
| 12:15 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 | |
| 12:30 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 9 | |
| 12:45 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 7 | |
| 1:00 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 8 | |
| 1:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 6 | |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | |
| 1:45 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 8 | |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL | |
| APPROACH %'s: | 44 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0.00% | 23.26% | 76.74% | 0.00% | 40.00% | 60.00% | 0.00% | 0.00% | 105 | |
| PEAK HR: | 11:15 AM - 12:15 PM | | | | | | | | | | | | | | | | TOTAL | |
| PEAK HR VOL: | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 0 | 0 | 2 | 0 | 0 | 33 | |
| PEAK HR FACTOR: | 0.528 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.375 | 0.563 | 0.000 | 0.000 | 0.500 | 0.000 | 0.000 | 0.589 | |
| | 0.528 | | | | | | | | 0.600 | | | | 0.500 | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL | |
| | 2:00 PM | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 9 |
| | 2:15 PM | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 8 |
| | 2:30 PM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 6 |
| | 2:45 PM | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 3 | 1 | 0 | 0 | 12 |
| | 3:00 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 3:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 3:30 PM | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 2 | 1 | 0 | 0 | 11 |
| | 3:45 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 1 | 1 | 0 | 0 | 11 |
| 4:00 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 2 | 0 | 0 | 0 | 8 | |
| 4:15 PM | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 3 | 0 | 0 | 14 | |
| 4:30 PM | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 14 | |
| 4:45 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 1 | 3 | 0 | 0 | 13 | |
| 5:00 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 2 | 0 | 0 | 10 | |
| 5:15 PM | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 1 | 1 | 0 | 0 | 15 | |
| 5:30 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 7 | |
| 5:45 PM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 1 | 2 | 0 | 0 | 14 | |
| 6:00 PM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 9 | |
| 6:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 6 | |
| 6:30 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 1 | 0 | 0 | 8 | |
| 6:45 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 1 | 1 | 0 | 0 | 9 | |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL | |
| APPROACH %'s: | 42 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0.00% | 32.69% | 67.31% | 0.00% | 47.06% | 52.94% | 0.00% | 0.00% | 192 | |
| PEAK HR: | 04:30 PM - 05:30 PM | | | | | | | | | | | | | | | | TOTAL | |
| PEAK HR VOL: | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 14 | 0 | 2 | 6 | 0 | 0 | 52 | |
| PEAK HR FACTOR: | 0.625 | 0.000 | 0.417 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.469 | 0.583 | 0.000 | 0.500 | 0.500 | 0.000 | 0.000 | 0.867 | |
| | 0.750 | | | | | | | | 0.806 | | | | 0.500 | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Cagle Mill Rd & Cagle Rd
 City: Lula
 Control: 1-Way Stop (NB)

Project ID: 22-180056-002
 Date: 3/30/2022

Data - Cars

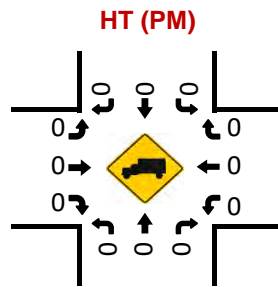
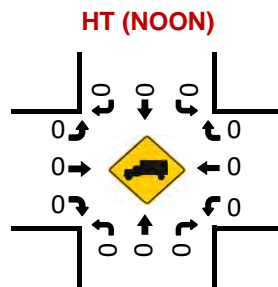
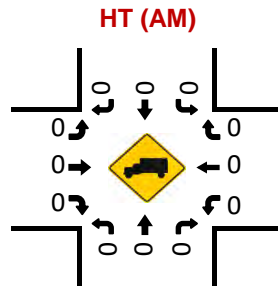
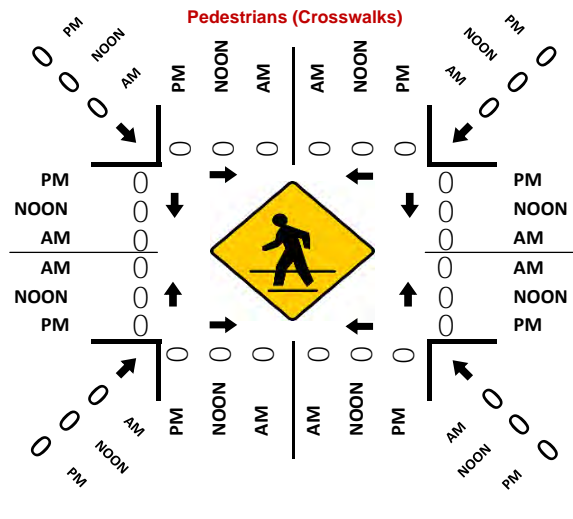
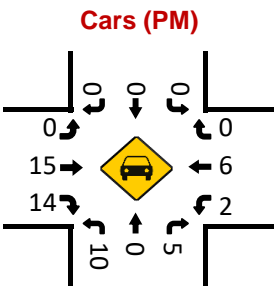
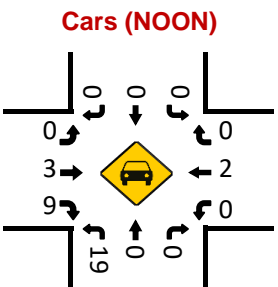
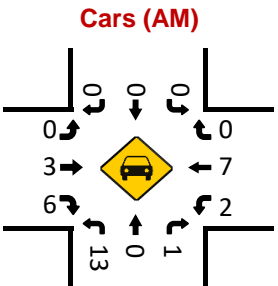
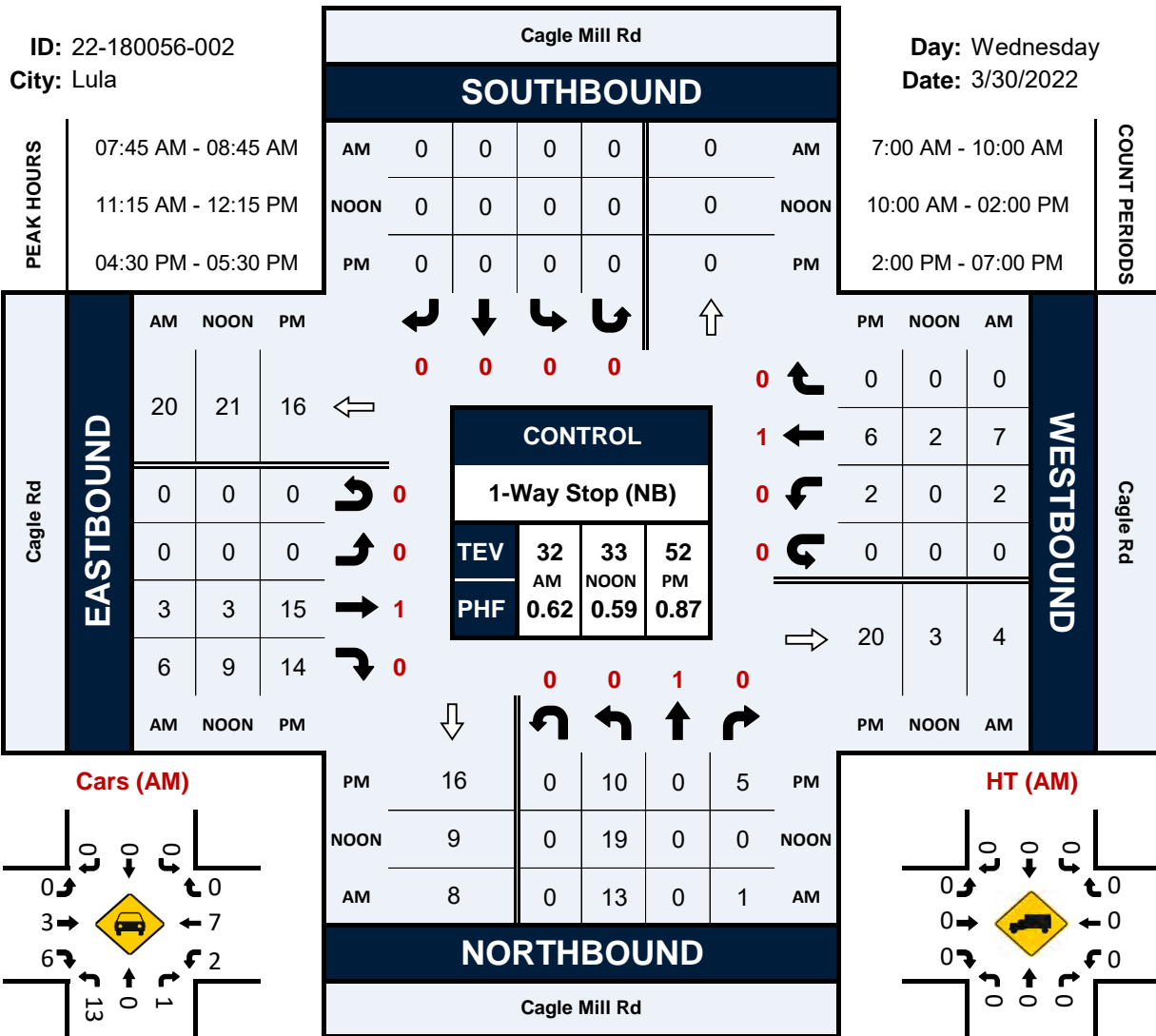
| NS/EW Streets: | Cagle Mill Rd | | | | Cagle Mill Rd | | | | Cagle Rd | | | | Cagle Rd | | | | |
|-----------------|---------------------|-------|-------|-------|---------------|-------|-------|-------|-----------|-------|-------|-------|-----------|-------|-------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 7:15 AM | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 7:30 AM | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 8 | |
| 7:45 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 6 | |
| 8:00 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 6 | |
| 8:15 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 7 | |
| 8:30 AM | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 3 | 0 | 13 | |
| 8:45 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
| 9:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 4 | |
| 9:15 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 4 | 0 | 7 | |
| 9:30 AM | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 8 | |
| 9:45 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 | |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 33 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 14 | 0 | 3 | 14 | 0 | 0 | 74 |
| PEAK HR: | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | |
| PEAK HR VOL: | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 0 | 2 | 7 | 0 | 0 | 32 |
| PEAK HR FACTOR: | 0.813 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.375 | 0.500 | 0.000 | 0.250 | 0.583 | 0.000 | 0.000 | 0.615 |
| | | | 0.700 | | | | | | | 0.450 | | | 0.750 | | | | |
| | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 3 |
| 10:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 5 |
| 10:30 AM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:45 AM | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 7 |
| 11:00 AM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 4 |
| 11:15 AM | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 14 |
| 11:30 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 11:45 AM | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:00 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 1 | 0 | 0 | 8 |
| 12:15 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 |
| 12:30 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 8 |
| 12:45 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 7 |
| 1:00 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 8 |
| 1:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 6 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1:45 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 8 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 44 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 32 | 0 | 4 | 8 | 0 | 0 | 99 |
| PEAK HR: | 11:15 AM - 12:15 PM | | | | | | | | | | | | | | | | |
| PEAK HR VOL: | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 0 | 0 | 2 | 0 | 0 | 33 |
| PEAK HR FACTOR: | 0.528 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.375 | 0.563 | 0.000 | 0.000 | 0.500 | 0.000 | 0.000 | 0.589 |
| | | | 0.528 | | | | | | | 0.600 | | | 0.500 | | | | |
| | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 2:00 PM | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 8 |
| 2:15 PM | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 8 |
| 2:30 PM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 6 |
| 2:45 PM | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 1 | 1 | 0 | 0 | 10 |
| 3:00 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 3:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| 3:30 PM | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 2 | 1 | 0 | 0 | 11 |
| 3:45 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 1 | 1 | 0 | 0 | 11 |
| 4:00 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 2 | 0 | 0 | 0 | 8 |
| 4:15 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 3 | 0 | 0 | 13 |
| 4:30 PM | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 14 |
| 4:45 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 1 | 3 | 0 | 0 | 13 |
| 5:00 PM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 2 | 0 | 0 | 10 |
| 5:15 PM | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 1 | 1 | 0 | 0 | 15 |
| 5:30 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 7 |
| 5:45 PM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 1 | 2 | 0 | 0 | 14 |
| 6:00 PM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 9 |
| 6:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 6 |
| 6:30 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 7 |
| 6:45 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 8 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 41 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 69 | 0 | 14 | 17 | 0 | 0 | 186 |
| PEAK HR: | 04:30 PM - 05:30 PM | | | | | | | | | | | | | | | | |
| PEAK HR VOL: | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 14 | 0 | 2 | 6 | 0 | 0 | 52 |
| PEAK HR FACTOR: | 0.625 | 0.000 | 0.417 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.469 | 0.583 | 0.000 | 0.500 | 0.500 | 0.000 | 0.000 | 0.867 |
| | | | 0.750 | | | | | | | 0.806 | | | 0.500 | | | | |

Cagle Mill Rd & Cagle Rd

Peak Hour Turning Movement Count

ID: 22-180056-002
City: Lula

Day: Wednesday
Date: 3/30/2022



| | | | | | | | | | | | | | | | | | | | | | |
|---------------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|
| %Heavy trucks | 1.7 | 0.0 | 11.1 | 0.0 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 2.5 | 0.0 | 3.0 | 16.0 | 4.9 | 0.0 | 0.0 | 9.1 | 4.0 |
|---------------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|

Project ID: 22-180056-002
 Location: Cagle Mill Rd & Cagle Rd
 City: Lula

PEAK HOURS

Day: Wednesday
 Date: 3/30/2022

AM

| Start Time | Cagle Mill Rd Northbound | | | | | Cagle Mill Rd Southbound | | | | | Cagle Rd Eastbound | | | | | Cagle Rd Westbound | | | | | Int. Total |
|--|--------------------------|------|-------|------|------------|--------------------------|------|-----|------|------------|--------------------|-------|-------|------|------------|--------------------|-------|-----|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 07:00 AM - 10:00 AM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | | | | | | | | | | | | |
| 7:45 AM | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 6 |
| 8:00 AM | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 6 |
| 8:15 AM | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8:30 AM | 4 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 5 | 0 | 3 | 0 | 0 | 3 | 13 |
| Total Volume | 13 | 0 | 1 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 0 | 9 | 2 | 7 | 0 | 0 | 9 | 32 |
| % App. Total | 92.9 | 0.0 | 7.1 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.3 | 66.7 | 0.0 | 100 | 22.2 | 77.8 | 0.0 | 0.0 | 100 | |
| PHF | 0.700 | | | | | | | | | | 0.450 | | | | | 0.750 | | | | | 0.615 |
| Cars, PU, Vans | 13 | 0 | 1 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 0 | 9 | 2 | 7 | 0 | 0 | 9 | 32 |
| % Cars, PU, Vans | 100.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 0.0 | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 | 100.0 | 100.0 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| %Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

NOON

| Start Time | Cagle Mill Rd Northbound | | | | | Cagle Mill Rd Southbound | | | | | Cagle Rd Eastbound | | | | | Cagle Rd Westbound | | | | | Int. Total |
|--|--------------------------|------|-----|------|------------|--------------------------|------|-----|------|------------|--------------------|-------|-------|------|------------|--------------------|-------|-----|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 10:00 AM - 02:00 PM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 11:15 AM | | | | | | | | | | | | | | | | | | | | | |
| 11:15 AM | 9 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 1 | 0 | 0 | 1 | 14 |
| 11:30 AM | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 11:45 AM | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:00 PM | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 5 | 0 | 1 | 0 | 0 | 1 | 8 |
| Total Volume | 19 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 0 | 12 | 0 | 2 | 0 | 0 | 2 | 33 |
| % App. Total | 100.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 75.0 | 0.0 | 100 | 0.0 | 100.0 | 0.0 | 0.0 | 100 | |
| PHF | 0.528 | | | | | | | | | | 0.600 | | | | | 0.500 | | | | | 0.589 |
| Cars, PU, Vans | 19 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 0 | 12 | 0 | 2 | 0 | 0 | 2 | 33 |
| % Cars, PU, Vans | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 100.0 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| %Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

PM

| Start Time | Cagle Mill Rd Northbound | | | | | Cagle Mill Rd Southbound | | | | | Cagle Rd Eastbound | | | | | Cagle Rd Westbound | | | | | Int. Total |
|--|--------------------------|------|-------|------|------------|--------------------------|------|-----|------|------------|--------------------|-------|-------|------|------------|--------------------|-------|-----|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 02:00 PM - 07:00 PM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | | | | | |
| 4:30 PM | 2 | 0 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 14 |
| 4:45 PM | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 8 | 1 | 3 | 0 | 0 | 4 | 13 |
| 5:00 PM | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 4 | 0 | 2 | 0 | 0 | 2 | 10 |
| 5:15 PM | 4 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 8 | 1 | 1 | 0 | 0 | 2 | 15 |
| Total Volume | 10 | 0 | 5 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 14 | 0 | 29 | 2 | 6 | 0 | 0 | 8 | 52 |
| % App. Total | 66.7 | 0.0 | 33.3 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 51.7 | 48.3 | 0.0 | 100 | 25.0 | 75.0 | 0.0 | 0.0 | 100 | |
| PHF | 0.750 | | | | | | | | | | 0.806 | | | | | 0.500 | | | | | 0.867 |
| Cars, PU, Vans | 10 | 0 | 5 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 14 | 0 | 29 | 2 | 6 | 0 | 0 | 8 | 52 |
| % Cars, PU, Vans | 100.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 0.0 | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 | 100.0 | 100.0 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| %Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

National Data & Surveying Services Intersection Turning Movement Count

Location: Julian Baugh Rd & Cagle Mill Rd
 City: Lula
 Control: 1-Way Stop (EB)

Project ID: 22-180056-003
 Date: 3/30/2022

Data - Total

| NS/EW Streets: | Julian Baugh Rd | | | | Julian Baugh Rd | | | | Cagle Mill Rd | | | | Cagle Mill Rd | | | | |
|-----------------|---------------------|--------|-------|-------|-----------------|--------|--------|-------|---------------|-------|--------|-------|---------------|-------|-------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 7:00 AM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 7:15 AM | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:30 AM | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7:45 AM | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:00 AM | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8:15 AM | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 8:30 AM | 0 | 3 | 0 | 0 | 0 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 8:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:00 AM | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:30 AM | 0 | 3 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 3.23% | 96.77% | 0.00% | 0.00% | 0.00% | 70.59% | 29.41% | 0.00% | 88.89% | 0.00% | 11.11% | 0.00% | 0 | 0 | 0 | 0 | 57 |
| PEAK HR: | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 1 | 10 | 0 | 0 | 0 | 5 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| PEAK HR FACTOR: | 0.250 | 0.833 | 0.000 | 0.000 | 0.000 | 0.625 | 0.375 | 0.000 | 0.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.719 |
| | | | 0.688 | | | | 0.667 | | | | 0.500 | | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:15 AM | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:30 AM | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 10:45 AM | 0 | 5 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 11:00 AM | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| 11:15 AM | 0 | 7 | 0 | 0 | 0 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 11:30 AM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 11:45 AM | 1 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:00 PM | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| 12:15 PM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 12:30 PM | 0 | 2 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:45 PM | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 1:00 PM | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1:15 PM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1:45 PM | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 5.26% | 94.74% | 0.00% | 0.00% | 0.00% | 70.73% | 26.83% | 2.44% | 66.67% | 0.00% | 33.33% | 0.00% | 0 | 0 | 0 | 0 | 94 |
| PEAK HR: | 10:45 AM - 11:45 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 0 | 16 | 0 | 0 | 0 | 6 | 3 | 1 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 32 |
| PEAK HR FACTOR: | 0.000 | 0.571 | 0.000 | 0.000 | 0.000 | 0.750 | 0.375 | 0.250 | 0.375 | 0.000 | 0.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.615 |
| | | | 0.571 | | | | 0.625 | | | | 0.750 | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 2:00 PM | 0 | 2 | 0 | 0 | 0 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 2:15 PM | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2:30 PM | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| 2:45 PM | 0 | 2 | 0 | 0 | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 3:00 PM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:15 PM | 1 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 3:30 PM | 0 | 2 | 0 | 0 | 0 | 4 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |
| 3:45 PM | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 4:00 PM | 0 | 1 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 4:15 PM | 0 | 4 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 4:30 PM | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 4:45 PM | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5:00 PM | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 5:15 PM | 0 | 5 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 5:30 PM | 1 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5:45 PM | 0 | 1 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 6:00 PM | 0 | 1 | 0 | 0 | 0 | 4 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 6:15 PM | 0 | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 6:45 PM | 0 | 1 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 4.65% | 95.35% | 0.00% | 0.00% | 0.00% | 74.42% | 25.58% | 0.00% | 81.25% | 0.00% | 12.50% | 6.25% | 0 | 0 | 0 | 0 | 145 |
| PEAK HR: | 05:15 PM - 06:15 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 1 | 10 | 0 | 0 | 0 | 21 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| PEAK HR FACTOR: | 0.250 | 0.500 | 0.000 | 0.000 | 0.000 | 0.656 | 0.500 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.750 |
| | | | 0.550 | | | | 0.639 | | | | 0.250 | | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Julian Baugh Rd & Cagle Mill Rd
 City: Lula
 Control: 1-Way Stop (EB)

Project ID: 22-180056-003
 Date: 3/30/2022

Data - Cars

| NS/EW Streets: | Julian Baugh Rd | | | | Julian Baugh Rd | | | | Cagle Mill Rd | | | | Cagle Mill Rd | | | | |
|-----------------|---------------------|--------|-------|-------|-----------------|--------|--------|-------|---------------|-------|--------|-------|---------------|-------|-------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:15 AM | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:30 AM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 7:45 AM | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:00 AM | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8:15 AM | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 8:30 AM | 0 | 3 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 8:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:00 AM | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:30 AM | 0 | 3 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 3.33% | 96.67% | 0.00% | 0.00% | 0.00% | 68.75% | 31.25% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0 | 0 | 0 | 0 | 54 |
| PEAK HR: | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 1 | 10 | 0 | 0 | 0 | 5 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| PEAK HR FACTOR: | 0.250 | 0.833 | 0.000 | 0.000 | 0.000 | 0.625 | 0.375 | 0.000 | 0.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.719 |
| | 0.688 | | | | 0.667 | | | | 0.500 | | | | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:15 AM | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:30 AM | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 10:45 AM | 0 | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 11:00 AM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 |
| 11:15 AM | 0 | 7 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 11:30 AM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| 11:45 AM | 1 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:00 PM | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| 12:15 PM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 12:30 PM | 0 | 2 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:45 PM | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1:00 PM | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1:15 PM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1:45 PM | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 5.41% | 94.59% | 0.00% | 0.00% | 0.00% | 73.68% | 26.32% | 0.00% | 66.67% | 0.00% | 33.33% | 0.00% | 0 | 0 | 0 | 0 | 90 |
| PEAK HR: | 10:45 AM - 11:45 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 0 | 15 | 0 | 0 | 0 | 6 | 2 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 29 |
| PEAK HR FACTOR: | 0.000 | 0.536 | 0.000 | 0.000 | 0.000 | 0.750 | 0.250 | 0.000 | 0.375 | 0.000 | 0.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.558 |
| | 0.536 | | | | 0.500 | | | | 0.750 | | | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 2:00 PM | 0 | 2 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 2:15 PM | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2:30 PM | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| 2:45 PM | 0 | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 3:00 PM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:15 PM | 1 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 3:30 PM | 0 | 2 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 9 |
| 3:45 PM | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 4:00 PM | 0 | 1 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 4:15 PM | 0 | 3 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 4:30 PM | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 4:45 PM | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5:00 PM | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 5:15 PM | 0 | 5 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 5:30 PM | 1 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5:45 PM | 0 | 1 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 6:00 PM | 0 | 1 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 6:15 PM | 0 | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 6:45 PM | 0 | 1 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 9 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 4.76% | 95.24% | 0.00% | 0.00% | 0.00% | 74.70% | 25.30% | 0.00% | 81.25% | 0.00% | 12.50% | 6.25% | 0 | 0 | 0 | 0 | 141 |
| PEAK HR: | 05:15 PM - 06:15 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 1 | 10 | 0 | 0 | 0 | 21 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| PEAK HR FACTOR: | 0.250 | 0.500 | 0.000 | 0.000 | 0.000 | 0.656 | 0.500 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.750 |
| | 0.550 | | | | 0.639 | | | | 0.250 | | | | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Julian Baugh Rd & Cagle Mill Rd
 City: Lula
 Control: 1-Way Stop (EB)

Project ID: 22-180056-003
 Date: 3/30/2022

Data - Bikes

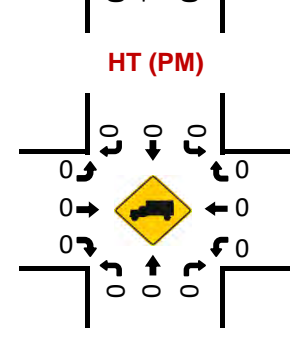
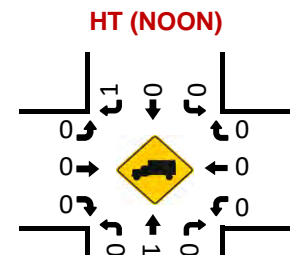
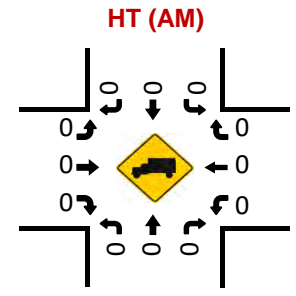
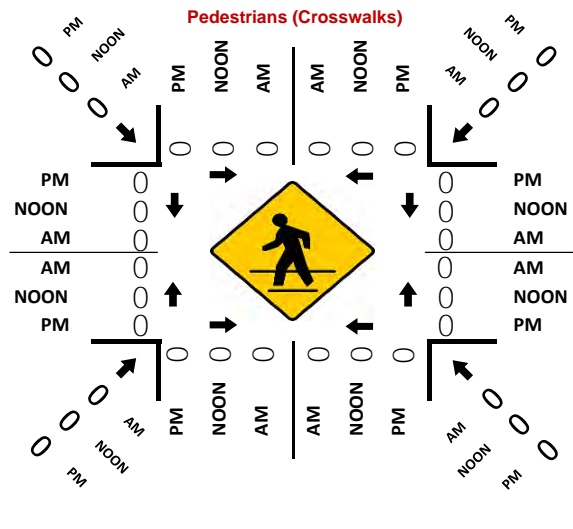
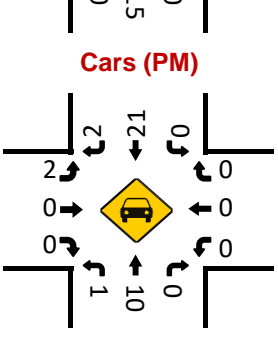
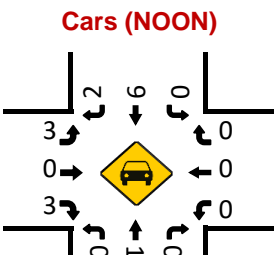
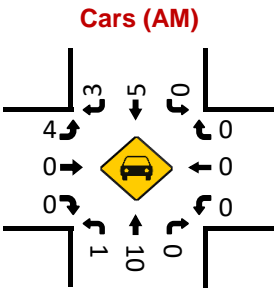
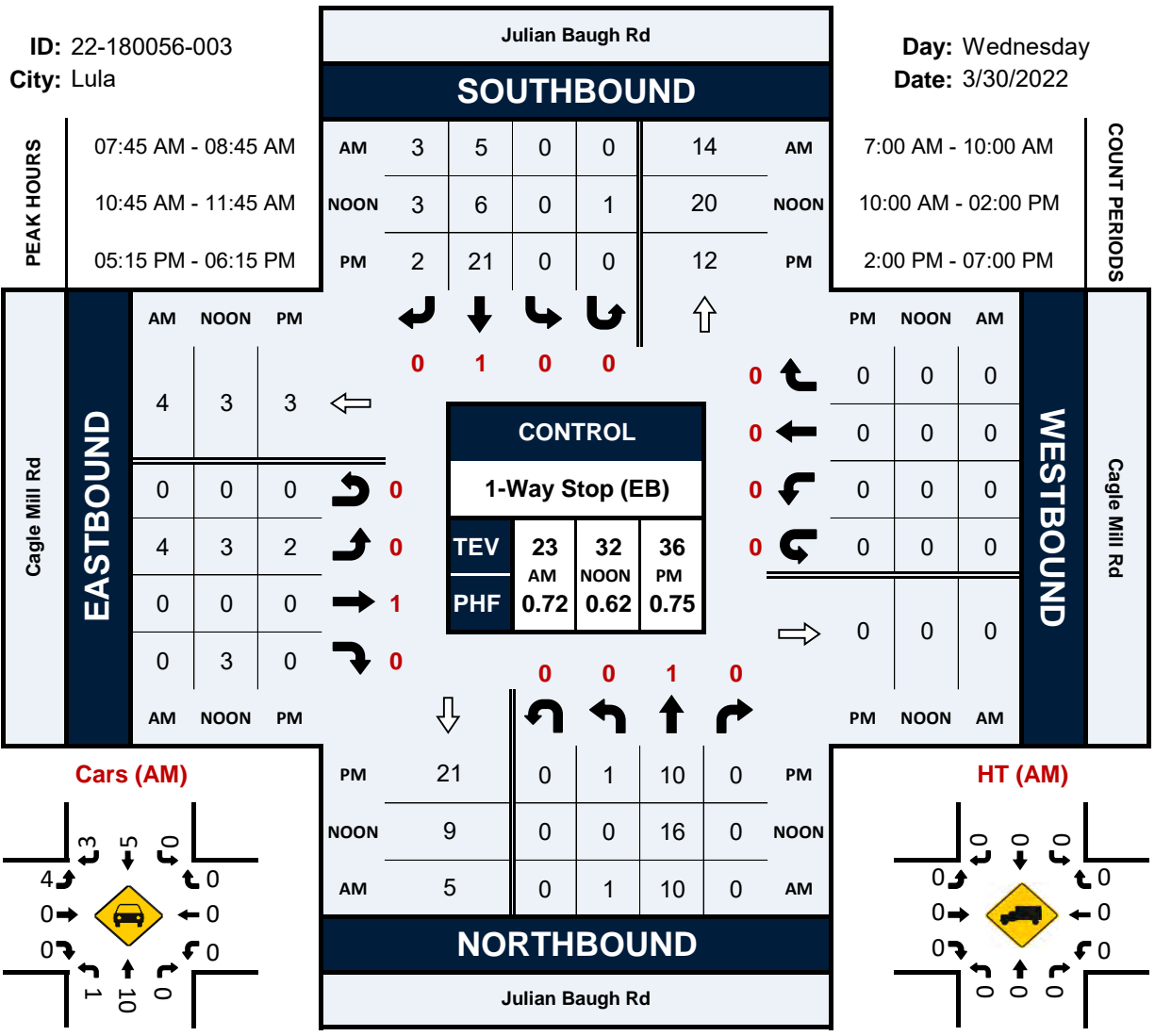
| NS/EW Streets: | Julian Baugh Rd | | | | Julian Baugh Rd | | | | Cagle Mill Rd | | | | Cagle Mill Rd | | | | |
|-----------------------------------|---------------------|-------|-------|-------|-----------------|-------|-------|-------|---------------|-------|-------|-------|---------------|-------|-------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |
| | | | | | | | | | | | | | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 10:45 AM - 11:45 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |
| | | | | | | | | | | | | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 05:15 PM - 06:15 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |

Julian Baugh Rd & Cagle Mill Rd

Peak Hour Turning Movement Count

ID: 22-180056-003
City: Lula

Day: Wednesday
Date: 3/30/2022



%Heavy trucks | 0.0 2.8 0.0 0.0 2.7 | 0.0 3.8 5.3 100.0 4.9 | 0.0 0.0 12.5 0.0 2.5 | 0.0 0.0 0.0 0.0 0.0 | 0.0 | 3.7

Project ID: 22-180056-003
 Location: Julian Baugh Rd & Cagle Mill Rd
 City: Lula

PEAK HOURS

Day: Wednesday
 Date: 3/30/2022

AM

| Start Time | Julian Baugh Rd Northbound | | | | | Julian Baugh Rd Southbound | | | | | Cagle Mill Rd Eastbound | | | | | Cagle Mill Rd Westbound | | | | | Int. Total |
|--|----------------------------|-------|-----|------|------------|----------------------------|-------|-------|------|------------|-------------------------|------|-----|------|------------|-------------------------|------|-----|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 07:00 AM - 10:00 AM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | | | | | | | | | | | | |
| 7:45 AM | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:00 AM | 1 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8:15 AM | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| 8:30 AM | 0 | 3 | 0 | 0 | 3 | 0 | 1 | 2 | 0 | 3 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 8 |
| Total Volume | 1 | 10 | 0 | 0 | 11 | 0 | 5 | 3 | 0 | 8 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 23 |
| % App. Total | 9.1 | 90.9 | 0.0 | 0.0 | 100 | 0.0 | 62.5 | 37.5 | 0.0 | 100 | 100.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | |
| PHF | 0.688 | | | | | 0.667 | | | | | 0.500 | | | | | 0.719 | | | | | |
| Cars, PU, Vans | 1 | 10 | 0 | 0 | 11 | 0 | 5 | 3 | 0 | 8 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 23 |
| % Cars, PU, Vans | 100.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| %Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

NOON

| Start Time | Julian Baugh Rd Northbound | | | | | Julian Baugh Rd Southbound | | | | | Cagle Mill Rd Eastbound | | | | | Cagle Mill Rd Westbound | | | | | Int. Total |
|--|----------------------------|-------|-----|------|------------|----------------------------|-------|------|-------|------------|-------------------------|------|-------|------|------------|-------------------------|------|-----|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 10:00 AM - 02:00 PM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 10:45 AM | | | | | | | | | | | | | | | | | | | | | |
| 10:45 AM | 0 | 5 | 0 | 0 | 5 | 0 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 11:00 AM | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| 11:15 AM | 0 | 7 | 0 | 0 | 7 | 0 | 2 | 2 | 0 | 4 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 13 |
| 11:30 AM | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total Volume | 0 | 16 | 0 | 0 | 16 | 0 | 6 | 3 | 1 | 10 | 3 | 0 | 3 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 32 |
| % App. Total | 0.0 | 100.0 | 0.0 | 0.0 | 100 | 0.0 | 60.0 | 30.0 | 10.0 | 100 | 50.0 | 0.0 | 50.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | |
| PHF | 0.571 | | | | | 0.625 | | | | | 0.750 | | | | | 0.615 | | | | | |
| Cars, PU, Vans | 0 | 15 | 0 | 0 | 15 | 0 | 6 | 2 | 0 | 8 | 3 | 0 | 3 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 29 |
| % Cars, PU, Vans | 0.0 | 93.8 | 0.0 | 0.0 | 93.8 | 0.0 | 100.0 | 66.7 | 0.0 | 80.0 | 100.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 90.6 |
| Heavy trucks | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| %Heavy trucks | 0.0 | 6.3 | 0.0 | 0.0 | 6.3 | 0.0 | 0.0 | 33.3 | 100.0 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.4 |

PM

| Start Time | Julian Baugh Rd Northbound | | | | | Julian Baugh Rd Southbound | | | | | Cagle Mill Rd Eastbound | | | | | Cagle Mill Rd Westbound | | | | | Int. Total |
|--|----------------------------|-------|-----|------|------------|----------------------------|-------|-------|------|------------|-------------------------|------|-----|------|------------|-------------------------|------|-----|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 02:00 PM - 07:00 PM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 05:15 PM | | | | | | | | | | | | | | | | | | | | | |
| 5:15 PM | 0 | 5 | 0 | 0 | 5 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 5:30 PM | 1 | 3 | 0 | 0 | 4 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5:45 PM | 0 | 1 | 0 | 0 | 1 | 0 | 8 | 1 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 6:00 PM | 0 | 1 | 0 | 0 | 1 | 0 | 4 | 1 | 0 | 5 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 8 |
| Total Volume | 1 | 10 | 0 | 0 | 11 | 0 | 21 | 2 | 0 | 23 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 36 |
| % App. Total | 9.1 | 90.9 | 0.0 | 0.0 | 100 | 0.0 | 91.3 | 8.7 | 0.0 | 100 | 100.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | |
| PHF | 0.550 | | | | | 0.639 | | | | | 0.250 | | | | | 0.750 | | | | | |
| Cars, PU, Vans | 1 | 10 | 0 | 0 | 11 | 0 | 21 | 2 | 0 | 23 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 36 |
| % Cars, PU, Vans | 100.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| %Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

National Data & Surveying Services Intersection Turning Movement Count

Location: Cagle Mill Rd/Noah Martin Rd & Whitehall Rd
 City: Lula
 Control: 2-Way Stop (NB/SB)

Project ID: 22-180056-004
 Date: 3/30/2022

Data - Total

| NS/EW Streets: | Cagle Mill Rd/Noah Martin Rd | | | | Cagle Mill Rd/Noah Martin Rd | | | | Whitehall Rd | | | | Whitehall Rd | | | | |
|-----------------|------------------------------|--------|--------|-------|------------------------------|--------|--------|-------|--------------|--------|--------|-------|--------------|--------|--------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| 7:15 AM | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 8 |
| 7:30 AM | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | 2 | 0 | 12 |
| 7:45 AM | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 7 |
| 8:00 AM | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 4 | 1 | 0 | 11 |
| 8:15 AM | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 7 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 3 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 5 |
| 9:00 AM | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 9:15 AM | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| 9:45 AM | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 6 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 37.50% | 37.50% | 25.00% | 0.00% | 10.00% | 65.00% | 25.00% | 0.00% | 13.33% | 66.67% | 20.00% | 0.00% | 3.45% | 82.76% | 13.79% | 0.00% | 72 |
| PEAK HR: | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 1 | 1 | 0 | 0 | 1 | 7 | 2 | 0 | 1 | 4 | 2 | 0 | 0 | 15 | 3 | 0 | 38 |
| PEAK HR FACTOR: | 0.250 | 0.250 | 0.250 | 0.000 | 0.250 | 0.875 | 0.500 | 0.000 | 0.250 | 0.333 | 0.500 | 0.000 | 0.000 | 0.625 | 0.375 | 0.000 | 0.792 |
| | | | 0.750 | | | 0.833 | | | | 0.583 | | | | 0.563 | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 3 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:30 AM | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 7 |
| 10:45 AM | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 5 |
| 11:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 6 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11:30 AM | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 1 | 1 | 0 | 11 |
| 11:45 AM | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 8 |
| 12:00 PM | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 0 | 8 |
| 12:15 PM | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 6 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 5 |
| 12:45 PM | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 8 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1:30 PM | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 0 | 8 |
| 1:45 PM | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 52.63% | 15.79% | 31.58% | 0.00% | 6.67% | 66.67% | 20.00% | 6.67% | 11.76% | 52.94% | 35.29% | 0.00% | 28.00% | 64.00% | 8.00% | 0.00% | 93 |
| PEAK HR: | 11:30 AM - 12:30 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 3 | 1 | 4 | 0 | 0 | 2 | 2 | 0 | 1 | 6 | 6 | 0 | 1 | 6 | 1 | 0 | 33 |
| PEAK HR FACTOR: | 0.375 | 0.250 | 0.500 | 0.000 | 0.000 | 0.500 | 0.500 | 0.000 | 0.250 | 0.375 | 0.375 | 0.000 | 0.250 | 0.750 | 0.250 | 0.000 | 0.750 |
| | | | 1.000 | | | 1.000 | | | | 0.542 | | | | 0.667 | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 2:00 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 5 |
| 2:15 PM | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 8 |
| 2:30 PM | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 1 | 0 | 10 |
| 2:45 PM | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 3 | 1 | 0 | 10 |
| 3:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:15 PM | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 3:30 PM | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 3 | 0 | 0 | 9 |
| 3:45 PM | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 4:00 PM | 2 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 2 | 2 | 0 | 0 | 4 | 1 | 0 | 16 |
| 4:15 PM | 0 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 10 |
| 4:30 PM | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 0 | 0 | 0 | 4 | 0 | 14 |
| 4:45 PM | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 9 |
| 5:00 PM | 2 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 2 | 3 | 0 | 0 | 1 | 2 | 0 | 0 | 15 |
| 5:15 PM | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 9 |
| 5:30 PM | 5 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 1 | 1 | 1 | 3 | 0 | 0 | 19 |
| 5:45 PM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 3 | 0 | 4 | 2 | 0 | 0 | 16 |
| 6:00 PM | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 8 |
| 6:15 PM | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 2 | 0 | 0 | 2 | 0 | 0 | 11 |
| 6:30 PM | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 0 | 4 | 0 | 0 | 1 | 15 |
| 6:45 PM | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 2 | 0 | 0 | 1 | 1 | 0 | 13 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 32.20% | 20.34% | 45.76% | 1.69% | 31.58% | 42.11% | 26.32% | 0.00% | 11.39% | 62.03% | 25.32% | 1.27% | 28.30% | 54.72% | 15.09% | 1.89% | 210 |
| PEAK HR: | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 7 | 2 | 7 | 1 | 1 | 2 | 1 | 0 | 3 | 14 | 5 | 1 | 7 | 8 | 0 | 0 | 59 |
| PEAK HR FACTOR: | 0.350 | 0.500 | 0.875 | 0.250 | 0.250 | 0.250 | 0.250 | 0.000 | 0.375 | 0.875 | 0.417 | 0.250 | 0.438 | 0.667 | 0.000 | 0.000 | 0.776 |
| | | | 0.531 | | | 0.333 | | | | 0.719 | | | | 0.625 | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Cagle Mill Rd/Noah Martin Rd & Whitehall Rd
 City: Lula
 Control: 2-Way Stop (NB/SB)

Project ID: 22-180056-004
 Date: 3/30/2022

Data - Cars

| NS/EW Streets: | Cagle Mill Rd/Noah Martin Rd | | | | Cagle Mill Rd/Noah Martin Rd | | | | Whitehall Rd | | | | Whitehall Rd | | | | |
|-----------------|------------------------------|--------|--------|-------|------------------------------|--------|--------|-------|--------------|--------|--------|-------|--------------|--------|--------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 7 |
| 7:30 AM | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 9 |
| 7:45 AM | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 7 |
| 8:00 AM | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 4 | 1 | 11 |
| 8:15 AM | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 7 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 3 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 5 |
| 9:00 AM | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 9:15 AM | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| 9:45 AM | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 6 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 42.86% | 42.86% | 14.29% | 0.00% | 10.53% | 68.42% | 21.05% | 0.00% | 14.29% | 71.43% | 14.29% | 0.00% | 3.57% | 85.71% | 10.71% | 0.00% | 68 |
| PEAK HR: | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 1 | 1 | 0 | 0 | 1 | 7 | 1 | 0 | 1 | 4 | 1 | 0 | 0 | 15 | 2 | 0 | 34 |
| PEAK HR FACTOR: | 0.250 | 0.250 | 0.000 | 0.000 | 0.250 | 0.875 | 0.250 | 0.000 | 0.250 | 0.333 | 0.250 | 0.000 | 0.000 | 0.625 | 0.500 | 0.000 | 0.773 |
| | 0.500 | | | | 0.750 | | | | 0.500 | | | | 0.607 | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 3 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10:30 AM | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 6 |
| 10:45 AM | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 5 |
| 11:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 6 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11:30 AM | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 10 |
| 11:45 AM | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 1 | 0 | 8 |
| 12:00 PM | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 8 |
| 12:15 PM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 4 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 5 |
| 12:45 PM | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 8 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1:30 PM | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 8 |
| 1:45 PM | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 5 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 52.63% | 15.79% | 31.58% | 0.00% | 7.69% | 76.92% | 7.69% | 7.69% | 12.90% | 51.61% | 35.48% | 0.00% | 25.00% | 66.67% | 8.33% | 0.00% | 87 |
| PEAK HR: | 11:30 AM - 12:30 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 3 | 1 | 4 | 0 | 0 | 2 | 1 | 0 | 1 | 5 | 5 | 0 | 1 | 6 | 1 | 0 | 30 |
| PEAK HR FACTOR: | 0.375 | 0.250 | 0.500 | 0.000 | 0.000 | 0.500 | 0.250 | 0.000 | 0.250 | 0.313 | 0.313 | 0.000 | 0.250 | 0.750 | 0.250 | 0.000 | 0.750 |
| | 1.000 | | | | 0.750 | | | | 0.550 | | | | 0.667 | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 2:00 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 5 |
| 2:15 PM | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 8 |
| 2:30 PM | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 1 | 9 |
| 2:45 PM | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 9 |
| 3:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:15 PM | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 3:30 PM | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 3 | 0 | 9 |
| 3:45 PM | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 4:00 PM | 2 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 4 | 0 | 13 |
| 4:15 PM | 0 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 10 |
| 4:30 PM | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 0 | 0 | 0 | 4 | 0 | 14 |
| 4:45 PM | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 9 |
| 5:00 PM | 2 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 2 | 3 | 0 | 0 | 1 | 2 | 0 | 0 | 15 |
| 5:15 PM | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 9 |
| 5:30 PM | 5 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 1 | 1 | 1 | 3 | 0 | 0 | 19 |
| 5:45 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 3 | 0 | 3 | 2 | 0 | 0 | 14 |
| 6:00 PM | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 8 |
| 6:15 PM | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 2 | 0 | 0 | 2 | 0 | 0 | 11 |
| 6:30 PM | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 0 | 4 | 0 | 0 | 1 | 14 |
| 6:45 PM | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 11 |
| TOTAL VOLUMES: | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s: | 33.93% | 21.43% | 42.86% | 1.79% | 33.33% | 44.44% | 22.22% | 0.00% | 12.00% | 64.00% | 22.67% | 1.33% | 28.00% | 56.00% | 14.00% | 2.00% | 199 |
| PEAK HR: | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL: | 7 | 2 | 6 | 1 | 1 | 2 | 1 | 0 | 3 | 14 | 5 | 1 | 6 | 8 | 0 | 0 | 57 |
| PEAK HR FACTOR: | 0.350 | 0.500 | 0.750 | 0.250 | 0.250 | 0.250 | 0.250 | 0.000 | 0.375 | 0.875 | 0.417 | 0.250 | 0.500 | 0.667 | 0.000 | 0.000 | 0.750 |
| | 0.500 | | | | 0.333 | | | | 0.719 | | | | 0.700 | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Cagle Mill Rd/Noah Martin Rd & Whitehall Rd
 City: Lula
 Control: 2-Way Stop (NB/SB)

Project ID: 22-180056-004
 Date: 3/30/2022

Data - HT

| NS/EW Streets: | Cagle Mill Rd/Noah Martin Rd | | | | Cagle Mill Rd/Noah Martin Rd | | | | Whitehall Rd | | | | Whitehall Rd | | | | |
|------------------|------------------------------|-------|---------|-------|------------------------------|-------|---------|-------|--------------|--------|---------|-------|--------------|--------|---------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 3 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 4 |
| | 0.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 4 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.250 | 0.000 | 0.333 |
| | 0.250 | | | | | | | | 0.250 | | | | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 6 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 0.00% | 66.67% | 33.33% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | |
| PEAK HR : | 11:30 AM - 12:30 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.250 | 0.000 | 0.000 | 0.250 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.375 |
| | 0.250 | | | | | | | | 0.500 | | | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 0 | 1 | 1 | 1 | 0 | 11 |
| | 0.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 0.00% | 25.00% | 75.00% | 0.00% | 33.33% | 33.33% | 33.33% | 0.00% | |
| PEAK HR : | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.250 |
| | 0.250 | | | | | | | | 0.250 | | | | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Cagle Mill Rd/Noah Martin Rd & Whitehall Rd
 City: Lula
 Control: 2-Way Stop (NB/SB)

Project ID: 22-180056-004
 Date: 3/30/2022

Data - Bikes

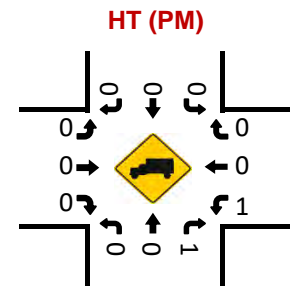
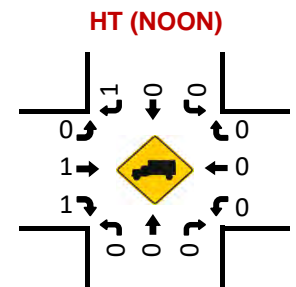
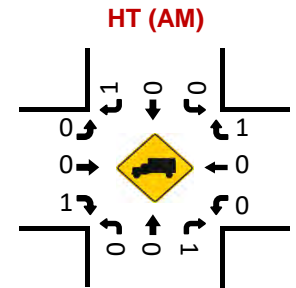
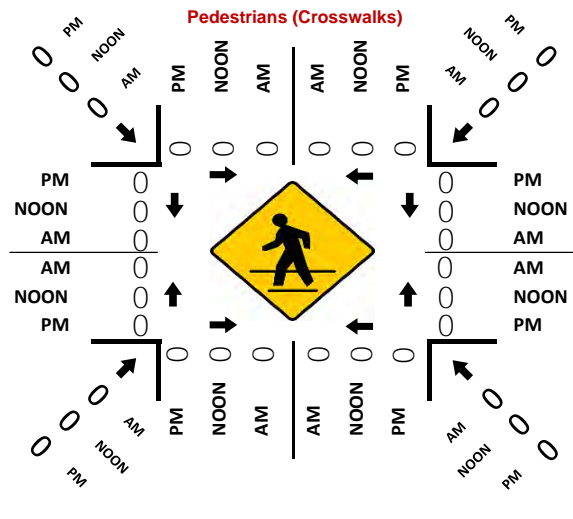
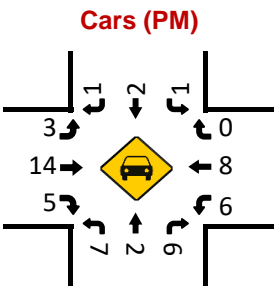
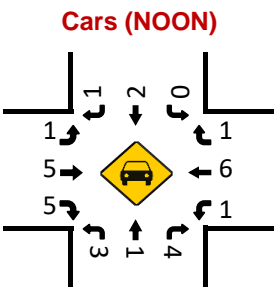
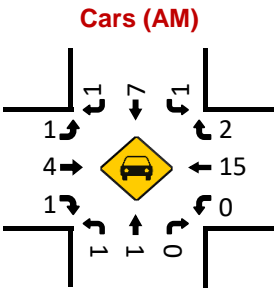
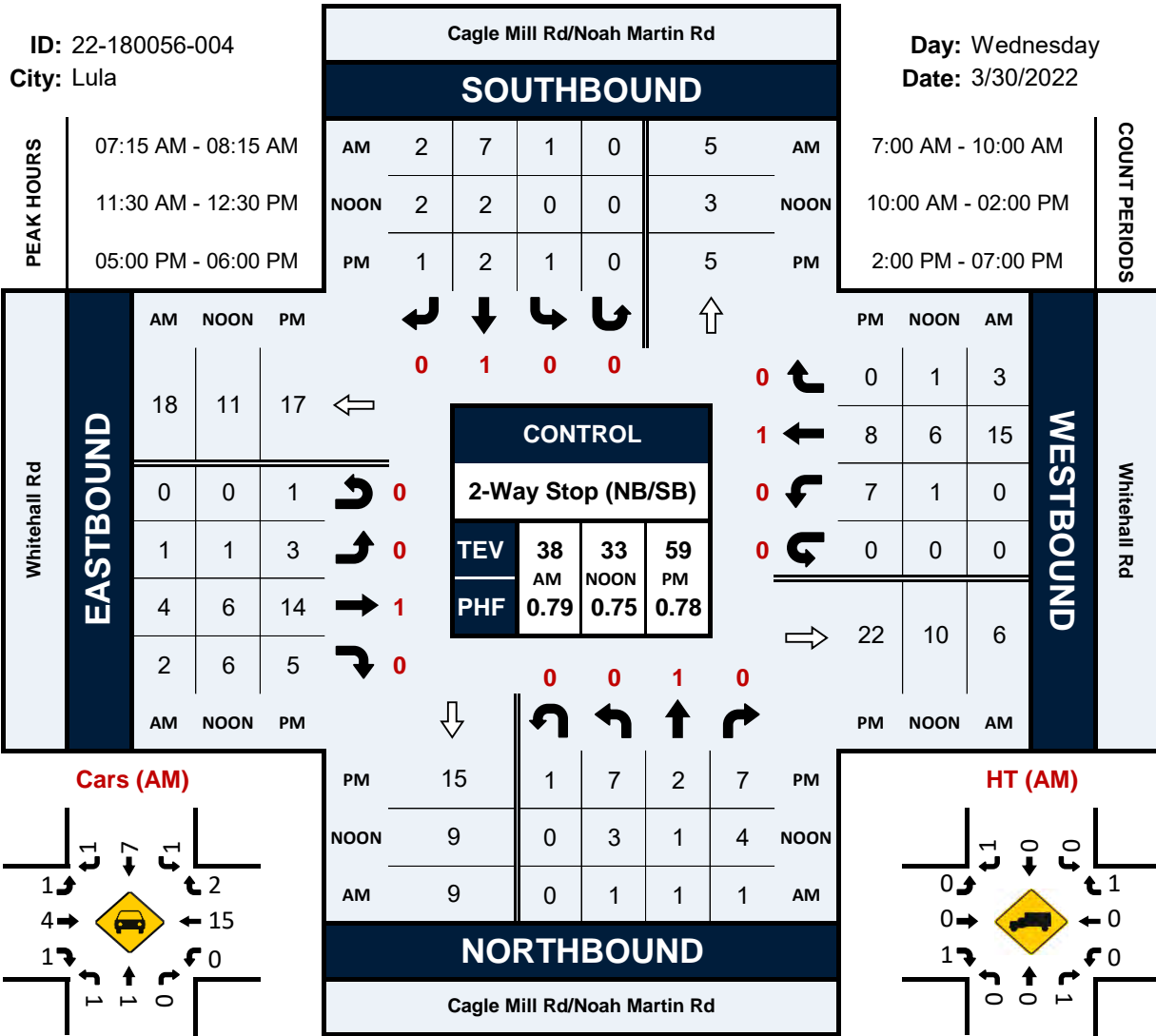
| NS/EW Streets: | Cagle Mill Rd/Noah Martin Rd | | | | Cagle Mill Rd/Noah Martin Rd | | | | Whitehall Rd | | | | Whitehall Rd | | | | |
|-----------------------------------|------------------------------|-------|-------|-------|------------------------------|-------|-------|-------|--------------|-------|-------|-------|--------------|-------|-------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |
| | | | | | | | | | | | | | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 11:30 AM - 12:30 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |
| | | | | | | | | | | | | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |

Cagle Mill Rd/Noah Martin Rd & Whitehall Rd

Peak Hour Turning Movement Count

ID: 22-180056-004
City: Lula

Day: Wednesday
Date: 3/30/2022



| | | | | | | | | | | | | | | | | | | | | | |
|---------------|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|
| %Heavy trucks | 0.0 | 0.0 | 11.4 | 0.0 | 4.7 | 0.0 | 0.0 | 30.8 | 0.0 | 7.4 | 0.0 | 3.9 | 14.3 | 0.0 | 6.3 | 8.7 | 1.4 | 14.3 | 0.0 | 4.7 | 5.6 |
|---------------|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|

Project ID: 22-180056-004

Location: Cagle Mill Rd/Noah Martin Rd & Whitehall Rd
City: Lula

PEAK HOURS

Day: Wednesday
Date: 3/30/2022

AM

| Start Time | Cagle Mill Rd/Noah Martin Rd Northbound | | | | | Cagle Mill Rd/Noah Martin Rd Southbound | | | | | Whitehall Rd Eastbound | | | | | Whitehall Rd Westbound | | | | | Int. Total |
|--|---|-------|-------|------|------------|---|-------|------|------|------------|------------------------|-------|------|------|------------|------------------------|-------|------|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 07:00 AM - 10:00 AM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | | | | | |
| 7:15 AM | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 3 | 0 | 3 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 1 | 8 |
| 7:30 AM | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | 2 | 0 | 8 | 12 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 7 |
| 8:00 AM | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 3 | 0 | 4 | 1 | 0 | 5 | 11 |
| Total Volume | 1 | 1 | 1 | 0 | 3 | 1 | 7 | 2 | 0 | 10 | 1 | 4 | 2 | 0 | 7 | 0 | 15 | 3 | 0 | 18 | 38 |
| % App. Total | 33.3 | 33.3 | 33.3 | 0.0 | 100 | 10.0 | 70.0 | 20.0 | 0.0 | 100 | 14.3 | 57.1 | 28.6 | 0.0 | 100 | 0.0 | 83.3 | 16.7 | 0.0 | 100 | |
| PHF | 0.750 | | | | | 0.833 | | | | | 0.583 | | | | | 0.792 | | | | | |
| Cars, PU, Vans | 1 | 1 | 0 | 0 | 2 | 1 | 7 | 1 | 0 | 9 | 1 | 4 | 1 | 0 | 6 | 0 | 15 | 2 | 0 | 17 | 34 |
| % Cars, PU, Vans | 100.0 | 100.0 | 0.0 | 0.0 | 66.7 | 100.0 | 100.0 | 50.0 | 0.0 | 90.0 | 100.0 | 100.0 | 50.0 | 0.0 | 85.7 | 0.0 | 100.0 | 66.7 | 0.0 | 94.4 | 89.5 |
| Heavy trucks | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 4 |
| % Heavy trucks | 0.0 | 0.0 | 100.0 | 0.0 | 33.3 | 0.0 | 0.0 | 50.0 | 0.0 | 10.0 | 0.0 | 0.0 | 50.0 | 0.0 | 14.3 | 0.0 | 0.0 | 33.3 | 0.0 | 5.6 | 10.5 |

NOON

| Start Time | Cagle Mill Rd/Noah Martin Rd Northbound | | | | | Cagle Mill Rd/Noah Martin Rd Southbound | | | | | Whitehall Rd Eastbound | | | | | Whitehall Rd Westbound | | | | | Int. Total |
|--|---|-------|-------|------|------------|---|-------|------|------|------------|------------------------|------|------|------|------------|------------------------|-------|-------|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 10:00 AM - 02:00 PM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 11:30 AM | | | | | | | | | | | | | | | | | | | | | |
| 11:30 AM | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 4 | 1 | 0 | 6 | 0 | 1 | 1 | 0 | 2 | 11 |
| 11:45 AM | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | 0 | 4 | 0 | 1 | 0 | 0 | 1 | 8 |
| 12:00 PM | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 0 | 3 | 8 |
| 12:15 PM | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 6 |
| Total Volume | 3 | 1 | 4 | 0 | 8 | 0 | 2 | 2 | 0 | 4 | 1 | 6 | 6 | 0 | 13 | 1 | 6 | 1 | 0 | 8 | 33 |
| % App. Total | 37.5 | 12.5 | 50.0 | 0.0 | 100 | 0.0 | 50.0 | 50.0 | 0.0 | 100 | 7.7 | 46.2 | 46.2 | 0.0 | 100 | 12.5 | 75.0 | 12.5 | 0.0 | 100 | |
| PHF | 1.000 | | | | | 1.000 | | | | | 0.542 | | | | | 0.667 | | | | | |
| Cars, PU, Vans | 3 | 1 | 4 | 0 | 8 | 0 | 2 | 1 | 0 | 3 | 1 | 5 | 5 | 0 | 11 | 1 | 6 | 1 | 0 | 8 | 30 |
| % Cars, PU, Vans | 100.0 | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 100.0 | 50.0 | 0.0 | 75.0 | 100.0 | 83.3 | 83.3 | 0.0 | 84.6 | 100.0 | 100.0 | 100.0 | 0.0 | 100.0 | 90.9 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 |
| % Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 25.0 | 0.0 | 16.7 | 16.7 | 0.0 | 15.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.1 |

PM

| Start Time | Cagle Mill Rd/Noah Martin Rd Northbound | | | | | Cagle Mill Rd/Noah Martin Rd Southbound | | | | | Whitehall Rd Eastbound | | | | | Whitehall Rd Westbound | | | | | Int. Total |
|--|---|-------|------|-------|------------|---|-------|-------|------|------------|------------------------|-------|-------|-------|------------|------------------------|-------|-----|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 02:00 PM - 07:00 PM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 05:00 PM | | | | | | | | | | | | | | | | | | | | | |
| 5:00 PM | 2 | 0 | 1 | 1 | 4 | 1 | 2 | 0 | 0 | 3 | 2 | 3 | 0 | 0 | 5 | 1 | 2 | 0 | 0 | 3 | 15 |
| 5:15 PM | 0 | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 4 | 1 | 1 | 0 | 0 | 2 | 9 |
| 5:30 PM | 5 | 1 | 2 | 0 | 8 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 1 | 1 | 6 | 1 | 3 | 0 | 0 | 4 | 19 |
| 5:45 PM | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 3 | 0 | 8 | 4 | 2 | 0 | 0 | 6 | 16 |
| Total Volume | 7 | 2 | 7 | 1 | 17 | 1 | 2 | 1 | 0 | 4 | 3 | 14 | 5 | 1 | 23 | 7 | 8 | 0 | 0 | 15 | 59 |
| % App. Total | 41.2 | 11.8 | 41.2 | 5.9 | 100 | 25.0 | 50.0 | 25.0 | 0.0 | 100 | 13.0 | 60.9 | 21.7 | 4.3 | 100 | 46.7 | 53.3 | 0.0 | 0.0 | 100 | |
| PHF | 0.531 | | | | | 0.333 | | | | | 0.719 | | | | | 0.625 | | | | | |
| Cars, PU, Vans | 7 | 2 | 6 | 1 | 16 | 1 | 2 | 1 | 0 | 4 | 3 | 14 | 5 | 1 | 23 | 6 | 8 | 0 | 0 | 14 | 57 |
| % Cars, PU, Vans | 100.0 | 100.0 | 85.7 | 100.0 | 94.1 | 100.0 | 100.0 | 100.0 | 0.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 85.7 | 100.0 | 0.0 | 0.0 | 93.3 | 96.6 |
| Heavy trucks | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 |
| % Heavy trucks | 0.0 | 0.0 | 14.3 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.3 | 0.0 | 0.0 | 0.0 | 6.7 | 3.4 |

National Data & Surveying Services Intersection Turning Movement Count

Location: Noah Martin Rd & Old Cornelia Hwy
City: Lula
Control: 1-Way Stop (SB)

Project ID: 22-180056-005
Date: 3/30/2022

Data - Total

| NS/EW Streets: | Noah Martin Rd | | | | Noah Martin Rd | | | | Old Cornelia Hwy | | | | Old Cornelia Hwy | | | | |
|------------------|---------------------|-------|-------|-------|----------------|-------|--------|-------|------------------|--------|-------|-------|------------------|--------|-------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 10 | 0 | 0 | 0 | 58 | 0 | 0 | 70 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 71 | 1 | 0 | 84 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 19 | 0 | 0 | 0 | 101 | 0 | 0 | 124 |
| 7:45 AM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 15 | 0 | 0 | 0 | 93 | 1 | 0 | 112 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 32 | 0 | 0 | 0 | 90 | 0 | 0 | 123 |
| 8:15 AM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 34 | 0 | 0 | 0 | 45 | 1 | 0 | 83 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 38 | 0 | 0 | 49 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 11 | 0 | 0 | 0 | 32 | 1 | 0 | 45 |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 28 | 0 | 0 | 43 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 16 | 0 | 0 | 0 | 32 | 0 | 0 | 50 |
| 9:30 AM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 16 | 0 | 0 | 0 | 26 | 1 | 0 | 45 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 13 | 0 | 0 | 0 | 38 | 0 | 0 | 52 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 0 | 0 | 0 | 0 | 3 | 0 | 15 | 0 | 1 | 204 | 0 | 0 | 0 | 652 | 5 | 0 | 880 |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | 16.67% | 0.00% | 83.33% | 0.00% | 0.49% | 99.51% | 0.00% | 0.00% | 0.00% | 99.24% | 0.76% | 0.00% | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 0 | 78 | 0 | 0 | 0 | 355 | 2 | 0 | 443 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.250 | 0.000 | 0.438 | 0.000 | 0.000 | 0.609 | 0.000 | 0.000 | 0.000 | 0.879 | 0.500 | 0.000 | 0.893 |
| | | | | | 0.500 | | | | | 0.609 | | | | 0.884 | | | |

| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
|------------------|---------------------|-------|-------|-------|------------|-------|--------|-------|-----------|--------|-------|-------|-----------|--------|-------|-------|-------|
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 12 | 0 | 0 | 0 | 24 | 0 | 0 | 37 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 20 | 0 | 0 | 0 | 21 | 1 | 0 | 43 |
| 10:30 AM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 22 | 0 | 0 | 0 | 20 | 0 | 0 | 45 |
| 10:45 AM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 17 | 0 | 0 | 0 | 25 | 2 | 0 | 48 |
| 11:00 AM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 19 | 0 | 0 | 0 | 16 | 0 | 0 | 37 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 23 | 1 | 0 | 52 |
| 11:30 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 29 | 0 | 0 | 0 | 23 | 0 | 0 | 54 |
| 11:45 AM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 17 | 0 | 0 | 0 | 24 | 1 | 0 | 45 |
| 12:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 29 | 0 | 0 | 0 | 20 | 0 | 0 | 53 |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 24 | 0 | 0 | 0 | 26 | 0 | 0 | 54 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 28 | 0 | 0 | 0 | 26 | 0 | 0 | 55 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 38 | 0 | 0 | 0 | 25 | 0 | 0 | 68 |
| 1:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 29 | 0 | 0 | 0 | 23 | 1 | 0 | 56 |
| 1:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 26 | 0 | 0 | 49 |
| 1:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 25 | 0 | 0 | 0 | 22 | 1 | 0 | 52 |
| 1:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 47 | 0 | 0 | 0 | 18 | 1 | 0 | 70 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 0 | 0 | 0 | 0 | 10 | 0 | 21 | 0 | 11 | 406 | 0 | 0 | 0 | 362 | 8 | 0 | 818 |
| PEAK HR : | 12:15 PM - 01:15 PM | | | | 32.26% | 0.00% | 67.74% | 0.00% | 2.64% | 97.36% | 0.00% | 0.00% | 0.00% | 97.84% | 2.16% | 0.00% | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 4 | 119 | 0 | 0 | 0 | 100 | 1 | 0 | 233 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.250 | 0.000 | 0.500 | 0.000 | 0.500 | 0.783 | 0.000 | 0.000 | 0.000 | 0.962 | 0.250 | 0.000 | 0.857 |
| | | | | | 0.563 | | | | | 0.788 | | | | 0.971 | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
|------------------|---------------------|-------|-------|-------|------------|-------|--------|-------|-----------|--------|-------|-------|-----------|--------|-------|-------|-------|
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 27 | 0 | 0 | 50 |
| 2:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 38 | 0 | 0 | 0 | 25 | 0 | 0 | 66 |
| 2:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 29 | 0 | 0 | 0 | 39 | 0 | 0 | 73 |
| 2:45 PM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 40 | 0 | 0 | 74 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 37 | 0 | 0 | 0 | 34 | 1 | 0 | 74 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 54 | 0 | 0 | 0 | 26 | 1 | 0 | 85 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 60 | 0 | 0 | 0 | 25 | 0 | 0 | 86 |
| 3:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 76 | 0 | 0 | 0 | 23 | 0 | 1 | 106 |
| 4:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 61 | 0 | 0 | 0 | 22 | 0 | 0 | 88 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 54 | 0 | 0 | 0 | 35 | 1 | 0 | 93 |
| 4:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 62 | 0 | 0 | 0 | 30 | 1 | 0 | 97 |
| 4:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 79 | 0 | 0 | 0 | 27 | 1 | 0 | 109 |
| 5:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 3 | 74 | 0 | 0 | 0 | 33 | 2 | 0 | 115 |
| 5:15 PM | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 4 | 86 | 0 | 0 | 0 | 34 | 3 | 0 | 130 |
| 5:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 67 | 0 | 0 | 0 | 22 | 0 | 0 | 92 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 58 | 0 | 0 | 0 | 16 | 1 | 0 | 79 |
| 6:00 PM | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 61 | 0 | 0 | 0 | 32 | 1 | 0 | 101 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 58 | 0 | 0 | 0 | 18 | 1 | 0 | 81 |
| 6:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 2 | 43 | 0 | 0 | 0 | 29 | 0 | 0 | 79 |
| 6:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 30 | 0 | 0 | 0 | 25 | 0 | 0 | 59 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 0 | 0 | 0 | 0 | 17 | 0 | 20 | 0 | 42 | 1082 | 0 | 0 | 0 | 562 | 13 | 1 | 1737 |
| PEAK HR : | 04:30 PM - 05:30 PM | | | | 45.95% | 0.00% | 54.05% | 0.00% | 3.74% | 96.26% | 0.00% | 0.00% | 0.00% | 97.57% | 2.26% | 0.17% | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 6 | 0 | 3 | 0 | 10 | 301 | 0 | 0 | 0 | 124 | 7 | 0 | 451 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.500 | 0.000 | 0.375 | 0.000 | 0.625 | 0.875 | 0.000 | 0.000 | 0.000 | 0.912 | 0.583 | 0.000 | 0.867 |
| | | | | | 0.750 | | | | | 0.864 | | | | 0.885 | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Noah Martin Rd & Old Cornelia Hwy
 City: Lula
 Control: 1-Way Stop (SB)

Project ID: 22-180056-005
 Date: 3/30/2022

Data - Bikes

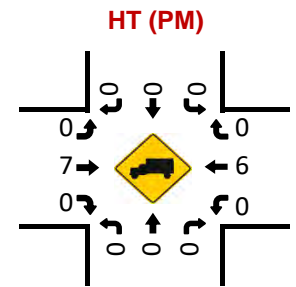
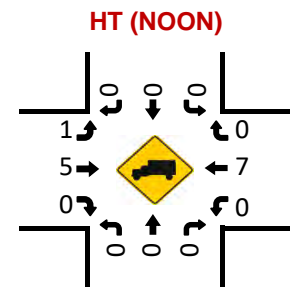
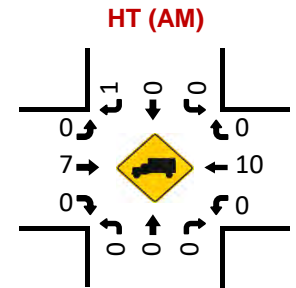
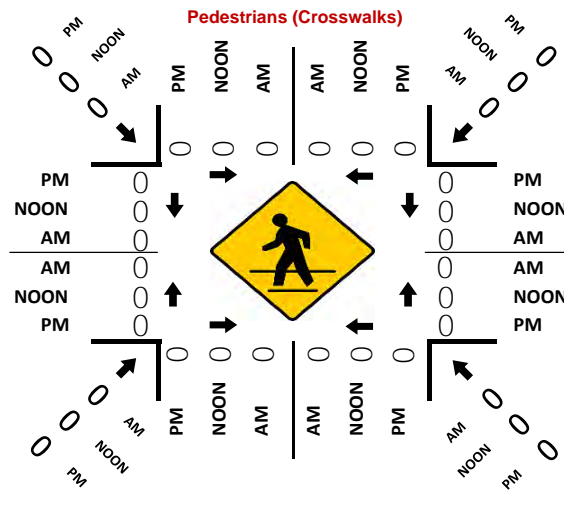
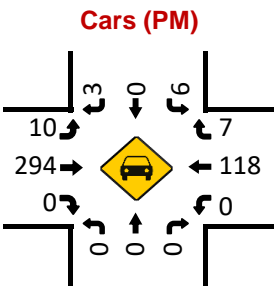
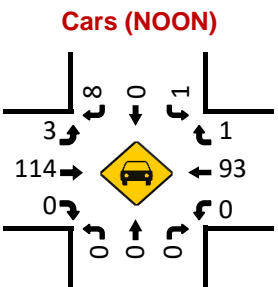
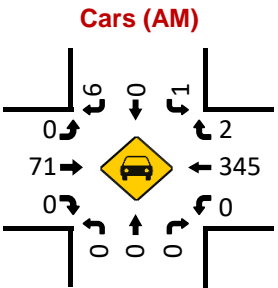
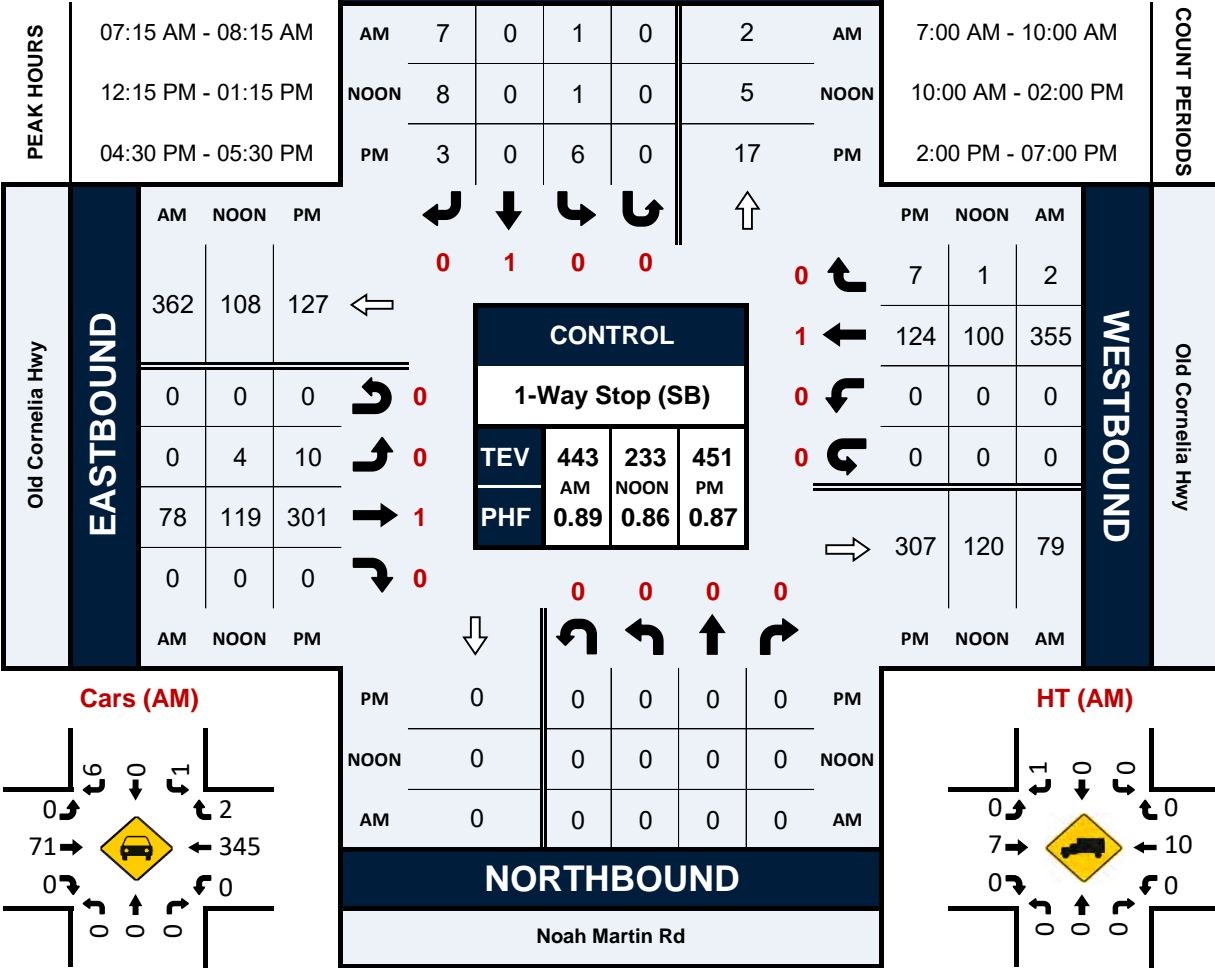
| NS/EW Streets: | Noah Martin Rd | | | | Noah Martin Rd | | | | Old Cornelia Hwy | | | | Old Cornelia Hwy | | | | |
|-----------------------------------|---------------------|-------|-------|-------|----------------|-------|-------|-------|------------------|-------|-------|-------|------------------|-------|-------|-------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 12:15 PM - 01:15 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES : APPROACH %'s : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR : | 04:30 PM - 05:30 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |

Noah Martin Rd & Old Cornelia Hwy

Peak Hour Turning Movement Count

ID: 22-180056-005
City: Lula

Day: Wednesday
Date: 3/30/2022



%Heavy trucks | 0.0 0.0 0.0 0.0 0.0 | 6.7 0.0 10.7 0.0 9.3 | 9.3 4.6 0.0 0.0 4.8 | 0.0 5.1 0.0 0.0 5.0 | 5.0

Project ID: 22-180056-005
 Location: Noah Martin Rd & Old Cornelia Hwy
 City: Lula

PEAK HOURS

Day: Wednesday
 Date: 3/30/2022

AM

| Start Time | Noah Martin Rd Northbound | | | | | Noah Martin Rd Southbound | | | | | Old Cornelia Hwy Eastbound | | | | | Old Cornelia Hwy Westbound | | | | | Int. Total |
|--|---------------------------|------|-----|------|------------|---------------------------|------|------|------|------------|----------------------------|-------|-----|------|------------|----------------------------|-------|-------|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 07:00 AM - 10:00 AM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | | | | | |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 | 0 | 71 | 1 | 0 | 72 | 84 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 19 | 0 | 0 | 19 | 0 | 101 | 0 | 0 | 101 | 124 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 3 | 0 | 15 | 0 | 0 | 15 | 0 | 93 | 1 | 0 | 94 | 112 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 32 | 0 | 0 | 32 | 0 | 90 | 0 | 0 | 90 | 123 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 8 | 0 | 78 | 0 | 0 | 78 | 0 | 355 | 2 | 0 | 357 | 443 |
| % App. Total | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 0.0 | 87.5 | 0.0 | 100 | 0.0 | 100.0 | 0.0 | 0.0 | 100 | 0.0 | 99.4 | 0.6 | 0.0 | 100 | |
| PHF | 0.500 | | | | | | | | | | 0.609 | | | | | 0.884 | 0.893 | | | | |
| Cars, PU, Vans | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 7 | 0 | 71 | 0 | 0 | 71 | 0 | 345 | 2 | 0 | 347 | 425 |
| % Cars, PU, Vans | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 85.7 | 0.0 | 87.5 | 0.0 | 91.0 | 0.0 | 0.0 | 91.0 | 0.0 | 97.2 | 100.0 | 0.0 | 97.2 | 95.9 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 7 | 0 | 0 | 7 | 0 | 10 | 0 | 0 | 10 | 18 |
| % Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.3 | 0.0 | 12.5 | 0.0 | 9.0 | 0.0 | 0.0 | 9.0 | 0.0 | 2.8 | 0.0 | 0.0 | 2.8 | 4.1 |

NOON

| Start Time | Noah Martin Rd Northbound | | | | | Noah Martin Rd Southbound | | | | | Old Cornelia Hwy Eastbound | | | | | Old Cornelia Hwy Westbound | | | | | Int. Total |
|--|---------------------------|------|-----|------|------------|---------------------------|------|-------|------|------------|----------------------------|------|-----|------|------------|----------------------------|-------|-------|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 10:00 AM - 02:00 PM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 12:15 PM | | | | | | | | | | | | | | | | | | | | | |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 24 | 0 | 0 | 26 | 0 | 26 | 0 | 0 | 26 | 54 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 28 | 0 | 0 | 28 | 0 | 26 | 0 | 0 | 26 | 55 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 1 | 38 | 0 | 0 | 39 | 0 | 25 | 0 | 0 | 25 | 68 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 29 | 0 | 0 | 30 | 0 | 23 | 1 | 0 | 24 | 56 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 9 | 4 | 119 | 0 | 0 | 123 | 0 | 100 | 1 | 0 | 101 | 233 |
| % App. Total | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.1 | 0.0 | 88.9 | 0.0 | 100 | 3.3 | 96.7 | 0.0 | 0.0 | 100 | 0.0 | 99.0 | 1.0 | 0.0 | 100 | |
| PHF | 0.563 | | | | | | | | | | 0.788 | | | | | 0.971 | 0.857 | | | | |
| Cars, PU, Vans | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 9 | 3 | 114 | 0 | 0 | 117 | 0 | 93 | 1 | 0 | 94 | 220 |
| % Cars, PU, Vans | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 100.0 | 75.0 | 95.8 | 0.0 | 0.0 | 95.1 | 0.0 | 93.0 | 100.0 | 0.0 | 93.1 | 94.4 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 6 | 0 | 7 | 0 | 0 | 7 | 13 |
| % Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 4.2 | 0.0 | 0.0 | 4.9 | 0.0 | 7.0 | 0.0 | 0.0 | 6.9 | 5.6 |

PM

| Start Time | Noah Martin Rd Northbound | | | | | Noah Martin Rd Southbound | | | | | Old Cornelia Hwy Eastbound | | | | | Old Cornelia Hwy Westbound | | | | | Int. Total |
|--|---------------------------|------|-----|------|------------|---------------------------|------|-------|------|------------|----------------------------|------|-----|------|------------|----------------------------|-------|-------|------|------------|------------|
| | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | Left | Thru | Rgt | Utum | App. Total | |
| Peak Hour Analysis from 02:00 PM - 07:00 PM | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | | | | | |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 2 | 62 | 0 | 0 | 64 | 0 | 30 | 1 | 0 | 31 | 97 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 79 | 0 | 0 | 80 | 0 | 27 | 1 | 0 | 28 | 109 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 3 | 3 | 74 | 0 | 0 | 77 | 0 | 33 | 2 | 0 | 35 | 115 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 4 | 86 | 0 | 0 | 90 | 0 | 34 | 3 | 0 | 37 | 130 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 3 | 0 | 9 | 10 | 301 | 0 | 0 | 311 | 0 | 124 | 7 | 0 | 131 | 451 |
| % App. Total | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 100 | 3.2 | 96.8 | 0.0 | 0.0 | 100 | 0.0 | 94.7 | 5.3 | 0.0 | 100 | |
| PHF | 0.750 | | | | | | | | | | 0.864 | | | | | 0.885 | 0.867 | | | | |
| Cars, PU, Vans | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 3 | 0 | 9 | 10 | 294 | 0 | 0 | 304 | 0 | 118 | 7 | 0 | 125 | 438 |
| % Cars, PU, Vans | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 100.0 | 100.0 | 97.7 | 0.0 | 0.0 | 97.7 | 0.0 | 95.2 | 100.0 | 0.0 | 95.4 | 97.1 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 6 | 0 | 0 | 6 | 13 |
| % Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 | 2.3 | 0.0 | 4.8 | 0.0 | 0.0 | 4.6 | 2.9 |

National Data & Surveying Services Intersection Turning Movement Count

Location: US 23/SR 365/Cornelia Hwy & Cagle Rd
 City: Lula
 Control: 2-Way Stop (EB/WB)

Project ID: 22-180056-006
 Date: 3/30/2022

Data - Total

| NS/EW Streets: | US 23/SR 365/Cornelia Hwy | | | | US 23/SR 365/Cornelia Hwy | | | | Cagle Rd | | | | Cagle Rd | | | | TOTAL |
|------------------|---------------------------|---------|---------|---------|---------------------------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 NL | 2 NT | 1 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 1 WT | 1 WR | 0 WU | |
| 7:00 AM | 1 | 149 | 0 | 1 | 0 | 418 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 7:15 AM | 0 | 191 | 0 | 0 | 0 | 564 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | |
| 7:30 AM | 0 | 246 | 0 | 0 | 0 | 605 | 1 | 0 | 1 | 2 | 0 | 0 | 8 | 0 | 0 | 0 | |
| 7:45 AM | 0 | 170 | 0 | 0 | 0 | 476 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | |
| 8:00 AM | 0 | 221 | 0 | 0 | 0 | 429 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | |
| 8:15 AM | 3 | 211 | 6 | 0 | 0 | 378 | 2 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 8:30 AM | 0 | 182 | 2 | 0 | 0 | 336 | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | |
| 8:45 AM | 0 | 221 | 0 | 0 | 1 | 303 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | |
| 9:00 AM | 1 | 187 | 1 | 0 | 1 | 296 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | |
| 9:15 AM | 2 | 193 | 2 | 0 | 1 | 264 | 1 | 0 | 1 | 1 | 3 | 0 | 2 | 1 | 1 | 0 | |
| 9:30 AM | 0 | 207 | 1 | 0 | 1 | 248 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 9:45 AM | 1 | 168 | 0 | 0 | 0 | 282 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| APPROACH %'s : | 0.34% | 99.11% | 0.51% | 0.04% | 0.09% | 99.72% | 0.20% | 0.00% | 44.44% | 22.22% | 33.33% | 0.00% | 82.98% | 10.64% | 6.38% | 0.00% | |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | |
| PEAK HR VOL : | 0 | 828 | 0 | 0 | 0 | 2074 | 2 | 0 | 3 | 2 | 1 | 0 | 21 | 2 | 1 | 0 | |
| PEAK HR FACTOR : | 0.000 | 0.841 | 0.000 | 0.000 | 0.000 | 0.857 | 0.500 | 0.000 | 0.750 | 0.250 | 0.250 | 0.000 | 0.656 | 0.250 | 0.250 | 0.000 | |
| | 0.841 | | | | 0.856 | | | | 0.500 | | | | 0.750 | | | | 0.850 |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 1 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 1 WT | 1 WR | 0 WU | |
| 4:00 PM | 0 | 456 | 4 | 0 | 0 | 235 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | |
| 4:15 PM | 0 | 556 | 5 | 0 | 0 | 264 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | |
| 4:30 PM | 0 | 487 | 10 | 0 | 2 | 239 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | |
| 4:45 PM | 0 | 560 | 7 | 0 | 0 | 250 | 3 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | |
| 5:00 PM | 1 | 567 | 1 | 0 | 1 | 228 | 1 | 0 | 1 | 1 | 0 | 1 | 3 | 0 | 3 | 0 | |
| 5:15 PM | 1 | 596 | 8 | 0 | 0 | 267 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | |
| 5:30 PM | 0 | 623 | 8 | 0 | 0 | 242 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | |
| 5:45 PM | 1 | 505 | 6 | 0 | 0 | 216 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | |
| 6:00 PM | 0 | 417 | 3 | 0 | 1 | 220 | 3 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | |
| 6:15 PM | 0 | 323 | 3 | 0 | 1 | 221 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | |
| 6:30 PM | 0 | 323 | 5 | 1 | 1 | 208 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 6:45 PM | 0 | 265 | 4 | 0 | 1 | 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | |
| APPROACH %'s : | 0.05% | 98.82% | 1.11% | 0.02% | 0.25% | 99.28% | 0.47% | 0.00% | 52.94% | 11.76% | 29.41% | 5.88% | 77.50% | 7.50% | 15.00% | 0.00% | |
| PEAK HR : | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | |
| PEAK HR VOL : | 2 | 2346 | 24 | 0 | 1 | 987 | 4 | 0 | 5 | 1 | 4 | 1 | 12 | 0 | 4 | 0 | |
| PEAK HR FACTOR : | 0.500 | 0.941 | 0.750 | 0.000 | 0.250 | 0.924 | 0.333 | 0.000 | 0.625 | 0.250 | 0.500 | 0.250 | 0.750 | 0.000 | 0.333 | 0.000 | |
| | 0.940 | | | | 0.929 | | | | 0.688 | | | | 0.667 | | | | 0.963 |

National Data & Surveying Services Intersection Turning Movement Count

Location: US 23/SR 365/Cornelia Hwy & Cagle Rd
 City: Lula
 Control: 2-Way Stop (EB/WB)

Project ID: 22-180056-006
 Date: 3/30/2022

Data - Cars

| NS/EW Streets: | US 23/SR 365/Cornelia Hwy | | | | US 23/SR 365/Cornelia Hwy | | | | Cagle Rd | | | | Cagle Rd | | | | |
|------------------|---------------------------|---------|---------|---------|---------------------------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 1 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 1 WT | 1 WR | 0 WU | |
| 7:00 AM | 1 | 130 | 0 | 0 | 0 | 401 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 535 |
| 7:15 AM | 0 | 167 | 0 | 0 | 0 | 545 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 715 |
| 7:30 AM | 0 | 230 | 0 | 0 | 0 | 581 | 1 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 821 |
| 7:45 AM | 0 | 155 | 0 | 0 | 0 | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 613 |
| 8:00 AM | 0 | 189 | 0 | 0 | 0 | 406 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 603 |
| 8:15 AM | 3 | 182 | 6 | 0 | 0 | 347 | 2 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 544 |
| 8:30 AM | 0 | 154 | 2 | 0 | 0 | 314 | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 477 |
| 8:45 AM | 0 | 190 | 0 | 0 | 1 | 273 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 469 |
| 9:00 AM | 1 | 165 | 1 | 0 | 1 | 273 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 444 |
| 9:15 AM | 2 | 164 | 2 | 0 | 1 | 246 | 1 | 0 | 1 | 1 | 3 | 0 | 2 | 1 | 1 | 0 | 425 |
| 9:30 AM | 0 | 176 | 1 | 0 | 1 | 230 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 412 |
| 9:45 AM | 1 | 143 | 0 | 0 | 0 | 247 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 394 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 8 | 2045 | 12 | 0 | 4 | 4313 | 9 | 0 | 7 | 2 | 6 | 0 | 39 | 5 | 2 | 0 | 6452 |
| | 0.39% | 99.03% | 0.58% | 0.00% | 0.09% | 99.70% | 0.21% | 0.00% | 46.67% | 13.33% | 40.00% | 0.00% | 84.78% | 10.87% | 4.35% | 0.00% | |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 741 | 0 | 0 | 0 | 1982 | 2 | 0 | 2 | 0 | 1 | 0 | 21 | 2 | 1 | 0 | 2752 |
| PEAK HR FACTOR : | 0.000 | 0.805 | 0.000 | 0.000 | 0.000 | 0.853 | 0.500 | 0.000 | 0.500 | 0.000 | 0.250 | 0.000 | 0.656 | 0.250 | 0.250 | 0.000 | 0.838 |
| | 0.805 | | | | 0.852 | | | | 0.750 | | | | 0.750 | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 1 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 1 WT | 1 WR | 0 WU | |
| 4:00 PM | 0 | 430 | 4 | 0 | 0 | 216 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 656 |
| 4:15 PM | 0 | 534 | 5 | 0 | 0 | 237 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 782 |
| 4:30 PM | 0 | 473 | 10 | 0 | 2 | 215 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | 708 |
| 4:45 PM | 0 | 529 | 7 | 0 | 0 | 228 | 3 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 772 |
| 5:00 PM | 1 | 541 | 1 | 0 | 1 | 204 | 1 | 0 | 1 | 1 | 0 | 1 | 3 | 0 | 3 | 0 | 758 |
| 5:15 PM | 1 | 573 | 8 | 0 | 0 | 252 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 840 |
| 5:30 PM | 0 | 603 | 8 | 0 | 0 | 224 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 842 |
| 5:45 PM | 1 | 494 | 6 | 0 | 0 | 201 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 706 |
| 6:00 PM | 0 | 403 | 3 | 0 | 1 | 198 | 3 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 611 |
| 6:15 PM | 0 | 317 | 3 | 0 | 1 | 202 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 528 |
| 6:30 PM | 0 | 315 | 5 | 0 | 0 | 194 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 516 |
| 6:45 PM | 0 | 256 | 4 | 0 | 1 | 142 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 404 |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 3 | 5468 | 64 | 0 | 6 | 2513 | 13 | 0 | 9 | 2 | 5 | 1 | 31 | 2 | 6 | 0 | 8123 |
| | 0.05% | 98.79% | 1.16% | 0.00% | 0.24% | 99.25% | 0.51% | 0.00% | 52.94% | 11.76% | 29.41% | 5.88% | 79.49% | 5.13% | 15.38% | 0.00% | |
| PEAK HR : | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 2 | 2246 | 24 | 0 | 1 | 908 | 4 | 0 | 5 | 1 | 4 | 1 | 12 | 0 | 4 | 0 | 3212 |
| PEAK HR FACTOR : | 0.500 | 0.931 | 0.750 | 0.000 | 0.250 | 0.901 | 0.333 | 0.000 | 0.625 | 0.250 | 0.500 | 0.250 | 0.750 | 0.000 | 0.333 | 0.000 | 0.954 |
| | 0.930 | | | | 0.906 | | | | 0.688 | | | | 0.667 | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: US 23/SR 365/Cornelia Hwy & Cagle Rd
 City: Lula
 Control: 2-Way Stop (EB/WB)

Project ID: 22-180056-006
 Date: 3/30/2022

Data - HT

| NS/EW Streets: | US 23/SR 365/Cornelia Hwy | | | | US 23/SR 365/Cornelia Hwy | | | | Cagle Rd | | | | Cagle Rd | | | | |
|------------------|---------------------------|---------|---------|---------|---------------------------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 1 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 1 WT | 1 WR | 0 WU | |
| 7:00 AM | 0 | 19 | 0 | 1 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 7:15 AM | 0 | 24 | 0 | 0 | 0 | 19 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 AM | 0 | 16 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 AM | 0 | 15 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 AM | 0 | 32 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 AM | 0 | 29 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 AM | 0 | 28 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 AM | 0 | 31 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 AM | 0 | 22 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 AM | 0 | 29 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 AM | 0 | 31 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 AM | 0 | 25 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 0.00% | 99.67% | 0.00% | 0.33% | 0.00% | 100.00% | 0.00% | 0.00% | 33.33% | 66.67% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 592 |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 87 | 0 | 0 | 0 | 92 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 182 |
| PEAK HR FACTOR : | 0.000 | 0.680 | 0.000 | 0.000 | 0.000 | 0.885 | 0.000 | 0.000 | 0.250 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.827 |
| | 0.680 | | | | 0.885 | | | | 0.375 | | | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 2 NT | 1 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 1 WT | 1 WR | 0 WU | |
| 4:00 PM | 0 | 26 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 PM | 0 | 22 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 4:30 PM | 0 | 14 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 PM | 0 | 31 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 PM | 0 | 26 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 PM | 0 | 23 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 PM | 0 | 20 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 PM | 0 | 11 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:00 PM | 0 | 14 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:15 PM | 0 | 6 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 PM | 0 | 8 | 0 | 1 | 1 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 PM | 0 | 9 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL VOLUMES : | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| APPROACH %'s : | 0.00% | 99.53% | 0.00% | 0.47% | 0.42% | 99.58% | 0.00% | 0.00% | 0 | 0 | 0 | 0 | 0.00% | 100.00% | 0.00% | 0.00% | 449 |
| PEAK HR : | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 0 | 100 | 0 | 0 | 0 | 79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 179 |
| PEAK HR FACTOR : | 0.000 | 0.806 | 0.000 | 0.000 | 0.000 | 0.823 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.844 |
| | 0.806 | | | | 0.823 | | | | | | | | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: US 23/SR 365/Cornelia Hwy & Cagle Rd
 City: Lula
 Control: 2-Way Stop (EB/WB)

Project ID: 22-180056-006
 Date: 3/30/2022

Data - Bikes

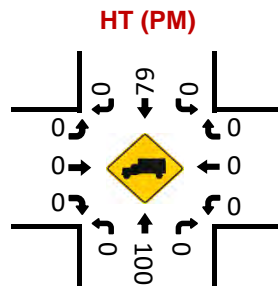
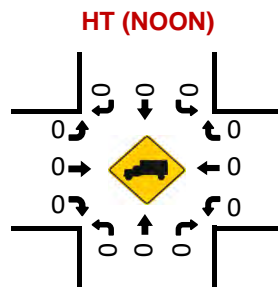
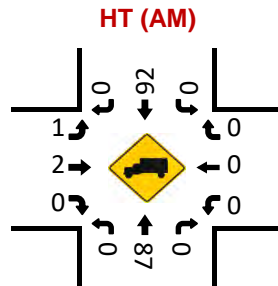
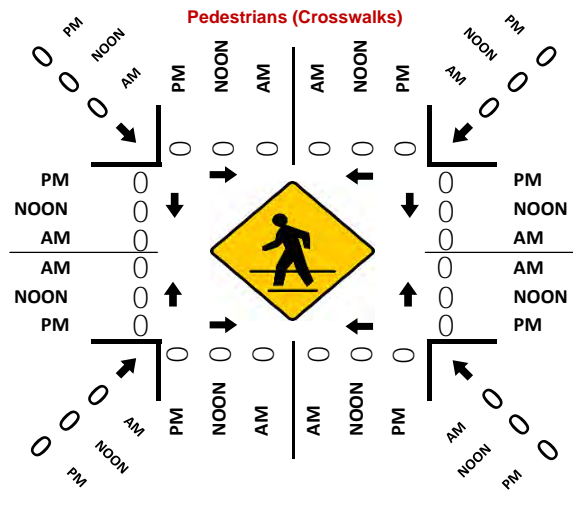
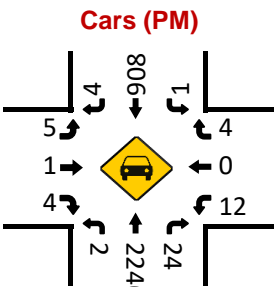
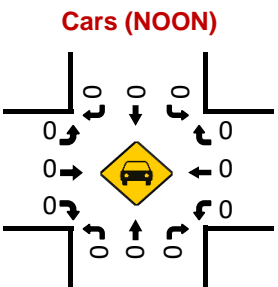
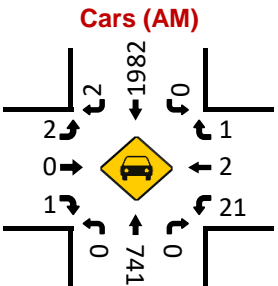
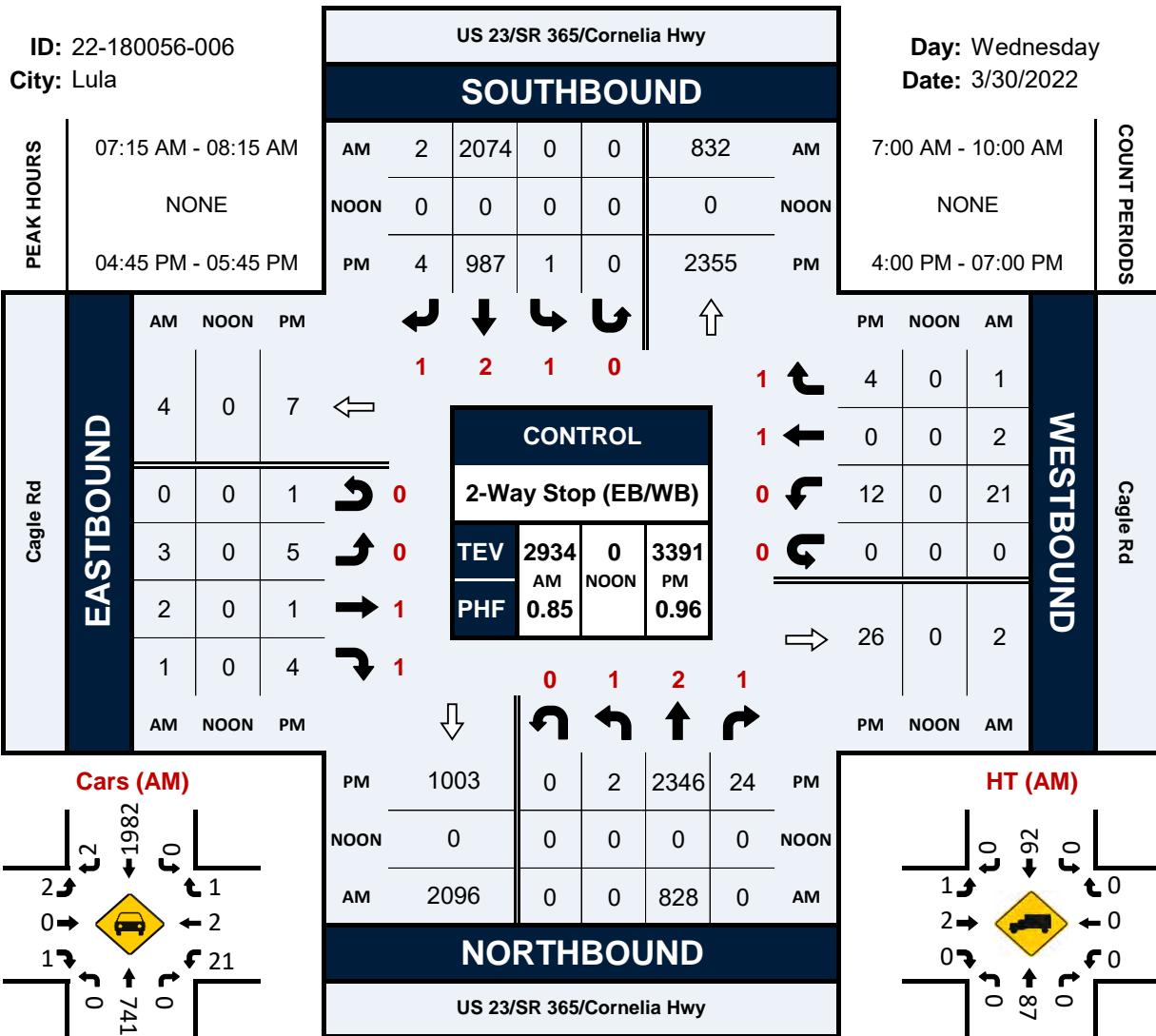
| NS/EW Streets: | US 23/SR 365/Cornelia Hwy | | | | US 23/SR 365/Cornelia Hwy | | | | Cagle Rd | | | | Cagle Rd | | | | | |
|-----------------------------------|---------------------------|---------|---------|---------|---------------------------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|------------|------------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL | |
| | 1 NL | 2 NT | 1 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 1 WT | 1 WR | 0 WU | | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL VOLUMES : APPROACH %'s : | NL 0 | NT 0 | NR 0 | NU 0 | SL 0 | ST 0 | SR 0 | SU 0 | EL 0 | ET 0 | ER 0 | EU 0 | WL 0 | WT 0 | WR 0 | WU 0 | TOTAL 0 | |
| PEAK HR : | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL | |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | TOTAL 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL | |
| | 1 NL | 2 NT | 1 NR | 0 NU | 1 SL | 2 ST | 1 SR | 0 SU | 0 EL | 1 ET | 1 ER | 0 EU | 0 WL | 1 WT | 1 WR | 0 WU | | |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL VOLUMES : APPROACH %'s : | NL 0 | NT 0 | NR 0 | NU 0 | SL 0 | ST 0 | SR 0 | SU 0 | EL 0 | ET 0 | ER 0 | EU 0 | WL 0 | WT 0 | WR 0 | WU 0 | TOTAL 0 | |
| PEAK HR : | 04:45 PM - 05:45 PM | | | | | | | | | | | | | | | | TOTAL | |
| PEAK HR VOL : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | TOTAL 0 |
| PEAK HR FACTOR : | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |

US 23/SR 365/Cornelia Hwy & Cagle Rd

Peak Hour Turning Movement Count

ID: 22-180056-006
City: Lula

Day: Wednesday
Date: 3/30/2022



Project ID: 22-180056-006
 Location: US 23/SR 365/Cornelia Hwy & Cagle Rd
 City: Lula

Day: Wednesday
 Date: 3/30/2022

Groups Printed - Cars, PU, Vans - Heavy Trucks

| Start Time | US 23/SR 365/Cornelia Hwy Northbound | | | | | | US 23/SR 365/Cornelia Hwy Southbound | | | | | | Cagle Rd Eastbound | | | | | | Cagle Rd Westbound | | | | | | Int. Total |
|------------------|--------------------------------------|------|-------|-------|------|------------|--------------------------------------|------|-------|------|------|------------|--------------------|-------|-------|------|-------|------------|--------------------|------|------|------|------|------------|------------|
| | Left | Thru | Rgt | Utum | Peds | App. Total | Left | Thru | Rgt | Utum | Peds | App. Total | Left | Thru | Rgt | Utum | Peds | App. Total | Left | Thru | Rgt | Utum | Peds | App. Total | |
| 7:00 AM | 1 | 149 | 0 | 1 | 0 | 151 | 0 | 418 | 2 | 0 | 0 | 420 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 573 |
| 7:15 AM | 0 | 191 | 0 | 0 | 0 | 191 | 0 | 564 | 0 | 0 | 0 | 564 | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 759 |
| 7:30 AM | 0 | 246 | 0 | 0 | 0 | 246 | 0 | 605 | 1 | 0 | 0 | 606 | 1 | 2 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 8 | 863 |
| 7:45 AM | 0 | 170 | 0 | 0 | 0 | 170 | 0 | 476 | 0 | 0 | 0 | 476 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 8 | 654 |
| Total | 1 | 756 | 0 | 1 | 0 | 758 | 0 | 2063 | 3 | 0 | 0 | 2066 | 3 | 2 | 1 | 0 | 0 | 6 | 18 | 0 | 1 | 0 | 0 | 19 | 2849 |
| 8:00 AM | 0 | 221 | 0 | 0 | 0 | 221 | 0 | 429 | 1 | 0 | 0 | 430 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 1 | 0 | 0 | 6 | 658 |
| 8:15 AM | 3 | 211 | 6 | 0 | 0 | 220 | 0 | 378 | 2 | 0 | 0 | 380 | 0 | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 2 | 604 |
| 8:30 AM | 0 | 182 | 2 | 0 | 0 | 184 | 0 | 336 | 0 | 0 | 0 | 336 | 2 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 5 | 527 |
| 8:45 AM | 0 | 221 | 0 | 0 | 0 | 221 | 1 | 303 | 1 | 0 | 0 | 305 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 530 |
| Total | 3 | 835 | 8 | 0 | 0 | 846 | 1 | 1446 | 4 | 0 | 0 | 1451 | 3 | 1 | 1 | 0 | 0 | 5 | 13 | 3 | 1 | 0 | 0 | 17 | 2319 |
| 9:00 AM | 1 | 187 | 1 | 0 | 0 | 189 | 1 | 296 | 1 | 0 | 0 | 298 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 489 |
| 9:15 AM | 2 | 193 | 2 | 0 | 0 | 197 | 1 | 264 | 1 | 0 | 0 | 266 | 1 | 1 | 3 | 0 | 0 | 5 | 2 | 1 | 1 | 0 | 0 | 4 | 472 |
| 9:30 AM | 0 | 207 | 1 | 0 | 0 | 208 | 1 | 248 | 0 | 0 | 0 | 249 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 2 | 461 |
| 9:45 AM | 1 | 168 | 0 | 0 | 0 | 169 | 0 | 282 | 0 | 0 | 0 | 282 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 454 |
| Total | 4 | 755 | 4 | 0 | 0 | 763 | 3 | 1090 | 2 | 0 | 0 | 1095 | 2 | 1 | 4 | 0 | 0 | 7 | 8 | 2 | 1 | 0 | 0 | 11 | 1876 |
| ***BREAK*** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4:00 PM | 0 | 456 | 4 | 0 | 0 | 460 | 0 | 235 | 2 | 0 | 0 | 237 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 701 |
| 4:15 PM | 0 | 556 | 5 | 0 | 0 | 561 | 0 | 264 | 1 | 0 | 0 | 265 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 0 | 0 | 0 | 5 | 832 |
| 4:30 PM | 0 | 487 | 10 | 0 | 0 | 497 | 2 | 239 | 0 | 0 | 0 | 241 | 2 | 0 | 1 | 0 | 0 | 3 | 4 | 0 | 1 | 0 | 0 | 5 | 746 |
| 4:45 PM | 0 | 560 | 7 | 0 | 0 | 567 | 0 | 250 | 3 | 0 | 0 | 253 | 2 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 3 | 825 |
| Total | 0 | 2059 | 26 | 0 | 0 | 2085 | 2 | 988 | 6 | 0 | 0 | 996 | 5 | 0 | 1 | 0 | 0 | 6 | 14 | 2 | 1 | 0 | 0 | 17 | 3104 |
| 5:00 PM | 1 | 567 | 1 | 0 | 0 | 569 | 1 | 228 | 1 | 0 | 0 | 230 | 1 | 1 | 1 | 0 | 1 | 3 | 3 | 0 | 3 | 0 | 0 | 6 | 808 |
| 5:15 PM | 1 | 596 | 8 | 0 | 0 | 605 | 0 | 267 | 0 | 0 | 0 | 267 | 0 | 0 | 2 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 4 | 878 |
| 5:30 PM | 0 | 623 | 8 | 0 | 0 | 631 | 0 | 242 | 0 | 0 | 0 | 242 | 2 | 0 | 2 | 0 | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 3 | 880 |
| 5:45 PM | 1 | 505 | 6 | 0 | 0 | 512 | 0 | 216 | 1 | 0 | 0 | 217 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 732 |
| Total | 3 | 2291 | 23 | 0 | 0 | 2317 | 1 | 953 | 2 | 0 | 0 | 956 | 3 | 1 | 4 | 1 | 0 | 9 | 12 | 0 | 4 | 0 | 0 | 16 | 3298 |
| 6:00 PM | 0 | 417 | 3 | 0 | 0 | 420 | 1 | 220 | 3 | 0 | 0 | 224 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 647 |
| 6:15 PM | 0 | 323 | 3 | 0 | 0 | 326 | 1 | 221 | 1 | 0 | 0 | 223 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 3 | 553 |
| 6:30 PM | 0 | 323 | 5 | 1 | 0 | 329 | 1 | 208 | 1 | 0 | 0 | 210 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 540 |
| 6:45 PM | 0 | 265 | 4 | 0 | 0 | 269 | 1 | 159 | 0 | 0 | 0 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 430 |
| Total | 0 | 1328 | 15 | 1 | 0 | 1344 | 4 | 808 | 5 | 0 | 0 | 817 | 1 | 1 | 0 | 0 | 0 | 2 | 5 | 1 | 1 | 0 | 0 | 7 | 2170 |
| Grand Total | 11 | 8024 | 76 | 2 | 0 | 8113 | 11 | 7348 | 22 | 0 | 0 | 7381 | 17 | 6 | 11 | 1 | 0 | 35 | 70 | 8 | 9 | 0 | 0 | 87 | 15616 |
| Apprch % | 0.1 | 98.9 | 0.9 | 0.0 | 0.0 | | 0.1 | 99.6 | 0.3 | 0.0 | 0.0 | | 48.6 | 17.1 | 31.4 | 2.9 | 0.0 | | 80.5 | 9.2 | 10.3 | 0.0 | 0.0 | | |
| Total % | 0.1 | 51.4 | 0.5 | 0.0 | 0.0 | 52.0 | 0.1 | 47.1 | 0.1 | 0.0 | 0.0 | 47.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.6 | |
| Cars, PU, Vans | 11 | 7513 | 76 | 0 | 0 | 7600 | 10 | 6826 | 22 | 0 | 0 | 6858 | 16 | 4 | 11 | 1 | 0 | 32 | 70 | 7 | 8 | 0 | 0 | 85 | 14575 |
| % Cars, PU, Vans | 100.0 | 93.6 | 100.0 | 0.0 | 0.0 | 93.7 | 90.9 | 92.9 | 100.0 | 0.0 | 92.9 | 94.1 | 66.7 | 100.0 | 100.0 | 91.4 | 100.0 | 91.4 | 100.0 | 87.5 | 88.9 | 0.0 | 0.0 | 97.7 | 93.3 |
| Heavy trucks | 0 | 511 | 0 | 2 | 0 | 513 | 1 | 522 | 0 | 0 | 0 | 523 | 1 | 2 | 0 | 0 | 0 | 3 | 0 | 1 | 1 | 0 | 0 | 2 | 1041 |
| % Heavy trucks | 0.0 | 6.4 | 0.0 | 100.0 | 0.0 | 6.3 | 9.1 | 7.1 | 0.0 | 0.0 | 7.1 | 5.9 | 33.3 | 0.0 | 0.0 | 8.6 | 0.0 | 8.6 | 0.0 | 12.5 | 11.1 | 0.0 | 0.0 | 2.3 | 6.7 |

CLASSIFICATION

US 23/SR 365/Cornelia Hwy S/O Cagle Rd

Day: Wednesday

Date: 3/30/2022

City: Lula

Project #: GA22_180057_001n

North Bound

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|--------------|-------------|-----------|------------|------------|-----------|------------|------------|-----------|-----------|------|------|--------------|
| 00:00 AM | 1 | 122 | 12 | 0 | 3 | 1 | 0 | 5 | 8 | 0 | 0 | 0 | 0 | 152 |
| 01:00 | 0 | 82 | 10 | 0 | 1 | 2 | 0 | 1 | 17 | 0 | 2 | 0 | 0 | 115 |
| 02:00 | 0 | 73 | 6 | 0 | 2 | 2 | 0 | 1 | 13 | 0 | 3 | 0 | 0 | 100 |
| 03:00 | 0 | 61 | 3 | 0 | 6 | 4 | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 85 |
| 04:00 | 0 | 54 | 6 | 0 | 8 | 0 | 0 | 3 | 27 | 0 | 0 | 0 | 0 | 98 |
| 05:00 | 0 | 109 | 16 | 0 | 10 | 0 | 0 | 9 | 19 | 0 | 1 | 0 | 0 | 164 |
| 06:00 | 0 | 235 | 46 | 0 | 17 | 1 | 0 | 3 | 29 | 0 | 0 | 0 | 0 | 331 |
| 07:00 | 0 | 486 | 208 | 2 | 31 | 2 | 0 | 3 | 40 | 0 | 0 | 0 | 0 | 772 |
| 08:00 | 0 | 410 | 273 | 5 | 60 | 4 | 0 | 13 | 60 | 0 | 0 | 0 | 0 | 825 |
| 09:00 | 1 | 383 | 250 | 3 | 57 | 12 | 0 | 14 | 44 | 1 | 0 | 0 | 0 | 765 |
| 10:00 | 0 | 453 | 242 | 2 | 57 | 6 | 1 | 10 | 54 | 0 | 1 | 0 | 0 | 826 |
| 11:00 | 0 | 577 | 287 | 3 | 49 | 10 | 0 | 8 | 57 | 3 | 0 | 0 | 0 | 994 |
| 12:00 PM | 4 | 676 | 244 | 2 | 33 | 5 | 0 | 8 | 67 | 0 | 0 | 0 | 0 | 1039 |
| 13:00 | 2 | 800 | 284 | 4 | 35 | 11 | 0 | 5 | 54 | 0 | 0 | 0 | 0 | 1195 |
| 14:00 | 1 | 939 | 326 | 3 | 28 | 13 | 3 | 9 | 48 | 2 | 0 | 0 | 0 | 1372 |
| 15:00 | 1 | 1183 | 495 | 3 | 28 | 11 | 1 | 8 | 57 | 2 | 2 | 0 | 0 | 1791 |
| 16:00 | 3 | 1446 | 548 | 3 | 42 | 8 | 0 | 6 | 27 | 2 | 0 | 0 | 0 | 2085 |
| 17:00 | 1 | 1687 | 562 | 2 | 28 | 3 | 0 | 11 | 41 | 0 | 0 | 0 | 0 | 2335 |
| 18:00 | 1 | 938 | 360 | 1 | 14 | 2 | 0 | 3 | 18 | 1 | 0 | 0 | 0 | 1338 |
| 19:00 | 2 | 724 | 225 | 0 | 11 | 2 | 0 | 3 | 23 | 0 | 0 | 0 | 0 | 990 |
| 20:00 | 1 | 609 | 99 | 3 | 3 | 1 | 0 | 11 | 15 | 0 | 0 | 0 | 0 | 742 |
| 21:00 | 0 | 552 | 55 | 0 | 5 | 2 | 0 | 7 | 9 | 0 | 1 | 0 | 0 | 631 |
| 22:00 | 0 | 353 | 13 | 0 | 1 | 0 | 0 | 6 | 15 | 0 | 2 | 0 | 0 | 390 |
| 23:00 | 0 | 260 | 3 | 0 | 3 | 0 | 0 | 1 | 14 | 0 | 2 | 0 | 0 | 283 |
| Totals | 18 | 13212 | 4573 | 36 | 532 | 102 | 5 | 151 | 764 | 11 | 14 | | | 19418 |
| % of Totals | 0% | 68% | 24% | 0% | 3% | 1% | 0% | 1% | 4% | 0% | 0% | | | 100% |

| | | | | | | | | | | | | | | | | |
|---------------------------------|-------|---------------|-------|-------|-------|------------------|-------|-------|-------|---------------|-------|---|-----|-------------------------|---|--|
| AM Volumes | 2 | 3045 | 1359 | 15 | 301 | 44 | 1 | 73 | 376 | 4 | 7 | 0 | 0 | 5227 | | |
| % AM | 0% | 16% | 7% | 0% | 2% | 0% | 0% | 0% | 2% | 0% | 0% | | | 27% | | |
| AM Peak Hour | | 11:00 | 11:00 | 08:00 | 08:00 | 09:00 | 10:00 | 09:00 | 08:00 | 11:00 | 02:00 | | | 11:00 | | |
| Volume | 1 | 577 | 287 | 5 | 60 | 12 | 1 | 14 | 60 | 3 | 3 | | | 994 | | |
| PM Volumes | 16 | 10167 | 3214 | 21 | 231 | 58 | 4 | 78 | 388 | 7 | 7 | 0 | 0 | 14191 | | |
| % PM | 0% | 52% | 17% | 0% | 1% | 0% | 0% | 0% | 2% | 0% | 0% | | | 73% | | |
| PM Peak Hour | 12:00 | 17:00 | 17:00 | 13:00 | 16:00 | 14:00 | 14:00 | 17:00 | 12:00 | 14:00 | 15:00 | | | 17:00 | | |
| Volume | 4 | 1687 | 562 | 4 | 42 | 13 | 3 | 11 | 67 | 2 | 2 | | | 2335 | | |
| Directional Peak Periods | | AM 7-9 | | | | NOON 12-2 | | | | PM 4-6 | | | | Off Peak Volumes | | |
| All Classes | | Volume | | | % | Volume | | | % | Volume | | | % | Volume | | |
| | | 1597 | ↔ | | 8% | 2234 | ↔ | | 12% | 4420 | ↔ | | 23% | 11167 | ↔ | |

| Classification Definitions | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

CLASSIFICATION

US 23/SR 365/Cornelia Hwy S/O Cagle Rd

Day: Wednesday

Date: 3/30/2022

City: Lula

Project #: GA22_180057_001s

South Bound

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|--------------|-------------|-----------|------------|-----------|-----|-----------|------------|-----------|-----------|-----------|------|--------------|
| 00:00 AM | 0 | 60 | 2 | 0 | 3 | 0 | 0 | 2 | 11 | 0 | 0 | 0 | 0 | 78 |
| 01:00 | 0 | 45 | 2 | 0 | 1 | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 0 | 62 |
| 02:00 | 0 | 54 | 3 | 0 | 2 | 0 | 0 | 1 | 17 | 0 | 0 | 0 | 0 | 77 |
| 03:00 | 0 | 111 | 2 | 0 | 4 | 0 | 0 | 1 | 13 | 0 | 0 | 0 | 0 | 131 |
| 04:00 | 0 | 319 | 4 | 0 | 5 | 0 | 0 | 5 | 19 | 0 | 0 | 0 | 0 | 352 |
| 05:00 | 0 | 869 | 18 | 0 | 11 | 0 | 0 | 3 | 11 | 0 | 0 | 0 | 0 | 912 |
| 06:00 | 0 | 1531 | 13 | 5 | 14 | 0 | 0 | 3 | 27 | 0 | 1 | 0 | 0 | 1594 |
| 07:00 | 0 | 1671 | 377 | 1 | 32 | 1 | 0 | 1 | 30 | 0 | 0 | 0 | 0 | 2113 |
| 08:00 | 0 | 1026 | 299 | 6 | 38 | 4 | 0 | 5 | 43 | 0 | 0 | 1 | 0 | 1422 |
| 09:00 | 1 | 778 | 232 | 0 | 28 | 3 | 0 | 5 | 53 | 0 | 0 | 0 | 0 | 1100 |
| 10:00 | 1 | 743 | 258 | 1 | 26 | 8 | 0 | 2 | 54 | 0 | 0 | 0 | 0 | 1093 |
| 11:00 | 2 | 630 | 232 | 0 | 31 | 11 | 0 | 5 | 61 | 0 | 0 | 0 | 0 | 972 |
| 12:00 PM | 2 | 743 | 203 | 3 | 27 | 5 | 0 | 4 | 53 | 1 | 0 | 0 | 0 | 1041 |
| 13:00 | 2 | 795 | 171 | 5 | 25 | 4 | 0 | 7 | 54 | 0 | 0 | 0 | 0 | 1063 |
| 14:00 | 3 | 761 | 202 | 3 | 32 | 4 | 0 | 3 | 48 | 0 | 0 | 0 | 0 | 1056 |
| 15:00 | 1 | 691 | 225 | 3 | 26 | 3 | 0 | 4 | 61 | 2 | 0 | 0 | 0 | 1016 |
| 16:00 | 3 | 746 | 188 | 1 | 33 | 1 | 0 | 7 | 38 | 0 | 0 | 0 | 0 | 1017 |
| 17:00 | 0 | 742 | 181 | 2 | 25 | 1 | 0 | 9 | 31 | 0 | 0 | 0 | 0 | 991 |
| 18:00 | 3 | 567 | 185 | 1 | 31 | 2 | 0 | 3 | 30 | 0 | 0 | 0 | 0 | 822 |
| 19:00 | 6 | 401 | 146 | 1 | 11 | 6 | 0 | 1 | 28 | 0 | 0 | 0 | 0 | 600 |
| 20:00 | 0 | 366 | 27 | 0 | 15 | 2 | 0 | 7 | 16 | 0 | 1 | 0 | 0 | 434 |
| 21:00 | 0 | 297 | 3 | 1 | 5 | 0 | 0 | 4 | 18 | 0 | 0 | 0 | 0 | 328 |
| 22:00 | 0 | 185 | 1 | 0 | 0 | 0 | 0 | 5 | 8 | 0 | 0 | 0 | 0 | 199 |
| 23:00 | 0 | 110 | 0 | 0 | 2 | 0 | 0 | 6 | 5 | 0 | 0 | 0 | 0 | 123 |
| Totals | 24 | 14241 | 2974 | 33 | 427 | 55 | | 93 | 742 | 3 | 3 | 1 | | 18596 |
| % of Totals | 0% | 77% | 16% | 0% | 2% | 0% | | 1% | 4% | 0% | 0% | 0% | | 100% |

| | | | | | | | | | | | | | | | | |
|---------------------------------|-------|---------------|-------|-------|-------|------------------|---|-------|---------------|--------|-------|-------------------------|-----|--------|---|--|
| AM Volumes | 4 | 7837 | 1442 | 13 | 195 | 27 | 0 | 33 | 352 | 0 | 2 | 1 | 0 | 9906 | | |
| % AM | 0% | 42% | 8% | 0% | 1% | 0% | | 0% | 2% | | 0% | 0% | | 53% | | |
| AM Peak Hour | 11:00 | 07:00 | 07:00 | 08:00 | 08:00 | 11:00 | | 04:00 | 11:00 | | 01:00 | 08:00 | | 07:00 | | |
| Volume | 2 | 1671 | 377 | 6 | 38 | 11 | | 5 | 61 | | 1 | 1 | | 2113 | | |
| PM Volumes | 20 | 6404 | 1532 | 20 | 232 | 28 | 0 | 60 | 390 | 3 | 1 | 0 | 0 | 8690 | | |
| % PM | 0% | 34% | 8% | 0% | 1% | 0% | | 0% | 2% | 0% | 0% | | | 47% | | |
| PM Peak Hour | 19:00 | 13:00 | 15:00 | 13:00 | 16:00 | 19:00 | | 17:00 | 15:00 | 15:00 | 20:00 | | | 13:00 | | |
| Volume | 6 | 795 | 225 | 5 | 33 | 6 | | 9 | 61 | 2 | 1 | | | 1063 | | |
| Directional Peak Periods | | AM 7-9 | | | | NOON 12-2 | | | PM 4-6 | | | Off Peak Volumes | | | | |
| All Classes | | Volume | | | % | Volume | | | % | Volume | | | % | Volume | | |
| | | 3535 | ↔ | | 19% | 2104 | ↔ | | 11% | 2008 | ↔ | | 11% | 10949 | ↔ | |

| Classification Definitions | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

CLASSIFICATION

US 23/SR 365/Cornelia Hwy S/O Cagle Rd

Day: Wednesday

Date: 3/30/2022

City: Lula

Project #: GA22_180057_001

Summary

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|--------------|-------------|-----------|------------|------------|-----------|------------|-------------|-----------|-----------|-----------|------|--------------|
| 00:00 AM | 1 | 182 | 14 | 0 | 6 | 1 | 0 | 7 | 19 | 0 | 0 | 0 | 0 | 230 |
| 01:00 | 0 | 127 | 12 | 0 | 2 | 2 | 0 | 1 | 30 | 0 | 3 | 0 | 0 | 177 |
| 02:00 | 0 | 127 | 9 | 0 | 4 | 2 | 0 | 2 | 30 | 0 | 3 | 0 | 0 | 177 |
| 03:00 | 0 | 172 | 5 | 0 | 10 | 4 | 0 | 4 | 21 | 0 | 0 | 0 | 0 | 216 |
| 04:00 | 0 | 373 | 10 | 0 | 13 | 0 | 0 | 8 | 46 | 0 | 0 | 0 | 0 | 450 |
| 05:00 | 0 | 978 | 34 | 0 | 21 | 0 | 0 | 12 | 30 | 0 | 1 | 0 | 0 | 1076 |
| 06:00 | 0 | 1766 | 59 | 5 | 31 | 1 | 0 | 6 | 56 | 0 | 1 | 0 | 0 | 1925 |
| 07:00 | 0 | 2157 | 585 | 3 | 63 | 3 | 0 | 4 | 70 | 0 | 0 | 0 | 0 | 2885 |
| 08:00 | 0 | 1436 | 572 | 11 | 98 | 8 | 0 | 18 | 103 | 0 | 0 | 1 | 0 | 2247 |
| 09:00 | 2 | 1161 | 482 | 3 | 85 | 15 | 0 | 19 | 97 | 1 | 0 | 0 | 0 | 1865 |
| 10:00 | 1 | 1196 | 500 | 3 | 83 | 14 | 1 | 12 | 108 | 0 | 1 | 0 | 0 | 1919 |
| 11:00 | 2 | 1207 | 519 | 3 | 80 | 21 | 0 | 13 | 118 | 3 | 0 | 0 | 0 | 1966 |
| 12:00 PM | 6 | 1419 | 447 | 5 | 60 | 10 | 0 | 12 | 120 | 1 | 0 | 0 | 0 | 2080 |
| 13:00 | 4 | 1595 | 455 | 9 | 60 | 15 | 0 | 12 | 108 | 0 | 0 | 0 | 0 | 2258 |
| 14:00 | 4 | 1700 | 528 | 6 | 60 | 17 | 3 | 12 | 96 | 2 | 0 | 0 | 0 | 2428 |
| 15:00 | 2 | 1874 | 720 | 6 | 54 | 14 | 1 | 12 | 118 | 4 | 2 | 0 | 0 | 2807 |
| 16:00 | 6 | 2192 | 736 | 4 | 75 | 9 | 0 | 13 | 65 | 2 | 0 | 0 | 0 | 3102 |
| 17:00 | 1 | 2429 | 743 | 4 | 53 | 4 | 0 | 20 | 72 | 0 | 0 | 0 | 0 | 3326 |
| 18:00 | 4 | 1505 | 545 | 2 | 45 | 4 | 0 | 6 | 48 | 1 | 0 | 0 | 0 | 2160 |
| 19:00 | 8 | 1125 | 371 | 1 | 22 | 8 | 0 | 4 | 51 | 0 | 0 | 0 | 0 | 1590 |
| 20:00 | 1 | 975 | 126 | 3 | 18 | 3 | 0 | 18 | 31 | 0 | 1 | 0 | 0 | 1176 |
| 21:00 | 0 | 849 | 58 | 1 | 10 | 2 | 0 | 11 | 27 | 0 | 1 | 0 | 0 | 959 |
| 22:00 | 0 | 538 | 14 | 0 | 1 | 0 | 0 | 11 | 23 | 0 | 2 | 0 | 0 | 589 |
| 23:00 | 0 | 370 | 3 | 0 | 5 | 0 | 0 | 7 | 19 | 0 | 2 | 0 | 0 | 406 |
| Totals | 42 | 27453 | 7547 | 69 | 959 | 157 | 5 | 244 | 1506 | 14 | 17 | 1 | | 38014 |
| % of Totals | 0% | 72% | 20% | 0% | 3% | 0% | 0% | 1% | 4% | 0% | 0% | 0% | | 100% |

| | | | | | | | | | | | | | | |
|---------------------------------|---------------|-------|------------------|--------|-------|-------|---------------|-------|-------|--------|-------------------------|-------|---|-------|
| AM Volumes | 6 | 10882 | 2801 | 28 | 496 | 71 | 1 | 106 | 728 | 4 | 9 | 1 | 0 | 15133 |
| % AM | 0% | 29% | 7% | 0% | 1% | 0% | 0% | 0% | 2% | 0% | 0% | 0% | | 40% |
| AM Peak Hour | 09:00 | 07:00 | 07:00 | 08:00 | 08:00 | 11:00 | 10:00 | 09:00 | 11:00 | 11:00 | 01:00 | 08:00 | | 07:00 |
| Volume | 2 | 2157 | 585 | 11 | 98 | 21 | 1 | 19 | 118 | 3 | 3 | 1 | | 2885 |
| PM Volumes | 36 | 16571 | 4746 | 41 | 463 | 86 | 4 | 138 | 778 | 10 | 8 | 0 | 0 | 22881 |
| % PM | 0% | 44% | 12% | 0% | 1% | 0% | 0% | 0% | 2% | 0% | 0% | | | 60% |
| PM Peak Hour | 19:00 | 17:00 | 17:00 | 13:00 | 16:00 | 14:00 | 14:00 | 17:00 | 12:00 | 15:00 | 15:00 | | | 17:00 |
| Volume | 8 | 2429 | 743 | 9 | 75 | 17 | 3 | 20 | 120 | 4 | 2 | | | 3326 |
| Directional Peak Periods | AM 7-9 | | NOON 12-2 | | | | PM 4-6 | | | | Off Peak Volumes | | | |
| All Classes | Volume | | % | Volume | | % | Volume | | % | Volume | | % | | |
| | 5132 | ↔ | 14% | 4338 | ↔ | 11% | 6428 | ↔ | 17% | 22116 | ↔ | 58% | | |

Classification Definitions

| | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

VOLUME

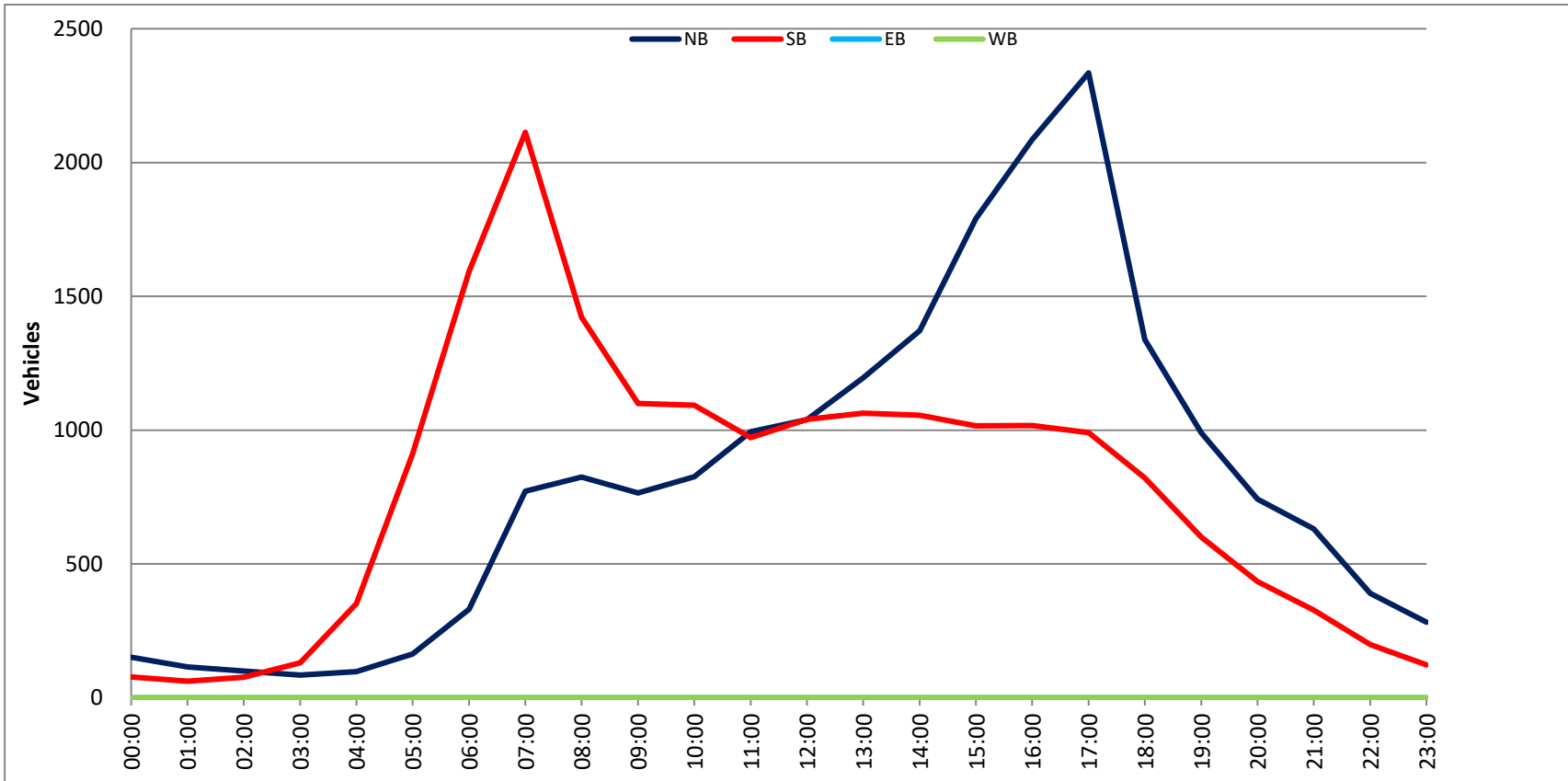
US 23/SR 365/Cornelia Hwy S/O Cagle Rd

Day: Wednesday
 Date: 3/30/2022

City: Lula
 Project #: GA22_180057_001

| DAILY TOTALS | | | | | | NB | SB | EB | WB | Total | |
|----------------|-------|-------|-----|------|-------|----------------|--------|-------|-----|--------|-------|
| | | | | | | 19,418 | 18,596 | 0 | 0 | 38,014 | |
| AM Period | NB | SB | EB | WB | TOTAL | PM Period | NB | SB | EB | WB | TOTAL |
| 00:00 | 43 | 17 | 0 | 0 | 60 | 12:00 | 259 | 261 | 0 | 0 | 520 |
| 00:15 | 28 | 26 | 0 | 0 | 54 | 12:15 | 248 | 271 | 0 | 0 | 519 |
| 00:30 | 43 | 26 | 0 | 0 | 69 | 12:30 | 247 | 241 | 0 | 0 | 488 |
| 00:45 | 38 | 152 | 9 | 78 | 47 | 12:45 | 285 | 1039 | 268 | 1041 | 553 |
| 01:00 | 26 | 24 | 0 | 0 | 50 | 13:00 | 296 | 271 | 0 | 0 | 567 |
| 01:15 | 28 | 13 | 0 | 0 | 41 | 13:15 | 299 | 274 | 0 | 0 | 573 |
| 01:30 | 29 | 14 | 0 | 0 | 43 | 13:30 | 295 | 271 | 0 | 0 | 566 |
| 01:45 | 32 | 115 | 11 | 62 | 43 | 13:45 | 305 | 1195 | 247 | 1063 | 552 |
| 02:00 | 22 | 15 | 0 | 0 | 37 | 14:00 | 288 | 248 | 0 | 0 | 536 |
| 02:15 | 27 | 23 | 0 | 0 | 50 | 14:15 | 344 | 273 | 0 | 0 | 617 |
| 02:30 | 21 | 18 | 0 | 0 | 39 | 14:30 | 356 | 286 | 0 | 0 | 642 |
| 02:45 | 30 | 100 | 21 | 77 | 51 | 14:45 | 384 | 1372 | 249 | 1056 | 633 |
| 03:00 | 16 | 23 | 0 | 0 | 39 | 15:00 | 399 | 242 | 0 | 0 | 641 |
| 03:15 | 29 | 23 | 0 | 0 | 52 | 15:15 | 426 | 267 | 0 | 0 | 693 |
| 03:30 | 22 | 42 | 0 | 0 | 64 | 15:30 | 468 | 247 | 0 | 0 | 715 |
| 03:45 | 18 | 85 | 43 | 131 | 61 | 15:45 | 498 | 1791 | 260 | 1016 | 758 |
| 04:00 | 18 | 48 | 0 | 0 | 66 | 16:00 | 464 | 239 | 0 | 0 | 703 |
| 04:15 | 17 | 74 | 0 | 0 | 91 | 16:15 | 553 | 268 | 0 | 0 | 821 |
| 04:30 | 35 | 121 | 0 | 0 | 156 | 16:30 | 494 | 243 | 0 | 0 | 737 |
| 04:45 | 28 | 98 | 109 | 352 | 137 | 16:45 | 574 | 2085 | 267 | 1017 | 841 |
| 05:00 | 25 | 133 | 0 | 0 | 158 | 17:00 | 576 | 239 | 0 | 0 | 815 |
| 05:15 | 35 | 209 | 0 | 0 | 244 | 17:15 | 599 | 286 | 0 | 0 | 885 |
| 05:30 | 52 | 286 | 0 | 0 | 338 | 17:30 | 630 | 245 | 0 | 0 | 875 |
| 05:45 | 52 | 164 | 284 | 912 | 336 | 17:45 | 530 | 2335 | 221 | 991 | 751 |
| 06:00 | 73 | 361 | 0 | 0 | 434 | 18:00 | 410 | 229 | 0 | 0 | 639 |
| 06:15 | 80 | 426 | 0 | 0 | 506 | 18:15 | 318 | 221 | 0 | 0 | 539 |
| 06:30 | 83 | 432 | 0 | 0 | 515 | 18:30 | 339 | 210 | 0 | 0 | 549 |
| 06:45 | 95 | 331 | 375 | 1594 | 470 | 18:45 | 271 | 1338 | 162 | 822 | 433 |
| 07:00 | 154 | 428 | 0 | 0 | 582 | 19:00 | 260 | 168 | 0 | 0 | 428 |
| 07:15 | 204 | 618 | 0 | 0 | 822 | 19:15 | 258 | 160 | 0 | 0 | 418 |
| 07:30 | 240 | 605 | 0 | 0 | 845 | 19:30 | 248 | 149 | 0 | 0 | 397 |
| 07:45 | 174 | 772 | 462 | 2113 | 636 | 19:45 | 224 | 990 | 123 | 600 | 347 |
| 08:00 | 219 | 393 | 0 | 0 | 612 | 20:00 | 214 | 120 | 0 | 0 | 334 |
| 08:15 | 212 | 395 | 0 | 0 | 607 | 20:15 | 197 | 118 | 0 | 0 | 315 |
| 08:30 | 181 | 337 | 0 | 0 | 518 | 20:30 | 179 | 115 | 0 | 0 | 294 |
| 08:45 | 213 | 825 | 297 | 1422 | 510 | 20:45 | 152 | 742 | 81 | 434 | 233 |
| 09:00 | 193 | 292 | 0 | 0 | 485 | 21:00 | 172 | 88 | 0 | 0 | 260 |
| 09:15 | 193 | 268 | 0 | 0 | 461 | 21:15 | 172 | 88 | 0 | 0 | 260 |
| 09:30 | 201 | 257 | 0 | 0 | 458 | 21:30 | 157 | 78 | 0 | 0 | 235 |
| 09:45 | 178 | 765 | 283 | 1100 | 461 | 21:45 | 130 | 631 | 74 | 328 | 204 |
| 10:00 | 183 | 262 | 0 | 0 | 445 | 22:00 | 115 | 64 | 0 | 0 | 179 |
| 10:15 | 205 | 283 | 0 | 0 | 488 | 22:15 | 103 | 57 | 0 | 0 | 160 |
| 10:30 | 224 | 282 | 0 | 0 | 506 | 22:30 | 106 | 47 | 0 | 0 | 153 |
| 10:45 | 214 | 826 | 266 | 1093 | 480 | 22:45 | 66 | 390 | 31 | 199 | 97 |
| 11:00 | 222 | 245 | 0 | 0 | 467 | 23:00 | 78 | 33 | 0 | 0 | 111 |
| 11:15 | 247 | 244 | 0 | 0 | 491 | 23:15 | 85 | 32 | 0 | 0 | 117 |
| 11:30 | 268 | 264 | 0 | 0 | 532 | 23:30 | 66 | 32 | 0 | 0 | 98 |
| 11:45 | 257 | 994 | 219 | 972 | 476 | 23:45 | 54 | 283 | 26 | 123 | 80 |
| TOTALS | 5227 | 9906 | | | 15133 | TOTALS | 14191 | 8690 | | | 22881 |
| SPLIT % | 34.5% | 65.5% | | | 39.8% | SPLIT % | 62.0% | 38.0% | | | 60.2% |

| DAILY TOTALS | | | | | | NB | SB | EB | WB | Total |
|-----------------|-------|-------|-------|-------|-------|-----------------|--------|-------|-------|--------|
| | | | | | | 19,418 | 18,596 | 0 | 0 | 38,014 |
| AM Peak Hour | 11:30 | 07:00 | | | 07:15 | PM Peak Hour | 16:45 | 12:45 | | 16:45 |
| AM Pk Volume | 1032 | 2113 | | | 2915 | PM Pk Volume | 2379 | 1084 | | 3416 |
| Pk Hr Factor | 0.963 | 0.855 | | | 0.862 | Pk Hr Factor | 0.944 | 0.989 | | 0.965 |
| 7 - 9 Volume | 1597 | 3535 | 0 | 0 | 5132 | 4 - 6 Volume | 4420 | 2008 | 0 | 6428 |
| 7 - 9 Peak Hour | 07:30 | 07:00 | | | 07:15 | 4 - 6 Peak Hour | 16:45 | 16:45 | | 16:45 |
| 7 - 9 Pk Volume | 845 | 2113 | 0 | 0 | 2915 | 4 - 6 Pk Volume | 2379 | 1037 | 0 | 3416 |
| Pk Hr Factor | 0.880 | 0.855 | 0.000 | 0.000 | 0.862 | Pk Hr Factor | 0.944 | 0.906 | 0.000 | 0.965 |



CLASSIFICATION

Old Cornelia Hwy W/O Hyde Mill Rd

Day: Wednesday
Date: 3/30/2022

City: Lula
Project #: GA22_180057_002e

East Bound

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|-------------|------------|-----------|-----------|-----------|-----|-----------|-----------|-----------|------|------|------|-------------|
| 00:00 AM | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 01:00 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 9 |
| 02:00 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 03:00 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 9 |
| 04:00 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 05:00 | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| 06:00 | 0 | 26 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 07:00 | 0 | 45 | 12 | 0 | 4 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 63 |
| 08:00 | 0 | 72 | 19 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 98 |
| 09:00 | 0 | 44 | 14 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| 10:00 | 0 | 48 | 17 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 |
| 11:00 | 0 | 70 | 25 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 99 |
| 12:00 PM | 0 | 100 | 23 | 0 | 2 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 129 |
| 13:00 | 2 | 106 | 30 | 0 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 144 |
| 14:00 | 2 | 91 | 29 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 129 |
| 15:00 | 2 | 166 | 58 | 2 | 6 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 236 |
| 16:00 | 0 | 210 | 48 | 2 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 267 |
| 17:00 | 3 | 234 | 50 | 0 | 3 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 294 |
| 18:00 | 2 | 162 | 34 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 |
| 19:00 | 0 | 90 | 17 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 108 |
| 20:00 | 0 | 103 | 26 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 131 |
| 21:00 | 0 | 52 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 |
| 22:00 | 0 | 42 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 |
| 23:00 | 0 | 27 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| Totals | 12 | 1724 | 430 | 5 | 53 | 9 | | 6 | 11 | 1 | | | | 2251 |
| % of Totals | 1% | 77% | 19% | 0% | 2% | 0% | | 0% | 0% | 0% | | | | 100% |

| | | | | | | | | | | | | | | |
|---------------------------------|-------|---------------|-------|-------|--------|------------------|-----|--------|---------------|-------|--------|-------------------------|-----|-------|
| AM Volumes | 1 | 341 | 98 | 0 | 24 | 0 | 0 | 2 | 6 | 0 | 0 | 0 | 0 | 472 |
| % AM | 0% | 15% | 4% | | 1% | | | 0% | 0% | | | | | 21% |
| AM Peak Hour | 05:00 | 08:00 | 11:00 | | 08:00 | | | 07:00 | 01:00 | | | | | 11:00 |
| Volume | 1 | 72 | 25 | | 7 | | | 1 | 2 | | | | | 99 |
| PM Volumes | 11 | 1383 | 332 | 5 | 29 | 9 | 0 | 4 | 5 | 1 | 0 | 0 | 0 | 1779 |
| % PM | 0% | 61% | 15% | 0% | 1% | 0% | | 0% | 0% | 0% | | | | 79% |
| PM Peak Hour | 17:00 | 17:00 | 15:00 | 15:00 | 14:00 | 12:00 | | 13:00 | 12:00 | 15:00 | | | | 17:00 |
| Volume | 3 | 234 | 58 | 2 | 6 | 2 | | 2 | 2 | 1 | | | | 294 |
| Directional Peak Periods | | AM 7-9 | | | | NOON 12-2 | | | PM 4-6 | | | Off Peak Volumes | | |
| All Classes | | Volume | | | Volume | | | Volume | | | Volume | | | |
| | | 161 | ↔ | 7% | 273 | ↔ | 12% | 561 | ↔ | 25% | 1256 | ↔ | 56% | |

| Classification Definitions | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

CLASSIFICATION

Old Cornelia Hwy W/O Hyde Mill Rd

Day: Wednesday

Date: 3/30/2022

City: Lula

Project #: GA22_180057_002w

West Bound

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|-------------|------------|-----------|-----------|-----------|-----|-----------|-----------|-----------|------|------|------|-------------|
| 00:00 AM | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 01:00 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| 02:00 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 5 |
| 03:00 | 0 | 4 | 4 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 10 |
| 04:00 | 0 | 13 | 10 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 25 |
| 05:00 | 1 | 59 | 22 | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 87 |
| 06:00 | 2 | 134 | 40 | 2 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 186 |
| 07:00 | 0 | 270 | 59 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 337 |
| 08:00 | 0 | 166 | 42 | 2 | 4 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 216 |
| 09:00 | 0 | 96 | 27 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 129 |
| 10:00 | 0 | 71 | 23 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 99 |
| 11:00 | 0 | 57 | 26 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 92 |
| 12:00 PM | 0 | 78 | 31 | 0 | 6 | 1 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 121 |
| 13:00 | 1 | 63 | 24 | 1 | 5 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 96 |
| 14:00 | 1 | 116 | 24 | 1 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 148 |
| 15:00 | 1 | 74 | 27 | 2 | 6 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 112 |
| 16:00 | 0 | 96 | 23 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 124 |
| 17:00 | 1 | 88 | 25 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 115 |
| 18:00 | 1 | 80 | 28 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 |
| 19:00 | 1 | 61 | 17 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| 20:00 | 0 | 50 | 15 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 |
| 21:00 | 0 | 31 | 12 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| 22:00 | 0 | 23 | 5 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 31 |
| 23:00 | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Totals | 9 | 1648 | 488 | 15 | 65 | 6 | | 9 | 14 | 1 | | | | 2255 |
| % of Totals | 0% | 73% | 22% | 1% | 3% | 0% | | 0% | 1% | 0% | | | | 100% |

| | | | | | | | | | | | | | | | | |
|---------------------------------|-------|---------------|-------|-------|-------|------------------|---|-------|---------------|--------|---|-------------------------|-----|--------|---|--|
| AM Volumes | 3 | 881 | 255 | 10 | 33 | 4 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 1197 | | |
| % AM | 0% | 39% | 11% | 0% | 1% | 0% | | 0% | 0% | | | | | 53% | | |
| AM Peak Hour | 06:00 | 07:00 | 07:00 | 07:00 | 06:00 | 03:00 | | 02:00 | 01:00 | | | | | 07:00 | | |
| Volume | 2 | 270 | 59 | 3 | 7 | 1 | | 1 | 1 | | | | | 337 | | |
| PM Volumes | 6 | 767 | 233 | 5 | 32 | 2 | 0 | 5 | 7 | 1 | 0 | 0 | 0 | 1058 | | |
| % PM | 0% | 34% | 10% | 0% | 1% | 0% | | 0% | 0% | 0% | | | | 47% | | |
| PM Peak Hour | 13:00 | 14:00 | 12:00 | 15:00 | 12:00 | 12:00 | | 12:00 | 12:00 | 15:00 | | | | 14:00 | | |
| Volume | 1 | 116 | 31 | 2 | 6 | 1 | | 2 | 3 | 1 | | | | 148 | | |
| Directional Peak Periods | | AM 7-9 | | | | NOON 12-2 | | | PM 4-6 | | | Off Peak Volumes | | | | |
| All Classes | | Volume | | | % | Volume | | | % | Volume | | | % | Volume | | |
| | | 553 | ↔ | | 25% | 217 | ↔ | | 10% | 239 | ↔ | | 11% | 1246 | ↔ | |

| Classification Definitions | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

CLASSIFICATION

Old Cornelia Hwy W/O Hyde Mill Rd

Day: Wednesday
Date: 3/30/2022

City: Lula
Project #: GA22_180057_002

Summary

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|-------------|------------|-----------|------------|-----------|-----|-----------|-----------|-----------|------|------|------|-------------|
| 00:00 AM | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 01:00 | 0 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 14 |
| 02:00 | 0 | 8 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 12 |
| 03:00 | 0 | 9 | 6 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 19 |
| 04:00 | 0 | 16 | 11 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 29 |
| 05:00 | 2 | 62 | 24 | 0 | 3 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 94 |
| 06:00 | 2 | 160 | 43 | 2 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 218 |
| 07:00 | 0 | 315 | 71 | 3 | 9 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 400 |
| 08:00 | 0 | 238 | 61 | 2 | 11 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 314 |
| 09:00 | 0 | 140 | 41 | 1 | 5 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 190 |
| 10:00 | 0 | 119 | 40 | 0 | 8 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 168 |
| 11:00 | 0 | 127 | 51 | 2 | 10 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 191 |
| 12:00 PM | 0 | 178 | 54 | 0 | 8 | 3 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 250 |
| 13:00 | 3 | 169 | 54 | 1 | 7 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 240 |
| 14:00 | 3 | 207 | 53 | 2 | 10 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 277 |
| 15:00 | 3 | 240 | 85 | 4 | 12 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 348 |
| 16:00 | 0 | 306 | 71 | 3 | 8 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 391 |
| 17:00 | 4 | 322 | 75 | 0 | 4 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 409 |
| 18:00 | 3 | 242 | 62 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 310 |
| 19:00 | 1 | 151 | 34 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 189 |
| 20:00 | 0 | 153 | 41 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 198 |
| 21:00 | 0 | 83 | 22 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 |
| 22:00 | 0 | 65 | 11 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 80 |
| 23:00 | 0 | 34 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| Totals | 21 | 3372 | 918 | 20 | 118 | 15 | | 15 | 25 | 2 | | | | 4506 |
| % of Totals | 0% | 75% | 20% | 0% | 3% | 0% | | 0% | 1% | 0% | | | | 100% |

| | | | | | | | | | | | | | | |
|---------------------|-------|-------|-------|-------|-------|-------|---|-------|-------|-------|---|---|---|-------|
| AM Volumes | 4 | 1222 | 353 | 10 | 57 | 4 | 0 | 6 | 13 | 0 | 0 | 0 | 0 | 1669 |
| % AM | 0% | 27% | 8% | 0% | 1% | 0% | | 0% | 0% | | | | | 37% |
| AM Peak Hour | 05:00 | 07:00 | 07:00 | 07:00 | 08:00 | 03:00 | | 02:00 | 01:00 | | | | | 07:00 |
| Volume | 2 | 315 | 71 | 3 | 11 | 1 | | 1 | 3 | | | | | 400 |
| PM Volumes | 17 | 2150 | 565 | 10 | 61 | 11 | 0 | 9 | 12 | 2 | 0 | 0 | 0 | 2837 |
| % PM | 0% | 48% | 13% | 0% | 1% | 0% | | 0% | 0% | 0% | | | | 63% |
| PM Peak Hour | 17:00 | 17:00 | 15:00 | 15:00 | 15:00 | 12:00 | | 13:00 | 12:00 | 15:00 | | | | 17:00 |
| Volume | 4 | 322 | 85 | 4 | 12 | 3 | | 4 | 5 | 2 | | | | 409 |

| Directional Peak Periods All Classes | AM 7-9 | | NOON 12-2 | | PM 4-6 | | Off Peak Volumes | |
|---|--------|-----|-----------|-----|--------|-----|------------------|-----|
| | Volume | % | Volume | % | Volume | % | Volume | % |
| | 714 | 16% | 490 | 11% | 800 | 18% | 2502 | 56% |

| Classification Definitions | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

VOLUME

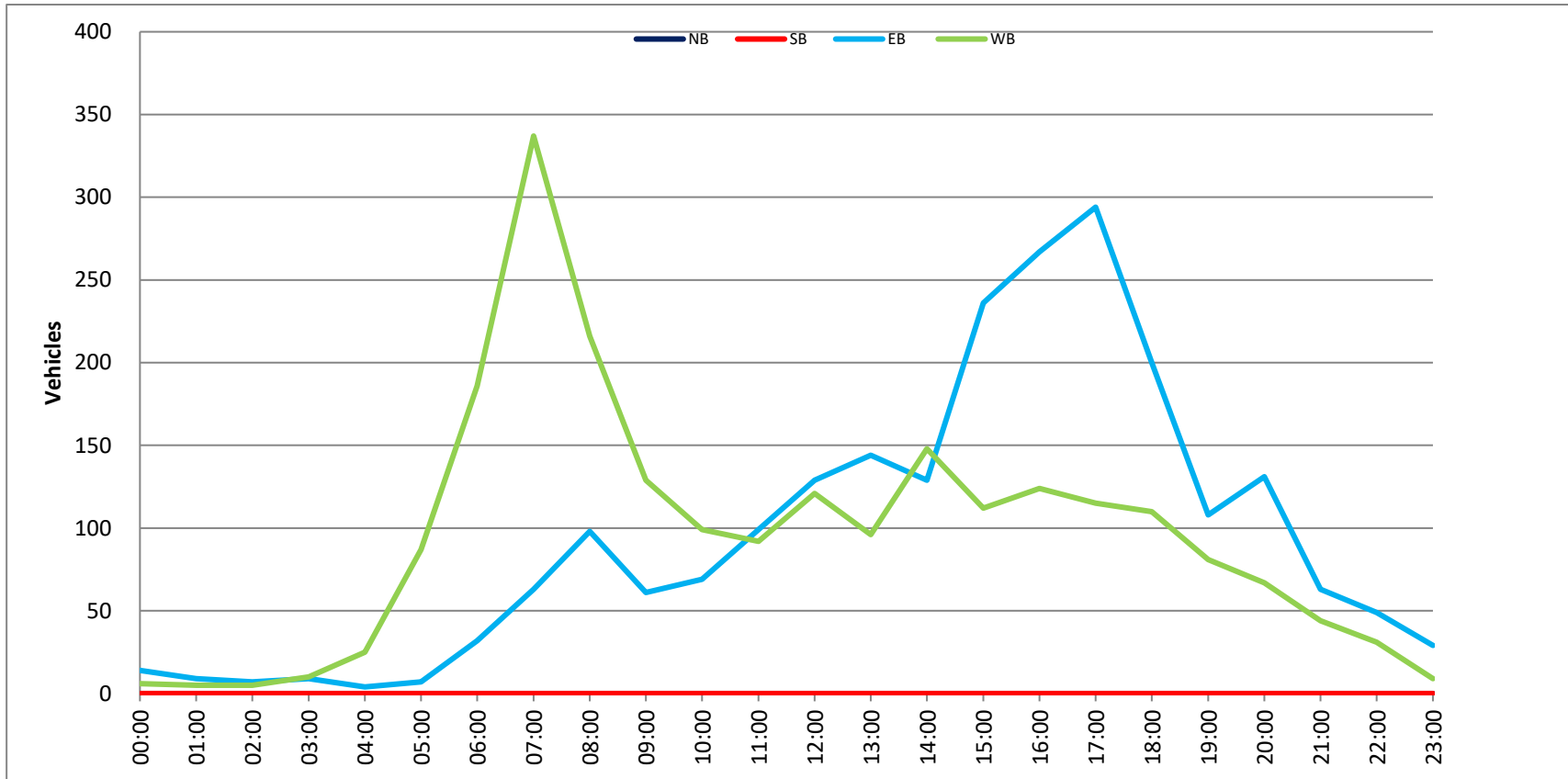
Old Cornelia Hwy W/O Hyde Mill Rd

Day: Wednesday
 Date: 3/30/2022

City: Lula
 Project #: GA22_180057_002

| DAILY TOTALS | | | | | | NB | SB | EB | WB | Total | | | | |
|----------------|----|----|-------|-------|-------|----------------|----|-------|-------|-------|-------|-----|-----|-----|
| | | | | | | 0 | 0 | 2,251 | 2,255 | 4,506 | | | | |
| AM Period | NB | SB | EB | WB | TOTAL | PM Period | NB | SB | EB | WB | TOTAL | | | |
| 00:00 | 0 | 0 | 4 | 0 | 4 | 12:00 | 0 | 0 | 35 | 23 | 58 | | | |
| 00:15 | 0 | 0 | 6 | 3 | 9 | 12:15 | 0 | 0 | 32 | 31 | 63 | | | |
| 00:30 | 0 | 0 | 2 | 2 | 4 | 12:30 | 0 | 0 | 32 | 32 | 64 | | | |
| 00:45 | 0 | 0 | 2 | 14 | 1 | 12:45 | 0 | 0 | 30 | 129 | 35 | 121 | 65 | 250 |
| 01:00 | 0 | 0 | 3 | 0 | 3 | 13:00 | 0 | 0 | 34 | 23 | 57 | | | |
| 01:15 | 0 | 0 | 3 | 2 | 5 | 13:15 | 0 | 0 | 27 | 27 | 54 | | | |
| 01:30 | 0 | 0 | 1 | 2 | 3 | 13:30 | 0 | 0 | 32 | 24 | 56 | | | |
| 01:45 | 0 | 0 | 2 | 9 | 1 | 13:45 | 0 | 0 | 51 | 144 | 22 | 96 | 73 | 240 |
| 02:00 | 0 | 0 | 1 | 0 | 1 | 14:00 | 0 | 0 | 21 | 34 | 55 | | | |
| 02:15 | 0 | 0 | 3 | 3 | 6 | 14:15 | 0 | 0 | 36 | 22 | 58 | | | |
| 02:30 | 0 | 0 | 0 | 0 | 0 | 14:30 | 0 | 0 | 38 | 45 | 83 | | | |
| 02:45 | 0 | 0 | 3 | 7 | 2 | 14:45 | 0 | 0 | 34 | 129 | 47 | 148 | 81 | 277 |
| 03:00 | 0 | 0 | 2 | 1 | 3 | 15:00 | 0 | 0 | 41 | 31 | 72 | | | |
| 03:15 | 0 | 0 | 3 | 4 | 7 | 15:15 | 0 | 0 | 53 | 28 | 81 | | | |
| 03:30 | 0 | 0 | 3 | 4 | 7 | 15:30 | 0 | 0 | 66 | 28 | 94 | | | |
| 03:45 | 0 | 0 | 1 | 9 | 1 | 15:45 | 0 | 0 | 76 | 236 | 25 | 112 | 101 | 348 |
| 04:00 | 0 | 0 | 2 | 3 | 5 | 16:00 | 0 | 0 | 66 | 26 | 92 | | | |
| 04:15 | 0 | 0 | 0 | 6 | 6 | 16:15 | 0 | 0 | 61 | 33 | 94 | | | |
| 04:30 | 0 | 0 | 1 | 6 | 7 | 16:30 | 0 | 0 | 62 | 34 | 96 | | | |
| 04:45 | 0 | 0 | 1 | 4 | 10 | 16:45 | 0 | 0 | 78 | 267 | 31 | 124 | 109 | 391 |
| 05:00 | 0 | 0 | 2 | 14 | 16 | 17:00 | 0 | 0 | 79 | 38 | 117 | | | |
| 05:15 | 0 | 0 | 0 | 23 | 23 | 17:15 | 0 | 0 | 91 | 31 | 122 | | | |
| 05:30 | 0 | 0 | 2 | 23 | 25 | 17:30 | 0 | 0 | 73 | 27 | 100 | | | |
| 05:45 | 0 | 0 | 3 | 7 | 27 | 17:45 | 0 | 0 | 51 | 294 | 19 | 115 | 70 | 409 |
| 06:00 | 0 | 0 | 8 | 37 | 45 | 18:00 | 0 | 0 | 60 | 35 | 95 | | | |
| 06:15 | 0 | 0 | 9 | 40 | 49 | 18:15 | 0 | 0 | 66 | 22 | 88 | | | |
| 06:30 | 0 | 0 | 4 | 57 | 61 | 18:30 | 0 | 0 | 48 | 29 | 77 | | | |
| 06:45 | 0 | 0 | 11 | 32 | 52 | 18:45 | 0 | 0 | 26 | 200 | 24 | 110 | 50 | 310 |
| 07:00 | 0 | 0 | 9 | 63 | 72 | 19:00 | 0 | 0 | 26 | 27 | 53 | | | |
| 07:15 | 0 | 0 | 16 | 75 | 91 | 19:15 | 0 | 0 | 27 | 23 | 50 | | | |
| 07:30 | 0 | 0 | 22 | 100 | 122 | 19:30 | 0 | 0 | 31 | 12 | 43 | | | |
| 07:45 | 0 | 0 | 16 | 63 | 99 | 19:45 | 0 | 0 | 24 | 108 | 19 | 81 | 43 | 189 |
| 08:00 | 0 | 0 | 38 | 94 | 132 | 20:00 | 0 | 0 | 37 | 20 | 57 | | | |
| 08:15 | 0 | 0 | 29 | 50 | 79 | 20:15 | 0 | 0 | 39 | 19 | 58 | | | |
| 08:30 | 0 | 0 | 16 | 37 | 53 | 20:30 | 0 | 0 | 26 | 16 | 42 | | | |
| 08:45 | 0 | 0 | 15 | 98 | 35 | 20:45 | 0 | 0 | 29 | 131 | 12 | 67 | 41 | 198 |
| 09:00 | 0 | 0 | 16 | 31 | 47 | 21:00 | 0 | 0 | 24 | 10 | 34 | | | |
| 09:15 | 0 | 0 | 17 | 34 | 51 | 21:15 | 0 | 0 | 19 | 7 | 26 | | | |
| 09:30 | 0 | 0 | 12 | 23 | 35 | 21:30 | 0 | 0 | 11 | 16 | 27 | | | |
| 09:45 | 0 | 0 | 16 | 61 | 41 | 21:45 | 0 | 0 | 9 | 63 | 11 | 44 | 20 | 107 |
| 10:00 | 0 | 0 | 13 | 30 | 43 | 22:00 | 0 | 0 | 19 | 6 | 25 | | | |
| 10:15 | 0 | 0 | 19 | 23 | 42 | 22:15 | 0 | 0 | 15 | 11 | 26 | | | |
| 10:30 | 0 | 0 | 19 | 21 | 40 | 22:30 | 0 | 0 | 4 | 9 | 13 | | | |
| 10:45 | 0 | 0 | 18 | 69 | 25 | 22:45 | 0 | 0 | 11 | 49 | 5 | 31 | 16 | 80 |
| 11:00 | 0 | 0 | 25 | 16 | 41 | 23:00 | 0 | 0 | 8 | 3 | 11 | | | |
| 11:15 | 0 | 0 | 28 | 21 | 49 | 23:15 | 0 | 0 | 8 | 4 | 12 | | | |
| 11:30 | 0 | 0 | 30 | 26 | 56 | 23:30 | 0 | 0 | 6 | 2 | 8 | | | |
| 11:45 | 0 | 0 | 16 | 99 | 29 | 23:45 | 0 | 0 | 7 | 29 | 0 | 9 | 7 | 38 |
| TOTALS | | | 472 | 1197 | 1669 | TOTALS | | | 1779 | 1058 | 2837 | | | |
| SPLIT % | | | 28.3% | 71.7% | 37.0% | SPLIT % | | | 62.7% | 37.3% | 63.0% | | | |

| DAILY TOTALS | | | | | | NB | SB | EB | WB | Total | |
|-----------------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|
| | | | | | | 0 | 0 | 2,251 | 2,255 | 4,506 | |
| AM Peak Hour | | | 11:45 | 07:15 | 07:15 | PM Peak Hour | | | 16:45 | 14:30 | 16:45 |
| AM Pk Volume | | | 115 | 368 | 460 | PM Pk Volume | | | 321 | 151 | 448 |
| Pk Hr Factor | | | 0.821 | 0.920 | 0.871 | Pk Hr Factor | | | 0.882 | 0.803 | 0.918 |
| 7 - 9 Volume | 0 | 0 | 161 | 553 | 714 | 4 - 6 Volume | 0 | 0 | 561 | 239 | 800 |
| 7 - 9 Peak Hour | | | 07:30 | 07:15 | 07:15 | 4 - 6 Peak Hour | | | 16:45 | 16:15 | 16:45 |
| 7 - 9 Pk Volume | 0 | 0 | 105 | 368 | 460 | 4 - 6 Pk Volume | 0 | 0 | 321 | 136 | 448 |
| Pk Hr Factor | 0.000 | 0.000 | 0.691 | 0.920 | 0.871 | Pk Hr Factor | 0.000 | 0.000 | 0.882 | 0.895 | 0.918 |



CLASSIFICATION

Cagle Mill Rd S/O Julian Baugh Rd

Day: Wednesday
Date: 3/30/2022

City: Lula
Project #: GA22_180057_003

Summary

Table with columns: Time, #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13, Total. Rows show hourly traffic counts from 00:00 AM to 23:45.

Summary statistics table including AM Volumes, PM Volumes, Directional Peak Periods, and Off Peak Volumes.

Classification Definitions table listing vehicle types and their corresponding classification codes (1-13).

CLASSIFICATION

Cagle Mill Rd S/O Julian Baugh Rd

Day: Wednesday

Date: 3/30/2022

City: Lula

Project #: GA22_180057_003n

North Bound

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|------------|------------|-----|-----------|-----|-----|-----|-----|------|------|------|------|-------------|
| 00:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:00 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 06:00 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 07:00 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 08:00 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 09:00 | 0 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 10:00 | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 11:00 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 12:00 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 13:00 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 14:00 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 15:00 | 0 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 16:00 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 17:00 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 18:00 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 19:00 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21:00 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 1 | 44 | 18 | | 2 | | | | | | | | | 65 |
| % of Totals | 2% | 68% | 28% | | 3% | | | | | | | | | 100% |

| | | | | | | | | | | | | | | | | |
|---------------------------------|----|---------------|-------|---|-------|------------------|---|---|-----|---------------|---|---|----|-------------------------|---|--|
| AM Volumes | 1 | 24 | 11 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | | |
| % AM | 2% | 37% | 17% | | 2% | | | | | | | | | 57% | | |
| AM Peak Hour | | 10:00 | 05:00 | | 09:00 | | | | | | | | | 10:00 | | |
| Volume | 1 | 7 | 2 | | 1 | | | | | | | | | 9 | | |
| PM Volumes | 0 | 20 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | | |
| % PM | | 31% | 11% | | 2% | | | | | | | | | 43% | | |
| PM Peak Hour | | 12:00 | 15:00 | | 15:00 | | | | | | | | | 15:00 | | |
| Volume | | 3 | 2 | | 1 | | | | | | | | | 5 | | |
| Directional Peak Periods | | AM 7-9 | | | | NOON 12-2 | | | | PM 4-6 | | | | Off Peak Volumes | | |
| All Classes | | Volume | ↔ | | % | Volume | ↔ | | % | Volume | ↔ | | % | Volume | ↔ | |
| | | 6 | | | 9% | 8 | | | 12% | 4 | | | 6% | 47 | | |

| Classification Definitions | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

CLASSIFICATION

Cagle Mill Rd S/O Julian Baugh Rd

Day: Wednesday

Date: 3/30/2022

City: Lula

Project #: GA22_180057_003s

South Bound

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|------------|------------|-----|-----------|-----------|-----|-----|-----|------|------|------|------|-------------|
| 00:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:00 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 06:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 07:00 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 08:00 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 09:00 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 10:00 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 11:00 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 12:00 PM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 13:00 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 14:00 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 15:00 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 16:00 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 17:00 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 18:00 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 19:00 | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 20:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 21:00 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 22:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 1 | 48 | 17 | | 1 | 2 | | | | | | | | 69 |
| % of Totals | 1% | 70% | 25% | | 1% | 3% | | | | | | | | 100% |

| | | | | | | | | | | | | | | |
|---------------------------------|-------|---------------|-------|-----|--------|------------------|--------|---|---------------|---|--------|-------------------------|-----|-------|
| AM Volumes | 1 | 13 | 6 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| % AM | 1% | 19% | 9% | | 1% | 1% | | | | | | | | 32% |
| AM Peak Hour | 02:00 | 09:00 | 08:00 | | 11:00 | 07:00 | | | | | | | | 08:00 |
| Volume | 1 | 3 | 4 | | 1 | 1 | | | | | | | | 5 |
| PM Volumes | 0 | 35 | 11 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 |
| % PM | | 51% | 16% | | | 1% | | | | | | | | 68% |
| PM Peak Hour | | 19:00 | 15:00 | | | 14:00 | | | | | | | | 19:00 |
| Volume | | 7 | 2 | | | 1 | | | | | | | | 9 |
| Directional Peak Periods | | AM 7-9 | | | | NOON 12-2 | | | PM 4-6 | | | Off Peak Volumes | | |
| All Classes | | Volume | | % | Volume | % | Volume | % | Volume | % | Volume | % | | |
| | | 8 | ↔ | 12% | 6 | ↔ | 7 | ↔ | 7 | ↔ | 48 | ↔ | 70% | |

| Classification Definitions | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

CLASSIFICATION

Cagle Mill Rd S/O Julian Baugh Rd

Day: Wednesday

Date: 3/30/2022

City: Lula

Project #: GA22_180057_003

Summary

| Time | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 | # 7 | # 8 | # 9 | # 10 | # 11 | # 12 | # 13 | Total |
|--------------------|-----------|------------|------------|-----|-----------|-----------|-----|-----|-----|------|------|------|------|-------------|
| 00:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:00 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 06:00 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 07:00 | 0 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 08:00 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 09:00 | 0 | 7 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10:00 | 0 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 11:00 | 0 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:00 PM | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 13:00 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 14:00 | 0 | 7 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 15:00 | 0 | 7 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 16:00 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 17:00 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 18:00 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 19:00 | 0 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 20:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 21:00 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 22:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 2 | 92 | 35 | | 3 | 2 | | | | | | | | 134 |
| % of Totals | 1% | 69% | 26% | | 2% | 1% | | | | | | | | 100% |

| | | | | | | | | | | | | | | | | |
|---------------------------------|----|---------------|-------|---|-------|------------------|---|---|-----|---------------|---|---|----|-------------------------|---|--|
| AM Volumes | 2 | 37 | 17 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | | |
| % AM | 1% | 28% | 13% | | 1% | 1% | | | | | | | | 44% | | |
| AM Peak Hour | | 10:00 | 08:00 | | 09:00 | 07:00 | | | | | | | | 10:00 | | |
| Volume | 1 | 10 | 5 | | 1 | 1 | | | | | | | | 12 | | |
| PM Volumes | 0 | 55 | 18 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | | |
| % PM | | 41% | 13% | | 1% | 1% | | | | | | | | 56% | | |
| PM Peak Hour | | 19:00 | 15:00 | | 15:00 | 14:00 | | | | | | | | 15:00 | | |
| Volume | | 9 | 4 | | 1 | 1 | | | | | | | | 12 | | |
| Directional Peak Periods | | AM 7-9 | | | | NOON 12-2 | | | | PM 4-6 | | | | Off Peak Volumes | | |
| All Classes | | Volume | ↔ | | % | Volume | ↔ | | % | Volume | ↔ | | % | Volume | ↔ | |
| | | 14 | | | 10% | 14 | | | 10% | 11 | | | 8% | 95 | | |

| Classification Definitions | | | | |
|-------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|
| 1 Motorcycles | 4 Buses | 7 >=4-Axle Single Units | 10 >=6-Axle Single Trailers | 13 >=7-Axle Multi-Trailers |
| 2 Passenger Cars | 5 2-Axle, 6-Tire Single Units | 8 <=4-Axle Single Trailers | 11 <=5-Axle Multi-Trailers | |
| 3 2-Axle, 4-Tire Single Units | 6 3-Axle Single Units | 9 5-Axle Single Trailers | 12 6-Axle Multi-Trailers | |

VOLUME

Cagle Mill Rd S/O Julian Baugh Rd

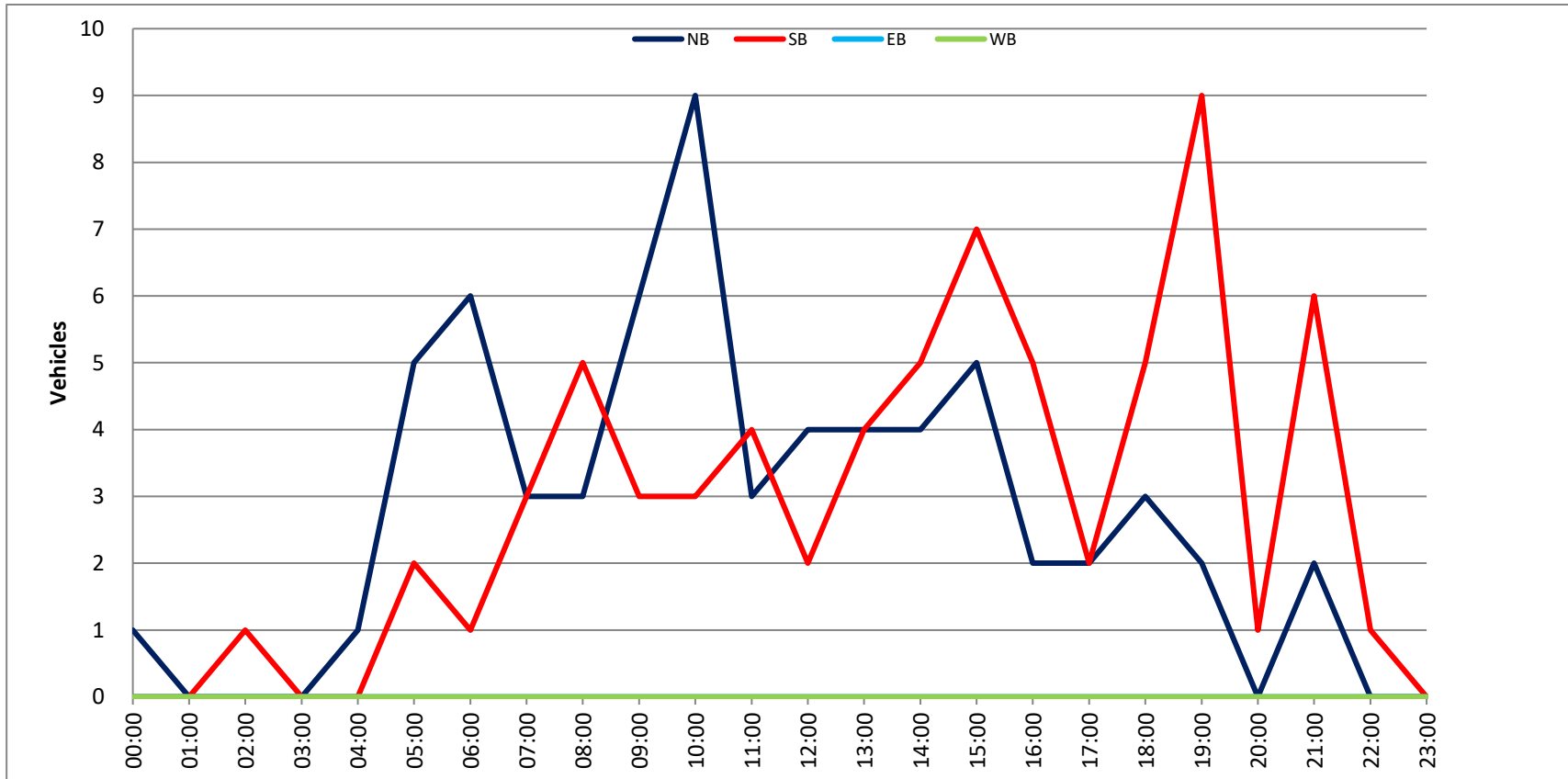
Day: Wednesday
 Date: 3/30/2022

City: Lula
 Project #: GA22_180057_003

| DAILY TOTALS | | | | | NB | SB | EB | WB | Total | | |
|----------------|-------|-------|----|----|-------|----------------|-------|-------|-------|----|-------|
| | | | | | 65 | 69 | 0 | 0 | 134 | | |
| AM Period | NB | SB | EB | WB | TOTAL | PM Period | NB | SB | EB | WB | TOTAL |
| 00:00 | 0 | 0 | 0 | 0 | | 12:00 | 0 | 0 | 0 | 0 | |
| 00:15 | 1 | 0 | 0 | 0 | 1 | 12:15 | 1 | 1 | 0 | 0 | 2 |
| 00:30 | 0 | 0 | 0 | 0 | | 12:30 | 3 | 1 | 0 | 0 | 4 |
| 00:45 | 0 | 1 | 0 | 0 | 1 | 12:45 | 0 | 4 | 0 | 2 | 6 |
| 01:00 | 0 | 0 | 0 | 0 | | 13:00 | 2 | 1 | 0 | 0 | 3 |
| 01:15 | 0 | 0 | 0 | 0 | | 13:15 | 0 | 1 | 0 | 0 | 1 |
| 01:30 | 0 | 0 | 0 | 0 | | 13:30 | 0 | 1 | 0 | 0 | 1 |
| 01:45 | 0 | 0 | 0 | 0 | | 13:45 | 2 | 4 | 1 | 4 | 8 |
| 02:00 | 0 | 1 | 0 | 0 | 1 | 14:00 | 1 | 1 | 0 | 0 | 2 |
| 02:15 | 0 | 0 | 0 | 0 | | 14:15 | 1 | 1 | 0 | 0 | 2 |
| 02:30 | 0 | 0 | 0 | 0 | | 14:30 | 1 | 0 | 0 | 0 | 1 |
| 02:45 | 0 | 0 | 1 | 0 | 1 | 14:45 | 1 | 4 | 3 | 5 | 9 |
| 03:00 | 0 | 0 | 0 | 0 | | 15:00 | 0 | 0 | 0 | 0 | |
| 03:15 | 0 | 0 | 0 | 0 | | 15:15 | 1 | 1 | 0 | 0 | 2 |
| 03:30 | 0 | 0 | 0 | 0 | | 15:30 | 2 | 1 | 0 | 0 | 3 |
| 03:45 | 0 | 0 | 0 | 0 | | 15:45 | 2 | 5 | 7 | 0 | 12 |
| 04:00 | 0 | 0 | 0 | 0 | | 16:00 | 0 | 2 | 0 | 0 | 2 |
| 04:15 | 0 | 0 | 0 | 0 | | 16:15 | 1 | 1 | 0 | 0 | 2 |
| 04:30 | 0 | 0 | 0 | 0 | | 16:30 | 1 | 0 | 0 | 0 | 1 |
| 04:45 | 1 | 1 | 0 | 0 | 1 | 16:45 | 0 | 2 | 2 | 5 | 7 |
| 05:00 | 1 | 1 | 0 | 0 | 2 | 17:00 | 2 | 0 | 0 | 0 | 2 |
| 05:15 | 0 | 0 | 0 | 0 | | 17:15 | 0 | 0 | 0 | 0 | |
| 05:30 | 2 | 0 | 0 | 0 | 2 | 17:30 | 0 | 1 | 0 | 0 | 1 |
| 05:45 | 2 | 5 | 1 | 2 | 3 | 17:45 | 0 | 2 | 1 | 2 | 4 |
| 06:00 | 1 | 0 | 0 | 0 | 1 | 18:00 | 2 | 0 | 0 | 0 | 2 |
| 06:15 | 4 | 0 | 0 | 0 | 4 | 18:15 | 0 | 2 | 0 | 0 | 2 |
| 06:30 | 1 | 0 | 0 | 0 | 1 | 18:30 | 0 | 2 | 0 | 0 | 2 |
| 06:45 | 0 | 6 | 1 | 1 | 1 | 18:45 | 1 | 3 | 1 | 5 | 8 |
| 07:00 | 1 | 0 | 0 | 0 | 1 | 19:00 | 1 | 6 | 0 | 0 | 7 |
| 07:15 | 1 | 1 | 0 | 0 | 2 | 19:15 | 0 | 1 | 0 | 0 | 1 |
| 07:30 | 0 | 0 | 0 | 0 | | 19:30 | 0 | 1 | 0 | 0 | 1 |
| 07:45 | 1 | 3 | 2 | 3 | 3 | 19:45 | 1 | 2 | 1 | 9 | 11 |
| 08:00 | 0 | 1 | 0 | 0 | 1 | 20:00 | 0 | 1 | 0 | 0 | 1 |
| 08:15 | 1 | 1 | 0 | 0 | 2 | 20:15 | 0 | 0 | 0 | 0 | |
| 08:30 | 2 | 1 | 0 | 0 | 3 | 20:30 | 0 | 0 | 0 | 0 | |
| 08:45 | 0 | 3 | 2 | 5 | 2 | 20:45 | 0 | 0 | 1 | 0 | 1 |
| 09:00 | 0 | 1 | 0 | 0 | 1 | 21:00 | 1 | 2 | 0 | 0 | 3 |
| 09:15 | 2 | 0 | 0 | 0 | 2 | 21:15 | 0 | 1 | 0 | 0 | 1 |
| 09:30 | 2 | 2 | 0 | 0 | 4 | 21:30 | 1 | 1 | 0 | 0 | 2 |
| 09:45 | 2 | 6 | 0 | 3 | 2 | 21:45 | 0 | 2 | 2 | 6 | 8 |
| 10:00 | 0 | 0 | 0 | 0 | | 22:00 | 0 | 0 | 0 | 0 | |
| 10:15 | 3 | 1 | 0 | 0 | 4 | 22:15 | 0 | 1 | 0 | 0 | 1 |
| 10:30 | 2 | 2 | 0 | 0 | 4 | 22:30 | 0 | 0 | 0 | 0 | |
| 10:45 | 4 | 9 | 0 | 3 | 4 | 22:45 | 0 | 0 | 1 | 0 | 1 |
| 11:00 | 0 | 1 | 0 | 0 | 1 | 23:00 | 0 | 0 | 0 | 0 | |
| 11:15 | 1 | 3 | 0 | 0 | 4 | 23:15 | 0 | 0 | 0 | 0 | |
| 11:30 | 0 | 0 | 0 | 0 | | 23:30 | 0 | 0 | 0 | 0 | |
| 11:45 | 2 | 3 | 0 | 4 | 2 | 23:45 | 0 | 0 | 0 | 0 | |
| TOTALS | 37 | 22 | | | 59 | TOTALS | 28 | 47 | | | 75 |
| SPLIT % | 62.7% | 37.3% | | | 44.0% | SPLIT % | 37.3% | 62.7% | | | 56.0% |

| DAILY TOTALS | | | | | NB | SB | EB | WB | Total |
|-----------------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|
| | | | | | 65 | 69 | 0 | 0 | 134 |
| AM Peak Hour | 05:30 | 10:30 | | 10:15 | PM Peak Hour | 12:15 | 18:15 | 15:15 | |
| AM Pk Volume | 9 | 6 | | 13 | PM Pk Volume | 6 | 11 | 14 | |
| Pk Hr Factor | 0.563 | 0.500 | | 0.813 | Pk Hr Factor | 0.500 | 0.458 | 0.500 | |
| 7 - 9 Volume | 6 | 8 | 0 | 14 | 4 - 6 Volume | 4 | 7 | 0 | 11 |
| 7 - 9 Peak Hour | 07:45 | 07:45 | | 07:45 | 4 - 6 Peak Hour | 16:15 | 16:00 | | 16:00 |
| 7 - 9 Pk Volume | 4 | 5 | 0 | 9 | 4 - 6 Pk Volume | 4 | 5 | 0 | 7 |
| Pk Hr Factor | 0.500 | 0.625 | 0.000 | 0.750 | Pk Hr Factor | 0.500 | 0.625 | 0.000 | 0.875 |

Appendix E: Historic Traffic Counts





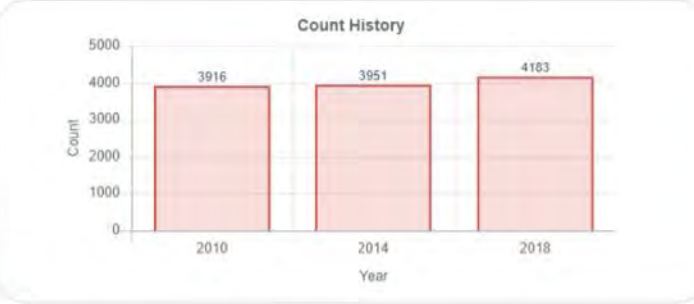
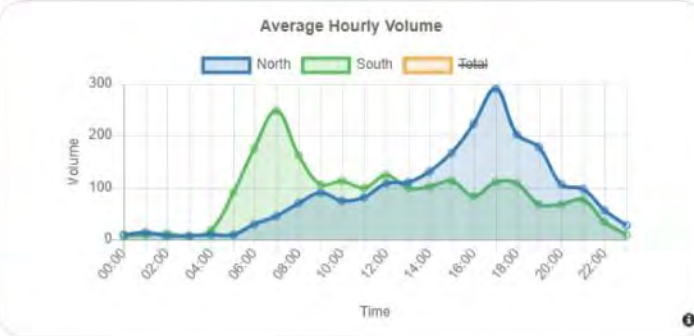
0000139_0225 - 139-0225
 Description: CRT 084900 R
 County: Hall
 Route number: 00145700
 LRS section: 1392145700
 Functional class: 5R - Major Collector (Rural)
 Coordinates: 34.3478044, -83.72471714

Site Data



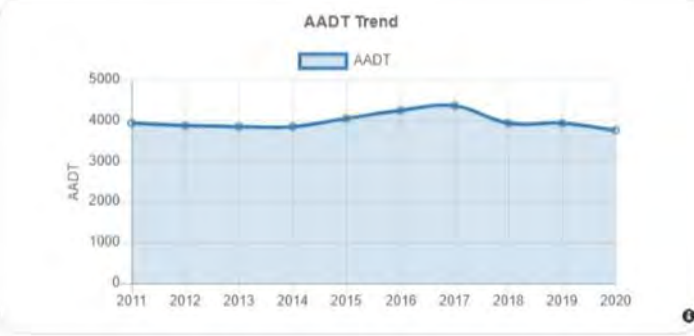
Count History

| Year | Month | Count type | Duration | Count |
|------|---------|------------|----------|-------|
| 2018 | July | Class | 48 hours | 4183 |
| 2014 | April | Volume | 48 hours | 3951 |
| 2010 | January | Volume | 48 hours | 3916 |



Annual Statistics

| Data Item | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------|------|------|------|-------|-----------|-----------|-----------|--------|-----------|-----------|
| Statistics type | - | - | - | - | Estimated | Estimated | Estimated | Actual | Estimated | Estimated |
| AADT | 3940 | 3880 | 3860 | 3850 | 4040 | 4250 | 4380 | 3930 | 3930 | 3770 |
| K-Factor | - | - | - | 0.104 | 0.104 | 0.104 | - | 0.104 | 0.104 | 0.104 |
| D-Factor | - | - | - | 0.500 | 0.500 | 0.500 | - | 0.720 | 0.720 | 0.720 |
| Future AADT | - | - | - | - | - | 4790 | 5520 | 4960 | 4950 | 4950 |



FHWA Vehicle Classification

| | | |
|--|--|--------|
| 1. Motorcycles 2 axes, 2 or 3 wheels. | | 0.91% |
| 2. Passenger cars 2 axes. Can have 1- or 2-axle trailers. | | 72.17% |
| 3. Pickups, panels, vans 2-axle, 4-tire single units. Can have 1- or 2-axle trailers. | | 21.31% |
| 4. Buses 2- or 3-axle, full length. | | 0.18% |
| 5. Single-unit trucks 2-axle, 6-tire, (dual rear tires), single-unit trucks. | | 3.01% |
| 6. Single-unit trucks 3-axle, single-unit trucks. | | 0.50% |
| 7. Single-unit trucks 4 or more axle, single-unit trucks. | | 0% |
| 8. Single-trailer trucks 3- or 4-axle, single-trailer trucks. | | 0.71% |
| 9. Single-trailer trucks 5-axle, single-trailer trucks. | | 1.16% |
| 10. Single-trailer trucks 6 or more axle, single-trailer trucks. | | 0.04% |
| 11. Multi-trailer trucks 5 or less axle, multi-trailer trucks. | | 0% |
| 12. Multi-trailer trucks 6-axle, multi-trailer trucks. | | 0% |
| 13. Multi-trailer trucks 7 or more axle, multi-trailer trucks. | | 0.01% |



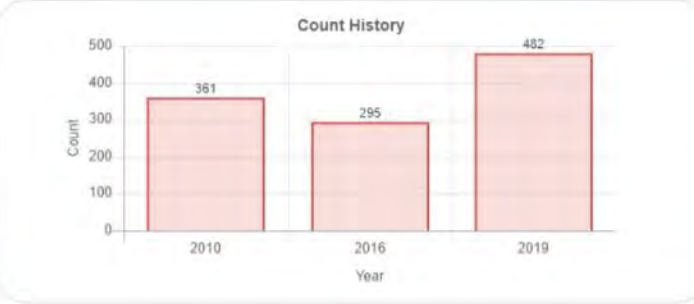
0000139_8201 - 139-8201
Description: CRY 092800 L
County: Hall
Route number: 00092400
LRS section: 1392092400
Functional class: 7R - Local (Rural)
Coordinates: 34.3604089054467, -83.7324372906166

Site Data




Count History

| Year | Month | Count type | Duration | Count |
|------|---------|------------|----------|-------|
| 2019 | July | Class | 48 hours | 482 |
| 2016 | July | Class | 72 hours | 295 |
| 2010 | October | Class | 48 hours | 361 |



Annual Statistics

| Data Item | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------|------|------|------|------|-----------|--------|-----------|-----------|--------|-----------|
| Statistics type | - | - | - | - | Estimated | Actual | Estimated | Estimated | Actual | Estimated |
| AADT | 330 | 330 | 330 | 330 | 350 | 400 | 410 | 400 | 470 | 450 |
| K-Factor | - | - | - | - | - | 0.096 | - | - | 0.103 | 0.103 |
| D-Factor | - | - | - | - | - | 0.700 | - | - | 0.650 | 0.650 |
| Future AADT | - | - | - | - | - | 530 | 630 | 620 | 710 | 710 |



FHWA Vehicle Classification

- Motorcycles**
2 axes, 2 or 3 wheels.  0.41%
- Passenger cars**
2 axes. Can have 1- or 2-axle trailers.  66.63%
- Pickups, panels, vans**
2-axle, 4-tire single units. Can have 1- or 2-axle trailers.  27.36%
- Buses**
2- or 3-axle, full length.  0.83%
- Single-unit trucks**
2-axle, 6-tire, (dual rear tires), single-unit trucks.  3.73%
- Single-unit trucks**
3-axle, single-unit trucks.  0.10%
- Single-unit trucks**
4 or more axle, single-unit trucks.  0%
- Single-trailer trucks**
3- or 4-axle, single-trailer trucks.  0.52%
- Single-trailer trucks**
5-axle, single-trailer trucks.  0.41%
- Single-trailer trucks**
6 or more axle, single-trailer trucks.  0%
- Multi-trailer trucks**
5 or less axle, multi-trailer trucks.  0%
- Multi-trailer trucks**
6-axle, multi-trailer trucks.  0%
- Multi-trailer trucks**
7 or more axle, multi-trailer trucks.  0%



0000139_0215 - 139-0215
 Description: CRX 087600
 County: Hall
 Route number: 00041900
 LRS section: 1391041900
 Functional class: 3R - Principal Arterial - Other (Rural)
 Coordinates: 34.3939327144585, -83.6928845977857

Site Data

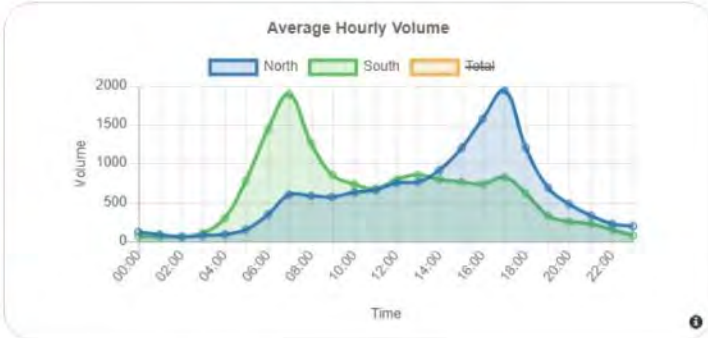


Count History

| Year | Month | Count type | Duration | Count |
|------|-----------|------------|----------|-------|
| 2019 | January | Class | 48 hours | 28906 |
| 2015 | June | Class | 48 hours | 31210 |
| 2013 | March | Class | 48 hours | 27163 |
| 2011 | September | Class | 48 hours | 27398 |
| 2010 | March | Volume | 48 hours | 28969 |

Annual Statistics

| Data Item | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------|-------|-------|-------|-------|--------|-----------|-----------|-----------|--------|-----------|
| Statistics type | - | - | - | - | Actual | Estimated | Estimated | Estimated | Actual | Estimated |
| AADT | 27200 | 26900 | 27300 | 30000 | 30000 | 31200 | 32200 | 32400 | 31700 | 30100 |
| K-Factor | - | - | 0.090 | 0.090 | 0.093 | 0.093 | - | - | 0.099 | 0.099 |
| D-Factor | - | - | 0.700 | 0.700 | 0.700 | 0.700 | - | - | 0.690 | 0.690 |
| Future AADT | - | - | - | - | - | 40100 | 43900 | 47400 | 46600 | 46600 |



| | | |
|---|--|--------|
| 1. Motorcycles 2 axes, 2 or 3 wheels. | | 0.07% |
| 2. Passenger cars 2 axes. Can have 1- or 2- axle trailers. | | 64.13% |
| 3. Pickups, panels, vans 2-axis, 4-tire single units. Can have 1- or 2-axle trailers. | | 24.66% |
| 4. Buses 2- or 3-axle, full length. | | 0.83% |
| 5. Single-unit trucks 2-axis, 6-tire, (dual rear tires), single-unit trucks. | | 4.83% |
| 6. Single-unit trucks 3-axle, single-unit trucks. | | 0.66% |
| 7. Single-unit trucks 4 or more axle, single-unit trucks. | | 0.01% |
| 8. Single-trailer trucks 3- or 4-axle, single-trailer trucks. | | 0.91% |
| 9. Single-trailer trucks 5-axle, single-trailer trucks. | | 3.73% |
| 10. Single-trailer trucks 6 or more axle, single-trailer trucks. | | 0.15% |
| 11. Multi-trailer trucks 5 or less axle, multi-trailer trucks. | | 0% |
| 12. Multi-trailer trucks 6-axle, multi-trailer trucks. | | 0% |
| 13. Multi-trailer trucks 7 or more axle, multi-trailer trucks. | | 0.02% |



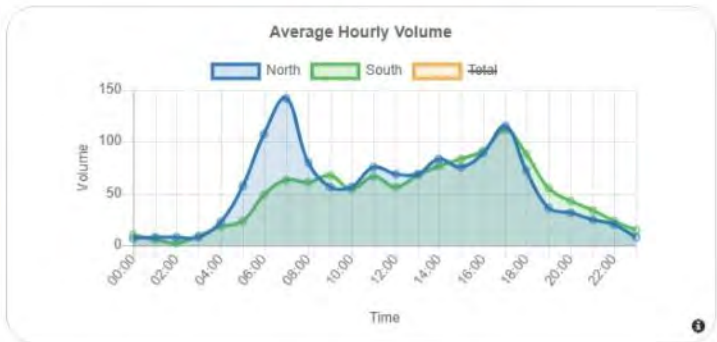
0000139_0249 - 139-0249
Description: LULA
County: Hall
Route number: 00005200
LRS section: 1391005200
Functional class: 4R - Minor Arterial (Rural)
Coordinates: 34.38950853, -83.68435217

Site Data




Count History

| Year | Month | Count type | Duration | Count |
|------|----------|------------|----------|-------|
| 2020 | January | Volume | 48 hours | 2498 |
| 2018 | June | Class | 48 hours | 2468 |
| 2016 | July | Volume | 48 hours | 3136 |
| 2014 | April | Volume | 48 hours | 2524 |
| 2012 | February | Volume | 48 hours | 2446 |



Annual Statistics

| Data Item | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------|------|------|------|-------|-----------|--------|-----------|--------|-----------|--------|
| Statistics type | - | - | - | - | Estimated | Actual | Estimated | Actual | Estimated | Actual |
| AADT | 2160 | 2200 | 2200 | 2430 | 2550 | 2700 | 2780 | 2380 | 2450 | 2170 |
| K-Factor | - | - | - | 0.098 | 0.098 | 0.101 | - | 0.102 | 0.102 | 0.096 |
| D-Factor | - | - | - | 0.500 | 0.500 | 0.500 | - | 0.520 | 0.520 | 0.520 |
| Future AADT | - | - | - | - | - | 2940 | 3550 | 3790 | 3640 | 3640 |





0000139_0248 - 139-0248
 County: Hall
 Route number: 00005200
 LRS section: 1391005200
 Functional class: 4R - Minor Arterial (Rural)
 Coordinates: 34.3756288365924, -83.6786885028939

Site Data

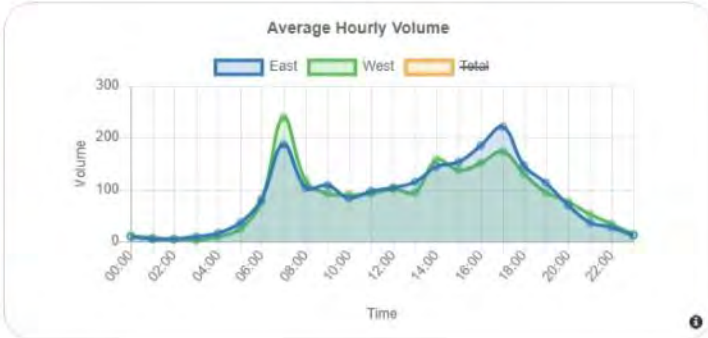


Count History

| Year | Month | Count type | Duration | Count |
|------|-----------|------------|----------|-------|
| 2021 | April | Class | 48 hours | 4050 |
| 2019 | January | Class | 48 hours | 3140 |
| 2015 | June | Class | 48 hours | 3348 |
| 2013 | March | Volume | 48 hours | 3621 |
| 2011 | September | Class | 48 hours | 3870 |
| 2010 | January | Class | 48 hours | 3574 |

Annual Statistics

| Data Item | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------|------|------|-------|-------|--------|-----------|-----------|-----------|--------|-----------|
| Statistics type | - | - | - | - | Actual | Estimated | Estimated | Estimated | Actual | Estimated |
| AADT | 3630 | 3610 | 3210 | 3210 | 3230 | 3360 | 3460 | 3480 | 3450 | 3270 |
| K-Factor | - | - | 0.110 | 0.110 | 0.115 | 0.115 | - | - | 0.109 | 0.109 |
| D-Factor | - | - | - | - | 0.600 | 0.600 | - | - | 0.540 | 0.540 |
| Future AADT | - | - | - | - | - | 4020 | 4360 | 4380 | 4350 | 4350 |



FHWA Vehicle Classification

| | | |
|---|--|--------|
| 1. Motorcycles 2 axes, 2 or 3 wheels. | | 0.69% |
| 2. Passenger cars 2 axes. Can have 1- or 2-axle trailers. | | 64.86% |
| 3. Pickups, panels, vans 2-axle, 4-tire single units. Can have 1- or 2-axle trailers. | | 25.68% |
| 4. Buses 2- or 3-axle, full length. | | 0.58% |
| 5. Single-unit trucks 2-axle, 6-tire, (dual rear tires), single-unit trucks. | | 3.79% |
| 6. Single-unit trucks 3-axle, single-unit trucks. | | 0.63% |
| 7. Single-unit trucks 4 or more axle, single-unit trucks. | | 0% |
| 8. Single-trailer trucks 3- or 4-axle, single-trailer trucks. | | 1.07% |
| 9. Single-trailer trucks 5-axle, single-trailer trucks. | | 2.67% |
| 10. Single-trailer trucks 6 or more axle, single-trailer trucks. | | 0.02% |
| 11. Multi-trailer trucks 5 or less axle, multi-trailer trucks. | | 0% |
| 12. Multi-trailer trucks 6-axle, multi-trailer trucks. | | 0% |
| 13. Multi-trailer trucks 7 or more axle, multi-trailer trucks. | | 0% |



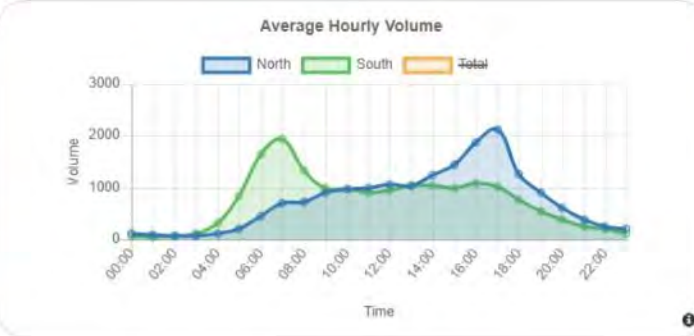
0000139_0214 - 139-0214
 Description: CRX 129800
 County: Hall
 Route number: 00041900
 LRS section: 1391041900
 Functional class: 3R - Principal Arterial - Other (Rural)
 Coordinates: 34.3777272, -83.71739246

Site Data



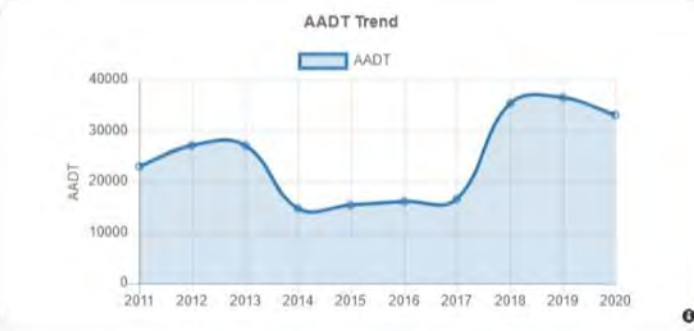

Count History

| Year | Month | Count type | Duration | Count |
|------|-----------|------------|----------|-------|
| 2020 | September | Class | 48 hours | 35410 |
| 2018 | July | Class | 48 hours | 35424 |
| 2016 | December | Class | 48 hours | 31740 |
| 2014 | April | Class | 48 hours | 28406 |
| 2012 | February | Class | 48 hours | 26636 |



Annual Statistics

| Data Item | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------|-------|-------|-------|-------|-----------|-----------|-----------|--------|-----------|--------|
| Statistics type | - | - | - | - | Estimated | Estimated | Estimated | Actual | Estimated | Actual |
| AADT | 23000 | 27100 | 27100 | 14700 | 15400 | 16000 | 16500 | 35500 | 36500 | 33200 |
| K-Factor | - | - | - | 0.172 | 0.172 | 0.172 | - | 0.088 | 0.088 | 0.096 |
| D-Factor | - | - | - | 0.800 | 0.800 | 0.800 | - | 0.690 | 0.690 | 0.680 |
| Future AADT | - | - | - | - | - | 20700 | 20800 | 44700 | 46000 | 46000 |



FHWA Vehicle Classification

| | | |
|--|--|--------|
| 1. Motorcycles 2 axes, 2 or 3 wheels. |  | 0.25% |
| 2. Passenger cars 2 axes. Can have 1- or 2-axle trailers. |  | 48.74% |
| 3. Pickups, panels, vans 2-axle, 4-tire single units. Can have 1- or 2-axle trailers. |  | 35.64% |
| 4. Buses 2- or 3-axle, full length. |  | 1.67% |
| 5. Single-unit trucks 2-axle, 6-tire, (dual rear tires), single-unit trucks. |  | 10.23% |
| 6. Single-unit trucks 3-axle, single-unit trucks. |  | 0.61% |
| 7. Single-unit trucks 4 or more axle, single-unit trucks. |  | 0.01% |
| 8. Single-trailer trucks 3- or 4-axle, single-trailer trucks. |  | 0.61% |
| 9. Single-trailer trucks 5-axle, single-trailer trucks. |  | 2.14% |
| 10. Single-trailer trucks 6 or more axle, single-trailer trucks. |  | 0.08% |
| 11. Multi-trailer trucks 5 or less axle, multi-trailer trucks. |  | 0.01% |
| 12. Multi-trailer trucks 6-axle, multi-trailer trucks. |  | 0% |
| 13. Multi-trailer trucks 7 or more axle, multi-trailer trucks. |  | 0.01% |

Appendix F:
Existing Year and Future Year
Build and No-Build Volumes

Existing COVID Adj

AM

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 57 | 864 | 0 | 1 | 0 | 2167 | 33 | 6 | 0 | 18 | 0 | 0 | 0 |
| 2 | 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 2 | 7 | 0 |
| 3 | 1 | 11 | 0 | 0 | 0 | 5 | 3 | 4 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 0 | 1 | 7 | 2 | 1 | 4 | 2 | 0 | 16 | 2 |
| 5 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 82 | 0 | 0 | 373 | 2 |
| 6 | 0 | 778 | 0 | 0 | 0 | 2178 | 2 | 2 | 0 | 1 | 22 | 2 | 1 |

No Build

2023

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 59 | 892 | 0 | 1 | 0 | 2237 | 34 | 6 | 0 | 19 | 0 | 0 | 0 |
| 2 | 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 2 | 7 | 0 |
| 3 | 1 | 11 | 0 | 0 | 0 | 5 | 3 | 4 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 0 | 1 | 7 | 2 | 1 | 4 | 2 | 0 | 17 | 2 |
| 5 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 85 | 0 | 0 | 385 | 2 |
| 6 | 0 | 803 | 0 | 0 | 0 | 2249 | 2 | 2 | 0 | 1 | 23 | 2 | 1 |

No Build

2028

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 69 | 1047 | 0 | 1 | 0 | 2625 | 40 | 7 | 0 | 22 | 0 | 0 | 0 |
| 2 | 16 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 2 | 8 | 0 |
| 3 | 1 | 13 | 0 | 0 | 0 | 6 | 4 | 5 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 0 | 1 | 8 | 2 | 1 | 5 | 2 | 0 | 20 | 2 |
| 5 | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0 | 100 | 0 | 0 | 452 | 2 |
| 6 | 0 | 942 | 0 | 0 | 0 | 2639 | 2 | 2 | 0 | 1 | 27 | 2 | 1 |

Build

2023

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 59 | 892 | 35 | 1 | 19 | 2237 | 34 | 6 | 0 | 19 | 105 | 0 | 55 |
| 2 | 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 2 | 7 | 0 |
| 3 | 2 | 11 | 0 | 0 | 0 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 2 | 1 | 0 | 2 | 15 | 4 | 2 | 4 | 2 | 0 | 17 | 4 |
| 5 | 0 | 0 | 0 | 0 | 2 | 0 | 14 | 0 | 85 | 0 | 0 | 385 | 3 |
| 6 | 0 | 858 | 0 | 0 | 0 | 2268 | 2 | 2 | 0 | 1 | 23 | 2 | 1 |
| 7 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 12 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 0 | 22 | 1 |

Build

2028

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 69 | 1047 | 35 | 1 | 19 | 2625 | 40 | 7 | 0 | 22 | 105 | 0 | 55 |
| 2 | 16 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 2 | 8 | 0 |
| 3 | 2 | 13 | 0 | 0 | 0 | 6 | 6 | 11 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 2 | 1 | 0 | 2 | 16 | 4 | 2 | 5 | 2 | 0 | 20 | 4 |
| 5 | 0 | 0 | 0 | 0 | 2 | 0 | 15 | 0 | 100 | 0 | 0 | 452 | 3 |
| 6 | 0 | 997 | 0 | 0 | 0 | 2658 | 2 | 2 | 0 | 1 | 27 | 2 | 1 |
| 7 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 12 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 0 | 25 | 1 |

Existing COVID Adj

PM

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 6 | 2475 | 0 | 2 | 0 | 1035 | 8 | 19 | 0 | 25 | 0 | 0 | 0 |
| 2 | 11 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 16 | 15 | 2 | 6 | 0 |
| 3 | 1 | 11 | 0 | 0 | 0 | 22 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| 4 | 8 | 2 | 7 | 0 | 1 | 2 | 1 | 4 | 15 | 5 | 7 | 8 | 0 |
| 5 | 0 | 0 | 0 | 0 | 6 | 0 | 3 | 11 | 316 | 0 | 0 | 130 | 7 |
| 6 | 2 | 2463 | 25 | 0 | 1 | 1036 | 4 | 6 | 1 | 4 | 13 | 0 | 4 |

No Build

2023

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 6 | 2555 | 0 | 2 | 0 | 1069 | 8 | 20 | 0 | 26 | 0 | 0 | 0 |
| 2 | 11 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 17 | 15 | 2 | 6 | 0 |
| 3 | 1 | 11 | 0 | 0 | 0 | 23 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| 4 | 8 | 2 | 7 | 0 | 1 | 2 | 1 | 4 | 15 | 5 | 7 | 8 | 0 |
| 5 | 0 | 0 | 0 | 0 | 6 | 0 | 3 | 11 | 326 | 0 | 0 | 134 | 7 |
| 6 | 2 | 2543 | 26 | 0 | 1 | 1070 | 4 | 6 | 1 | 4 | 13 | 0 | 4 |

No Build

2028

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 7 | 2998 | 0 | 2 | 0 | 1254 | 9 | 23 | 0 | 31 | 0 | 0 | 0 |
| 2 | 13 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 20 | 18 | 2 | 7 | 0 |
| 3 | 1 | 13 | 0 | 0 | 0 | 27 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| 4 | 9 | 2 | 8 | 0 | 1 | 2 | 1 | 5 | 18 | 6 | 8 | 9 | 0 |
| 5 | 0 | 0 | 0 | 0 | 7 | 0 | 4 | 13 | 383 | 0 | 0 | 157 | 8 |
| 6 | 2 | 2984 | 31 | 0 | 1 | 1256 | 5 | 7 | 1 | 5 | 15 | 0 | 5 |

Build

2023

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 6 | 2555 | 110 | 2 | 68 | 1069 | 8 | 20 | 0 | 26 | 65 | 0 | 40 |
| 2 | 11 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 17 | 15 | 2 | 6 | 0 |
| 3 | 9 | 11 | 0 | 0 | 0 | 23 | 7 | 7 | 0 | 0 | 0 | 0 | 0 |
| 4 | 8 | 6 | 7 | 0 | 3 | 6 | 3 | 12 | 15 | 5 | 7 | 8 | 0 |
| 5 | 0 | 0 | 0 | 0 | 9 | 0 | 4 | 16 | 326 | 0 | 0 | 134 | 10 |
| 6 | 2 | 2583 | 26 | 0 | 1 | 1139 | 4 | 6 | 1 | 4 | 13 | 0 | 4 |
| 7 | 12 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 0 | 7 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 33 | 0 | 0 | 19 | 2 |

Build

2028

| INTID | NBL | NBT | NBR | SBU | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR |
|-------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 7 | 2998 | 110 | 2 | 68 | 1254 | 9 | 23 | 0 | 31 | 65 | 0 | 40 |
| 2 | 13 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 20 | 18 | 2 | 7 | 0 |
| 3 | 9 | 13 | 0 | 0 | 0 | 27 | 7 | 7 | 0 | 0 | 0 | 0 | 0 |
| 4 | 9 | 6 | 8 | 0 | 3 | 6 | 3 | 13 | 18 | 6 | 8 | 9 | 0 |
| 5 | 0 | 0 | 0 | 0 | 10 | 0 | 5 | 18 | 383 | 0 | 0 | 157 | 11 |
| 6 | 2 | 3024 | 31 | 0 | 1 | 1325 | 5 | 7 | 1 | 5 | 15 | 0 | 5 |
| 7 | 12 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 0 | 7 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 38 | 0 | 0 | 21 | 0 |

Appendix G: Truck Percentage Calculation Chart

| Old Cornelia Hwy W/O Hyde Mill Rd | | Truck Percentage Calculation | | | | | | |
|-----------------------------------|------------------------|------------------------------|-------------------------|-------------------------------|--|---------------------------------------|--|-----------------|
| | | Total | Class 1: Motorcycles | Class 2: Passenger Cars | Class 3: Pickups, Panels, Trucks | Classes 4-7: Single Unit Trucks | Classes 8-15: Combination Trucks | Total Trucks |
| | 24 hr T | | | | | | | |
| | Volume | 4506 | 21 | 3372 | 918 | 153 | 42 | |
| | Percentage | | 0% | 100% | 0% | 0% | 0% | 0.0% |
| | 7:15 AM-8:15 AM | | | | | | | |
| | Volume | 15430 | 354 | 87 | 5 | 12 | 2 | |
| | Percentage | | 0% | 0% | 0% | 0% | 0% | 0.0% |
| | 4:45 PM-5:45 PM | | | | | | | |
| | Volume | 448 | 2 | 355 | 80 | 9 | 2 | |
| | Percentage | | 0% | 100% | 0% | 0% | 0% | 0.0% |

| US 23/SR 365/Cornelia Hwy S/O Cagle Rd | | Truck Percentage Calculation | | | | | | |
|--|------------------------|------------------------------|-------------------------|-------------------------------|--|---------------------------------------|--|-----------------|
| | | Total | Class 1: Motorcycles | Class 2: Passenger Cars | Class 3: Pickups, Panels, Trucks | Classes 4-7: Single Unit Trucks | Classes 8-15: Combination Trucks | Total Trucks |
| | 24 hr T | | | | | | | |
| | Volume | 38014 | 42 | 27453 | 7547 | 1190 | 1782 | |
| | Percentage | | 0% | 100% | 0% | 0% | 0% | 0.0% |
| | 7:15 AM-8:15 AM | | | | | | | |
| | Volume | 2915 | 0 | 2087 | 672 | 81 | 75 | |
| | Percentage | | 0% | 100% | 0% | 0% | 0% | 0.0% |
| | 4:45 PM-5:45 PM | | | | | | | |
| | Volume | 3416 | 0 | 2504 | 742 | 75 | 95 | |
| | Percentage | | 0% | 100% | 0% | 0% | 0% | 0.0% |

| Cagle Mill Rd S/O Julian Baugh Rd | | Truck Percentage Calculation | | | | | | |
|-----------------------------------|--------------------------|------------------------------|-------------------------|-------------------------------|--|---------------------------------------|--|-----------------|
| | | Total | Class 1: Motorcycles | Class 2: Passenger Cars | Class 3: Pickups, Panels, Trucks | Classes 4-7: Single Unit Trucks | Classes 8-15: Combination Trucks | Total Trucks |
| | 24 hr T | | | | | | | |
| | Volume | 134 | 2 | 92 | 35 | 5 | 0 | |
| | Percentage | | 0% | 100% | 0% | 0% | 0% | 0.0% |
| | 10:15 AM-11:15 AM | | | | | | | |
| | Volume | 13 | 0 | 10 | 2 | 1 | 0 | |
| | Percentage | | 0% | 100% | 0% | 0% | 0% | 0.0% |
| | 3:15 PM-4:15 PM | | | | | | | |
| | Volume | 14 | 0 | 8 | 5 | 1 | 0 | |
| | Percentage | | 0% | 100% | 0% | 0% | 0% | 0.0% |

| Roadway | Truck Percentages | | | | | | | | |
|--|-------------------|--------------|-------------|-----------------|--------------|-------------|-----------------|--------------|-------------|
| | 24 hr T | | | 7:15 AM-8:15 AM | | | 4:45 PM-5:45 PM | | |
| | Light Trucks | Heavy Trucks | Total | Light Trucks | Heavy Trucks | Total | Light Trucks | Heavy Trucks | Total |
| US 23/SR 365/Cornelia Hwy S/O Cagle Rd | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Old Cornelia Hwy W/O Hyde Mill Rd | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Cagle Mill Rd S/O Julian Baugh Rd | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

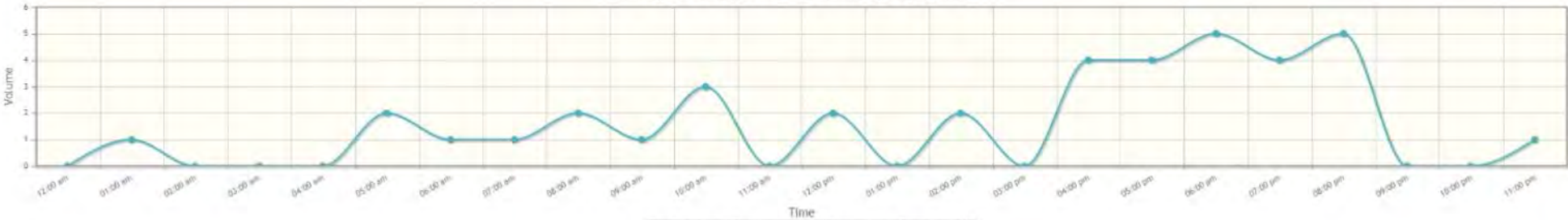
Appendix H: COVID-19 Factor Calculation

| TC Station | Location | Year of Most Recent GDOT Count | GDOT Historical ADT | Growth Rate | Theoretical 2022 ADT | Collected 2022 ADT | COVID-19 Factor |
|-------------------------|--|--------------------------------|---------------------|-------------|----------------------|--------------------|-----------------|
| 139-0214 | US 23/SR 365/Cornelia Hwy S/O Cagle Rd | 2018 | 35,216 | 3.25% | 40,022 | 38,014 | 1.05 |
| 139-8204 | Cagle Mill Rd S/O Cagle Rd | 2019 | 38 | 3.25% | 42 | 134 | 0.31 |
| 139-0225 | Old Cornelia Hwy S/O Country Lane | 2018 | 4,260 | 3.25% | 4,841 | 4,506 | 1.07 |
| Weighted Average | | | | | | | 1.05 |



Multi-Day Volume Report 139-8204 Wednesday, July 24, 2019

Multi-Day Volume Report 139-8204 Wednesday, July 24, 2019



Toggle All
 Wed Jul 24
 Average Weekday
 Average 7 Day

[Switch chart type](#) |
 [Open in new window](#) |
 [Export as image](#) |
 [Hide graph](#)

Site Name: 139-8204 | Site ID: 0000139_8204 | Description: CR 092800 BEG AT

All Lanes ▾ | Time Period: 1 hour ▾ | Class: Any ▾ | Exclude data: None ▾

| | Wed Jul 24 | Average Weekday | Average 7 Day | Total Count |
|-------------|------------|-----------------|---------------|-------------|
| 12:00 am | 0 | - | - | 0 |
| 01:00 am | 1 | - | - | 1 |
| 02:00 am | 0 | - | - | 0 |
| 03:00 am | 0 | - | - | 0 |
| 04:00 am | 0 | - | - | 0 |
| 05:00 am | 2 | - | - | 2 |
| 06:00 am | 1 | - | - | 1 |
| 07:00 am | 1 | - | - | 1 |
| 08:00 am | 2 | - | - | 2 |
| 09:00 am | 1 | - | - | 1 |
| 10:00 am | 3 | - | - | 3 |
| 11:00 am | 0 | - | - | 0 |
| 12:00 pm | 2 | - | - | 2 |
| 01:00 pm | 0 | - | - | 0 |
| 02:00 pm | 2 | - | - | 2 |
| 03:00 pm | 0 | - | - | 0 |
| 04:00 pm | 4 | - | - | 4 |
| 05:00 pm | 4 | - | - | 4 |
| 06:00 pm | 5 | - | - | 5 |
| 07:00 pm | 4 | - | - | 4 |
| 08:00 pm | 5 | - | - | 5 |
| 09:00 pm | 0 | - | - | 0 |
| 10:00 pm | 0 | - | - | 0 |
| 11:00 pm | 1 | - | - | 1 |
| 7am-7pm | 34 | - | - | 34 |
| 6am-10pm | 34 | - | - | 34 |
| 6am-12am | 35 | - | - | 35 |
| 12am-12am | 38 | - | - | 38 |
| am Peak | 10:00 am | - | - | - |
| Peak Volume | 3 | - | - | - |
| pm Peak | 06:00 pm | - | - | - |
| Peak Volume | 5 | - | - | - |

Event key: ■ QC failure ■ Atypical (QC) ■ Events ■ Special ■ Holiday ■ Other
■ Weekends and defined holidays

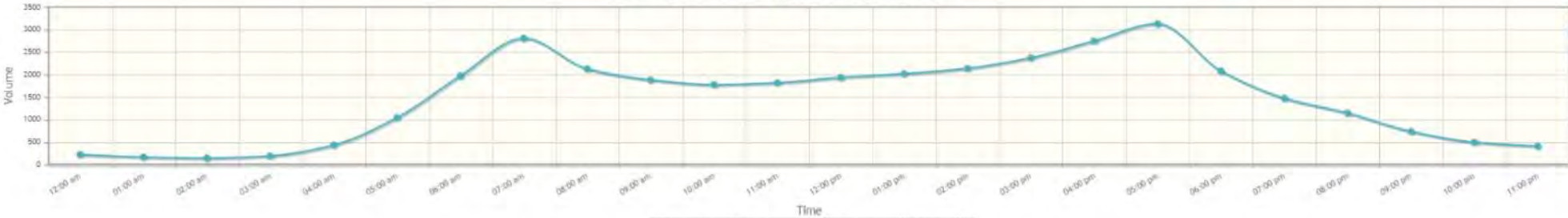
Notes on data:
 Weekly (7-day) averages are weighted by each day of the week.
 Holidays & Events:
 None

Data prepared by Drakewell US 01N - Nevada May 13, 2022 4:15:57 PM



Multi-Day Volume Report 139-0214 Tuesday, July 24, 2018

Multi-Day Volume Report 139-0214 Tuesday, July 24, 2018



Toggle All
 Tue Jul 24
 Average Workday
 Average 7 Day

Switch chart type | Open in new window | Export as image | Hide graph

Site Name: 139-0214 | Site ID: 0000139_0214 | Description: CRX 129800

All Lanes ▾ | Time Period: 1 hour ▾ | Class: Any ▾ | Exclude data: None ▾

| | Tue Jul 24 | Average Workday | Total 7 Day |
|-------------|------------|-----------------|-------------|
| 12:00 am | 222 | - | 222 |
| 01:00 am | 165 | - | 165 |
| 02:00 am | 143 | - | 143 |
| 03:00 am | 191 | - | 191 |
| 04:00 am | 433 | - | 433 |
| 05:00 am | 1041 | - | 1041 |
| 06:00 am | 1968 | - | 1968 |
| 07:00 am | 2804 | - | 2804 |
| 08:00 am | 2125 | - | 2125 |
| 09:00 am | 1879 | - | 1879 |
| 10:00 am | 1774 | - | 1774 |
| 11:00 am | 1815 | - | 1815 |
| 12:00 pm | 1933 | - | 1933 |
| 01:00 pm | 2018 | - | 2018 |
| 02:00 pm | 2136 | - | 2136 |
| 03:00 pm | 2371 | - | 2371 |
| 04:00 pm | 2745 | - | 2745 |
| 05:00 pm | 3126 | - | 3126 |
| 06:00 pm | 2078 | - | 2078 |
| 07:00 pm | 1472 | - | 1472 |
| 08:00 pm | 1141 | - | 1141 |
| 09:00 pm | 734 | - | 734 |
| 10:00 pm | 494 | - | 494 |
| 11:00 pm | 408 | - | 408 |
| 7am-7pm | 26804 | - | 26804 |
| 6am-10pm | 32119 | - | 32119 |
| 6am-12am | 33021 | - | 33021 |
| 12am-12am | 35216 | - | 35216 |
| am Peak | 07:00 am | - | - |
| Peak Volume | 2804 | - | - |
| pm Peak | 05:00 pm | - | - |
| Peak Volume | 3126 | - | - |

Event key: ■ QC failure ■ Atypical (QC) ■ Events ■ Special ■ Holiday ■ Other
■ Weekends and defined holidays

Notes on data:
 Weekly (7-day) averages are weighted by each day of the week.
 Holidays & Events: None



Multi-Day Volume Report 139-0225 Wednesday, July 25, 2018

Multi-Day Volume Report 139-0225 Wednesday, July 25, 2018



Toggle All

Wed Jul 25

Average Weekday

Average 7 Day

Switch chart type | Open in new window | Export as image | Hide graph

Site Name: 139-0225 Site ID: 0000139_0225 Description: CRT 084900 R

All Lanes | Time Period: 1 hour | Class: Any | Exclude data: None

| | Wed Jul 25 | Average Weekday | Average 7 Day | Total Count |
|-------------|------------|-----------------|---------------|-------------|
| 12:00 am | 10 | - | - | 10 |
| 01:00 am | 20 | - | - | 20 |
| 02:00 am | 17 | - | - | 17 |
| 03:00 am | 8 | - | - | 8 |
| 04:00 am | 29 | - | - | 29 |
| 05:00 am | 95 | - | - | 95 |
| 06:00 am | 210 | - | - | 210 |
| 07:00 am | 290 | - | - | 290 |
| 08:00 am | 239 | - | - | 239 |
| 09:00 am | 191 | - | - | 191 |
| 10:00 am | 184 | - | - | 184 |
| 11:00 am | 193 | - | - | 193 |
| 12:00 pm | 210 | - | - | 210 |
| 01:00 pm | 203 | - | - | 203 |
| 02:00 pm | 238 | - | - | 238 |
| 03:00 pm | 291 | - | - | 291 |
| 04:00 pm | 324 | - | - | 324 |
| 05:00 pm | 411 | - | - | 411 |
| 06:00 pm | 322 | - | - | 322 |
| 07:00 pm | 256 | - | - | 256 |
| 08:00 pm | 171 | - | - | 171 |
| 09:00 pm | 186 | - | - | 186 |
| 10:00 pm | 93 | - | - | 93 |
| 11:00 pm | 39 | - | - | 39 |
| 7am-7pm | 3126 | - | - | 3126 |
| 6am-10pm | 3949 | - | - | 3949 |
| 6am-12am | 4081 | - | - | 4081 |
| 12am-12am | 4260 | - | - | 4260 |
| am Peak | 07:00 am | - | - | - |
| Peak Volume | 290 | - | - | - |
| pm Peak | 05:00 pm | - | - | - |
| Peak Volume | 411 | - | - | - |

Event key: QC failure, Atypical (QC), Events, Special, Holiday, Other, Weekends and defined holidays

Notes on data: Weekly (7-day) averages are weighted by each day of the week.

Holidays & Events: None

Appendix I: Trip Generation

ADT-001 ADT-002 TC-139_8203
 38014 4506 94 42614
 0.89205425 0.1057399 0.002205848

| | |
|--------|--------|
| Gate 1 | 89.00% |
| Gate 2 | 10.00% |
| Gate 3 | 1.00% |

Total
 Gate 1
 Gate 2
 Gate 3

| Trip Generation: Combined | | | | | | |
|---------------------------------|-------|------|---------------------------------|-------|------|--|
| AM Peak Hour of Adjacent Street | | | PM Peak Hour of Adjacent Street | | | |
| Total | Enter | Exit | Total | Enter | Exit | |
| 240 | 61 | 179 | 318 | 200 | 118 | |
| 214 | 54 | 160 | 283 | 178 | 105 | |
| 24 | 6 | 18 | 32 | 20 | 12 | |
| 2 | 1 | 1 | 3 | 2 | 1 | |

next, adt for each gate
 am peak hour
 calc percent for each direction
 will tell you percent traveling n and s
 which will tell you percent entering
 which is sbi and nbr

| AM | | | PM | | |
|------|-------|--------|------|-------|--------|
| N | 5227 | 34.5% | N | 14191 | 62.0% |
| S | 9906 | 65.5% | S | 8690 | 38.0% |
| Sum: | 15133 | 100.0% | Sum: | 22881 | 100.0% |

Gate 2
 ADT 3

| AM | | | PM | | |
|------|----|--------|------|----|--------|
| N | 37 | 62.7% | N | 28 | 37.3% |
| S | 22 | 37.3% | S | 47 | 62.7% |
| Sum: | 59 | 100.0% | Sum: | 75 | 100.0% |

Distribute through Entering and Exiting Volume

Gate 1

| Scenario | Trip Distribution Along US 23/SR 365/Cornelia Hwy | | | | |
|----------|---|--------------|----------------|--------------|----------------|
| | Total | To the North | From the North | To the South | From the South |
| AM | 214 | 55 | 19 | 105 | 35 |
| PM | 283 | 40 | 68 | 65 | 110 |

Gate 2

| Scenario | Trip Distribution Along Cagle Mill Rd | | | | |
|----------|---------------------------------------|--------------|----------------|--------------|----------------|
| | Total | To the North | From the North | To the South | From the South |
| AM | 24 | 6 | 2 | 12 | 4 |
| PM | 32 | 5 | 8 | 7 | 12 |

Gate 3

| Scenario | Trip Distribution Along Whitehall Rd | | | | |
|----------|--------------------------------------|-------------|---------------|-------------|---------------|
| | Total | To the East | From the East | To the West | From the West |
| AM | N | 1 | 1 | 0 | 0 |
| PM | N | 1 | 2 | 0 | 0 |

Appendix J: Trip Distribution

From US 23/SR 365/Cornelia Highway Driveway

| Peak Hr | Gate 1/TMC 1 | | | | | | | | | | | | | | Sum | | |
|---------|--------------|-----|-----|----|-----|-----|-----|----|-----|-----|-----|----|-----|-----|-----|-----|----|
| | NB | | | | SB | | | | EB | | | | WB | | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | | WBR | WB |
| AM | | | 22 | | 12 | | | | | | | | 66 | | 35 | | |
| PM | | | 68 | | 41 | | | | | | | | 39 | | 24 | | |

Add above to TMC 1

SBL comes from TMC 6 north of TMC 1
So add volume to TMC 6, that can make the movement to the south

| | AM | PM |
|-------|----|----|
| Enter | 35 | 24 |
| Exit | 12 | 41 |

Enter

| Feeder | SBL: To South, From TMC 6, to TMC 1 | | | | | |
|--------|-------------------------------------|---------|-------|-------|---------|-------|
| | AM | | | PM | | |
| | Value | Percent | Distr | Value | Percent | Distr |
| WBL | 21 | 1.00% | 0 | 12 | 1.20% | 0 |
| EBR | 1 | 0.05% | 0 | 4 | 0.40% | 0 |
| SBT | 2074 | 98.95% | 12 | 987 | 98.40% | 41 |
| Total | 2096 | 100% | 12 | 1003 | 100% | 41 |

Add 12 to SBT TMC 6 in AM
Add 41 to SBT TMC 6 in PM

Done
SBT do not come from anywhere else

WBR feeds into TMC 6

Exit

| Feeder | WBR: To North, From TMC 1 | | | | | |
|--------|---------------------------|---------|-------|-------|---------|-------|
| | AM | | | PM | | |
| | Value | Percent | Distr | Value | Percent | Distr |
| NBL | 0 | 0.00% | 0 | 2 | 0.08% | 0 |
| NBT | 828 | 100.00% | 35 | 2346 | 98.90% | 24 |
| NBR | 0 | 0.00% | 0 | 24 | 1.01% | 0 |
| Total | 828 | 100% | 35 | 2372 | 100% | 24 |

Add 35 to NBT in TMC 6 in AM
Add 24 to NBT in TMC 6 in PM

Add 22 to NBR in TMC 1 in AM
Add 12 to SBL in TMC 1 in AM
Add 66 to WBL in TMC 1 in AM
Add 35 to WBR in TMC 1 in AM

Add 68 to NBR in TMC 1 in PM
Add 41 to SBL in TMC 1 in PM
Add 39 to WBL in TMC 1 in PM
Add 24 to WBR in TMC 1 in PM

| Peak Hr | TMC 6 | | | | | | | | | | | | | | Sum | | | |
|---------|---------|-------|--------|-------|--------|-------|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | NB | | | | SB | | | | EB | | | | WB | | | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | | WBR | WB | |
| AM | AM Vol | 0 | 828 | 0 | 828 | 0 | 2074 | 2 | 2076 | 3 | 2 | 1 | 6 | 21 | 2 | 1 | 24 | 2934 |
| | Percent | 0.00% | 28.22% | 0.00% | 28.22% | 0.00% | 70.69% | 0.07% | 70.76% | 0.10% | 0.07% | 0.03% | 0.20% | 0.72% | 0.07% | 0.03% | 0.82% | 1 |
| PM | PM Vol | 2 | 2346 | 24 | 2372 | 1 | 987 | 4 | 992 | 6 | 1 | 4 | 11 | 12 | 0 | 4 | 16 | 3391 |
| | Percent | 0.06% | 69.18% | 0.71% | 69.95% | 0.03% | 29.11% | 0.12% | 29.25% | 0.18% | 0.03% | 0.12% | 0.32% | 0.35% | 0.00% | 0.12% | 0.47% | 1 |

| Peak Hr | TMC 6 | | | | | | | | | | | | | | Sum | | | |
|---------|---------|-------|--------|-------|--------|-------|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | NB | | | | SB | | | | EB | | | | WB | | | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | | WBR | WB | |
| AM | AM Vol | 0 | 828 | 0 | 828 | 0 | 2074 | 2 | 2076 | 3 | 2 | 1 | 6 | 21 | 2 | 1 | 24 | 2934 |
| | Percent | 0.00% | 28.22% | 0.00% | 28.22% | 0.00% | 70.69% | 0.07% | 70.76% | 0.10% | 0.07% | 0.03% | 0.20% | 0.72% | 0.07% | 0.03% | 0.82% | 1 |
| PM | PM Vol | 2 | 2346 | 24 | 2372 | 1 | 987 | 4 | 992 | 6 | 1 | 4 | 11 | 12 | 0 | 4 | 16 | 3391 |
| | Percent | 0.06% | 69.18% | 0.71% | 69.95% | 0.03% | 29.11% | 0.12% | 29.25% | 0.18% | 0.03% | 0.12% | 0.32% | 0.35% | 0.00% | 0.12% | 0.47% | 1 |

| Peak Hr | Gate 2/TMC 7 | | | | | | | | | | | | | | Sum | |
|---------|--------------|-----|-----|----|-----|-----|-----|----|-----|-----|-----|----|-----|-----|-----|----|
| | NB | | | | SB | | | | EB | | | | WB | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | WBR | WB |
| AM | 3 | | | | | | 1 | | 4 | | 8 | | | | | |
| PM | 8 | | | | | | 5 | | 3 | | 5 | | | | | |

NBL comes from TMC 4 From South
 SBR comes from TMC 3 From North
 EBR goes to TMC 4 To South
 EBL goes to TMC 3 To North
 Add 3 to NBL in TMC 7 in AM
 Add 1 to SBR in TMC 7 in AM
 Add 4 to EBL in TMC 7 in AM
 Add 8 to EBR in TMC 7 in AM
 Add 8 to NBL in TMC 7 in PM
 Add 5 to SBR in TMC 7 in PM
 Add 3 to EBL in TMC 7 in PM
 Add 5 to EBR in TMC 7 in PM

| | AM | PM |
|-------|----|----|
| Enter | 3 | 8 |
| Exit | 1 | 5 |

Taking from TMC 3 to TMC 7

Enter

| Feeder | SBR: To South, From TMC 3, To TMC 7 | | | | | |
|--------|-------------------------------------|---------|-------|-------|---------|-------|
| | AM | | | PM | | |
| | Value | Percent | Distr | Value | Percent | Distr |
| SBR | 3 | 75.00% | 1 | 2 | 66.67% | 3 |
| NBL | 1 | 25.00% | 0 | 1 | 33.33% | 2 |
| Total | 4 | 100% | 1 | 3 | 100% | 5 |

Add 1 to SBR in TMC 3 in AM
 Add 3 to SBR in TMC 3 in PM
 Add 2 to NBL in TMC 3 in PM

Add 1 to EBR in TMC 2 in AM
 Add 1 to EBT in TMC 6 in AM

Add 3 to EBR in TMC 2 in PM
 Add 3 to NBR in TMC 6 in PM
 Add 3 to NBT in TMC 1 in PM

SBR comes from TMC 2 - EBR (6) and WBL (2)
 EBR comes from TMC 6 - NBR (0), EBT (2), SBL (0)
 SBR comes from TMC 2 - EBR (14) and WBL (2)
 EBR comes from TMC 6 - NBR (24), EBT (1), SBL (1)
 NBR comes from TMC 1 - NBT (2356), EBL (18), WBR (0)

Adding to TMC 3 from TMC 7

Exit

| Feeder | EBL: To North, From 7, To TMC 3 | | | | | |
|--------|---------------------------------|---------|-------|-------|---------|-------|
| | AM | | | PM | | |
| | Value | Percent | Distr | Value | Percent | Distr |
| EBL | 4 | 100.00% | 4 | 2 | 100.00% | 3 |
| EBT | 0 | 0.00% | 0 | 0 | 0.00% | 0 |
| EBR | 0 | 0.00% | 0 | 0 | 0.00% | 0 |
| Total | 4 | 100% | 4 | 2 | 100% | 3 |

Add 4 to EBL in TMC 3 in AM
 Add 3 to EBL in TMC 3 in PM

Add 4 to NBL in TMC 2 in AM
 Add 1 to NBR in TMC 2 in PM
 Add 2 to NBL in TMC 2 in PM

Add 4 to EBT in TMC 6 in AM
 Add 2 to NBR in TMC 6 in PM

Add 2 to NBT in TMC 1 in PM

EBL goes to TMC 2 - NBL (12), NBR (1)
 EBL goes to TMC 2 - NBL (10), NBR (5)
 NBL goes to TMC 6 - NBR (0), EBT (2), SBL (0)
 NBL goes to TMC 6 - NBR (24), EBT (1), SBL (1)
 NBR goes to TMC 1 - NBT (2357), EBL (18), WBR (0)

Taking from TMC 4 to TMC 7

Enter

| Feeder | NBL: To North, From TMC 4, To TMC 7 | | | | | |
|--------|-------------------------------------|---------|-------|-------|---------|-------|
| | AM | | | PM | | |
| | Value | Percent | Distr | Value | Percent | Distr |
| NBT | 1 | 20.00% | 1 | 2 | 33.33% | 3 |
| WBR | 3 | 60.00% | 2 | 0 | 0.00% | 0 |
| EBL | 1 | 20.00% | 1 | 4 | 66.67% | 5 |
| Total | 5 | 100% | 4 | 6 | 100% | 8 |

Add 1 to WBR in TMC 5 in AM

Add 2 to WBR in TMC 5 in PM
 Add 3 to EBL in TMC 5 in PM

NBT comes from TMC 5 - EBL (10), WBR (7)
 NBT comes from TMC 5 - EBL (10), WBR (7)
 To North, From TMC 5, To TMC 4
 Add 2 to WBR in TMC 5 in PM
 Add 3 to EBL in TMC 5 in PM

Adding to TMC 4 from TMC 7

Add 1 to SBL in TMC 4 in AM
 Add 6 to SBT in TMC 4 in AM
 Add 2 to SBR in TMC 4 in AM
 Add 1 to SBL in TMC 4 in PM
 Add 3 to SBT in TMC 4 in PM
 Add 1 to SBR in TMC 4 in PM

| Feeder | To South, From 7, To TMC 4 | | | | | |
|--------|----------------------------|---------|-------|-------|---------|-------|
| | AM | | | PM | | |
| | Value | Percent | Distr | Value | Percent | Distr |
| SBL | 1 | 10.00% | 1 | 1 | 25.00% | 1 |
| SBT | 7 | 70.00% | 6 | 2 | 50.00% | 3 |
| SBR | 2 | 20.00% | 2 | 1 | 25.00% | 1 |
| Total | 10 | 100% | 9 | 4 | 100% | 5 |

Adding to TMC 5 from TMC 4

Add 1 to SBL in TMC 5 in AM
 Add 5 to SBR in TMC 5 in AM
 Add 2 to SBL in TMC 5 in PM
 Add 1 to SBR in TMC 5 in PM

| Feeder | To South, From 4, To TMC 5 | | | | | |
|--------|----------------------------|---------|-------|-------|---------|-------|
| | AM | | | PM | | |
| | Value | Percent | Distr | Value | Percent | Distr |
| SBL | 1 | 12.50% | 1 | 6 | 66.67% | 2 |
| SBT | 0 | 0.00% | 0 | 0 | 0.00% | 0 |
| SBR | 7 | 87.50% | 5 | 3 | 33.33% | 1 |
| Total | 8 | 100% | 6 | 9 | 100% | 3 |

| Peak Hr | TMC 3 | | | | | | | | | | | | | | Sum | |
|---------|---------|-------|--------|-------|--------|-------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| | NB | | | | SB | | | | EB | | | | WB | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | WBR | WB |
| AM | AM Vol | 1 | 10 | 0 | 11 | 0 | 5 | 3 | 8 | 4 | 0 | 4 | 0 | 0 | 0 | 0 |
| | Percent | 4.35% | 43.48% | 0.00% | 47.83% | 0.00% | 21.74% | 13.04% | 34.78% | 17.39% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| PM | PM Vol | 1 | 10 | 0 | 11 | 0 | 21 | 2 | 23 | 2 | 0 | 2 | 0 | 0 | 0 | 0 |
| | Percent | 2.78% | 27.78% | 0.00% | 30.56% | 0.00% | 58.33% | 5.56% | 63.89% | 5.56% | 0.00% | 0.00% | 5.56% | 0.00% | 0.00% | 0.00% |

Eastbound here is Cagle Mill Rd going north

| Peak Hr | TMC 3 | | | | | | | | | | | | | | Sum | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | NB | | | | SB | | | | EB | | | | WB | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | WBR | WB |
| AM | AM Vol | 1 | 10 | 0 | 11 | 0 | 5 | 3 | 8 | 4 | 0 | 4 | 0 | 0 | 0 | 0 |
| | Percent | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| | Entry | | | | | | | | | | | | | | | |
| | From | | | | | | | | | | | | | | | |
| PM | PM Vol | 1 | 10 | 0 | 11 | 0 | 21 | 2 | 23 | 2 | 0 | 2 | 0 | 0 | 0 | 0 |
| | Percent | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| | Entry | | | | | | | | | | | | | | | |
| | From | | | | | | | | | | | | | | | |

| Peak Hr | TMC 4 | | | | | | | | | | | | | | Sum | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | NB | | | | SB | | | | EB | | | | WB | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | WBR | WB |
| AM | AM Vol | 1 | 1 | 1 | 3 | 1 | 7 | 2 | 10 | 1 | 4 | 2 | 7 | 0 | 15 | 3 |
| | Percent | 33.33% | 33.33% | 33.33% | 100.00% | 33.33% | 233.33% | 66.67% | 333.33% | 33.33% | 133.33% | 66.67% | 233.33% | 0.00% | 500.00% | 100.00% |
| PM | PM Vol | 8 | 2 | 7 | 17 | 1 | 2 | 1 | 4 | 4 | 14 | 5 | 23 | 7 | 8 | 0 |
| | Percent | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |














| Peak Hr | TMC 5 | | | | | | | | | | | | | | Sum | |
|---------|---------|-------|-------|-------|-------|--------|-------|---------|---------|---------|----------|-------|----------|-------|----------|---------|
| | NB | | | | SB | | | | EB | | | | WB | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | WBR | WB |
| AM | AM Vol | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 8 | 0 | 78 | 0 | 78 | 0 | 355 | 2 |
| | Percent | 0.00% | 0.00% | 0.00% | 0.00% | 50.00% | 0.00% | 350.00% | 400.00% | 0.00% | 3900.00% | 0.00% | 3900.00% | 0.00% | ##### | 100.00% |
| PM | PM Vol | 0 | 0 | 0 | 0 | 6 | 0 | 3 | 9 | 10 | 301 | 0 | 311 | 0 | 124 | 7 |
| | Percent | 0.00% | 0.00% | 0.00% | 0.00% | 85.71% | 0.00% | 42.86% | 128.57% | 142.86% | 4300.00% | 0.00% | 4442.86% | 0.00% | 1771.43% | 100.00% |

| Peak Hr | TMC 4 | | | | | | | | | | | | | | Sum | |
|---------|---------|--------|--------|--------|---------|-------|--------|--------|---------|--------|--------|---------|---------|--------|--------|---------|
| | NB | | | | SB | | | | EB | | | | WB | | | |
| | NBL | NBT | NBR | NB | SBL | SBT | SBR | SB | EBL | EBT | EBR | EB | WBL | WBT | WBR | WB |
| AM | AM Vol | 1 | 1 | 1 | 3 | 1 | 7 | 2 | 10 | 1 | 4 | 2 | 7 | 0 | 15 | 3 |
| | Percent | 5.56% | 5.56% | 5.56% | 16.67% | 5.56% | 38.89% | 11.11% | 55.56% | 5.56% | 22.22% | 11.11% | 38.89% | 0.00% | 83.33% | 16.67% |
| | Entry | | | | | | | | | | | | | | | |
| | From | | | | | | | | | | | | | | | |
| PM | PM Vol | 8 | 2 | 7 | 17 | 1 | 2 | 1 | 4 | 4 | 14 | 5 | 23 | 7 | 8 | 0 |
| | Percent | 53.33% | 13.33% | 46.67% | 113.33% | 6.67% | 13.33% | 6.67% | 26.67% | 93.33% | 33.33% | 153.33% | 46.67% | 53.33% | 0.00% | 100.00% |
| | Entry | | | | #VALUE! | | | | #VALUE! | | | | #VALUE! | | | #VALUE! |
| | From | | | | NBR | | | | SBL | | | | | | | |

Appendix K: Capacity Analysis

HCM Unsignalized Intersection Capacity Analysis
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

05/13/2022

| |  |  |  |  |  |  |  | |
|------------------------|---|---|---|---|---|---|---|------|
| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR | |
| Lane Configurations |  | |  |  |  |  |  | |
| Traffic Volume (veh/h) | 6 | 18 | 57 | 864 | 1 | 2167 | 33 | |
| Future Volume (Veh/h) | 6 | 18 | 57 | 864 | 1 | 2167 | 33 | |
| Sign Control | Stop | | | Free | | Free | | |
| Grade | 0% | | | 0% | | 0% | | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | |
| Hourly flow rate (vph) | 7 | 21 | 66 | 1005 | 0 | 2520 | 38 | |
| Pedestrians | | | | | | | | |
| Lane Width (ft) | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | |
| Percent Blockage | | | | | | | | |
| Right turn flare (veh) | | | | | | | | |
| Median type | | | | None | None | | | |
| Median storage (veh) | | | | | | | | |
| Upstream signal (ft) | | | | | | | | |
| pX, platoon unblocked | | | | | 0.00 | | | |
| vC, conflicting volume | 3154 | 1260 | 2558 | 0 | | | | |
| vC1, stage 1 conf vol | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | |
| vCu, unblocked vol | 3154 | 1260 | 2558 | 0 | | | | |
| tC, single (s) | 7.1 | 7.2 | 4.3 | 0.0 | | | | |
| tC, 2 stage (s) | | | | | | | | |
| tF (s) | 3.7 | 3.5 | 2.3 | 0.0 | | | | |
| p0 queue free % | 0 | 85 | 55 | 0 | | | | |
| cM capacity (veh/h) | 3 | 142 | 147 | 0 | | | | |
| Direction, Lane # | EB 1 | NB 1 | NB 2 | NB 3 | SB 1 | SB 2 | SB 3 | SB 4 |
| Volume Total | 28 | 66 | 502 | 502 | 1260 | 1260 | 38 | 0 |
| Volume Left | 7 | 66 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 21 | 0 | 0 | 0 | 0 | 0 | 38 | 0 |
| cSH | 13 | 147 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 2.16 | 0.45 | 0.30 | 0.30 | 0.74 | 0.74 | 0.02 | 0.00 |
| Queue Length 95th (ft) | 108 | 51 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 1124.7 | 47.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

HCM Unsignalized Intersection Capacity Analysis

1: US 23/Cornelia Hwy & Americold Logistics Driveway

05/13/2022

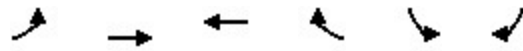
| | | | |
|--------------------|--------|-----|-----|
| Lane LOS | F | E | |
| Approach Delay (s) | 1124.7 | 3.0 | 0.0 |
| Approach LOS | F | | |

| | | | |
|-----------------------------------|--|-------|------------------------|
| Intersection Summary | | | |
| Average Delay | | 9.5 | |
| Intersection Capacity Utilization | | 69.9% | ICU Level of Service C |
| Analysis Period (min) | | 15 | |

HCM Unsignalized Intersection Capacity Analysis

3: Cagle Mill Rd & Julian Baugh Rd

05/13/2022



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↶ | | ↷ | | | ↷ |
| Traffic Volume (veh/h) | 4 | 0 | 1 | 11 | 5 | 3 |
| Future Volume (Veh/h) | 4 | 0 | 1 | 11 | 5 | 3 |
| Sign Control | | Stop | Stop | | Free | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Hourly flow rate (vph) | 6 | 0 | 1 | 15 | 7 | 4 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 30 | 14 | 18 | 0 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 30 | 14 | 18 | 0 | 0 | |
| tC, single (s) | 7.1 | 6.5 | 6.5 | 6.2 | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 4.0 | 4.0 | 3.3 | 2.2 | |
| p0 queue free % | 99 | 100 | 100 | 99 | 100 | |
| cM capacity (veh/h) | 967 | 881 | 876 | 1091 | 1636 | |
| Direction, Lane # | EB 1 | WB 1 | SB 1 | | | |
| Volume Total | 6 | 16 | 11 | | | |
| Volume Left | 6 | 0 | 7 | | | |
| Volume Right | 0 | 15 | 4 | | | |
| cSH | 967 | 1074 | 1636 | | | |
| Volume to Capacity | 0.01 | 0.01 | 0.00 | | | |
| Queue Length 95th (ft) | 0 | 1 | 0 | | | |
| Control Delay (s) | 8.7 | 8.4 | 4.6 | | | |

HCM Unsignalized Intersection Capacity Analysis

3: Cagle Mill Rd & Julian Baugh Rd

05/13/2022

| | | | |
|-----------------------------------|-----|------|------------------------|
| Lane LOS | A | A | A |
| Approach Delay (s) | 8.7 | 8.4 | 4.6 |
| Approach LOS | A | A | |
| Intersection Summary | | | |
| Average Delay | | 7.2 | |
| Intersection Capacity Utilization | | Err% | ICU Level of Service H |
| Analysis Period (min) | | 15 | |

HCM 6th TWSC
2: Julian Baugh Rd & Cagle Rd

05/13/2022

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑ | | | ↑ | ↑ | |
| Traffic Vol, veh/h | 3 | 6 | 2 | 7 | 14 | 1 |
| Future Vol, veh/h | 3 | 6 | 2 | 7 | 14 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 62 | 62 | 62 | 62 | 62 | 62 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 10 | 3 | 11 | 23 | 2 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 15 | 0 | 27 |
| Stage 1 | - | - | - | - | 10 |
| Stage 2 | - | - | - | - | 17 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1616 | - | 993 |
| Stage 1 | - | - | - | - | 1018 |
| Stage 2 | - | - | - | - | 1011 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1616 | - | 991 |
| Mov Cap-2 Maneuver | - | - | - | - | 991 |
| Stage 1 | - | - | - | - | 1018 |
| Stage 2 | - | - | - | - | 1009 |

HCM 6th TWSC

2: Julian Baugh Rd & Cagle Rd

05/13/2022

| Approach | EB | WB | NB | | |
|-----------------------|-------|-----|-----|-------|-----|
| HCM Control Delay, s | 0 | 1.6 | 8.7 | | |
| HCM LOS | | | | A | |
| | | | | | |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
| Capacity (veh/h) | 996 | - | - | 1616 | - |
| HCM Lane V/C Ratio | 0.024 | - | - | 0.002 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.2 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

HCM 6th TWSC
4: Noah Martin Rd & Whitehall Rd

05/13/2022

| 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 | 1 | 4 | 2 | 0 | 16 | 2 | 1 | 1 | 1 | 1 | 7 | 2 |
| Future Vol, veh/h | 1 | 4 | 2 | 0 | 16 | 2 | 1 | 1 | 1 | 1 | 7 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 14 | 14 | 14 | 6 | 6 | 6 | 33 | 33 | 33 | 10 | 10 | 10 |
| Mvmt Flow | 1 | 5 | 3 | 0 | 20 | 3 | 1 | 1 | 1 | 1 | 9 | 3 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 28 | 17 | 11 | 21 | 18 | 2 | 12 | 0 | 0 | 2 | 0 | 0 |
| Stage 1 | 13 | 13 | - | 4 | 4 | - | - | - | - | - | - | - |
| Stage 2 | 15 | 4 | - | 17 | 14 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.24 | 6.64 | 6.34 | 7.16 | 6.56 | 6.26 | 4.43 | - | - | 4.2 | - | - |
| Critical Hdwy Stg 1 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.626 | 4.126 | 3.426 | 3.554 | 4.054 | 3.354 | 2.497 | - | - | 2.29 | - | - |
| Pot Cap-1 Maneuver | 952 | 854 | 1036 | 982 | 868 | 1071 | 1427 | - | - | 1569 | - | - |
| Stage 1 | 977 | 861 | - | 1008 | 885 | - | - | - | - | - | - | - |
| Stage 2 | 975 | 869 | - | 992 | 876 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | | | | | |
| Mov Cap-1 Maneuver | 931 | 852 | 1036 | 974 | 866 | 1071 | 1427 | - | - | 1569 | - | - |
| Mov Cap-2 Maneuver | 931 | 852 | - | 974 | 866 | - | - | - | - | - | - | - |
| Stage 1 | 976 | 860 | - | 1007 | 884 | - | - | - | - | - | - | - |
| Stage 2 | 949 | 868 | - | 983 | 875 | - | - | - | - | - | - | - |

HCM 6th TWSC

4: Noah Martin Rd & Whitehall Rd

05/13/2022

| Approach | EB | WB | | | NB | | SB | |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| HCM Control Delay, s | 9 | 9.2 | | | 2.5 | | 0.7 | |
| HCM LOS | A | A | | | | | | |
| | | | | | | | | |
| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| Capacity (veh/h) | 1427 | - | - | 909 | 885 | 1569 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.01 | 0.026 | 0.001 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 9 | 9.2 | 7.3 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.1 | 0 | - | - |

HCM 6th TWSC
 5: Old Cornelia Hwy & Noah Martin Rd

05/13/2022

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | ↷ |
| Traffic Vol, veh/h | 0 | 82 | 373 | 2 | 1 | 7 |
| Future Vol, veh/h | 0 | 82 | 373 | 2 | 1 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 9 | 9 | 3 | 3 | 13 | 13 |
| Mvmt Flow | 0 | 92 | 419 | 2 | 1 | 8 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 421 | 0 | 512 |
| Stage 1 | - | - | 420 |
| Stage 2 | - | - | 92 |
| Critical Hdwy | 4.19 | - | 6.53 |
| Critical Hdwy Stg 1 | - | - | 5.53 |
| Critical Hdwy Stg 2 | - | - | 5.53 |
| Follow-up Hdwy | 2.281 | - | 3.617 |
| Pot Cap-1 Maneuver | 1102 | - | 503 |
| Stage 1 | - | - | 640 |
| Stage 2 | - | - | 905 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1102 | - | 503 |
| Mov Cap-2 Maneuver | - | - | 503 |
| Stage 1 | - | - | 640 |
| Stage 2 | - | - | 905 |

HCM 6th TWSC

5: Old Cornelia Hwy & Noah Martin Rd

05/13/2022

| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.2 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|------|-----|-----|-----|-------|
| Capacity (veh/h) | 1102 | - | - | - | 594 |
| HCM Lane V/C Ratio | - | - | - | - | 0.015 |
| HCM Control Delay (s) | 0 | - | - | - | 11.2 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

HCM 6th TWSC
6: US 23/Cornelia Hwy & Cagle Rd

05/13/2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 11.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | | ↑ | ↑↑ | ↑ | ↑ | ↑↑ | ↑ |
| Traffic Vol, veh/h | 2 | 0 | 1 | 22 | 2 | 1 | 0 | 778 | 0 | 0 | 2178 | 2 |
| Future Vol, veh/h | 2 | 0 | 1 | 22 | 2 | 1 | 0 | 778 | 0 | 0 | 2178 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 50 | 50 | 50 | 0 | 0 | 0 | 11 | 11 | 11 | 4 | 4 | 4 |
| Mvmt Flow | 2 | 0 | 1 | 26 | 2 | 1 | 0 | 915 | 0 | 0 | 2562 | 2 |

| Major/Minor | Minor2 | | Minor1 | | | Major1 | | Major2 | | | | |
|----------------------|--------|------|--------|------|------|--------|------|--------|---|------|---|---|
| Conflicting Flow All | 3021 | 3477 | 1281 | 2196 | 3479 | 458 | 2564 | 0 | 0 | 915 | 0 | 0 |
| Stage 1 | 2562 | 2562 | - | 915 | 915 | - | - | - | - | - | - | - |
| Stage 2 | 459 | 915 | - | 1281 | 2564 | - | - | - | - | - | - | - |
| Critical Hdwy | 8.5 | 7.5 | 7.9 | 7.5 | 6.5 | 6.9 | 4.32 | - | - | 4.18 | - | - |
| Critical Hdwy Stg 1 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 4 | 4.5 | 3.8 | 3.5 | 4 | 3.3 | 2.31 | - | - | 2.24 | - | - |
| Pot Cap-1 Maneuver | ~ 2 | 3 | 104 | 26 | 7 | 555 | 146 | - | - | 729 | - | - |
| Stage 1 | 13 | 26 | - | 298 | 354 | - | - | - | - | - | - | - |
| Stage 2 | 442 | 257 | - | 178 | 54 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | ~ 1 | 3 | 104 | 26 | 7 | 555 | 146 | - | - | 729 | - | - |
| Mov Cap-2 Maneuver | ~ 1 | 3 | - | 26 | 7 | - | - | - | - | - | - | - |
| Stage 1 | 13 | 26 | - | 298 | 354 | - | - | - | - | - | - | - |
| Stage 2 | 438 | 257 | - | 176 | 54 | - | - | - | - | - | - | - |

HCM 6th TWSC
6: US 23/Cornelia Hwy & Cagle Rd

05/13/2022

| Approach | EB | WB | | NB | | SB | | |
|-----------------------|-----------|----------|-----|-----------|----------|-----|-----|-----|
| HCM Control Delay, s | \$ 6632.1 | \$ 567.2 | | 0 | | 0 | | |
| HCM LOS | F | F | | | | | | |
| <hr/> | | | | | | | | |
| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| Capacity (veh/h) | 146 | - | - | 1 | 22 | 729 | - | - |
| HCM Lane V/C Ratio | - | - | - | 3.529 | 1.337 | - | - | - |
| HCM Control Delay (s) | 0 | - | - | \$ 6632.1 | \$ 567.2 | 0 | - | - |
| HCM Lane LOS | A | - | - | F | F | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.3 | 3.8 | 0 | - | - |

Notes

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

HCM Unsignalized Intersection Capacity Analysis
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

05/13/2022



| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR | |
|------------------------|-------|------|------|------|------|------|------|------|
| Lane Configurations | ↔ | | ↔ | ↑↑ | ↔ | ↑↑ | ↔ | |
| Traffic Volume (veh/h) | 19 | 25 | 6 | 2475 | 2 | 1035 | 8 | |
| Future Volume (Veh/h) | 19 | 25 | 6 | 2475 | 2 | 1035 | 8 | |
| Sign Control | Stop | | | Free | | Free | | |
| Grade | 0% | | | 0% | | 0% | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | |
| Hourly flow rate (vph) | 20 | 26 | 6 | 2605 | 0 | 1089 | 8 | |
| Pedestrians | | | | | | | | |
| Lane Width (ft) | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | |
| Percent Blockage | | | | | | | | |
| Right turn flare (veh) | | | | | | | | |
| Median type | | | | None | None | | | |
| Median storage (veh) | | | | | | | | |
| Upstream signal (ft) | | | | | | | | |
| pX, platoon unblocked | | | | | 0.00 | | | |
| vC, conflicting volume | 2404 | 544 | 1097 | 0 | | | | |
| vC1, stage 1 conf vol | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | |
| vCu, unblocked vol | 2404 | 544 | 1097 | 0 | | | | |
| tC, single (s) | 7.2 | 7.3 | 4.2 | 0.0 | | | | |
| tC, 2 stage (s) | | | | | | | | |
| tF (s) | 3.7 | 3.5 | 2.2 | 0.0 | | | | |
| p0 queue free % | 7 | 94 | 99 | 0 | | | | |
| cM capacity (veh/h) | 22 | 441 | 620 | 0 | | | | |
| Direction, Lane # | EB 1 | NB 1 | NB 2 | NB 3 | SB 1 | SB 2 | SB 3 | SB 4 |
| Volume Total | 46 | 6 | 1302 | 1302 | 544 | 544 | 8 | 0 |
| Volume Left | 20 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 26 | 0 | 0 | 0 | 0 | 0 | 8 | 0 |
| cSH | 47 | 620 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.99 | 0.01 | 0.77 | 0.77 | 0.32 | 0.32 | 0.00 | 0.00 |
| Queue Length 95th (ft) | 103 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 264.6 | 10.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

HCM Unsignalized Intersection Capacity Analysis

1: US 23/Cornelia Hwy & Americold Logistics Driveway

05/13/2022

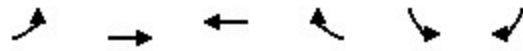
| | | | |
|--------------------|-------|-----|-----|
| Lane LOS | F | B | |
| Approach Delay (s) | 264.6 | 0.0 | 0.0 |
| Approach LOS | F | | |

| | | | |
|-----------------------------------|-------|----------------------|---|
| Intersection Summary | | | |
| Average Delay | | 3.3 | |
| Intersection Capacity Utilization | 78.4% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |

HCM Unsignalized Intersection Capacity Analysis

3: Cagle Mill Rd & Julian Baugh Rd

05/13/2022



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|------------------------|------|------|------|------|------|------|
| Lane Configurations | ↰ | | ↱ | | | ↱ |
| Traffic Volume (veh/h) | 2 | 0 | 1 | 11 | 22 | 2 |
| Future Volume (Veh/h) | 2 | 0 | 1 | 11 | 22 | 2 |
| Sign Control | | Stop | Stop | | Free | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Hourly flow rate (vph) | 3 | 0 | 1 | 15 | 29 | 3 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 74 | 58 | 61 | 0 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 74 | 58 | 61 | 0 | 0 | |
| tC, single (s) | 7.1 | 6.5 | 6.5 | 6.2 | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 4.0 | 4.0 | 3.3 | 2.2 | |
| p0 queue free % | 100 | 100 | 100 | 99 | 98 | |
| cM capacity (veh/h) | 896 | 822 | 819 | 1091 | 1636 | |
| Direction, Lane # | EB 1 | WB 1 | SB 1 | | | |
| Volume Total | 3 | 16 | 32 | | | |
| Volume Left | 3 | 0 | 29 | | | |
| Volume Right | 0 | 15 | 3 | | | |
| cSH | 896 | 1069 | 1636 | | | |
| Volume to Capacity | 0.00 | 0.01 | 0.02 | | | |
| Queue Length 95th (ft) | 0 | 1 | 1 | | | |
| Control Delay (s) | 9.0 | 8.4 | 6.6 | | | |

HCM Unsignalized Intersection Capacity Analysis

3: Cagle Mill Rd & Julian Baugh Rd

05/13/2022

| | | | |
|--------------------|-----|-----|-----|
| Lane LOS | A | A | A |
| Approach Delay (s) | 9.0 | 8.4 | 6.6 |
| Approach LOS | A | A | |

Intersection Summary

| | | | | |
|-----------------------------------|--|------|----------------------|---|
| Average Delay | | 7.3 | | |
| Intersection Capacity Utilization | | Err% | ICU Level of Service | H |
| Analysis Period (min) | | 15 | | |

HCM 6th TWSC
2: Julian Baugh Rd & Cagle Rd

05/13/2022

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.8 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑ | | | ↑ | ↑ | |
| Traffic Vol, veh/h | 16 | 15 | 2 | 6 | 11 | 5 |
| Future Vol, veh/h | 16 | 15 | 2 | 6 | 11 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 18 | 17 | 2 | 7 | 13 | 6 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 35 | 0 | 38 |
| Stage 1 | - | - | - | - | 27 |
| Stage 2 | - | - | - | - | 11 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1589 | - | 979 |
| Stage 1 | - | - | - | - | 1001 |
| Stage 2 | - | - | - | - | 1017 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1589 | - | 978 |
| Mov Cap-2 Maneuver | - | - | - | - | 978 |
| Stage 1 | - | - | - | - | 1001 |
| Stage 2 | - | - | - | - | 1016 |

HCM 6th TWSC

2: Julian Baugh Rd & Cagle Rd

05/13/2022

| Approach | EB | WB | NB | | |
|-----------------------|-------|-----|-----|-------|-----|
| HCM Control Delay, s | 0 | 1.8 | 8.7 | | |
| HCM LOS | | | A | | |
| | | | | | |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
| Capacity (veh/h) | 1001 | - | - | 1589 | - |
| HCM Lane V/C Ratio | 0.018 | - | - | 0.001 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

HCM 6th TWSC
4: Noah Martin Rd & Whitehall Rd

05/13/2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 4 | 15 | 5 | 7 | 8 | 0 | 8 | 2 | 7 | 1 | 2 | 1 |
| Future Vol, veh/h | 4 | 15 | 5 | 7 | 8 | 0 | 8 | 2 | 7 | 1 | 2 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 0 | 0 | 0 | 7 | 7 | 7 | 6 | 6 | 6 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 19 | 6 | 9 | 10 | 0 | 10 | 3 | 9 | 1 | 3 | 1 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-------|--------|-------|--------|---|---|------|---|---|
| Conflicting Flow All | 39 | 38 | 4 | 46 | 34 | 8 | 4 | 0 | 0 | 12 | 0 | 0 |
| Stage 1 | 6 | 6 | - | 28 | 28 | - | - | - | - | - | - | - |
| Stage 2 | 33 | 32 | - | 18 | 6 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.17 | 6.57 | 6.27 | 4.16 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.563 | 4.063 | 3.363 | 2.254 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 971 | 858 | 1085 | 943 | 849 | 1060 | 1592 | - | - | 1620 | - | - |
| Stage 1 | 1021 | 895 | - | 976 | 862 | - | - | - | - | - | - | - |
| Stage 2 | 988 | 872 | - | 988 | 881 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | | | | | |
| Mov Cap-1 Maneuver | 956 | 852 | 1085 | 917 | 843 | 1060 | 1592 | - | - | 1620 | - | - |
| Mov Cap-2 Maneuver | 956 | 852 | - | 917 | 843 | - | - | - | - | - | - | - |
| Stage 1 | 1015 | 894 | - | 970 | 857 | - | - | - | - | - | - | - |
| Stage 2 | 970 | 867 | - | 960 | 880 | - | - | - | - | - | - | - |

HCM 6th TWSC

4: Noah Martin Rd & Whitehall Rd

05/13/2022

| Approach | EB | WB | | | NB | | SB | |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| HCM Control Delay, s | 9.1 | 9.2 | | | 3.4 | | 1.8 | |
| HCM LOS | A | A | | | | | | |
| | | | | | | | | |
| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| Capacity (veh/h) | 1592 | - | - | 909 | 876 | 1620 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | - | 0.034 | 0.022 | 0.001 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | - | 9.1 | 9.2 | 7.2 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.1 | 0 | - | - |

HCM 6th TWSC
 5: Old Cornelia Hwy & Noah Martin Rd

05/13/2022

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↖ | ↗ | | ↖ | |
| Traffic Vol, veh/h | 11 | 316 | 130 | 7 | 6 | 3 |
| Future Vol, veh/h | 11 | 316 | 130 | 7 | 6 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 13 | 363 | 149 | 8 | 7 | 3 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|-----|-----|
| Conflicting Flow All | 157 | 0 | 0 | 542 | 153 |
| Stage 1 | - | - | - | 153 | - |
| Stage 2 | - | - | - | 389 | - |
| Critical Hdwy | 4.12 | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.218 | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1423 | - | - | 505 | 898 |
| Stage 1 | - | - | - | 880 | - |
| Stage 2 | - | - | - | 689 | - |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1423 | - | - | 499 | 898 |
| Mov Cap-2 Maneuver | - | - | - | 499 | - |
| Stage 1 | - | - | - | 870 | - |
| Stage 2 | - | - | - | 689 | - |

HCM 6th TWSC

5: Old Cornelia Hwy & Noah Martin Rd

05/13/2022

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.3 | 0 | 11.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1423 | - | - | - | 586 |
| HCM Lane V/C Ratio | 0.009 | - | - | - | 0.018 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 11.3 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

HCM 6th TWSC
6: US 23/Cornelia Hwy & Cagle Rd

05/13/2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 13 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↑↑ | ↕ | ↑↑ |
| Traffic Vol, veh/h | 6 | 1 | 4 | 13 | 0 | 4 | 2 | 2463 | 25 | 1 | 1036 | 4 |
| Future Vol, veh/h | 6 | 1 | 4 | 13 | 0 | 4 | 2 | 2463 | 25 | 1 | 1036 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 8 | 8 | 8 |
| Mvmt Flow | 6 | 1 | 4 | 14 | 0 | 4 | 2 | 2566 | 26 | 1 | 1079 | 4 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|------|--------|---|---|------|---|---|
| Conflicting Flow All | 2368 | 3677 | 540 | 3112 | 3655 | 1283 | 1083 | 0 | 0 | 2592 | 0 | 0 |
| Stage 1 | 1081 | 1081 | - | 2570 | 2570 | - | - | - | - | - | - | - |
| Stage 2 | 1287 | 2596 | - | 542 | 1085 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.18 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.24 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | 19 | 5 | 491 | ~ 5 | 5 | 159 | 628 | - | - | 150 | - | - |
| Stage 1 | 236 | 296 | - | 27 | 54 | - | - | - | - | - | - | - |
| Stage 2 | 177 | 52 | - | 497 | 295 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | | | | | |
| Mov Cap-1 Maneuver | 18 | 5 | 491 | ~ 4 | 5 | 159 | 628 | - | - | 150 | - | - |
| Mov Cap-2 Maneuver | 18 | 5 | - | ~ 4 | 5 | - | - | - | - | - | - | - |
| Stage 1 | 235 | 294 | - | 27 | 54 | - | - | - | - | - | - | - |
| Stage 2 | 172 | 52 | - | 488 | 293 | - | - | - | - | - | - | - |

HCM 6th TWSC
 6: US 23/Cornelia Hwy & Cagle Rd

05/13/2022

| Approach | EB | WB | NB | SB |
|----------------------|----------|-----------|----|----|
| HCM Control Delay, s | \$ 324.8 | \$ 2511.2 | 0 | 0 |
| HCM LOS | F | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|----------|-----------|-------|-----|-----|
| Capacity (veh/h) | 628 | - | - | 20 | 5 | 150 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.573 | 3.542 | 0.007 | - | - |
| HCM Control Delay (s) | 10.8 | - | - | \$ 324.8 | \$ 2511.2 | 29.2 | - | - |
| HCM Lane LOS | B | - | - | F | F | D | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.6 | 3.5 | 0 | - | - |

Notes

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

HCM Unsignalized Intersection Capacity Analysis
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

2023 AM Peak Hour
 2023 AM Peak Hour No-Build Conditions

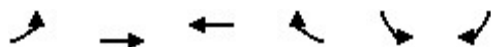


| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR | |
|-----------------------------------|-------------|-------------|-------------|----------------------|-------------|-------------|-------------|-------------|
| Lane Configurations | | | | | | | | |
| Traffic Volume (veh/h) | 6 | 19 | 59 | 892 | 1 | 2237 | 34 | |
| Future Volume (Veh/h) | 6 | 19 | 59 | 892 | 1 | 2237 | 34 | |
| Sign Control | Stop | | | Free | | Free | | |
| Grade | 0% | | | 0% | | 0% | | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | |
| Hourly flow rate (vph) | 7 | 22 | 69 | 1037 | 0 | 2601 | 40 | |
| Pedestrians | | | | | | | | |
| Lane Width (ft) | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | |
| Percent Blockage | | | | | | | | |
| Right turn flare (veh) | | | | | | | | |
| Median type | | | | None | None | | | |
| Median storage (veh) | | | | | | | | |
| Upstream signal (ft) | | | | | | | | |
| pX, platoon unblocked | | | | | 0.00 | | | |
| vC, conflicting volume | 3258 | 1300 | 2641 | 0 | | | | |
| vC1, stage 1 conf vol | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | |
| vCu, unblocked vol | 3258 | 1300 | 2641 | 0 | | | | |
| tC, single (s) | 7.1 | 7.2 | 4.3 | 0.0 | | | | |
| tC, 2 stage (s) | | | | | | | | |
| tF (s) | 3.7 | 3.5 | 2.3 | 0.0 | | | | |
| p0 queue free % | 0 | 83 | 49 | 0 | | | | |
| cM capacity (veh/h) | 3 | 133 | 136 | 0 | | | | |
| Direction, Lane # | EB 1 | NB 1 | NB 2 | NB 3 | SB 1 | SB 2 | SB 3 | SB 4 |
| Volume Total | 29 | 69 | 518 | 518 | 1300 | 1300 | 40 | 0 |
| Volume Left | 7 | 69 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 22 | 0 | 0 | 0 | 0 | 0 | 40 | 0 |
| cSH | 10 | 136 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 2.85 | 0.51 | 0.30 | 0.30 | 0.77 | 0.77 | 0.02 | 0.00 |
| Queue Length 95th (ft) | 117 | 60 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 1569.6 | 56.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | F | F | | | | | | |
| Approach Delay (s) | 1569.6 | 3.5 | 0.0 | | | | | |
| Approach LOS | F | | | | | | | |
| Intersection Summary | | | | | | | | |
| Average Delay | | | 13.1 | | | | | |
| Intersection Capacity Utilization | | | 71.8% | ICU Level of Service | C | | | |
| Analysis Period (min) | | | 15 | | | | | |

HCM Unsignalized Intersection Capacity Analysis

3: Cagle Mill Rd & Julian Baugh Rd

2023 AM Peak Hour
2023 AM Peak Hour No-Build Conditions



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|------|----------------------|------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 4 | 0 | 1 | 11 | 5 | 3 |
| Future Volume (Veh/h) | 4 | 0 | 1 | 11 | 5 | 3 |
| Sign Control | | Stop | Stop | | Free | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Hourly flow rate (vph) | 6 | 0 | 1 | 15 | 7 | 4 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | | | | |
| Median storage veh | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 30 | 14 | 18 | 0 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 30 | 14 | 18 | 0 | 0 | |
| tC, single (s) | 7.1 | 6.5 | 6.5 | 6.2 | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 4.0 | 4.0 | 3.3 | 2.2 | |
| p0 queue free % | 99 | 100 | 100 | 99 | 100 | |
| cM capacity (veh/h) | 967 | 881 | 876 | 1091 | 1636 | |
| Direction, Lane # | EB 1 | WB 1 | SB 1 | | | |
| Volume Total | 6 | 16 | 11 | | | |
| Volume Left | 6 | 0 | 7 | | | |
| Volume Right | 0 | 15 | 4 | | | |
| cSH | 967 | 1074 | 1636 | | | |
| Volume to Capacity | 0.01 | 0.01 | 0.00 | | | |
| Queue Length 95th (ft) | 0 | 1 | 0 | | | |
| Control Delay (s) | 8.7 | 8.4 | 4.6 | | | |
| Lane LOS | A | A | A | | | |
| Approach Delay (s) | 8.7 | 8.4 | 4.6 | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 7.2 | | | |
| Intersection Capacity Utilization | | | Err% | ICU Level of Service | | H |
| Analysis Period (min) | | | 15 | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 6 | 2 | 7 | 14 | 1 |
| Future Vol, veh/h | 3 | 6 | 2 | 7 | 14 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 62 | 62 | 62 | 62 | 62 | 62 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 10 | 3 | 11 | 23 | 2 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 15 | 0 | 27 |
| Stage 1 | - | - | - | - | 10 |
| Stage 2 | - | - | - | - | 17 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1616 | - | 993 |
| Stage 1 | - | - | - | - | 1018 |
| Stage 2 | - | - | - | - | 1011 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1616 | - | 991 |
| Mov Cap-2 Maneuver | - | - | - | - | 991 |
| Stage 1 | - | - | - | - | 1018 |
| Stage 2 | - | - | - | - | 1009 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 1.6 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 996 | - | - | 1616 | - |
| HCM Lane V/C Ratio | 0.024 | - | - | 0.002 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.2 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 6.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 1 | 4 | 2 | 0 | 17 | 2 | 1 | 1 | 1 | 1 | 7 | 2 |
| Future Vol, veh/h | 1 | 4 | 2 | 0 | 17 | 2 | 1 | 1 | 1 | 1 | 7 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 14 | 14 | 14 | 6 | 6 | 6 | 33 | 33 | 33 | 10 | 10 | 10 |
| Mvmt Flow | 1 | 5 | 3 | 0 | 22 | 3 | 1 | 1 | 1 | 1 | 9 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|------|---|---|
| Conflicting Flow All | 29 | 17 | 11 | 21 | 18 | 2 | 12 | 0 | 0 | 2 | 0 | 0 |
| Stage 1 | 13 | 13 | - | 4 | 4 | - | - | - | - | - | - | - |
| Stage 2 | 16 | 4 | - | 17 | 14 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.24 | 6.64 | 6.34 | 7.16 | 6.56 | 6.26 | 4.43 | - | - | 4.2 | - | - |
| Critical Hdwy Stg 1 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.626 | 4.126 | 3.426 | 3.554 | 4.054 | 3.354 | 2.497 | - | - | 2.29 | - | - |
| Pot Cap-1 Maneuver | 950 | 854 | 1036 | 982 | 868 | 1071 | 1427 | - | - | 1569 | - | - |
| Stage 1 | 977 | 861 | - | 1008 | 885 | - | - | - | - | - | - | - |
| Stage 2 | 973 | 869 | - | 992 | 876 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 928 | 852 | 1036 | 974 | 866 | 1071 | 1427 | - | - | 1569 | - | - |
| Mov Cap-2 Maneuver | 928 | 852 | - | 974 | 866 | - | - | - | - | - | - | - |
| Stage 1 | 976 | 860 | - | 1007 | 884 | - | - | - | - | - | - | - |
| Stage 2 | 946 | 868 | - | 983 | 875 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----|--|-----|--|-----|--|-----|--|
| HCM Control Delay, s | 9 | | 9.2 | | 2.5 | | 0.7 | |
| HCM LOS | A | | A | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1427 | - | - | 909 | 884 | 1569 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.01 | 0.027 | 0.001 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 9 | 9.2 | 7.3 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.1 | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | |
| Traffic Vol, veh/h | 0 | 85 | 385 | 2 | 1 | 7 |
| Future Vol, veh/h | 0 | 85 | 385 | 2 | 1 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 9 | 9 | 3 | 3 | 13 | 13 |
| Mvmt Flow | 0 | 96 | 433 | 2 | 1 | 8 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 435 | 0 | - | 0 | 530 |
| Stage 1 | - | - | - | - | 434 |
| Stage 2 | - | - | - | - | 96 |
| Critical Hdwy | 4.19 | - | - | - | 6.53 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.53 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.53 |
| Follow-up Hdwy | 2.281 | - | - | - | 3.617 |
| Pot Cap-1 Maneuver | 1088 | - | - | - | 491 |
| Stage 1 | - | - | - | - | 630 |
| Stage 2 | - | - | - | - | 901 |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1088 | - | - | - | 491 |
| Mov Cap-2 Maneuver | - | - | - | - | 491 |
| Stage 1 | - | - | - | - | 630 |
| Stage 2 | - | - | - | - | 901 |

| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|------|-----|-----|-----|-------|
| Capacity (veh/h) | 1088 | - | - | - | 583 |
| HCM Lane V/C Ratio | - | - | - | - | 0.015 |
| HCM Control Delay (s) | 0 | - | - | - | 11.3 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 12.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↕ | ↑↑ | ↕ |
| Traffic Vol, veh/h | 2 | 0 | 1 | 23 | 2 | 1 | 0 | 803 | 0 | 0 | 2249 | 2 |
| Future Vol, veh/h | 2 | 0 | 1 | 23 | 2 | 1 | 0 | 803 | 0 | 0 | 2249 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 50 | 50 | 50 | 0 | 0 | 0 | 11 | 11 | 11 | 4 | 4 | 4 |
| Mvmt Flow | 2 | 0 | 1 | 27 | 2 | 1 | 0 | 945 | 0 | 0 | 2646 | 2 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|-----|------|--------|---|------|---|---|
| Conflicting Flow All | 3120 | 3591 | 1323 | 2268 | 3593 | 473 | 2648 | 0 | 0 | 945 | 0 | 0 |
| Stage 1 | 2646 | 2646 | - | 945 | 945 | - | - | - | - | - | - | - |
| Stage 2 | 474 | 945 | - | 1323 | 2648 | - | - | - | - | - | - | - |
| Critical Hdwy | 8.5 | 7.5 | 7.9 | 7.5 | 6.5 | 6.9 | 4.32 | - | - | 4.18 | - | - |
| Critical Hdwy Stg 1 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 4 | 4.5 | 3.8 | 3.5 | 4 | 3.3 | 2.31 | - | - | 2.24 | - | - |
| Pot Cap-1 Maneuver | ~2 | 2 | 96 | ~23 | 6 | 543 | 135 | - | - | 710 | - | - |
| Stage 1 | 11 | 23 | - | 285 | 343 | - | - | - | - | - | - | - |
| Stage 2 | 431 | 248 | - | 168 | 49 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | ~1 | 2 | 96 | ~23 | 6 | 543 | 135 | - | - | 710 | - | - |
| Mov Cap-2 Maneuver | ~1 | 2 | - | ~23 | 6 | - | - | - | - | - | - | - |
| Stage 1 | 11 | 23 | - | 285 | 343 | - | - | - | - | - | - | - |
| Stage 2 | 427 | 248 | - | 166 | 49 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|-----------------------|--------|--|-------|--|----|--|----|--|
| HCM Control Delay, \$ | 6632.1 | | 726.8 | | 0 | | 0 | |
| HCM LOS | F | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-----|-----|-----|-----------|----------|-----|-----|-----|
| Capacity (veh/h) | 135 | - | - | 1 | 19 | 710 | - | - |
| HCM Lane V/C Ratio | - | - | - | 3.529 | 1.61 | - | - | - |
| HCM Control Delay (s) | 0 | - | - | \$ 6632.1 | \$ 726.8 | 0 | - | - |
| HCM Lane LOS | A | - | - | F | F | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.3 | 4.2 | 0 | - | - |

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

HCM Unsignalized Intersection Capacity Analysis
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

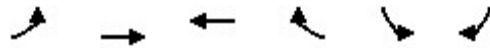
2023 PM Peak Hour
 2023 PM Peak Hour No-Build Conditions



| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR | |
|-----------------------------------|-------|------|-------|----------------------|------|------|------|------|
| Lane Configurations | | | | | | | | |
| Traffic Volume (veh/h) | 20 | 26 | 6 | 2555 | 2 | 1069 | 8 | |
| Future Volume (Veh/h) | 20 | 26 | 6 | 2555 | 2 | 1069 | 8 | |
| Sign Control | Stop | | | Free | | Free | | |
| Grade | 0% | | | 0% | | 0% | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | |
| Hourly flow rate (vph) | 21 | 27 | 6 | 2689 | 0 | 1125 | 8 | |
| Pedestrians | | | | | | | | |
| Lane Width (ft) | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | |
| Percent Blockage | | | | | | | | |
| Right turn flare (veh) | | | | | | | | |
| Median type | | | | None | None | | | |
| Median storage (veh) | | | | | | | | |
| Upstream signal (ft) | | | | | | | | |
| pX, platoon unblocked | | | | | 0.00 | | | |
| vC, conflicting volume | 2482 | 562 | 1133 | 0 | | | | |
| vC1, stage 1 conf vol | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | |
| vCu, unblocked vol | 2482 | 562 | 1133 | 0 | | | | |
| tC, single (s) | 7.2 | 7.3 | 4.2 | 0.0 | | | | |
| tC, 2 stage (s) | | | | | | | | |
| tF (s) | 3.7 | 3.5 | 2.2 | 0.0 | | | | |
| p0 queue free % | 0 | 94 | 99 | 0 | | | | |
| cM capacity (veh/h) | 19 | 429 | 601 | 0 | | | | |
| Direction, Lane # | EB 1 | NB 1 | NB 2 | NB 3 | SB 1 | SB 2 | SB 3 | SB 4 |
| Volume Total | 48 | 6 | 1344 | 1344 | 562 | 562 | 8 | 0 |
| Volume Left | 21 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 27 | 0 | 0 | 0 | 0 | 0 | 8 | 0 |
| cSH | 41 | 601 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 1.17 | 0.01 | 0.79 | 0.79 | 0.33 | 0.33 | 0.00 | 0.00 |
| Queue Length 95th (ft) | 118 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 351.4 | 11.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | F | B | | | | | | |
| Approach Delay (s) | 351.4 | 0.0 | 0.0 | | | | | |
| Approach LOS | F | | | | | | | |
| Intersection Summary | | | | | | | | |
| Average Delay | | | 4.4 | | | | | |
| Intersection Capacity Utilization | | | 80.6% | ICU Level of Service | | | D | |
| Analysis Period (min) | | | 15 | | | | | |

HCM Unsignalized Intersection Capacity Analysis
 3: Cagle Mill Rd & Julian Baugh Rd

2023 PM Peak Hour
 2023 PM Peak Hour No-Build Conditions



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|-------------|-------------|-------------|----------------------|------|------|
| Lane Configurations | ↗ | | ↖ | | | ↗ |
| Traffic Volume (veh/h) | 2 | 0 | 1 | 11 | 23 | 2 |
| Future Volume (Veh/h) | 2 | 0 | 1 | 11 | 23 | 2 |
| Sign Control | | Stop | Stop | | Free | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Hourly flow rate (vph) | 3 | 0 | 1 | 15 | 31 | 3 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 78 | 62 | 65 | 0 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 78 | 62 | 65 | 0 | 0 | |
| tC, single (s) | 7.1 | 6.5 | 6.5 | 6.2 | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 4.0 | 4.0 | 3.3 | 2.2 | |
| p0 queue free % | 100 | 100 | 100 | 99 | 98 | |
| cM capacity (veh/h) | 890 | 817 | 814 | 1091 | 1636 | |
| Direction, Lane # | EB 1 | WB 1 | SB 1 | | | |
| Volume Total | 3 | 16 | 34 | | | |
| Volume Left | 3 | 0 | 31 | | | |
| Volume Right | 0 | 15 | 3 | | | |
| cSH | 890 | 1068 | 1636 | | | |
| Volume to Capacity | 0.00 | 0.01 | 0.02 | | | |
| Queue Length 95th (ft) | 0 | 1 | 1 | | | |
| Control Delay (s) | 9.1 | 8.4 | 6.6 | | | |
| Lane LOS | A | A | A | | | |
| Approach Delay (s) | 9.1 | 8.4 | 6.6 | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 7.3 | | | |
| Intersection Capacity Utilization | | | Err% | ICU Level of Service | H | |
| Analysis Period (min) | | | 15 | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.7 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 17 | 15 | 2 | 6 | 11 | 5 |
| Future Vol, veh/h | 17 | 15 | 2 | 6 | 11 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 20 | 17 | 2 | 7 | 13 | 6 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|------|
| Conflicting Flow All | 0 | 0 | 37 | 0 | 40 |
| Stage 1 | - | - | - | - | 29 |
| Stage 2 | - | - | - | - | 11 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1587 | - | 977 |
| Stage 1 | - | - | - | - | 999 |
| Stage 2 | - | - | - | - | 1017 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1587 | - | 976 |
| Mov Cap-2 Maneuver | - | - | - | - | 976 |
| Stage 1 | - | - | - | - | 999 |
| Stage 2 | - | - | - | - | 1016 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 1.8 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 999 | - | - | 1587 | - |
| HCM Lane V/C Ratio | 0.018 | - | - | 0.001 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 4 | 15 | 5 | 7 | 8 | 0 | 8 | 2 | 7 | 1 | 2 | 1 |
| Future Vol, veh/h | 4 | 15 | 5 | 7 | 8 | 0 | 8 | 2 | 7 | 1 | 2 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 0 | 0 | 0 | 7 | 7 | 7 | 6 | 6 | 6 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 19 | 6 | 9 | 10 | 0 | 10 | 3 | 9 | 1 | 3 | 1 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-----|--------|-------|--------|-------|-------|--------|---|------|---|---|
| Conflicting Flow All | 39 | 38 | 4 | 46 | 34 | 8 | 4 | 0 | 0 | 12 | 0 | 0 |
| Stage 1 | 6 | 6 | - | 28 | 28 | - | - | - | - | - | - | - |
| Stage 2 | 33 | 32 | - | 18 | 6 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.17 | 6.57 | 6.27 | 4.16 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.563 | 4.063 | 3.363 | 2.254 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 971 | 858 | 1085 | 943 | 849 | 1060 | 1592 | - | - | 1620 | - | - |
| Stage 1 | 1021 | 895 | - | 976 | 862 | - | - | - | - | - | - | - |
| Stage 2 | 988 | 872 | - | 988 | 881 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 956 | 852 | 1085 | 917 | 843 | 1060 | 1592 | - | - | 1620 | - | - |
| Mov Cap-2 Maneuver | 956 | 852 | - | 917 | 843 | - | - | - | - | - | - | - |
| Stage 1 | 1015 | 894 | - | 970 | 857 | - | - | - | - | - | - | - |
| Stage 2 | 970 | 867 | - | 960 | 880 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|-----|-----|
| HCM Control Delay, s | 9.1 | 9.2 | 3.4 | 1.8 |
| HCM LOS | A | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1592 | - | - | 909 | 876 | 1620 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | - | 0.034 | 0.022 | 0.001 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | - | 9.1 | 9.2 | 7.2 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.1 | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.3 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | ↷ |
| Traffic Vol, veh/h | 11 | 326 | 134 | 7 | 6 | 3 |
| Future Vol, veh/h | 11 | 326 | 134 | 7 | 6 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 13 | 375 | 154 | 8 | 7 | 3 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|---------|
| Conflicting Flow All | 162 | 0 | - | 0 | 559 158 |
| Stage 1 | - | - | - | - | 158 - |
| Stage 2 | - | - | - | - | 401 - |
| Critical Hdwy | 4.12 | - | - | - | 6.4 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.5 3.3 |
| Pot Cap-1 Maneuver | 1417 | - | - | - | 494 893 |
| Stage 1 | - | - | - | - | 875 - |
| Stage 2 | - | - | - | - | 681 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1417 | - | - | - | 488 893 |
| Mov Cap-2 Maneuver | - | - | - | - | 488 - |
| Stage 1 | - | - | - | - | 865 - |
| Stage 2 | - | - | - | - | 681 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.2 | 0 | 11.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1417 | - | - | - | 575 |
| HCM Lane V/C Ratio | 0.009 | - | - | - | 0.018 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 11.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 16.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↕ | ↑↑ | ↕ |
| Traffic Vol, veh/h | 6 | 1 | 4 | 13 | 0 | 4 | 2 | 2543 | 26 | 1 | 1070 | 4 |
| Future Vol, veh/h | 6 | 1 | 4 | 13 | 0 | 4 | 2 | 2543 | 26 | 1 | 1070 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 8 | 8 | 8 |
| Mvmt Flow | 6 | 1 | 4 | 14 | 0 | 4 | 2 | 2649 | 27 | 1 | 1115 | 4 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|------|------|--------|---|------|---|---|
| Conflicting Flow All | 2446 | 3797 | 558 | 3213 | 3774 | 1325 | 1119 | 0 | 0 | 2676 | 0 | 0 |
| Stage 1 | 1117 | 1117 | - | 2653 | 2653 | - | - | - | - | - | - | - |
| Stage 2 | 1329 | 2680 | - | 560 | 1121 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.18 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.24 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | 17 | 4 | 478 | ~4 | 4 | 149 | 608 | - | - | 138 | - | - |
| Stage 1 | 224 | 285 | - | 24 | 49 | - | - | - | - | - | - | - |
| Stage 2 | 166 | 47 | - | 485 | 284 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 16 | 4 | 478 | ~3 | 4 | 149 | 608 | - | - | 138 | - | - |
| Mov Cap-2 Maneuver | 16 | 4 | - | ~3 | 4 | - | - | - | - | - | - | - |
| Stage 1 | 223 | 283 | - | 24 | 49 | - | - | - | - | - | - | - |
| Stage 2 | 161 | 47 | - | 476 | 282 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----------|--|-----------|--|----|--|----|--|
| HCM Control Delay, s | \$ 407.3 | | \$ 3221.3 | | 0 | | 0 | |
| HCM LOS | F | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|----------|-----------|-------|-----|-----|
| Capacity (veh/h) | 608 | - | - | 17 | 4 | 138 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.674 | 4.427 | 0.008 | - | - |
| HCM Control Delay (s) | 10.9 | - | - | \$ 407.3 | \$ 3221.3 | 31.3 | - | - |
| HCM Lane LOS | B | - | - | F | F | D | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.8 | 3.6 | 0 | - | - |

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

HCM Unsignalized Intersection Capacity Analysis
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

2028 AM Peak Hour
 2028 AM Peak Hour No Build Conditions



| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR | |
|-----------------------------------|-------|-------|-------|------|------|----------------------|------|------|
| Lane Configurations | | | | | | | | |
| Traffic Volume (veh/h) | 7 | 22 | 69 | 1047 | 1 | 2625 | 40 | |
| Future Volume (Veh/h) | 7 | 22 | 69 | 1047 | 1 | 2625 | 40 | |
| Sign Control | Stop | | | Free | | Free | | |
| Grade | 0% | | | 0% | | 0% | | |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | |
| Hourly flow rate (vph) | 8 | 26 | 80 | 1217 | 0 | 3052 | 47 | |
| Pedestrians | | | | | | | | |
| Lane Width (ft) | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | |
| Percent Blockage | | | | | | | | |
| Right turn flare (veh) | | | | | | | | |
| Median type | | | | None | | None | | |
| Median storage (veh) | | | | | | | | |
| Upstream signal (ft) | | | | | | | | |
| pX, platoon unblocked | | | | | 0.00 | | | |
| vC, conflicting volume | 3820 | 1526 | 3099 | 0 | | | | |
| vC1, stage 1 conf vol | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | |
| vCu, unblocked vol | 3820 | 1526 | 3099 | 0 | | | | |
| tC, single (s) | 7.1 | 7.2 | 4.3 | 0.0 | | | | |
| tC, 2 stage (s) | | | | | | | | |
| tF (s) | 3.7 | 3.5 | 2.3 | 0.0 | | | | |
| p0 queue free % | 0 | 72 | 8 | 0 | | | | |
| cM capacity (veh/h) | 0 | 92 | 87 | 0 | | | | |
| Direction, Lane # | EB 1 | NB 1 | NB 2 | NB 3 | SB 1 | SB 2 | SB 3 | SB 4 |
| Volume Total | 34 | 80 | 608 | 608 | 1526 | 1526 | 47 | 0 |
| Volume Left | 8 | 80 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 26 | 0 | 0 | 0 | 0 | 0 | 47 | 0 |
| cSH | 1 | 87 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 49.33 | 0.92 | 0.36 | 0.36 | 0.90 | 0.90 | 0.03 | 0.00 |
| Queue Length 95th (ft) | Err | 126 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | Err | 159.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | F | F | | | | | | |
| Approach Delay (s) | Err | 9.9 | | | 0.0 | | | |
| Approach LOS | F | | | | | | | |
| Intersection Summary | | | | | | | | |
| Average Delay | | | 79.6 | | | | | |
| Intersection Capacity Utilization | | | 82.6% | | | ICU Level of Service | | E |
| Analysis Period (min) | | | 15 | | | | | |

HCM Unsignalized Intersection Capacity Analysis
 3: Cagle Mill Rd & Julian Baugh Rd

2028 AM Peak Hour
 2028 AM Peak Hour No Build Conditions



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|------|----------------------|------|------|
| Lane Configurations | ↖ | | ↗ | | | ↖ |
| Traffic Volume (veh/h) | 5 | 0 | 1 | 13 | 6 | 4 |
| Future Volume (Veh/h) | 5 | 0 | 1 | 13 | 6 | 4 |
| Sign Control | | Stop | Stop | | Free | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Hourly flow rate (vph) | 7 | 0 | 1 | 18 | 8 | 6 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 34 | 16 | 22 | 0 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 34 | 16 | 22 | 0 | 0 | |
| tC, single (s) | 7.1 | 6.5 | 6.5 | 6.2 | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 4.0 | 4.0 | 3.3 | 2.2 | |
| p0 queue free % | 99 | 100 | 100 | 98 | 100 | |
| cM capacity (veh/h) | 957 | 878 | 871 | 1091 | 1636 | |
| Direction, Lane # | EB 1 | WB 1 | SB 1 | | | |
| Volume Total | 7 | 19 | 14 | | | |
| Volume Left | 7 | 0 | 8 | | | |
| Volume Right | 0 | 18 | 6 | | | |
| cSH | 957 | 1077 | 1636 | | | |
| Volume to Capacity | 0.01 | 0.02 | 0.00 | | | |
| Queue Length 95th (ft) | 1 | 1 | 0 | | | |
| Control Delay (s) | 8.8 | 8.4 | 4.1 | | | |
| Lane LOS | A | A | A | | | |
| Approach Delay (s) | 8.8 | 8.4 | 4.1 | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 7.0 | | | |
| Intersection Capacity Utilization | | | Err% | ICU Level of Service | | H |
| Analysis Period (min) | | | 15 | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.3 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 7 | 2 | 8 | 16 | 1 |
| Future Vol, veh/h | 4 | 7 | 2 | 8 | 16 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 62 | 62 | 62 | 62 | 62 | 62 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 6 | 11 | 3 | 13 | 26 | 2 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 17 | 0 | 31 |
| Stage 1 | - | - | - | - | 12 |
| Stage 2 | - | - | - | - | 19 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1613 | - | 988 |
| Stage 1 | - | - | - | - | 1016 |
| Stage 2 | - | - | - | - | 1009 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1613 | - | 986 |
| Mov Cap-2 Maneuver | - | - | - | - | 986 |
| Stage 1 | - | - | - | - | 1016 |
| Stage 2 | - | - | - | - | 1007 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 1.4 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 991 | - | - | 1613 | - |
| HCM Lane V/C Ratio | 0.028 | - | - | 0.002 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.2 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 6.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 1 | 5 | 2 | 0 | 20 | 2 | 1 | 1 | 1 | 1 | 8 | 2 |
| Future Vol, veh/h | 1 | 5 | 2 | 0 | 20 | 2 | 1 | 1 | 1 | 1 | 8 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 14 | 14 | 14 | 6 | 6 | 6 | 33 | 33 | 33 | 10 | 10 | 10 |
| Mvmt Flow | 1 | 6 | 3 | 0 | 25 | 3 | 1 | 1 | 1 | 1 | 10 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|------|---|---|
| Conflicting Flow All | 32 | 18 | 12 | 22 | 19 | 2 | 13 | 0 | 0 | 2 | 0 | 0 |
| Stage 1 | 14 | 14 | - | 4 | 4 | - | - | - | - | - | - | - |
| Stage 2 | 18 | 4 | - | 18 | 15 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.24 | 6.64 | 6.34 | 7.16 | 6.56 | 6.26 | 4.43 | - | - | 4.2 | - | - |
| Critical Hdwy Stg 1 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.626 | 4.126 | 3.426 | 3.554 | 4.054 | 3.354 | 2.497 | - | - | 2.29 | - | - |
| Pot Cap-1 Maneuver | 946 | 853 | 1035 | 980 | 867 | 1071 | 1425 | - | - | 1569 | - | - |
| Stage 1 | 976 | 860 | - | 1008 | 885 | - | - | - | - | - | - | - |
| Stage 2 | 971 | 869 | - | 991 | 875 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 921 | 851 | 1035 | 970 | 865 | 1071 | 1425 | - | - | 1569 | - | - |
| Mov Cap-2 Maneuver | 921 | 851 | - | 970 | 865 | - | - | - | - | - | - | - |
| Stage 1 | 975 | 859 | - | 1007 | 884 | - | - | - | - | - | - | - |
| Stage 2 | 940 | 868 | - | 980 | 874 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----|--|-----|--|-----|--|-----|--|
| HCM Control Delay, s | 9 | | 9.2 | | 2.5 | | 0.7 | |
| HCM LOS | A | | A | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1425 | - | - | 900 | 880 | 1569 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.011 | 0.032 | 0.001 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 9 | 9.2 | 7.3 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.1 | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | ↷ |
| Traffic Vol, veh/h | 0 | 100 | 452 | 2 | 1 | 8 |
| Future Vol, veh/h | 0 | 100 | 452 | 2 | 1 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 9 | 9 | 3 | 3 | 13 | 13 |
| Mvmt Flow | 0 | 112 | 508 | 2 | 1 | 9 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 510 | 0 | - | 0 | 621 509 |
| Stage 1 | - | - | - | - | 509 - |
| Stage 2 | - | - | - | - | 112 - |
| Critical Hdwy | 4.19 | - | - | - | 6.53 6.33 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.53 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.53 - |
| Follow-up Hdwy | 2.281 | - | - | - | 3.617 3.417 |
| Pot Cap-1 Maneuver | 1020 | - | - | - | 434 543 |
| Stage 1 | - | - | - | - | 582 - |
| Stage 2 | - | - | - | - | 886 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1020 | - | - | - | 434 543 |
| Mov Cap-2 Maneuver | - | - | - | - | 434 - |
| Stage 1 | - | - | - | - | 582 - |
| Stage 2 | - | - | - | - | 886 - |

| Approach | EB | WB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 12 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|------|-----|-----|-----|-------|
| Capacity (veh/h) | 1020 | - | - | - | 528 |
| HCM Lane V/C Ratio | - | - | - | - | 0.019 |
| HCM Control Delay (s) | 0 | - | - | - | 12 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 17.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↕ | ↑↑ | ↕ |
| Traffic Vol, veh/h | 2 | 0 | 1 | 27 | 2 | 1 | 0 | 942 | 0 | 0 | 2639 | 2 |
| Future Vol, veh/h | 2 | 0 | 1 | 27 | 2 | 1 | 0 | 942 | 0 | 0 | 2639 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 50 | 50 | 50 | 0 | 0 | 0 | 11 | 11 | 11 | 4 | 4 | 4 |
| Mvmt Flow | 2 | 0 | 1 | 32 | 2 | 1 | 0 | 1108 | 0 | 0 | 3105 | 2 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 3660 | 4213 | 1553 | 2661 | 4215 | 554 | 3107 | 0 | 0 | 1108 | 0 | 0 |
| Stage 1 | 3105 | 3105 | - | 1108 | 1108 | - | - | - | - | - | - | - |
| Stage 2 | 555 | 1108 | - | 1553 | 3107 | - | - | - | - | - | - | - |
| Critical Hdwy | 8.5 | 7.5 | 7.9 | 7.5 | 6.5 | 6.9 | 4.32 | - | - | 4.18 | - | - |
| Critical Hdwy Stg 1 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 4 | 4.5 | 3.8 | 3.5 | 4 | 3.3 | 2.31 | - | - | 2.24 | - | - |
| Pot Cap-1 Maneuver | ~ 1 | 1 | 64 | ~ 11 | ~ 2 | 481 | 86 | - | - | 614 | - | - |
| Stage 1 | 5 | 12 | - | 227 | 288 | - | - | - | - | - | - | - |
| Stage 2 | 379 | 200 | - | 121 | 28 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | 1 | 64 | ~ 11 | ~ 2 | 481 | 86 | - | - | 614 | - | - |
| Mov Cap-2 Maneuver | - | 1 | - | ~ 11 | ~ 2 | - | - | - | - | - | - | - |
| Stage 1 | 5 | 12 | - | 227 | 288 | - | - | - | - | - | - | - |
| Stage 2 | 375 | 200 | - | 119 | 28 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----------|----|----|
| HCM Control Delay, s | | \$ 2129.1 | 0 | 0 |
| HCM LOS | - | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-----|-----|-----|------------|-------|-----|-----|
| Capacity (veh/h) | 86 | - | - | - | 9 | 614 | - |
| HCM Lane V/C Ratio | - | - | - | - | 3.922 | - | - |
| HCM Control Delay (s) | 0 | - | - | \$ 2129.1 | 0 | - | - |
| HCM Lane LOS | A | - | - | - | F | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 5.6 | 0 | - |

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

HCM Unsignalized Intersection Capacity Analysis
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

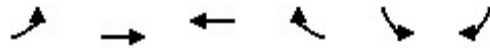
2028 PM Peak Hour
 2028 PM Peak Hour No Build Conditions



| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR | |
|-----------------------------------|-------------|-------------|-------------|----------------------|-------------|-------------|-------------|-------------|
| Lane Configurations | W | | W | ↑↑ | ↓ | ↑↑ | ↑ | |
| Traffic Volume (veh/h) | 23 | 31 | 7 | 2998 | 2 | 1254 | 9 | |
| Future Volume (Veh/h) | 23 | 31 | 7 | 2998 | 2 | 1254 | 9 | |
| Sign Control | Stop | | | Free | | Free | | |
| Grade | 0% | | | 0% | | 0% | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | |
| Hourly flow rate (vph) | 24 | 33 | 7 | 3156 | 0 | 1320 | 9 | |
| Pedestrians | | | | | | | | |
| Lane Width (ft) | | | | | | | | |
| Walking Speed (ft/s) | | | | | | | | |
| Percent Blockage | | | | | | | | |
| Right turn flare (veh) | | | | | | | | |
| Median type | | | | None | None | | | |
| Median storage (veh) | | | | | | | | |
| Upstream signal (ft) | | | | | | | | |
| pX, platoon unblocked | | | | | 0.00 | | | |
| vC, conflicting volume | 2912 | 660 | 1329 | 0 | | | | |
| vC1, stage 1 conf vol | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | |
| vCu, unblocked vol | 2912 | 660 | 1329 | 0 | | | | |
| tC, single (s) | 7.2 | 7.3 | 4.2 | 0.0 | | | | |
| tC, 2 stage (s) | | | | | | | | |
| tF (s) | 3.7 | 3.5 | 2.2 | 0.0 | | | | |
| p0 queue free % | 0 | 91 | 99 | 0 | | | | |
| cM capacity (veh/h) | 9 | 368 | 505 | 0 | | | | |
| Direction, Lane # | EB 1 | NB 1 | NB 2 | NB 3 | SB 1 | SB 2 | SB 3 | SB 4 |
| Volume Total | 57 | 7 | 1578 | 1578 | 660 | 660 | 9 | 0 |
| Volume Left | 24 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 33 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| cSH | 21 | 505 | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 2.73 | 0.01 | 0.93 | 0.93 | 0.39 | 0.39 | 0.01 | 0.00 |
| Queue Length 95th (ft) | 185 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Control Delay (s) | 1170.2 | 12.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | F | B | | | | | | |
| Approach Delay (s) | 1170.2 | 0.0 | 0.0 | | | | | |
| Approach LOS | F | | | | | | | |
| Intersection Summary | | | | | | | | |
| Average Delay | | | 14.7 | | | | | |
| Intersection Capacity Utilization | | | 92.9% | ICU Level of Service | | | F | |
| Analysis Period (min) | | | 15 | | | | | |

HCM Unsignalized Intersection Capacity Analysis
 3: Cagle Mill Rd & Julian Baugh Rd

2028 PM Peak Hour
 2028 PM Peak Hour No Build Conditions



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|-------------|-------------|-------------|----------------------|------|------|
| Lane Configurations | ↶ | | ↷ | | | ↶ |
| Traffic Volume (veh/h) | 2 | 0 | 1 | 13 | 27 | 2 |
| Future Volume (Veh/h) | 2 | 0 | 1 | 13 | 27 | 2 |
| Sign Control | | Stop | Stop | | Free | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Hourly flow rate (vph) | 3 | 0 | 1 | 17 | 36 | 3 |
| Pedestrians | | | | | | |
| Lane Width (ft) | | | | | | |
| Walking Speed (ft/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 90 | 72 | 75 | 0 | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 90 | 72 | 75 | 0 | 0 | |
| tC, single (s) | 7.1 | 6.5 | 6.5 | 6.2 | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 4.0 | 4.0 | 3.3 | 2.2 | |
| p0 queue free % | 100 | 100 | 100 | 98 | 98 | |
| cM capacity (veh/h) | 870 | 804 | 801 | 1091 | 1636 | |
| Direction, Lane # | EB 1 | WB 1 | SB 1 | | | |
| Volume Total | 3 | 18 | 39 | | | |
| Volume Left | 3 | 0 | 36 | | | |
| Volume Right | 0 | 17 | 3 | | | |
| cSH | 870 | 1069 | 1636 | | | |
| Volume to Capacity | 0.00 | 0.02 | 0.02 | | | |
| Queue Length 95th (ft) | 0 | 1 | 2 | | | |
| Control Delay (s) | 9.2 | 8.4 | 6.7 | | | |
| Lane LOS | A | A | A | | | |
| Approach Delay (s) | 9.2 | 8.4 | 6.7 | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 7.3 | | | |
| Intersection Capacity Utilization | | | Err% | ICU Level of Service | H | |
| Analysis Period (min) | | | 15 | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.7 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 18 | 2 | 7 | 13 | 6 |
| Future Vol, veh/h | 20 | 18 | 2 | 7 | 13 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 23 | 21 | 2 | 8 | 15 | 7 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|------|
| Conflicting Flow All | 0 | 0 | 44 | 0 | 46 |
| Stage 1 | - | - | - | - | 34 |
| Stage 2 | - | - | - | - | 12 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1577 | - | 969 |
| Stage 1 | - | - | - | - | 994 |
| Stage 2 | - | - | - | - | 1016 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1577 | - | 968 |
| Mov Cap-2 Maneuver | - | - | - | - | 968 |
| Stage 1 | - | - | - | - | 994 |
| Stage 2 | - | - | - | - | 1015 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 1.6 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 991 | - | - | 1577 | - |
| HCM Lane V/C Ratio | 0.022 | - | - | 0.001 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 7.2 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 18 | 6 | 8 | 9 | 0 | 9 | 2 | 8 | 1 | 2 | 1 |
| Future Vol, veh/h | 5 | 18 | 6 | 8 | 9 | 0 | 9 | 2 | 8 | 1 | 2 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 0 | 0 | 0 | 7 | 7 | 7 | 6 | 6 | 6 | 0 | 0 | 0 |
| Mvmt Flow | 6 | 23 | 8 | 10 | 12 | 0 | 12 | 3 | 10 | 1 | 3 | 1 |

| Major/Minor | Minor2 | | Minor1 | | | Major1 | | Major2 | | | | |
|----------------------|--------|-----|--------|-------|-------|--------|-------|--------|---|------|---|---|
| Conflicting Flow All | 44 | 43 | 4 | 53 | 38 | 8 | 4 | 0 | 0 | 13 | 0 | 0 |
| Stage 1 | 6 | 6 | - | 32 | 32 | - | - | - | - | - | - | - |
| Stage 2 | 38 | 37 | - | 21 | 6 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.17 | 6.57 | 6.27 | 4.16 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.563 | 4.063 | 3.363 | 2.254 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 963 | 853 | 1085 | 933 | 845 | 1060 | 1592 | - | - | 1619 | - | - |
| Stage 1 | 1021 | 895 | - | 972 | 859 | - | - | - | - | - | - | - |
| Stage 2 | 982 | 868 | - | 985 | 881 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 947 | 845 | 1085 | 901 | 837 | 1060 | 1592 | - | - | 1619 | - | - |
| Mov Cap-2 Maneuver | 947 | 845 | - | 901 | 837 | - | - | - | - | - | - | - |
| Stage 1 | 1013 | 894 | - | 964 | 852 | - | - | - | - | - | - | - |
| Stage 2 | 961 | 861 | - | 952 | 880 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|-----|--|-----|--|-----|--|-----|--|
| HCM Control Delay, s | 9.2 | | 9.3 | | 3.4 | | 1.8 | |
| HCM LOS | A | | A | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1592 | - | - | 903 | 866 | 1619 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | - | 0.041 | 0.025 | 0.001 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | - | 9.2 | 9.3 | 7.2 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.1 | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | ↷ |
| Traffic Vol, veh/h | 13 | 383 | 157 | 8 | 7 | 4 |
| Future Vol, veh/h | 13 | 383 | 157 | 8 | 7 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 15 | 440 | 180 | 9 | 8 | 5 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|---------|
| Conflicting Flow All | 189 | 0 | - | 0 | 655 185 |
| Stage 1 | - | - | - | - | 185 - |
| Stage 2 | - | - | - | - | 470 - |
| Critical Hdwy | 4.12 | - | - | - | 6.4 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.5 3.3 |
| Pot Cap-1 Maneuver | 1385 | - | - | - | 434 862 |
| Stage 1 | - | - | - | - | 852 - |
| Stage 2 | - | - | - | - | 633 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1385 | - | - | - | 428 862 |
| Mov Cap-2 Maneuver | - | - | - | - | 428 - |
| Stage 1 | - | - | - | - | 840 - |
| Stage 2 | - | - | - | - | 633 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 0.3 | 0 | 12 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1385 | - | - | - | 524 |
| HCM Lane V/C Ratio | 0.011 | - | - | - | 0.024 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 12 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↕ | ↑↑ | ↕ |
| Traffic Vol, veh/h | 7 | 1 | 5 | 15 | 0 | 5 | 2 | 2984 | 31 | 1 | 1256 | 5 |
| Future Vol, veh/h | 7 | 1 | 5 | 15 | 0 | 5 | 2 | 2984 | 31 | 1 | 1256 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 8 | 8 | 8 |
| Mvmt Flow | 7 | 1 | 5 | 16 | 0 | 5 | 2 | 3108 | 32 | 1 | 1308 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|------|------|--------|---|------|---|---|
| Conflicting Flow All | 2868 | 4454 | 654 | 3769 | 4427 | 1554 | 1313 | 0 | 0 | 3140 | 0 | 0 |
| Stage 1 | 1310 | 1310 | - | 3112 | 3112 | - | - | - | - | - | - | - |
| Stage 2 | 1558 | 3144 | - | 657 | 1315 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.18 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.24 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | 8 | ~1 | 414 | ~2 | 2 | 104 | 512 | - | - | 89 | - | - |
| Stage 1 | 171 | 231 | - | ~12 | 28 | - | - | - | - | - | - | - |
| Stage 2 | 120 | 27 | - | 425 | 230 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 8 | ~1 | 414 | - | 2 | 104 | 512 | - | - | 89 | - | - |
| Mov Cap-2 Maneuver | 8 | ~1 | - | - | 2 | - | - | - | - | - | - | - |
| Stage 1 | 170 | 228 | - | ~12 | 28 | - | - | - | - | - | - | - |
| Stage 2 | 114 | 27 | - | 413 | 227 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|-----------------------|--------|----|----|----|
| HCM Control Delay, \$ | 1430.9 | | 0 | 0 |
| HCM LOS | F | - | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-----------|-------|-------|-----|-----|
| Capacity (veh/h) | 512 | - | - | 7 | - | 89 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 1.935 | - | 0.012 | - | - |
| HCM Control Delay (s) | 12.1 | - | - | \$ 1430.9 | - | 45.9 | - | - |
| HCM Lane LOS | B | - | - | F | - | E | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 2.7 | - | 0 | - | - |

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

HCM 6th TWSC
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

2023 AM Peak Hour Build Conditions- RCUT

| Intersection | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.2 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBU | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | | ↗ | ↗ | ↗↗ | | | | ↗↗ | ↗ |
| Traffic Vol, veh/h | 0 | 0 | 25 | 0 | 0 | 160 | 59 | 898 | 35 | 1 | 19 | 2342 | 34 |
| Future Vol, veh/h | 0 | 0 | 25 | 0 | 0 | 160 | 59 | 898 | 35 | 1 | 19 | 2342 | 34 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | 475 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | - | 0 | - |
| Peak Hour Factor | 86 | 92 | 86 | 92 | 92 | 92 | 86 | 86 | 92 | 86 | 92 | 86 | 86 |
| Heavy Vehicles, % | 17 | 2 | 17 | 2 | 2 | 2 | 11 | 11 | 2 | 4 | 2 | 4 | 4 |
| Mvmt Flow | 0 | 0 | 29 | 0 | 0 | 174 | 69 | 1044 | 38 | 1 | 21 | 2723 | 40 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | | |
|----------------------|--------|---|--------|---|--------|------|--------|---|---|------|------|---|---|
| Conflicting Flow All | - | - | 1362 | - | - | 541 | 2763 | 0 | 0 | 1082 | 1082 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.24 | - | - | 6.94 | 4.32 | - | - | 6.48 | 4.14 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.47 | - | - | 3.32 | 2.31 | - | - | 2.54 | 2.22 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 120 | 0 | 0 | 485 | 121 | - | - | 289 | 640 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 120 | - | - | 485 | 121 | - | - | 570 | 570 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 44.3 | | 16.5 | | 4.1 | | 0.1 | |
| HCM LOS | E | | C | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 121 | - | - | 120 | 485 | 570 | - | - |
| HCM Lane V/C Ratio | 0.567 | - | - | 0.242 | 0.359 | 0.036 | - | - |
| HCM Control Delay (s) | 68 | - | - | 44.3 | 16.5 | 11.6 | - | - |
| HCM Lane LOS | F | - | - | E | C | B | - | - |
| HCM 95th %tile Q(veh) | 2.8 | - | - | 0.9 | 1.6 | 0.1 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | | ↑↑ | | ↘ | ↑↑ |
| Traffic Vol, veh/h | 0 | 0 | 992 | 0 | 6 | 2361 |
| Future Vol, veh/h | 0 | 0 | 992 | 0 | 6 | 2361 |
| 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 | - | - | - | 410 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 1078 | 0 | 7 | 2566 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 2375 | - | 0 |
| Stage 1 | 1078 | - | - |
| Stage 2 | 1297 | - | - |
| Critical Hdwy | 6.84 | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - |
| Follow-up Hdwy | 3.52 | - | - |
| Pot Cap-1 Maneuver | 29 | 0 | 0 |
| Stage 1 | 288 | 0 | 0 |
| Stage 2 | 220 | 0 | 0 |
| Platoon blocked, % | | - | - |
| Mov Cap-1 Maneuver | 29 | - | - |
| Mov Cap-2 Maneuver | 29 | - | - |
| Stage 1 | 288 | - | - |
| Stage 2 | 218 | - | - |

| Approach | WB | NB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBTWBLn1 | SBL | SBT |
|-----------------------|----------|-----|------|
| Capacity (veh/h) | - | - | 643 |
| HCM Lane V/C Ratio | - | - | 0.01 |
| HCM Control Delay (s) | - | 0 | 10.7 |
| HCM Lane LOS | - | A | B |
| HCM 95th %tile Q(veh) | - | - | 0 |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | ↘ | ↕ | ↕ | |
| Traffic Vol, veh/h | 0 | 0 | 105 | 954 | 2396 | 0 |
| Future Vol, veh/h | 0 | 0 | 105 | 954 | 2396 | 0 |
| 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 | 410 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 114 | 1037 | 2604 | 0 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | - | 1302 | 2604 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 151 | 163 | - | - | 0 |
| Stage 1 | 0 | - | - | - | - | 0 |
| Stage 2 | 0 | - | - | - | - | 0 |
| Platoon blocked, % | | | | - | - | |
| Mov Cap-1 Maneuver | - | 151 | 163 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 0 | 6.6 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT |
|-----------------------|------|-----|-------|-----|
| Capacity (veh/h) | 163 | - | - | - |
| HCM Lane V/C Ratio | 0.7 | - | - | - |
| HCM Control Delay (s) | 66.9 | - | 0 | - |
| HCM Lane LOS | F | - | A | - |
| HCM 95th %tile Q(veh) | 4.2 | - | - | - |

HCM 6th TWSC
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

2023 PM Peak Hour Build Conditions- RCUT

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | | ↗ | ↗ | ↗↗ | | | ↗↗ | ↗ |
| Traffic Vol, veh/h | 0 | 0 | 46 | 0 | 0 | 105 | 6 | 2575 | 110 | 70 | 1134 | 8 |
| Future Vol, veh/h | 0 | 0 | 46 | 0 | 0 | 105 | 6 | 2575 | 110 | 70 | 1134 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | 475 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 92 | 95 | 92 | 92 | 92 | 95 | 95 | 92 | 92 | 95 | 95 |
| Heavy Vehicles, % | 19 | 2 | 19 | 2 | 2 | 2 | 4 | 4 | 2 | 2 | 8 | 8 |
| Mvmt Flow | 0 | 0 | 48 | 0 | 0 | 114 | 6 | 2711 | 120 | 76 | 1194 | 8 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|---|--------|---|--------|------|--------|---|---|------|---|---|
| Conflicting Flow All | - | - | 597 | - | - | 1416 | 1202 | 0 | 0 | 2831 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.28 | - | - | 6.94 | 4.18 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.49 | - | - | 3.32 | 2.24 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 406 | 0 | 0 | 127 | 565 | - | - | 132 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 406 | - | - | 127 | 565 | - | - | 132 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|-----|--|----|--|-----|--|
| HCM Control Delay, s | 15.1 | | 120 | | 0 | | 3.8 | |
| HCM LOS | C | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 565 | - | - | 406 | 127 | 132 | - | - |
| HCM Lane V/C Ratio | 0.011 | - | - | 0.119 | 0.899 | 0.576 | - | - |
| HCM Control Delay (s) | 11.4 | - | - | 15.1 | 120 | 64.1 | - | - |
| HCM Lane LOS | B | - | - | C | F | F | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.4 | 5.8 | 2.9 | - | - |

HCM 6th TWSC
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

2028 AM Peak Hour Build Conditions- RCUT

| Intersection | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.8 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBU | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | | ↗ | ↗ | ↗↗ | | | | ↗↗ | ↗ |
| Traffic Vol, veh/h | 0 | 0 | 29 | 0 | 0 | 160 | 69 | 1054 | 35 | 1 | 19 | 2730 | 40 |
| Future Vol, veh/h | 0 | 0 | 29 | 0 | 0 | 160 | 69 | 1054 | 35 | 1 | 19 | 2730 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | 475 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | - | 0 | - |
| Peak Hour Factor | 86 | 92 | 86 | 92 | 92 | 92 | 86 | 86 | 92 | 86 | 92 | 86 | 86 |
| Heavy Vehicles, % | 17 | 2 | 17 | 2 | 2 | 2 | 11 | 11 | 2 | 4 | 2 | 4 | 4 |
| Mvmt Flow | 0 | 0 | 34 | 0 | 0 | 174 | 80 | 1226 | 38 | 1 | 21 | 3174 | 47 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | | |
|----------------------|--------|---|--------|---|--------|------|------|--------|---|------|------|---|---|
| Conflicting Flow All | - | - | 1587 | - | - | 632 | 3221 | 0 | 0 | 1264 | 1264 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.24 | - | - | 6.94 | 4.32 | - | - | 6.48 | 4.14 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.47 | - | - | 3.32 | 2.31 | - | - | 2.54 | 2.22 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 83 | 0 | 0 | 423 | ~77 | - | - | 220 | 546 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | | - | - |
| Mov Cap-1 Maneuver | - | - | 83 | - | - | 423 | ~77 | - | - | 471 | 471 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | | SB | | |
|----------------------|------|--|------|--|------|--|--|-----|--|--|
| HCM Control Delay, s | 75.3 | | 19.3 | | 12.5 | | | 0.1 | | |
| HCM LOS | F | | C | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | ~77 | - | - | 83 | 423 | 471 | - | - |
| HCM Lane V/C Ratio | 1.042 | - | - | 0.406 | 0.411 | 0.044 | - | - |
| HCM Control Delay (s) | 209.6 | - | - | 75.3 | 19.3 | 13 | - | - |
| HCM Lane LOS | F | - | - | F | C | B | - | - |
| HCM 95th %tile Q(veh) | 5.7 | - | - | 1.6 | 2 | 0.1 | - | - |

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

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | | ↑↑ | | ↘ | ↑↑ |
| Traffic Vol, veh/h | 0 | 0 | 1158 | 0 | 7 | 2752 |
| Future Vol, veh/h | 0 | 0 | 1158 | 0 | 7 | 2752 |
| 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 | - | - | - | 410 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 1259 | 0 | 8 | 2991 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|--------|
| Conflicting Flow All | 2771 | - | 0 | - | 1259 0 |
| Stage 1 | 1259 | - | - | - | - |
| Stage 2 | 1512 | - | - | - | - |
| Critical Hdwy | 6.84 | - | - | - | 4.14 - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - |
| Follow-up Hdwy | 3.52 | - | - | - | 2.22 - |
| Pot Cap-1 Maneuver | 15 | 0 | - | 0 | 548 - |
| Stage 1 | 231 | 0 | - | 0 | - - |
| Stage 2 | 169 | 0 | - | 0 | - - |
| Platoon blocked, % | | | | | - |
| Mov Cap-1 Maneuver | 15 | - | - | - | 548 - |
| Mov Cap-2 Maneuver | 15 | - | - | - | - - |
| Stage 1 | 231 | - | - | - | - - |
| Stage 2 | 166 | - | - | - | - - |

| Approach | WB | NB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBTWBLn1 | SBL | SBT |
|-----------------------|----------|-----|---------|
| Capacity (veh/h) | - | - | 548 - |
| HCM Lane V/C Ratio | - | - | 0.014 - |
| HCM Control Delay (s) | - | 0 | 11.7 - |
| HCM Lane LOS | - | A | B - |
| HCM 95th %tile Q(veh) | - | - | 0 - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.5 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | ↘ | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 0 | 105 | 1110 | 2790 | 0 |
| Future Vol, veh/h | 0 | 0 | 105 | 1110 | 2790 | 0 |
| 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 | 410 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 114 | 1207 | 3033 | 0 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | - | 1517 | 3033 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 108 | ~ 110 | - | - | 0 |
| Stage 1 | 0 | - | - | - | - | 0 |
| Stage 2 | 0 | - | - | - | - | 0 |
| Platoon blocked, % | | | | - | - | |
| Mov Cap-1 Maneuver | - | 108 | ~ 110 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|----|------|----|
| HCM Control Delay, s | 0 | 14.7 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT |
|-----------------------|-------|-----|-------|-----|
| Capacity (veh/h) | ~ 110 | - | - | - |
| HCM Lane V/C Ratio | 1.038 | - | - | - |
| HCM Control Delay (s) | 170.1 | - | 0 | - |
| HCM Lane LOS | F | - | A | - |
| HCM 95th %tile Q(veh) | 6.8 | - | - | - |

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

HCM 6th TWSC
 1: US 23/Cornelia Hwy & Americold Logistics Driveway

2028 PM Peak Hour Build Conditions- RCUT

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 9.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | | ↗ | ↗ | ↗↗ | | | ↗↗ | ↗ |
| Traffic Vol, veh/h | 0 | 0 | 54 | 0 | 0 | 105 | 7 | 3021 | 110 | 70 | 1329 | 9 |
| Future Vol, veh/h | 0 | 0 | 54 | 0 | 0 | 105 | 7 | 3021 | 110 | 70 | 1329 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 0 | 475 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 92 | 95 | 92 | 92 | 92 | 95 | 95 | 92 | 92 | 95 | 95 |
| Heavy Vehicles, % | 19 | 2 | 19 | 2 | 2 | 2 | 4 | 4 | 2 | 2 | 8 | 8 |
| Mvmt Flow | 0 | 0 | 57 | 0 | 0 | 114 | 7 | 3180 | 120 | 76 | 1399 | 9 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|---|--------|---|--------|------|--------|---|---|------|---|---|
| Conflicting Flow All | - | - | 700 | - | - | 1650 | 1408 | 0 | 0 | 3300 | 0 | 0 |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 7.28 | - | - | 6.94 | 4.18 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.49 | - | - | 3.32 | 2.24 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 345 | 0 | 0 | ~ 88 | 470 | - | - | 85 | - | - |
| Stage 1 | 0 | 0 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 345 | - | - | ~ 88 | 470 | - | - | 85 | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|-------|--|----|--|----|--|
| HCM Control Delay, s | 17.5 | | 281.1 | | 0 | | 8 | |
| HCM LOS | C | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 470 | - | - | 345 | 88 | 85 | - | - |
| HCM Lane V/C Ratio | 0.016 | - | - | 0.165 | 1.297 | 0.895 | - | - |
| HCM Control Delay (s) | 12.8 | - | - | 17.5 | 281.1 | 156.5 | - | - |
| HCM Lane LOS | B | - | - | C | F | F | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.6 | 8.4 | 4.8 | - | - |

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

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 6 | 2 | 7 | 14 | 1 |
| Future Vol, veh/h | 3 | 6 | 2 | 7 | 14 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 62 | 62 | 62 | 62 | 62 | 62 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 10 | 3 | 11 | 23 | 2 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 15 | 0 | 27 |
| Stage 1 | - | - | - | - | 10 |
| Stage 2 | - | - | - | - | 17 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1616 | - | 993 |
| Stage 1 | - | - | - | - | 1018 |
| Stage 2 | - | - | - | - | 1011 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1616 | - | 991 |
| Mov Cap-2 Maneuver | - | - | - | - | 991 |
| Stage 1 | - | - | - | - | 1018 |
| Stage 2 | - | - | - | - | 1009 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 1.6 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 996 | - | - | 1616 | - |
| HCM Lane V/C Ratio | 0.024 | - | - | 0.002 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.2 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

HCM 6th TWSC
 3: Julian Baugh Rd & Cagle Mill Rd

2023 AM Peak Hour Build Conditions

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.1 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 0 | 2 | 11 | 5 | 5 |
| Future Vol, veh/h | 10 | 0 | 2 | 11 | 5 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 72 | 72 | 72 | 72 | 72 | 72 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 14 | 0 | 3 | 15 | 7 | 7 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|------|--------|---|
| Conflicting Flow All | 32 | 11 | 14 | 0 | 0 |
| Stage 1 | 11 | - | - | - | - |
| Stage 2 | 21 | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - |
| Pot Cap-1 Maneuver | 987 | 1076 | 1617 | - | - |
| Stage 1 | 1017 | - | - | - | - |
| Stage 2 | 1007 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 985 | 1076 | 1617 | - | - |
| Mov Cap-2 Maneuver | 985 | - | - | - | - |
| Stage 1 | 1015 | - | - | - | - |
| Stage 2 | 1007 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|-----|----|
| HCM Control Delay, s | 8.7 | 1.1 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1617 | - | 985 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | 0.014 | - | - |
| HCM Control Delay (s) | 7.2 | 0 | 8.7 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

HCM 6th TWSC
4: Noah Martin Rd & Whitehall Rd

2023 AM Peak Hour Build Conditions

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 5 | 2 | 0 | 18 | 4 | 1 | 2 | 1 | 2 | 15 | 4 |
| Future Vol, veh/h | 2 | 5 | 2 | 0 | 18 | 4 | 1 | 2 | 1 | 2 | 15 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 14 | 14 | 14 | 6 | 6 | 6 | 33 | 33 | 33 | 10 | 10 | 10 |
| Mvmt Flow | 3 | 6 | 3 | 0 | 23 | 5 | 1 | 3 | 1 | 3 | 19 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|------|---|---|
| Conflicting Flow All | 48 | 34 | 22 | 38 | 36 | 4 | 24 | 0 | 0 | 4 | 0 | 0 |
| Stage 1 | 28 | 28 | - | 6 | 6 | - | - | - | - | - | - | - |
| Stage 2 | 20 | 6 | - | 32 | 30 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.24 | 6.64 | 6.34 | 7.16 | 6.56 | 6.26 | 4.43 | - | - | 4.2 | - | - |
| Critical Hdwy Stg 1 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.626 | 4.126 | 3.426 | 3.554 | 4.054 | 3.354 | 2.497 | - | - | 2.29 | - | - |
| Pot Cap-1 Maneuver | 923 | 836 | 1021 | 957 | 849 | 1068 | 1411 | - | - | 1567 | - | - |
| Stage 1 | 959 | 849 | - | 1006 | 883 | - | - | - | - | - | - | - |
| Stage 2 | 969 | 867 | - | 974 | 862 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 898 | 833 | 1021 | 946 | 846 | 1068 | 1411 | - | - | 1567 | - | - |
| Mov Cap-2 Maneuver | 898 | 833 | - | 946 | 846 | - | - | - | - | - | - | - |
| Stage 1 | 958 | 847 | - | 1005 | 882 | - | - | - | - | - | - | - |
| Stage 2 | 939 | 866 | - | 962 | 860 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|-----|--|-----|--|-----|--|-----|--|
| HCM Control Delay, s | 9.1 | | 9.2 | | 1.9 | | 0.7 | |
| HCM LOS | A | | A | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1411 | - | - | 883 | 879 | 1567 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.013 | 0.032 | 0.002 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | - | 9.1 | 9.2 | 7.3 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.1 | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | |
| Traffic Vol, veh/h | 0 | 85 | 385 | 3 | 2 | 14 |
| Future Vol, veh/h | 0 | 85 | 385 | 3 | 2 | 14 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 9 | 9 | 3 | 3 | 13 | 13 |
| Mvmt Flow | 0 | 96 | 433 | 3 | 2 | 16 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 436 | 0 | - | 0 | 531 435 |
| Stage 1 | - | - | - | - | 435 - |
| Stage 2 | - | - | - | - | 96 - |
| Critical Hdwy | 4.19 | - | - | - | 6.53 6.33 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.53 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.53 - |
| Follow-up Hdwy | 2.281 | - | - | - | 3.617 3.417 |
| Pot Cap-1 Maneuver | 1087 | - | - | - | 490 598 |
| Stage 1 | - | - | - | - | 630 - |
| Stage 2 | - | - | - | - | 901 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1087 | - | - | - | 490 598 |
| Mov Cap-2 Maneuver | - | - | - | - | 490 - |
| Stage 1 | - | - | - | - | 630 - |
| Stage 2 | - | - | - | - | 901 - |

| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|------|-----|-----|-----|-------|
| Capacity (veh/h) | 1087 | - | - | - | 582 |
| HCM Lane V/C Ratio | - | - | - | - | 0.031 |
| HCM Control Delay (s) | 0 | - | - | - | 11.4 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 13.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↕ | ↑↑ | ↕ |
| Traffic Vol, veh/h | 2 | 0 | 1 | 23 | 2 | 1 | 0 | 858 | 0 | 0 | 2268 | 2 |
| Future Vol, veh/h | 2 | 0 | 1 | 23 | 2 | 1 | 0 | 858 | 0 | 0 | 2268 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 50 | 50 | 50 | 0 | 0 | 0 | 11 | 11 | 11 | 4 | 4 | 4 |
| Mvmt Flow | 2 | 0 | 1 | 27 | 2 | 1 | 0 | 1009 | 0 | 0 | 2668 | 2 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|-----|------|--------|---|------|---|---|
| Conflicting Flow All | 3174 | 3677 | 1334 | 2343 | 3679 | 505 | 2670 | 0 | 0 | 1009 | 0 | 0 |
| Stage 1 | 2668 | 2668 | - | 1009 | 1009 | - | - | - | - | - | - | - |
| Stage 2 | 506 | 1009 | - | 1334 | 2670 | - | - | - | - | - | - | - |
| Critical Hdwy | 8.5 | 7.5 | 7.9 | 7.5 | 6.5 | 6.9 | 4.32 | - | - | 4.18 | - | - |
| Critical Hdwy Stg 1 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 4 | 4.5 | 3.8 | 3.5 | 4 | 3.3 | 2.31 | - | - | 2.24 | - | - |
| Pot Cap-1 Maneuver | ~2 | 2 | 95 | ~20 | 5 | 518 | 132 | - | - | 671 | - | - |
| Stage 1 | 11 | 22 | - | 261 | 320 | - | - | - | - | - | - | - |
| Stage 2 | 410 | 228 | - | 165 | 48 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | ~1 | 2 | 95 | ~20 | 5 | 518 | 132 | - | - | 671 | - | - |
| Mov Cap-2 Maneuver | ~1 | 2 | - | ~20 | 5 | - | - | - | - | - | - | - |
| Stage 1 | 11 | 22 | - | 261 | 320 | - | - | - | - | - | - | - |
| Stage 2 | 406 | 228 | - | 163 | 48 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | | SB | | |
|-----------------------|--------|--|-------|--|----|--|--|----|--|--|
| HCM Control Delay, \$ | 6632.1 | | 848.1 | | 0 | | | 0 | | |
| HCM LOS | F | | F | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-----|-----|-----|-----------|----------|-----|-----|-----|
| Capacity (veh/h) | 132 | - | - | 1 | 17 | 671 | - | - |
| HCM Lane V/C Ratio | - | - | - | 3.529 | 1.799 | - | - | - |
| HCM Control Delay (s) | 0 | - | - | \$ 6632.1 | \$ 848.1 | 0 | - | - |
| HCM Lane LOS | A | - | - | F | F | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.3 | 4.3 | 0 | - | - |

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

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 7.6 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | T | | | T | | |
| Traffic Vol, veh/h | 6 | 12 | 4 | 0 | 0 | 2 |
| Future Vol, veh/h | 6 | 12 | 4 | 0 | 0 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 7 | 13 | 4 | 0 | 0 | 2 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 9 | 1 | 2 | 0 | - | 0 |
| Stage 1 | 1 | - | - | - | - | - |
| Stage 2 | 8 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 1011 | 1084 | 1620 | - | - | - |
| Stage 1 | 1022 | - | - | - | - | - |
| Stage 2 | 1015 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 1009 | 1084 | 1620 | - | - | - |
| Mov Cap-2 Maneuver | 1009 | - | - | - | - | - |
| Stage 1 | 1020 | - | - | - | - | - |
| Stage 2 | 1015 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|-----|----|
| HCM Control Delay, s | 8.5 | 7.2 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1620 | - | 1058 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.018 | - | - |
| HCM Control Delay (s) | 7.2 | 0 | 8.5 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.3 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↑ | ↑ | | ↓ | |
| Traffic Vol, veh/h | 0 | 8 | 22 | 1 | 1 | 0 |
| Future Vol, veh/h | 0 | 8 | 22 | 1 | 1 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 9 | 24 | 1 | 1 | 0 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | - | 0 | - | 0 | 34 25 |
| Stage 1 | - | - | - | - | 25 - |
| Stage 2 | - | - | - | - | 9 - |
| Critical Hdwy | - | - | - | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | - | - | - | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 979 1051 |
| Stage 1 | 0 | - | - | - | 998 - |
| Stage 2 | 0 | - | - | - | 1014 - |
| Platoon blocked, % | - | - | - | - | |
| Mov Cap-1 Maneuver | - | - | - | - | 979 1051 |
| Mov Cap-2 Maneuver | - | - | - | - | 979 - |
| Stage 1 | - | - | - | - | 998 - |
| Stage 2 | - | - | - | - | 1014 - |

| Approach | EB | WB | SB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|-----------------------|-----|-----|-----|-------|
| Capacity (veh/h) | - | - | - | 979 |
| HCM Lane V/C Ratio | - | - | - | 0.001 |
| HCM Control Delay (s) | - | - | - | 8.7 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0 |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.7 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 17 | 15 | 2 | 6 | 11 | 5 |
| Future Vol, veh/h | 17 | 15 | 2 | 6 | 11 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 20 | 17 | 2 | 7 | 13 | 6 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 |
|----------------------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 37 | 40 |
| Stage 1 | - | - | - | 29 |
| Stage 2 | - | - | - | 11 |
| Critical Hdwy | - | - | 4.1 | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1587 | 977 |
| Stage 1 | - | - | - | 999 |
| Stage 2 | - | - | - | 1017 |
| Platoon blocked, % | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1587 | 976 |
| Mov Cap-2 Maneuver | - | - | - | 976 |
| Stage 1 | - | - | - | 999 |
| Stage 2 | - | - | - | 1016 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 1.8 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 999 | - | - | 1587 | - |
| HCM Lane V/C Ratio | 0.018 | - | - | 0.001 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

HCM 6th TWSC
3: Julian Baugh Rd & Cagle Mill Rd

2023 PM Peak Hour Build Conditions

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.3 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 0 | 9 | 11 | 23 | 7 |
| Future Vol, veh/h | 7 | 0 | 9 | 11 | 23 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 75 | 75 | 75 | 75 | 75 | 75 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 9 | 0 | 12 | 15 | 31 | 9 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|------|--------|---|
| Conflicting Flow All | 75 | 36 | 40 | 0 | 0 |
| Stage 1 | 36 | - | - | - | - |
| Stage 2 | 39 | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - |
| Pot Cap-1 Maneuver | 933 | 1042 | 1583 | - | - |
| Stage 1 | 992 | - | - | - | - |
| Stage 2 | 989 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 926 | 1042 | 1583 | - | - |
| Mov Cap-2 Maneuver | 926 | - | - | - | - |
| Stage 1 | 984 | - | - | - | - |
| Stage 2 | 989 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|-----|----|
| HCM Control Delay, s | 8.9 | 3.3 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1583 | - | 926 | - | - |
| HCM Lane V/C Ratio | 0.008 | - | 0.01 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 8.9 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

HCM 6th TWSC
4: Noah Martin Rd & Whitehall Rd

2023 PM Peak Hour Build Conditions

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 6.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 12 | 16 | 5 | 7 | 10 | 0 | 8 | 6 | 7 | 3 | 6 | 3 |
| Future Vol, veh/h | 12 | 16 | 5 | 7 | 10 | 0 | 8 | 6 | 7 | 3 | 6 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 0 | 0 | 0 | 7 | 7 | 7 | 6 | 6 | 6 | 0 | 0 | 0 |
| Mvmt Flow | 15 | 21 | 6 | 9 | 13 | 0 | 10 | 8 | 9 | 4 | 8 | 4 |

| Major/Minor | Minor2 | | Minor1 | | | Major1 | | | Major2 | | | |
|----------------------|--------|-----|--------|-------|-------|--------|-------|---|--------|------|---|---|
| Conflicting Flow All | 57 | 55 | 10 | 65 | 53 | 13 | 12 | 0 | 0 | 17 | 0 | 0 |
| Stage 1 | 18 | 18 | - | 33 | 33 | - | - | - | - | - | - | - |
| Stage 2 | 39 | 37 | - | 32 | 20 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.17 | 6.57 | 6.27 | 4.16 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.563 | 4.063 | 3.363 | 2.254 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 945 | 840 | 1077 | 917 | 829 | 1053 | 1581 | - | - | 1613 | - | - |
| Stage 1 | 1006 | 884 | - | 971 | 858 | - | - | - | - | - | - | - |
| Stage 2 | 981 | 868 | - | 972 | 869 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 928 | 833 | 1077 | 889 | 822 | 1053 | 1581 | - | - | 1613 | - | - |
| Mov Cap-2 Maneuver | 928 | 833 | - | 889 | 822 | - | - | - | - | - | - | - |
| Stage 1 | 1000 | 882 | - | 965 | 853 | - | - | - | - | - | - | - |
| Stage 2 | 960 | 863 | - | 942 | 867 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | | NB | | | SB | | |
|----------------------|-----|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 9.2 | | 9.4 | | | 2.8 | | | 1.8 | | |
| HCM LOS | A | | A | | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1581 | - | - | 897 | 848 | 1613 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | - | 0.047 | 0.026 | 0.002 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | - | 9.2 | 9.4 | 7.2 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.1 | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.6 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | |
| Traffic Vol, veh/h | 16 | 326 | 134 | 10 | 9 | 4 |
| Future Vol, veh/h | 16 | 326 | 134 | 10 | 9 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 18 | 375 | 154 | 11 | 10 | 5 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|---------|
| Conflicting Flow All | 165 | 0 | - | 0 | 571 160 |
| Stage 1 | - | - | - | - | 160 - |
| Stage 2 | - | - | - | - | 411 - |
| Critical Hdwy | 4.12 | - | - | - | 6.4 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.5 3.3 |
| Pot Cap-1 Maneuver | 1413 | - | - | - | 486 890 |
| Stage 1 | - | - | - | - | 874 - |
| Stage 2 | - | - | - | - | 674 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1413 | - | - | - | 478 890 |
| Mov Cap-2 Maneuver | - | - | - | - | 478 - |
| Stage 1 | - | - | - | - | 860 - |
| Stage 2 | - | - | - | - | 674 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.4 | 0 | 11.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1413 | - | - | - | 557 |
| HCM Lane V/C Ratio | 0.013 | - | - | - | 0.027 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 11.6 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 16 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↕ | ↑↑ | ↕ |
| Traffic Vol, veh/h | 6 | 1 | 4 | 13 | 0 | 4 | 2 | 2583 | 26 | 1 | 1139 | 4 |
| Future Vol, veh/h | 6 | 1 | 4 | 13 | 0 | 4 | 2 | 2583 | 26 | 1 | 1139 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 8 | 8 | 8 |
| Mvmt Flow | 6 | 1 | 4 | 14 | 0 | 4 | 2 | 2691 | 27 | 1 | 1186 | 4 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|------|------|--------|---|------|---|---|
| Conflicting Flow All | 2538 | 3910 | 593 | 3291 | 3887 | 1346 | 1190 | 0 | 0 | 2718 | 0 | 0 |
| Stage 1 | 1188 | 1188 | - | 2695 | 2695 | - | - | - | - | - | - | - |
| Stage 2 | 1350 | 2722 | - | 596 | 1192 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.18 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.24 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | 14 | 3 | 454 | ~4 | 4 | 144 | 571 | - | - | 133 | - | - |
| Stage 1 | 203 | 264 | - | 22 | 46 | - | - | - | - | - | - | - |
| Stage 2 | 161 | 45 | - | 462 | 263 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 13 | 3 | 454 | ~3 | 4 | 144 | 571 | - | - | 133 | - | - |
| Mov Cap-2 Maneuver | 13 | 3 | - | ~3 | 4 | - | - | - | - | - | - | - |
| Stage 1 | 202 | 262 | - | 22 | 46 | - | - | - | - | - | - | - |
| Stage 2 | 156 | 45 | - | 453 | 261 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----------|--|-----------|--|----|--|----|--|
| HCM Control Delay, s | \$ 531.7 | | \$ 3221.3 | | 0 | | 0 | |
| HCM LOS | F | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|----------|-----------|-------|-----|-----|
| Capacity (veh/h) | 571 | - | - | 14 | 4 | 133 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.818 | 4.427 | 0.008 | - | - |
| HCM Control Delay (s) | 11.3 | - | - | \$ 531.7 | \$ 3221.3 | 32.3 | - | - |
| HCM Lane LOS | B | - | - | F | F | D | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.9 | 3.6 | 0 | - | - |

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

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.9 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | T | | | T | | T |
| Traffic Vol, veh/h | 5 | 7 | 12 | 0 | 0 | 8 |
| Future Vol, veh/h | 5 | 7 | 12 | 0 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 8 | 13 | 0 | 0 | 9 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 31 | 5 | 9 | 0 | 0 |
| Stage 1 | 5 | - | - | - | - |
| Stage 2 | 26 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 983 | 1078 | 1611 | - | - |
| Stage 1 | 1018 | - | - | - | - |
| Stage 2 | 997 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 975 | 1078 | 1611 | - | - |
| Mov Cap-2 Maneuver | 975 | - | - | - | - |
| Stage 1 | 1010 | - | - | - | - |
| Stage 2 | 997 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|-----|----|
| HCM Control Delay, s | 8.5 | 7.3 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1611 | - | 1033 | - | - |
| HCM Lane V/C Ratio | 0.008 | - | 0.013 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 8.5 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↑ | ↑ | | ↓ | |
| Traffic Vol, veh/h | 0 | 33 | 19 | 2 | 0 | 1 |
| Future Vol, veh/h | 0 | 33 | 19 | 2 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 36 | 21 | 2 | 0 | 1 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | - | 0 | - | 0 | 58 22 |
| Stage 1 | - | - | - | - | 22 - |
| Stage 2 | - | - | - | - | 36 - |
| Critical Hdwy | - | - | - | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | - | - | - | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 949 1055 |
| Stage 1 | 0 | - | - | - | 1001 - |
| Stage 2 | 0 | - | - | - | 986 - |
| Platoon blocked, % | - | - | - | - | |
| Mov Cap-1 Maneuver | - | - | - | - | 949 1055 |
| Mov Cap-2 Maneuver | - | - | - | - | 949 - |
| Stage 1 | - | - | - | - | 1001 - |
| Stage 2 | - | - | - | - | 986 - |

| Approach | EB | WB | SB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 8.4 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|-----------------------|-----|-----|-----|-------|
| Capacity (veh/h) | - | - | - | 1055 |
| HCM Lane V/C Ratio | - | - | - | 0.001 |
| HCM Control Delay (s) | - | - | - | 8.4 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0 |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.3 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 7 | 2 | 8 | 16 | 1 |
| Future Vol, veh/h | 4 | 7 | 2 | 8 | 16 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 62 | 62 | 62 | 62 | 62 | 62 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 6 | 11 | 3 | 13 | 26 | 2 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 17 | 0 | 31 |
| Stage 1 | - | - | - | - | 12 |
| Stage 2 | - | - | - | - | 19 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1613 | - | 988 |
| Stage 1 | - | - | - | - | 1016 |
| Stage 2 | - | - | - | - | 1009 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1613 | - | 986 |
| Mov Cap-2 Maneuver | - | - | - | - | 986 |
| Stage 1 | - | - | - | - | 1016 |
| Stage 2 | - | - | - | - | 1007 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 1.4 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 991 | - | - | 1613 | - |
| HCM Lane V/C Ratio | 0.028 | - | - | 0.002 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.2 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

HCM 6th TWSC
 3: Julian Baugh Rd & Cagle Mill Rd

2028 AM Peak Hour Build Conditions

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.9 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 11 | 0 | 2 | 13 | 6 | 6 |
| Future Vol, veh/h | 11 | 0 | 2 | 13 | 6 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 72 | 72 | 72 | 72 | 72 | 72 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 15 | 0 | 3 | 18 | 8 | 8 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|------|--------|---|
| Conflicting Flow All | 36 | 12 | 16 | 0 | 0 |
| Stage 1 | 12 | - | - | - | - |
| Stage 2 | 24 | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - |
| Pot Cap-1 Maneuver | 982 | 1074 | 1615 | - | - |
| Stage 1 | 1016 | - | - | - | - |
| Stage 2 | 1004 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 980 | 1074 | 1615 | - | - |
| Mov Cap-2 Maneuver | 980 | - | - | - | - |
| Stage 1 | 1014 | - | - | - | - |
| Stage 2 | 1004 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 8.7 | 1 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1615 | - | 980 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | 0.016 | - | - |
| HCM Control Delay (s) | 7.2 | 0 | 8.7 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

HCM 6th TWSC
4: Noah Martin Rd & Whitehall Rd

2028 AM Peak Hour Build Conditions

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 6 | 2 | 0 | 21 | 4 | 1 | 2 | 1 | 2 | 16 | 4 |
| Future Vol, veh/h | 2 | 6 | 2 | 0 | 21 | 4 | 1 | 2 | 1 | 2 | 16 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 14 | 14 | 14 | 6 | 6 | 6 | 33 | 33 | 33 | 10 | 10 | 10 |
| Mvmt Flow | 3 | 8 | 3 | 0 | 27 | 5 | 1 | 3 | 1 | 3 | 20 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|------|---|---|
| Conflicting Flow All | 51 | 35 | 23 | 40 | 37 | 4 | 25 | 0 | 0 | 4 | 0 | 0 |
| Stage 1 | 29 | 29 | - | 6 | 6 | - | - | - | - | - | - | - |
| Stage 2 | 22 | 6 | - | 34 | 31 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.24 | 6.64 | 6.34 | 7.16 | 6.56 | 6.26 | 4.43 | - | - | 4.2 | - | - |
| Critical Hdwy Stg 1 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.24 | 5.64 | - | 6.16 | 5.56 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.626 | 4.126 | 3.426 | 3.554 | 4.054 | 3.354 | 2.497 | - | - | 2.29 | - | - |
| Pot Cap-1 Maneuver | 919 | 834 | 1020 | 954 | 848 | 1068 | 1410 | - | - | 1567 | - | - |
| Stage 1 | 958 | 848 | - | 1006 | 883 | - | - | - | - | - | - | - |
| Stage 2 | 966 | 867 | - | 972 | 861 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 891 | 831 | 1020 | 943 | 845 | 1068 | 1410 | - | - | 1567 | - | - |
| Mov Cap-2 Maneuver | 891 | 831 | - | 943 | 845 | - | - | - | - | - | - | - |
| Stage 1 | 957 | 846 | - | 1005 | 882 | - | - | - | - | - | - | - |
| Stage 2 | 932 | 866 | - | 959 | 859 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|-----|--|-----|--|-----|--|-----|--|
| HCM Control Delay, s | 9.2 | | 9.3 | | 1.9 | | 0.7 | |
| HCM LOS | A | | A | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1410 | - | - | 875 | 874 | 1567 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.014 | 0.036 | 0.002 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | - | 9.2 | 9.3 | 7.3 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.1 | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | |
| Traffic Vol, veh/h | 0 | 100 | 452 | 3 | 2 | 15 |
| Future Vol, veh/h | 0 | 100 | 452 | 3 | 2 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 9 | 9 | 3 | 3 | 13 | 13 |
| Mvmt Flow | 0 | 112 | 508 | 3 | 2 | 17 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 511 | 0 | - | 0 | 622 510 |
| Stage 1 | - | - | - | - | 510 - |
| Stage 2 | - | - | - | - | 112 - |
| Critical Hdwy | 4.19 | - | - | - | 6.53 6.33 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.53 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.53 - |
| Follow-up Hdwy | 2.281 | - | - | - | 3.617 3.417 |
| Pot Cap-1 Maneuver | 1019 | - | - | - | 433 542 |
| Stage 1 | - | - | - | - | 581 - |
| Stage 2 | - | - | - | - | 886 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1019 | - | - | - | 433 542 |
| Mov Cap-2 Maneuver | - | - | - | - | 433 - |
| Stage 1 | - | - | - | - | 581 - |
| Stage 2 | - | - | - | - | 886 - |

| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 12.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|------|-----|-----|-----|-------|
| Capacity (veh/h) | 1019 | - | - | - | 526 |
| HCM Lane V/C Ratio | - | - | - | - | 0.036 |
| HCM Control Delay (s) | 0 | - | - | - | 12.1 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 19.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↕ | ↑↑ | ↕ |
| Traffic Vol, veh/h | 2 | 0 | 1 | 27 | 2 | 1 | 0 | 997 | 0 | 0 | 2658 | 2 |
| Future Vol, veh/h | 2 | 0 | 1 | 27 | 2 | 1 | 0 | 997 | 0 | 0 | 2658 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 50 | 50 | 50 | 0 | 0 | 0 | 11 | 11 | 11 | 4 | 4 | 4 |
| Mvmt Flow | 2 | 0 | 1 | 32 | 2 | 1 | 0 | 1173 | 0 | 0 | 3127 | 2 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 3715 | 4300 | 1564 | 2737 | 4302 | 587 | 3129 | 0 | 0 | 1173 | 0 | 0 |
| Stage 1 | 3127 | 3127 | - | 1173 | 1173 | - | - | - | - | - | - | - |
| Stage 2 | 588 | 1173 | - | 1564 | 3129 | - | - | - | - | - | - | - |
| Critical Hdwy | 8.5 | 7.5 | 7.9 | 7.5 | 6.5 | 6.9 | 4.32 | - | - | 4.18 | - | - |
| Critical Hdwy Stg 1 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.5 | 6.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 4 | 4.5 | 3.8 | 3.5 | 4 | 3.3 | 2.31 | - | - | 2.24 | - | - |
| Pot Cap-1 Maneuver | ~ 1 | 1 | 63 | ~ 10 | ~ 2 | 458 | 85 | - | - | 580 | - | - |
| Stage 1 | 5 | 11 | - | 207 | 268 | - | - | - | - | - | - | - |
| Stage 2 | 360 | 183 | - | 119 | 27 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | 1 | 63 | ~ 10 | ~ 2 | 458 | 85 | - | - | 580 | - | - |
| Mov Cap-2 Maneuver | - | 1 | - | ~ 10 | ~ 2 | - | - | - | - | - | - | - |
| Stage 1 | 5 | 11 | - | 207 | 268 | - | - | - | - | - | - | - |
| Stage 2 | 356 | 183 | - | 117 | 27 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----------|----|----|
| HCM Control Delay, s | | \$ 2440.3 | 0 | 0 |
| HCM LOS | - | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-----|-----|-----|------------|-------|-----|-----|
| Capacity (veh/h) | 85 | - | - | - | 8 | 580 | - |
| HCM Lane V/C Ratio | - | - | - | - | 4.412 | - | - |
| HCM Control Delay (s) | 0 | - | - | \$ 2440.3 | 0 | - | - |
| HCM Lane LOS | A | - | - | F | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 5.7 | 0 | - | - |

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

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 7.6 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | T | | | T | | |
| Traffic Vol, veh/h | 6 | 12 | 4 | 0 | 0 | 2 |
| Future Vol, veh/h | 6 | 12 | 4 | 0 | 0 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 7 | 13 | 4 | 0 | 0 | 2 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 9 | 1 | 2 | 0 | - | 0 |
| Stage 1 | 1 | - | - | - | - | - |
| Stage 2 | 8 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 1011 | 1084 | 1620 | - | - | - |
| Stage 1 | 1022 | - | - | - | - | - |
| Stage 2 | 1015 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 1009 | 1084 | 1620 | - | - | - |
| Mov Cap-2 Maneuver | 1009 | - | - | - | - | - |
| Stage 1 | 1020 | - | - | - | - | - |
| Stage 2 | 1015 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|-----|----|
| HCM Control Delay, s | 8.5 | 7.2 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1620 | - | 1058 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.018 | - | - |
| HCM Control Delay (s) | 7.2 | 0 | 8.5 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↑ | ↑ | | ↓ | |
| Traffic Vol, veh/h | 0 | 9 | 25 | 1 | 1 | 0 |
| Future Vol, veh/h | 0 | 9 | 25 | 1 | 1 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 10 | 27 | 1 | 1 | 0 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | - | 0 | - | 0 | 38 28 |
| Stage 1 | - | - | - | - | 28 - |
| Stage 2 | - | - | - | - | 10 - |
| Critical Hdwy | - | - | - | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | - | - | - | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 974 1047 |
| Stage 1 | 0 | - | - | - | 995 - |
| Stage 2 | 0 | - | - | - | 1013 - |
| Platoon blocked, % | - | - | - | - | |
| Mov Cap-1 Maneuver | - | - | - | - | 974 1047 |
| Mov Cap-2 Maneuver | - | - | - | - | 974 - |
| Stage 1 | - | - | - | - | 995 - |
| Stage 2 | - | - | - | - | 1013 - |

| Approach | EB | WB | SB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|-----------------------|-----|-----|-----|-------|
| Capacity (veh/h) | - | - | - | 974 |
| HCM Lane V/C Ratio | - | - | - | 0.001 |
| HCM Control Delay (s) | - | - | - | 8.7 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0 |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.7 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 18 | 2 | 7 | 13 | 6 |
| Future Vol, veh/h | 20 | 18 | 2 | 7 | 13 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 23 | 21 | 2 | 8 | 15 | 7 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 44 | 0 | 46 |
| Stage 1 | - | - | - | - | 34 |
| Stage 2 | - | - | - | - | 12 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1577 | - | 969 |
| Stage 1 | - | - | - | - | 994 |
| Stage 2 | - | - | - | - | 1016 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1577 | - | 968 |
| Mov Cap-2 Maneuver | - | - | - | - | 968 |
| Stage 1 | - | - | - | - | 994 |
| Stage 2 | - | - | - | - | 1015 |

| Approach | EB | WB | NB |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 1.6 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 991 | - | - | 1577 | - |
| HCM Lane V/C Ratio | 0.022 | - | - | 0.001 | - |
| HCM Control Delay (s) | 8.7 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

HCM 6th TWSC
 3: Julian Baugh Rd & Cagle Mill Rd

2028 PM Peak Hour Build Conditions

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | T | | T | | T | |
| Traffic Vol, veh/h | 7 | 0 | 9 | 13 | 27 | 7 |
| Future Vol, veh/h | 7 | 0 | 9 | 13 | 27 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 75 | 75 | 75 | 75 | 75 | 75 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 9 | 0 | 12 | 17 | 36 | 9 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|------|--------|---|
| Conflicting Flow All | 82 | 41 | 45 | 0 | 0 |
| Stage 1 | 41 | - | - | - | - |
| Stage 2 | 41 | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | 4.1 | - | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | - |
| Pot Cap-1 Maneuver | 925 | 1036 | 1576 | - | - |
| Stage 1 | 987 | - | - | - | - |
| Stage 2 | 987 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 918 | 1036 | 1576 | - | - |
| Mov Cap-2 Maneuver | 918 | - | - | - | - |
| Stage 1 | 979 | - | - | - | - |
| Stage 2 | 987 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 9 | 3 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1576 | - | 918 | - | - |
| HCM Lane V/C Ratio | 0.008 | - | 0.01 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 9 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 6.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 13 | 19 | 6 | 8 | 11 | 0 | 9 | 6 | 8 | 3 | 6 | 3 |
| Future Vol, veh/h | 13 | 19 | 6 | 8 | 11 | 0 | 9 | 6 | 8 | 3 | 6 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 0 | 0 | 0 | 7 | 7 | 7 | 6 | 6 | 6 | 0 | 0 | 0 |
| Mvmt Flow | 17 | 24 | 8 | 10 | 14 | 0 | 12 | 8 | 10 | 4 | 8 | 4 |

| Major/Minor | Minor2 | | Minor1 | | | Major1 | | | Major2 | | | |
|----------------------|--------|-----|--------|-------|-------|--------|-------|---|--------|------|---|---|
| Conflicting Flow All | 62 | 60 | 10 | 71 | 57 | 13 | 12 | 0 | 0 | 18 | 0 | 0 |
| Stage 1 | 18 | 18 | - | 37 | 37 | - | - | - | - | - | - | - |
| Stage 2 | 44 | 42 | - | 34 | 20 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.17 | 6.57 | 6.27 | 4.16 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.17 | 5.57 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.563 | 4.063 | 3.363 | 2.254 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 938 | 835 | 1077 | 908 | 824 | 1053 | 1581 | - | - | 1612 | - | - |
| Stage 1 | 1006 | 884 | - | 966 | 854 | - | - | - | - | - | - | - |
| Stage 2 | 975 | 864 | - | 969 | 869 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 918 | 827 | 1077 | 874 | 816 | 1053 | 1581 | - | - | 1612 | - | - |
| Mov Cap-2 Maneuver | 918 | 827 | - | 874 | 816 | - | - | - | - | - | - | - |
| Stage 1 | 998 | 882 | - | 958 | 847 | - | - | - | - | - | - | - |
| Stage 2 | 951 | 857 | - | 934 | 867 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | | NB | | | SB | | |
|----------------------|-----|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 9.3 | | 9.4 | | | 2.9 | | | 1.8 | | |
| HCM LOS | A | | A | | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1581 | - | - | 890 | 839 | 1612 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | - | 0.055 | 0.029 | 0.002 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | - | 9.3 | 9.4 | 7.2 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0.1 | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | |
| Traffic Vol, veh/h | 18 | 383 | 157 | 11 | 10 | 5 |
| Future Vol, veh/h | 18 | 383 | 157 | 11 | 10 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 21 | 440 | 180 | 13 | 11 | 6 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|---------|
| Conflicting Flow All | 193 | 0 | - | 0 | 669 187 |
| Stage 1 | - | - | - | - | 187 - |
| Stage 2 | - | - | - | - | 482 - |
| Critical Hdwy | 4.12 | - | - | - | 6.4 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.5 3.3 |
| Pot Cap-1 Maneuver | 1380 | - | - | - | 426 860 |
| Stage 1 | - | - | - | - | 850 - |
| Stage 2 | - | - | - | - | 625 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1380 | - | - | - | 417 860 |
| Mov Cap-2 Maneuver | - | - | - | - | 417 - |
| Stage 1 | - | - | - | - | 833 - |
| Stage 2 | - | - | - | - | 625 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.3 | 0 | 12.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1380 | - | - | - | 503 |
| HCM Lane V/C Ratio | 0.015 | - | - | - | 0.034 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 12.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↑↑ | ↕ | ↕ | ↑↑ | ↕ |
| Traffic Vol, veh/h | 7 | 1 | 5 | 15 | 0 | 5 | 2 | 3024 | 31 | 1 | 1325 | 5 |
| Future Vol, veh/h | 7 | 1 | 5 | 15 | 0 | 5 | 2 | 3024 | 31 | 1 | 1325 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 315 | - | 280 | 517 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 8 | 8 | 8 |
| Mvmt Flow | 7 | 1 | 5 | 16 | 0 | 5 | 2 | 3150 | 32 | 1 | 1380 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|------|------|--------|---|------|---|---|
| Conflicting Flow All | 2961 | 4568 | 690 | 3847 | 4541 | 1575 | 1385 | 0 | 0 | 3182 | 0 | 0 |
| Stage 1 | 1382 | 1382 | - | 3154 | 3154 | - | - | - | - | - | - | - |
| Stage 2 | 1579 | 3186 | - | 693 | 1387 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.18 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.24 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | ~ 7 | ~ 1 | 392 | ~ 1 | 1 | 101 | 480 | - | - | 85 | - | - |
| Stage 1 | 154 | 213 | - | ~ 11 | 26 | - | - | - | - | - | - | - |
| Stage 2 | 116 | 25 | - | 405 | 212 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | ~ 7 | ~ 1 | 392 | - | 1 | 101 | 480 | - | - | 85 | - | - |
| Mov Cap-2 Maneuver | ~ 7 | ~ 1 | - | - | 1 | - | - | - | - | - | - | - |
| Stage 1 | 153 | 210 | - | ~ 11 | 26 | - | - | - | - | - | - | - |
| Stage 2 | 110 | 25 | - | 393 | 209 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|-----------------------|--------|----|----|----|
| HCM Control Delay, \$ | 1718.1 | | 0 | 0 |
| HCM LOS | F | - | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-----------|-------|-------|-----|-----|
| Capacity (veh/h) | 480 | - | - | 6 | - | 85 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 2.257 | - | 0.012 | - | - |
| HCM Control Delay (s) | 12.5 | - | - | \$ 1718.1 | - | 47.9 | - | - |
| HCM Lane LOS | B | - | - | F | - | E | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 2.8 | - | 0 | - | - |

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

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.9 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 7 | 12 | 0 | 0 | 8 |
| Future Vol, veh/h | 5 | 7 | 12 | 0 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 8 | 13 | 0 | 0 | 9 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 31 | 5 | 9 | 0 | - | 0 |
| Stage 1 | 5 | - | - | - | - | - |
| Stage 2 | 26 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 983 | 1078 | 1611 | - | - | - |
| Stage 1 | 1018 | - | - | - | - | - |
| Stage 2 | 997 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 975 | 1078 | 1611 | - | - | - |
| Mov Cap-2 Maneuver | 975 | - | - | - | - | - |
| Stage 1 | 1010 | - | - | - | - | - |
| Stage 2 | 997 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|-----|----|
| HCM Control Delay, s | 8.5 | 7.3 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1611 | - | 1033 | - | - |
| HCM Lane V/C Ratio | 0.008 | - | 0.013 | - | - |
| HCM Control Delay (s) | 7.3 | 0 | 8.5 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↑ | ↑ | | ↓ | |
| Traffic Vol, veh/h | 0 | 38 | 21 | 2 | 0 | 1 |
| Future Vol, veh/h | 0 | 38 | 21 | 2 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 41 | 23 | 2 | 0 | 1 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | - | 0 | - | 0 | 65 24 |
| Stage 1 | - | - | - | - | 24 - |
| Stage 2 | - | - | - | - | 41 - |
| Critical Hdwy | - | - | - | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | - | - | - | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 941 1052 |
| Stage 1 | 0 | - | - | - | 999 - |
| Stage 2 | 0 | - | - | - | 981 - |
| Platoon blocked, % | - | - | - | - | |
| Mov Cap-1 Maneuver | - | - | - | - | 941 1052 |
| Mov Cap-2 Maneuver | - | - | - | - | 941 - |
| Stage 1 | - | - | - | - | 999 - |
| Stage 2 | - | - | - | - | 981 - |

| Approach | EB | WB | SB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 8.4 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|-----------------------|-----|-----|-----|-------|
| Capacity (veh/h) | - | - | - | 1052 |
| HCM Lane V/C Ratio | - | - | - | 0.001 |
| HCM Control Delay (s) | - | - | - | 8.4 |
| HCM Lane LOS | - | - | - | A |
| HCM 95th %tile Q(veh) | - | - | - | 0 |

Appendix L: ICE Analysis

GDOT PI # (or N/A): Request By:
 County: GDOT District:
 Major (State) Road: Speed Limit:
 Minor (Crossing) ST: Speed Limit:
 Major ST Direction: Area Type:
 Intersection Control:
 Prepared By: Analyst:
 Date: Project ID:
 Project Purpose:

Annual Growth Rate:
 K Factor*:

| | | 2022 Existing Year Volumes | | | | | |
|------|----------------------|----------------------------|-----|--------|-----|--|--|
| | | 2202 (1045) [35400] | | | | | |
| 2022 | Existing Data Year | (0) | (8) | (1035) | (2) | | |
| 2023 | Project Opening Year | 0 | 33 | 2,168 | 1 | | |
| 2028 | Project Design Year | 0 | 33 | 2,168 | 1 | | |

| | | 2022 Existing Year Volumes | | | | | |
|----------------|-----------------|---|-----|-----|-----|---|-----|
| | | 2202 (1045) [35400] | | | | | |
| | | 2022 Intersection Daily Entering Volume (est): 35,950 | | | | | |
| 24 (44) [1200] | EB Proposed Dwy | (19) | 6 | (0) | (0) | 0 | (0) |
| (0) | (0) | (25) | 18 | (0) | (0) | 0 | (0) |
| (0) | (0) | (0) | (0) | (0) | (0) | 0 | (0) |

| Peak Hour % Trucks | | | |
|--------------------|----|-----|----|
| EB | WB | NB | SB |
| 19% | 0% | 10% | 8% |

| | | 2028 Design Year Volumes | | | | | |
|----------------|-----------------|---|-----|-----|-----|-----|------|
| | | 2665 (1265) [43300] | | | | | |
| | | 2028 Intersection Daily Entering Volume (est): 44,950 | | | | | |
| 29 (54) [1400] | EB Proposed Dwy | (23) | 7 | (0) | (0) | 55 | (40) |
| (0) | (0) | (31) | 22 | (0) | (0) | 105 | (65) |
| (0) | (0) | (0) | (0) | (0) | (0) | 0 | (0) |

| | | 2023 Opening Year Volumes | | | | | |
|----------------|-----------------|---|-----|-----|-----|-----|------|
| | | 2275 (1080) [37000] | | | | | |
| | | 2023 Intersection Daily Entering Volume (est): 38,500 | | | | | |
| 25 (46) [1200] | EB Proposed Dwy | (20) | 6 | (0) | (0) | 55 | (40) |
| (0) | (0) | (26) | 19 | (0) | (0) | 105 | (65) |
| (0) | (0) | (0) | (0) | (0) | (0) | 0 | (0) |

| | | 2028 Design Year Volumes | | | | | |
|----------------|-----------------|---|-----|-----|-----|-----|------|
| | | 2665 (1265) [43300] | | | | | |
| | | 2028 Intersection Daily Entering Volume (est): 44,950 | | | | | |
| 29 (54) [1400] | EB Proposed Dwy | (23) | 7 | (0) | (0) | 55 | (40) |
| (0) | (0) | (31) | 22 | (0) | (0) | 105 | (65) |
| (0) | (0) | (0) | (0) | (0) | (0) | 0 | (0) |

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: **1)** the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or **2)** the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage Process: A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Screening Decision Record Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves as a screening effort meant to *eliminate* non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column.

Stage 2: Alternative Selection Decision Record Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.

Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

| GDOT PI # | 0008351 | Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2 <div style="font-size: small; text-align: center; margin-top: 10px;"> <ol style="list-style-type: none"> 1. Does alternative address the project need in a balanced manner and in scale with the project? 2. Does alternative improve safety performance in terms of reducing severe crashes? 3. Does alternative incorporate safety performance in operations for pedestrians and/or bicyclists? 4. Does alternative improve (or preserve) convenience characteristics, delay, reliability, etc.? 5. Does alternative appear feasible given the site respect to other project factors? 6. Does alternative appear feasible with respect to other project factors? 7. Overall feasible alternative (select alternative for further evaluation in Stage 2)? </div> | | | | | | | |
|---|----------------------------------|--|-----|-----|-----|-----|-----|--|---|
| Project Location: | US 23/SR 365 @ Proposed Dwy | | | | | | | | |
| Existing Control: | Conventional (Minor Stop) | | | | | | | | |
| Prepared by: | Pond & Company | | | | | | | | |
| Date: | 2/29/2024 | Screening Decision Justification: | | | | | | | |
| Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column | | | | | | | | | |
| Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type) | | | | | | | | | |
| Unsignalized Intersections | Conventional (Minor Stop) | No | No | No | No | No | No | No | Existing control, which has a failing LOS |
| | Conventional (All-Way Stop) | No | No | Yes | No | No | No | No | Major street capacity needs don't justify |
| | Mini Roundabout | No | No | No | No | No | No | No | Not justified due to intersection capacity needs |
| | Single Lane Roundabout | No | No | No | No | No | No | No | Existing lane configuration and capacity needs don't justify |
| | Multilane Roundabout | No | Yes | No | Yes | No | No | No | Not appropriate for the scale of this intersection |
| | RCUT (stop control) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Identified as feasible alternative |
| | RIRO w/down stream U-Turn | No | Yes | Yes | No | Yes | No | No | Side street left turn & thru volumes too high. Alternative would be restrictive |
| | High-T (unsignalized) | Yes | Yes | No | Yes | Yes | Yes | No | Not applicable. Intersection is not a T intersection |
| | Offset-T Intersections | No | No | No | No | No | No | No | Not applicable. Intersection is not a T intersection |
| | Diamond Interch (Stop Control) | No | No | No | No | No | No | No | Intersection not an interchange |
| | Diamond Interch (RAB Control) | No | No | No | No | No | No | No | Intersection not an interchange |
| | No LT Lane Improvements | No | No | No | No | No | No | No | N/A |
| | No RT Lane Improvements | No | No | No | No | No | No | No | N/A |
| Other unsignalized (provide description): | No | No | No | No | No | No | No | N/A | |
| Signalized Intersections | Traffic Signal | Yes | Yes | Yes | Yes | Yes | No | No | Signal not warranted |
| | Median U-Turn (Indirect Left) | Yes | Yes | No | No | Yes | No | No | Signal not warranted |
| | RCUT (signalized) | Yes | Yes | Yes | Yes | Yes | No | No | Signal not warranted |
| | Displaced Left Turn (CFI) | No | Yes | No | No | No | No | No | Not appropriate for the scale of this intersection |
| | Continuous Green-T | No | No | No | No | No | No | No | Not applicable. Intersection is not a T intersection |
| | Jughandle | No | Yes | No | Yes | No | No | No | Not appropriate for the scale of this intersection |
| | Quadrant Roadway | No | Yes | No | Yes | No | No | No | Not appropriate for the scale of this intersection |
| | Diamond Interch (Signal Control) | No | No | No | No | No | No | No | Intersection not an interchange |
| | Diverging Diamond | No | No | No | No | No | No | No | Intersection not an interchange |
| | Single Point Interchange | No | No | No | No | No | No | No | Intersection not an interchange |
| | No LT Lane Improvements | No | No | No | No | No | No | No | Existing lane configurations include turn lanes. Double lanes not warrantd |
| No RT Lane Improvements | No | No | No | No | No | No | No | Existing lane configurations include turn lanes. Double lanes not warrantd | |
| Other Signalized (provide description): | No | No | No | No | No | No | No | N/A | |

☐ = Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



GDOT INTERSECTION CONTROL EVALUATION (ICE) WAIVER FORM

ICE Version 2.15 | Revised 07/01/2019

Waiver Request - Level 1

In certain circumstances where an ICE would otherwise be required, an ICE may be waived based on appropriate evidence presented with a written request. Scenarios in which an ICE waiver request may be considered include:

- Proposed improvements do not substantially alter the character of the intersection, and are considered minor in nature, such as extending existing turn lane(s) or modifying signal phasing at an existing traffic signal
- The intersection consists of a public roadway intersecting a divided, multilane roadway where the access will be limited to a closed median with only right-in/right-out access that will operate acceptably; or
- The intersection is along an undivided, two-lane roadway that will not be widened and meets the following criteria:
 - Low risk in terms of exposure (total intersection entering volume less than 1,000 vehicles /day)
 - Latest 5 years of crash history is not indicative of a crash problem (no discernible crash patterns coupled with low crash frequency and severity)
 - Layout has no unusual or undesirable geometric features (such as restricted sight distance)
 - The proposed changes are not expected to adversely affect safety

If only one alternative is determined to be feasible from the ICE Stage 1, then a waiver may be submitted in lieu of completing ICE Stage 2. The waiver must clearly explain why there is no other feasible alternative. A Waiver Form should also be submitted to document an agreed upon decision to select a preferred alternative other than the highest scoring alternative in Stage 2.

ICE waiver forms with supporting documentation should be submitted for approval to the Office of Traffic Operations or District Engineer (depending on Waiver level). Questions regarding the waiver process should be routed to the State Traffic Engineer.

Project Information: Location: US 23/SR 365 @ Proposed Dwy GDOT PI # (or N/A): 0008351
 County: Hall Requested By: Hall County
 GDOT District: 1 - Gainesville Prepared By: Pond & Company
 Area Type: Suburb/Transition Analyst: 0
 Existing Intersection Control: Conventional (Minor Stop) Date: 2/29/2024
 Waiver Request Type:

Traffic and Operations Data:¹

| | | |
|---|--------------------|-----------|
| Intersection meets signal/AWS warrants? | None | |
| Traffic Analysis Type: | Intersection Delay | |
| Existing Avg Daily Traffic (Major Street): | 29,144 | |
| Existing Avg Daily Traffic (Minor Street): | 264 | |
| Analysis Period: | AM Peak | PM Peak |
| 2023 Opening Yr Peak Hour Intersection Delay: | 44.3 sec | 120.0 sec |
| 2023 Opening Yr Peak Hour Intersection V/C: | 0.57 | 1.23 |
| 2028 Design Yr Peak Hour Intersection Delay: | 75.3 sec | 281.1 sec |
| 2028 Design Yr Peak Hour Intersection V/C: | 1.04 | 1.30 |

| Crash Data (Required): ¹ | | | |
|---|----------------|---------------|--------------|
| Crash Data: Enter most recent 5 years of crash data | Crash Severity | | |
| | PDO | Injury Crash* | Fatal Crash* |
| Angle | 2 | 0 | 0 |
| Head-On | 0 | 0 | 0 |
| Rear End | 2 | 0 | 0 |
| Sideswipe - same | 1 | 0 | 0 |
| Sideswipe - opposite | 0 | 0 | 0 |
| Not Collision w/Motor Veh | 1 | 0 | 0 |
| TOTALS: | 6 | 0 | 0 |

Crash Type

¹Crash data required for all existing intersections. ADT's required if available (from data collected or nearest GDOT count station site). Capacity data is optional unless needed to justify basis of the waiver request.

* Number of crashes resulting in injuries / fatalities, not number of persons

Description of Work / Justification for Waiver (Required): Install RCUT at the intersection of US 23/SR 365/Cornelia Hwy due to the traffic impacts of a proposed residential development. This intersection does not warrant a signal and its high major street volume does not justify a roundabout. Additionally, it is not a T intersection or interchange and the RIRO alternative would be restrictive since there is a high amount of minor street left turning vehicles.

Proposed Intersection Control:

REQUESTED BY: Zach Puckett Date: 2/29/2024

Title: Project Engineer, IMSA Level II

APPROVED BY: _____ Date: _____

Name: _____

Chief Engineer or (Approved Delegate)

PRELIMINARY STORMWATER ASSESSMENT

FOR

**CAGLE MILL RESIDENTIAL
AND COMMERCIAL
DEVELOPMENT**

**4745 CAGLE MILL RD, LULA, GA 30554
4691 NOAH MARTIN DR, LULA, GA 30554**



3500 Parkway Lane, Suite 500
Peachtree Corners, Georgia 30092
678.336.7740
www.pondco.com
Pond & Company Project No. 1220263

Issued: March 22, 2024

TABLE OF CONTENTS

| | |
|---|----------|
| PROJECT DESCRIPTION | 2 |
| METHODOLOGY | 2 |
| HYDROLOGIC ANALYSIS..... | 3 |
| Predevelopment Conditions..... | 3 |
| Post-Development Conditions | 4 |
| Study Point(s) | 5 |
| Additional Information | 5 |
| STORMWATER MANAGEMENT DESIGN | 5 |
| Water Quality / Runoff Reduction..... | 6 |
| Channel Protection, Overbank Flood Protection, and Extreme Flood Protection | 6 |
| RUNOFF SUMMARY TABLES | 6 |
| DOWNSTREAM ANALYSIS..... | 7 |
| CONCLUSION | 7 |

APPENDICES

- Appendix A: Location Map, FEMA Firmette, Flow Summaries, and Rainfall Reports
- Appendix B: "TBD"
- Appendix C: Drainage Maps, StreamStats report, Alta Survey, and Soils Map
- Appendix D: Time of Concentration Calculations
- Appendix E: Hydraflow Hydrograph Model Output
- Appendix F: Georgia TSS Spreadsheet

PROJECT DESCRIPTION

This Preliminary Hydrology Study has been prepared for Cagle Mill, residential and commercial development in Hall County, Georgia. The property has been surveyed at 72.67 acres and is owned by CBD Investments, LLC. Cornelia Highway (GA State Road #365) abuts the site from the northwest side and Cagle Mill Road from the southeast side. The North Oconee River crosses the site.

Based on FIRM Panel Maps 13139C0225F, dated September 29, 2006, The North Oconee River in our site is within a Special Flood Hazard Area Flood Zone "A" (Appendix A).

This project intends to develop the site into two different parcels, commercial and residential areas. In the residential area, there will be 235 units of single-family, 50 units of townhomes, a clubhouse, and an amenities area. The commercial space will be adjacent to Cornelia Highway and mostly contain industrial-use buildings with a visitor's parking lot.

The development is anticipated to disturb about 75 percent of the site area. More detailed explanations will be provided in the final report. The site will drain to the North Oconee River on the west side of the property, which is also part of the floodplain.

The new construction will include the installation of a new BMP as follows:

- Regenerative Stormwater Conveyance: One (1)
- Stormwater wetlands: Two (2)
- Stormwater Wet Pond: One (1)
- Enhance Swale: One (1)
- Bioretention Basins: Two (2)

The following report describes the methodology and the associated analysis results to meet the proposed developments above performance criteria.

METHODOLOGY

Hydrograph modeling and pond routing are performed using Hydraflow Hydrographs Extension for AutoCAD Civil 3D 2018. Soil Conservation Service (SCS) hydrograph method generates Type II 24-hour hydrographs for all pre-and post-developed basins during storm events. SCS runoff curve numbers are taken from the *Georgia Stormwater Management Manual (GSMM)*. Curve numbers are selected based on existing and revised proposed ground covers located on soil group B. Where ground cover is not uniform over a basin area, a weighted curve number is calculated based on the area of each type of ground cover. Time of concentration calculations for each basin (pre- and post- developed) are performed per the procedure found in USDA's Technical Release 55 *Urban Hydrology for Small Watersheds* (TR-55) and Watershed Lag Method.

HYDROLOGIC ANALYSIS

Predevelopment Conditions

The existing area of the site is primarily wooded. Existing conditions basin maps can be found in Appendix C. Runoff from 3 basins drain to Study point 1 (SP-1), as follows:

- Existing Basin "A" is 53.31 acres located northwest of the site. The maximum allowable curve number for this basin is 55. This basin has a Time Concentration of 23 minutes.

| PRE-DEV BASIN A | | | | | |
|-------------------|--|------------------|-----------------|-------------------|--------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| A | | Woods | 53.31 | 55 | 2932.1 |
| | | Total Area = | 53.31 | Weighted CN = | 55 |

- Existing Basin "B" is 15.75 acres located southwest of the site. The maximum allowable curve number for this basin is 55. This basin has a Time of Concentration of 21.1 minutes.

| PRE-DEV BASIN B | | | | | |
|-------------------|--|------------------|-----------------|-------------------|-------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| B | | Woods | 15.75 | 55 | 866.3 |
| | | Total Area = | 15.75 | Weighted CN = | 55 |

- Existing Basin "B2" is 70 acres located southeast of the site. The maximum allowable curve number for this basin is 55. This basin has a time of Concentration of 10 minutes.

| PRE-DEV BASIN B-2 | | | | | |
|-------------------|--|------------------|-----------------|-------------------|------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| B | | Woods | 70.0 | 55 | 3850 |
| | | Total Area = | 70.0 | Weighted CN = | 55 |

- Existing Basin "C" is 6.07 acres located southeast of the site. The maximum allowable curve number for this basin is 55. This basin has a Time of Concentration of 22.9 minutes.

| PRE-DEV BASIN C | | | | | |
|-------------------|--|------------------|-----------------|-------------------|-------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| C | | Woods | 6.07 | 55 | 333.9 |
| | | Total Area = | 6.07 | Weighted CN = | 55 |

- Upstream Basin area is 3176.07 acres. To determine the area of the upstream basin, we subtract the entire area to SP-1 based on StreamStats (See appendix C) to the total area of pre-developed basins A, B, and C. We also use StreamStats to determine the impervious, grass area, and wooded percentages. Based on the StreamStats report, the total area drain to SP-1 is 3251.2 acres. The time of concentration of Upstream Basin is 436.7 min. The maximum allowable curve number for Upstream Basin is 67. Below is the breakdown of each area.

| UPSTREAM BASIN | | | | |
|-------------------|------------------------|-----------------|----------------------|-----------|
| Basin Description | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| UPSTREAM | Grass (Fair Condition) | 603.50 | 69 | 41641.5 |
| | Woods | 1870.67 | 55 | 102886.9 |
| | Impervious | 701.90 | 98 | 68786.2 |
| | Total Area = | 3176.07 | Weighted CN = | 67 |

Post-Development Conditions

The revised development encompasses a new commercial and residential area. Three basins are draining to SP-1 in the post-developed condition, as follows:

- Post-Basin “A” consists of 44.56 acres. Since most of the area is new residential development, per GSMM table 3.1.5-1, we use a Curve Number of 85 (1/8 acres or less [townhouse]). This basin has a Time of Concentration of 10.3 minutes.

| POST-DEV BASIN A | | | | |
|-------------------|-----------------------------|-----------------|----------------------|-----------|
| Basin Description | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| A | 1/8 AC or less (Townhouses) | 44.56 | 85 | 3787.6 |
| | Total Area = | 44.56 | Weighted CN = | 85 |

- Post Basin “A” (Bypass) consists of 25.8 acres. The proposed area in this basin is mostly commercial, some residential, and the bridge. We assumed additional impervious on this area is 6.5 acres which makes the curve number 70. The time of concentration of this basin is 18.4 minutes

| POST DEV BASIN A (BYPASS) | | | | |
|---------------------------|---------------------|-----------------|----------------------|-----------|
| Basin Description | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| A | Woods | 19.30 | 61 | 1177.3 |
| | Impervious | 6.50 | 98 | 637.0 |
| | Total Area = | 25.80 | Weighted CN = | 70 |

- Post-Basin “B” consists of 67.44 acres. The majority of the area is phase 2 of the new development approx. 38 acres, the rest will be recreate space or will remain wooded. Hence, we use a Curve Number of 80. This basin has a Time of Concentration of 5 minutes.

| POST-DEV BASIN B | | | | |
|-------------------|-----------------------------|-----------------|----------------------|-----------|
| Basin Description | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| B | 1/8 AC or less (Townhouses) | 1.95 | 85 | 165.8 |
| | Total Area = | 1.95 | Weighted CN = | 85 |

Water Quality / Runoff Reduction

According to the Georgia Stormwater Management Manual, Section 2.2.2:

“Treat the runoff from 85% of the storms that occur in an average year and reduce average annual post-development total suspended solids loadings by 80%. Average rainfall events across that state of Georgia equates to treating storm events of 1.2 inches or less, as well as the first 1.2 inches of runoff for all more significant storm events.

Communities that adopt runoff reduction may waive the water quality treatment volume from this standard if 100% of the 1.0-inch runoff reduction volume is achieved.”

As can be seen by referring to the TSS spreadsheet summary in Appendix F, this site does not achieve 100% Runoff Reduction (RRv), but 80% of the total TSS is removed.

Channel Protection, Overbank Flood Protection, and Extreme Flood Protection

The Channel Protection criteria are typically achieved by providing 24 hours of extended detention for runoff generated by the 1-year, 24-hour rainfall event. The overbank flood protection criteria generally are achieved by attenuating the post-development flows not to exceed the predevelopment flows for the 1, 2, 5, 10, and 25-year storm events. The extreme flood protection criteria are typically achieved by safely controlling and conveying the 100-year storm event.

It is recommended that these criteria not be required for this project due to the nature of the development and the site’s proximity to the 100-year floodplain. While this site is anticipated to contribute pollutants via stormwater runoff to be treated by the water quality measures listed above, the expected increase in peak runoff flows will not be significant, and flooding will not be exacerbated. See below for a summary of peak runoff rates for all storm events and Appendix E for Hydraflow Hydrograph model results.

RUNOFF SUMMARY TABLES

The tables below summarize runoff contributions to the Study Point 1 (SP-1)

| Return Frequency | PRE DEV BASIN A (Hyd 8) (CFS) | POST DEV BASIN A (Hyd 20) (CFS) | NET INCREASE (CFS) |
|------------------|-------------------------------|---------------------------------|--------------------|
| 1 | 292.32 | 295.02 | 2.7 |
| 2 | 394.61 | 397.57 | 2.96 |
| 5 | 586.83 | 590.12 | 3.29 |
| 10 | 765.47 | 768.95 | 3.48 |
| 25 | 1037.95 | 1041.59 | 3.64 |
| 50 | 1263.74 | 1267.44 | 3.7 |
| 100 | 1504.81 | 1508.51 | 3.7 |

- Post-Basin “C” consists of 2.82 acres. Since most of the area is new residential development, per GSMM table 3.1.5-1, we use a Curve Number of 85 (1/8 acres or less [townhouse]). This basin has a Time of Concentration of 9.3 minutes.

| POST-DEV BASIN C | | | | | |
|-------------------|--|-----------------------------|-----------------|----------------------|-----------|
| Basin Description | | Area Description | Area, A (acres) | Curve Number (CN) | CN*A |
| C | | 1/8 AC or less (Townhouses) | 2.82 | 85 | 239.7 |
| | | Total Area = | 2.82 | Weighted CN = | 85 |

- Upstream Basin remains the same under Post-Developed conditions.

Study Point(s)

Study Point 1 (SP-1)

SP-1 is located on North Oconee creek on the west side of the site. As mentioned, Basin A, B, C, and Upstream will be combined and drained to SP-1.

Delineation of all pre-developed and post-develop basins was based on StreamStats and Hall County GIS topography of the surrounding. All off-site area surfaces were determined based on aerial imagery from Hall County GIS. Below is a summary of areas contributing to each basin to compare predevelopment and post-development maps.

| SP | Description | Pre-Developed Drainage Areas (acres) | | | Post-Developed Drainage Areas (acres) | | | |
|--|----------------|--------------------------------------|-------|---------|---------------------------------------|-------|---------|---------|
| | | Off- | On- | Total | Off- | On- | By- | Total |
| SP-1 | Basin A | | 53.31 | 53.31 | | 44.56 | 25.80 | 70.36 |
| | Basin B | | 15.75 | 15.75 | | 1.95 | | 1.95 |
| | Basin C | | 6.07 | 6.07 | | 2.82 | | 2.82 |
| | Upstream Basin | 3176.07 | | 3176.07 | | | 3176.07 | 3176.07 |
| Total Drainage Area analyzed in Study Point 1: | | | Pre- | 3251.20 | | | Post- | 3251.20 |

Study Point 2 (SP-2)

SP-2 is located at the confluence of a tributary of North Oconee feeds into the creek. Basin B-2 will drain to SP-2.

Additional Information

For further information on the hydrologic analysis of this project, see the Pre/Post Development Drainage Maps and StreamStats report in Appendix C. For Time of Concentration Calculations, see Appendix D. See Appendix A for summary peak runoff rates for all storm events and Appendix E for Hydraflow Hydrograph model results.

STORMWATER MANAGEMENT DESIGN

This section describes what stormwater management measures are proposed to meet the performance criteria for the post-development condition. A BMP inspection schedule and checklist will be provided separately before approval.

DOWNSTREAM ANALYSIS

As described in the Georgia Stormwater Management Manual, the point at which the site accounts for 10% of the total drainage basin (10% point) typically reveals the most severe issues regarding the timing of hydrographs.

Since the site area (72.67 ac) is less than 10% of the total drainage area (3,251.52 ac), a downstream analysis will be located at SP-1.

CONCLUSION

This report demonstrates that the stormwater management practices designed herein will satisfy stormwater management and storm drainage requirements for the project based upon the following conclusions:

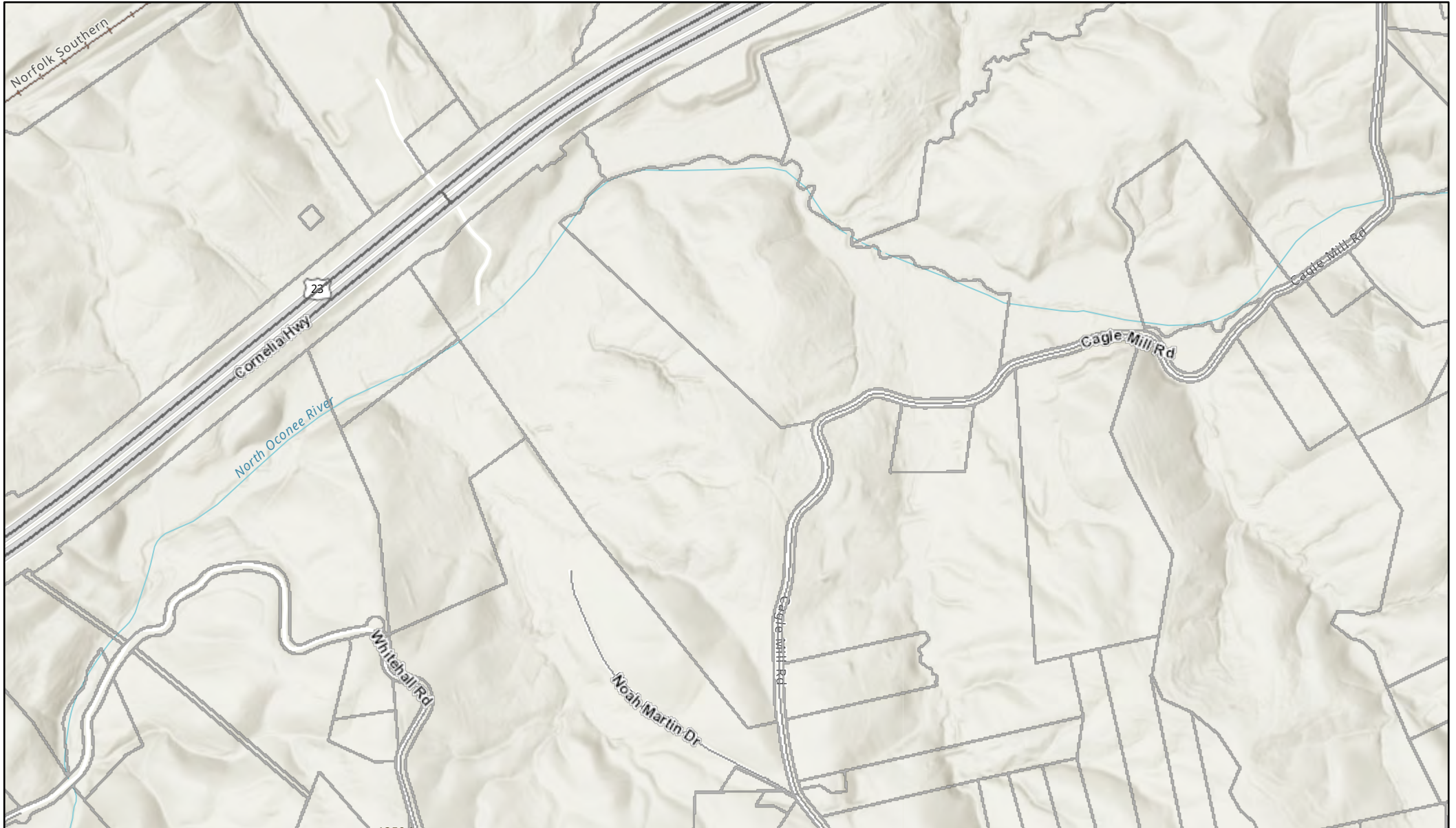
- 1) Water Quality is provided by using BMPs, reducing the Total Suspended Solids.
- 2) Peak flows are anticipated to increase due to this project, but not significantly. In addition, the site is adjacent to the Creek floodplain area. Due to these conditions, it is recommended that the Channel Protection, Overbank Flood Protection, and Extreme Flood Protection criteria be waived for this project.
- 3) No adverse downstream impacts are anticipated due to this development per hydraulic analysis.

The stormwater management facilities will continue to meet the regulatory requirements discussed herein only if the facilities are adequately maintained regularly. Any sediment or trash that accumulates in the facilities should be removed immediately.

This report and associated construction plans only pertain to the topics stated herein. The designer has not evaluated with regards to any other topic including, but not limited to: structural or geotechnical evaluations, environmental evaluations, etc.

Appendix A

Location Map



8/4/2022, 11:33:36 AM

- | | | | | |
|-----------------|----------------|-------------|-----------|--------------------|
| Parcel Boundary | BUFORD | GAINESVILLE | OAKWOOD | Arterial-Collector |
| Counties | CLERMONT | GILLSVILLE | RESTHAVEN | Interstate |
| Citylimits | FLOWERY BRANCH | LULA | Roads | Railway |
| BRASELTON | | | Local | |

1:11,015

0 412.5 825 1,650 ft

0 125 250 500 m

Esri Community Maps Contributors, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, FEMA, GHCGIS

Web AppBuilder for ArcGIS

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the **Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations** tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was Georgia State Plane West Zone (FIPS zone 1002). The **horizontal datum** was NAD 83, GRS 80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information about the **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Digital Orthophotos produced by Hall County, Georgia and the Center for GIS, Georgia Institute of Technology at a scale of 1:12,000 and dated 2005 or later.

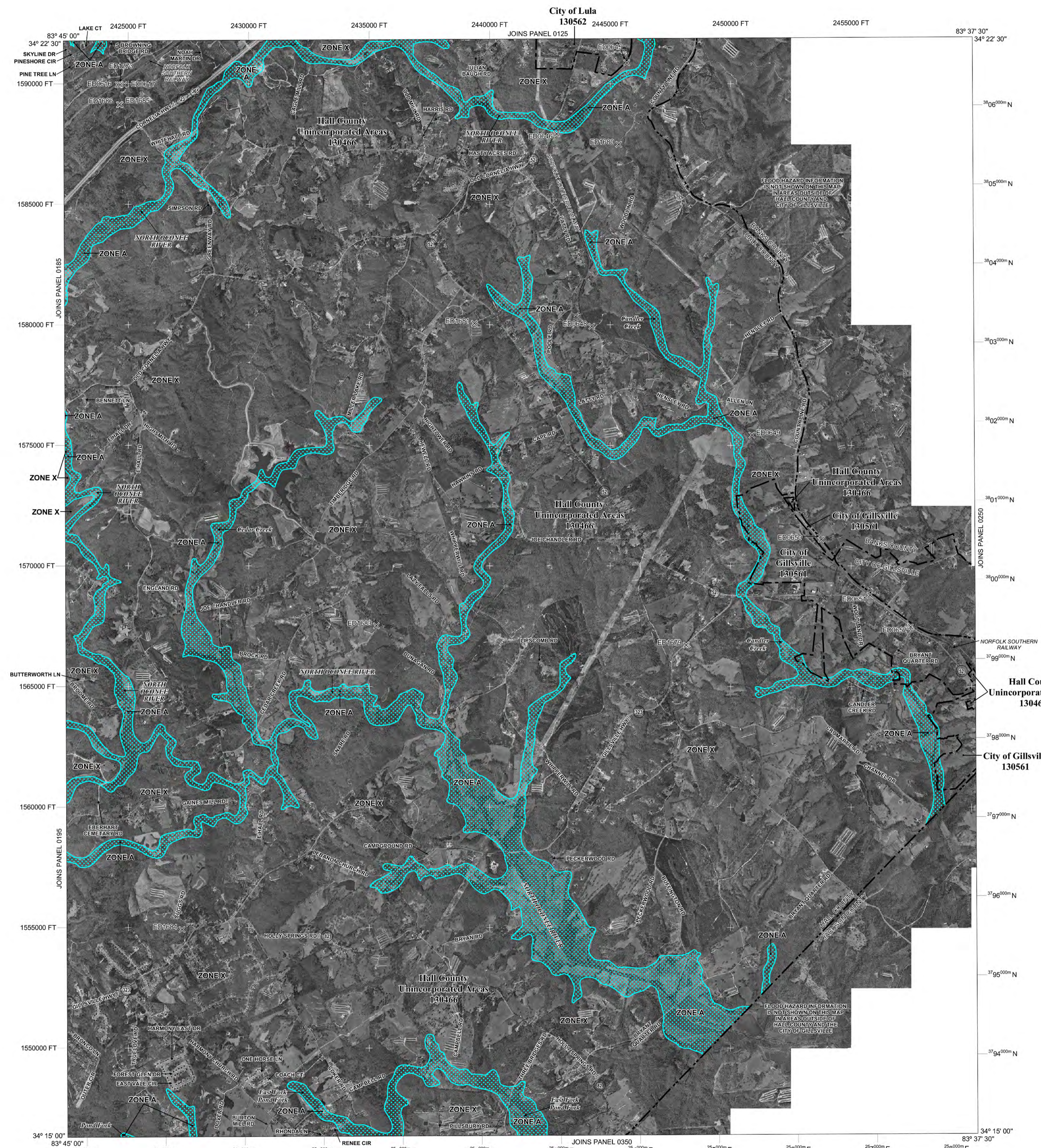
The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the Flood Insurance Study report. As a result of improved topographic data, the profile baseline, in some cases, may deviate significantly from the channel centerline or appear outside the Special Flood Hazard Area.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and their website at www.fema.gov/msc.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently identified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
Base Flood Elevation line and value; elevation in feet
(EL 987)
Base Flood Elevation value where uniform within zone; elevation in feet

Referenced to the North American Vertical Datum of 1988

⊕ ⊖ Cross section line
A B
23 23
Transect line

45° 02' 08", 93° 02' 12"
4899000 FT
5000-foot grid ticks: Georgia State Plane coordinate system, West zone (FIPS Zone 1002), Transverse Mercator
1000-meter Universal Transverse Mercator grid values, zone 16
DX5510x
Bench mark (see explanation in Notes to Users section of this FIRM panel)
• M1.5
River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTY-WIDE FLOOD INSURANCE RATE MAP
MARCH 21, 2000

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
September 29, 2006 - to increase Base Flood Elevations; to update corporate limits and map format; to add road and road names; to change Special Flood Hazard Areas; to reflect updated topographic information.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'

1000 0 2000 4000 FEET
600 0 600 1200 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0225F

FIRM

FLOOD INSURANCE RATE MAP

HALL COUNTY, GEORGIA AND INCORPORATED AREAS

PANEL 225 OF 377

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---------------------|--------|-------|--------|
| GILLSVILLE, CITY OF | 130561 | 0225 | F |
| HALL COUNTY | 130466 | 0225 | F |
| LULA, CITY OF | 130562 | 0225 | F |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 13139C0225F

MAP REVISED SEPTEMBER 29, 2006

Federal Emergency Management Agency



NOAA Atlas 14, Volume 9, Version 2
Location name: Lula, Georgia, USA*
Latitude: 34.3726°, Longitude: -83.7237°
Elevation: 1044 ft**



* source: ESRI Maps
 ** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerials](#)

PF tabular

| PDS-based point precipitation frequency estimates with 90% confidence intervals (ir | | | | | | | | | |
|--|--|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-----|
| Duration | Average recurrence interval (years) | | | | | | | | |
| | 1 | 2 | 5 | 10 | 25 | 50 | 100 | 200 | |
| 5-min | 5.04 (4.13-6.24) | 5.76 (4.70-7.13) | 6.95 (5.66-8.60) | 7.94 (6.47-9.86) | 9.34 (7.46-11.7) | 10.4 (8.22-13.2) | 11.5 (8.90-14.7) | 12.7 (9.55-16.3) | (1 |
| 10-min | 3.69 (3.02-4.57) | 4.22 (3.45-5.22) | 5.08 (4.15-6.30) | 5.81 (4.73-7.22) | 6.83 (5.46-8.60) | 7.63 (6.01-9.65) | 8.44 (6.52-10.8) | 9.27 (6.99-12.0) | (7 |
| 15-min | 3.00 (2.46-3.71) | 3.43 (2.80-4.24) | 4.13 (3.38-5.12) | 4.73 (3.85-5.87) | 5.56 (4.44-7.00) | 6.20 (4.89-7.85) | 6.86 (5.30-8.76) | 7.54 (5.68-9.73) | (6 |
| 30-min | 2.08 (1.70-2.58) | 2.39 (1.95-2.95) | 2.89 (2.36-3.58) | 3.31 (2.69-4.11) | 3.90 (3.11-4.90) | 4.35 (3.43-5.50) | 4.81 (3.72-6.14) | 5.28 (3.98-6.81) | (4 |
| 60-min | 1.33 (1.09-1.65) | 1.52 (1.24-1.88) | 1.84 (1.50-2.28) | 2.11 (1.72-2.62) | 2.51 (2.01-3.17) | 2.83 (2.24-3.59) | 3.16 (2.45-4.05) | 3.51 (2.66-4.55) | (2 |
| 2-hr | 0.813 (0.672-0.993) | 0.922 (0.762-1.13) | 1.11 (0.919-1.36) | 1.28 (1.06-1.58) | 1.54 (1.25-1.93) | 1.74 (1.39-2.19) | 1.96 (1.54-2.49) | 2.19 (1.68-2.82) | (1 |
| 3-hr | 0.610 (0.507-0.740) | 0.688 (0.572-0.835) | 0.828 (0.687-1.01) | 0.955 (0.790-1.16) | 1.15 (0.941-1.43) | 1.31 (1.06-1.64) | 1.48 (1.17-1.87) | 1.67 (1.29-2.13) | (1 |
| 6-hr | 0.381 (0.320-0.456) | 0.427 (0.359-0.512) | 0.511 (0.429-0.613) | 0.587 (0.491-0.707) | 0.704 (0.584-0.870) | 0.801 (0.654-0.993) | 0.907 (0.726-1.14) | 1.02 (0.798-1.29) | (0 |
| 12-hr | 0.238 (0.203-0.282) | 0.268 (0.228-0.317) | 0.319 (0.270-0.378) | 0.364 (0.308-0.433) | 0.431 (0.360-0.523) | 0.485 (0.399-0.591) | 0.542 (0.438-0.668) | 0.603 (0.476-0.752) | (0. |
| 24-hr | 0.146 (0.126-0.171) | 0.165 (0.142-0.194) | 0.198 (0.169-0.231) | 0.225 (0.192-0.264) | 0.263 (0.221-0.314) | 0.294 (0.244-0.352) | 0.325 (0.264-0.394) | 0.357 (0.284-0.438) | (0. |
| 2-day | 0.086 (0.075-0.099) | 0.098 (0.085-0.113) | 0.117 (0.101-0.135) | 0.133 (0.115-0.154) | 0.156 (0.132-0.183) | 0.173 (0.145-0.205) | 0.191 (0.157-0.229) | 0.209 (0.168-0.254) | (0. |
| 3-day | 0.063 (0.055-0.073) | 0.071 (0.062-0.082) | 0.085 (0.074-0.097) | 0.096 (0.084-0.111) | 0.112 (0.096-0.131) | 0.125 (0.105-0.147) | 0.138 (0.114-0.164) | 0.151 (0.122-0.182) | (0. |
| 4-day | 0.051 (0.045-0.058) | 0.057 (0.050-0.065) | 0.068 (0.059-0.077) | 0.077 (0.067-0.088) | 0.089 (0.077-0.104) | 0.099 (0.084-0.116) | 0.109 (0.091-0.129) | 0.119 (0.097-0.143) | (0. |
| 7-day | 0.035 (0.031-0.039) | 0.038 (0.034-0.043) | 0.045 (0.040-0.051) | 0.050 (0.044-0.057) | 0.058 (0.050-0.067) | 0.064 (0.055-0.074) | 0.070 (0.059-0.082) | 0.077 (0.063-0.091) | (0. |
| 10-day | 0.028 (0.025-0.031) | 0.030 (0.027-0.034) | 0.035 (0.031-0.040) | 0.039 (0.035-0.044) | 0.045 (0.039-0.051) | 0.049 (0.042-0.057) | 0.054 (0.046-0.063) | 0.058 (0.048-0.069) | (0. |
| 20-day | 0.018 (0.017-0.020) | 0.020 (0.018-0.022) | 0.023 (0.021-0.026) | 0.025 (0.023-0.028) | 0.029 (0.025-0.032) | 0.031 (0.027-0.035) | 0.034 (0.029-0.039) | 0.036 (0.030-0.042) | (0. |
| 30-day | 0.015 (0.014-0.016) | 0.016 (0.015-0.018) | 0.019 (0.017-0.020) | 0.020 (0.018-0.022) | 0.023 (0.020-0.025) | 0.024 (0.021-0.027) | 0.026 (0.022-0.030) | 0.028 (0.023-0.032) | (0. |

| | | | | | | | | | |
|---------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-----|
| 45-day | 0.012 (0.011-0.014) | 0.014 (0.012-0.015) | 0.015 (0.014-0.017) | 0.017 (0.015-0.018) | 0.018 (0.016-0.020) | 0.020 (0.017-0.022) | 0.021 (0.018-0.023) | 0.022 (0.018-0.025) | (0. |
| 60-day | 0.011 (0.010-0.012) | 0.012 (0.011-0.013) | 0.013 (0.012-0.015) | 0.015 (0.013-0.016) | 0.016 (0.014-0.017) | 0.017 (0.015-0.019) | 0.018 (0.015-0.020) | 0.018 (0.016-0.021) | (0. |

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

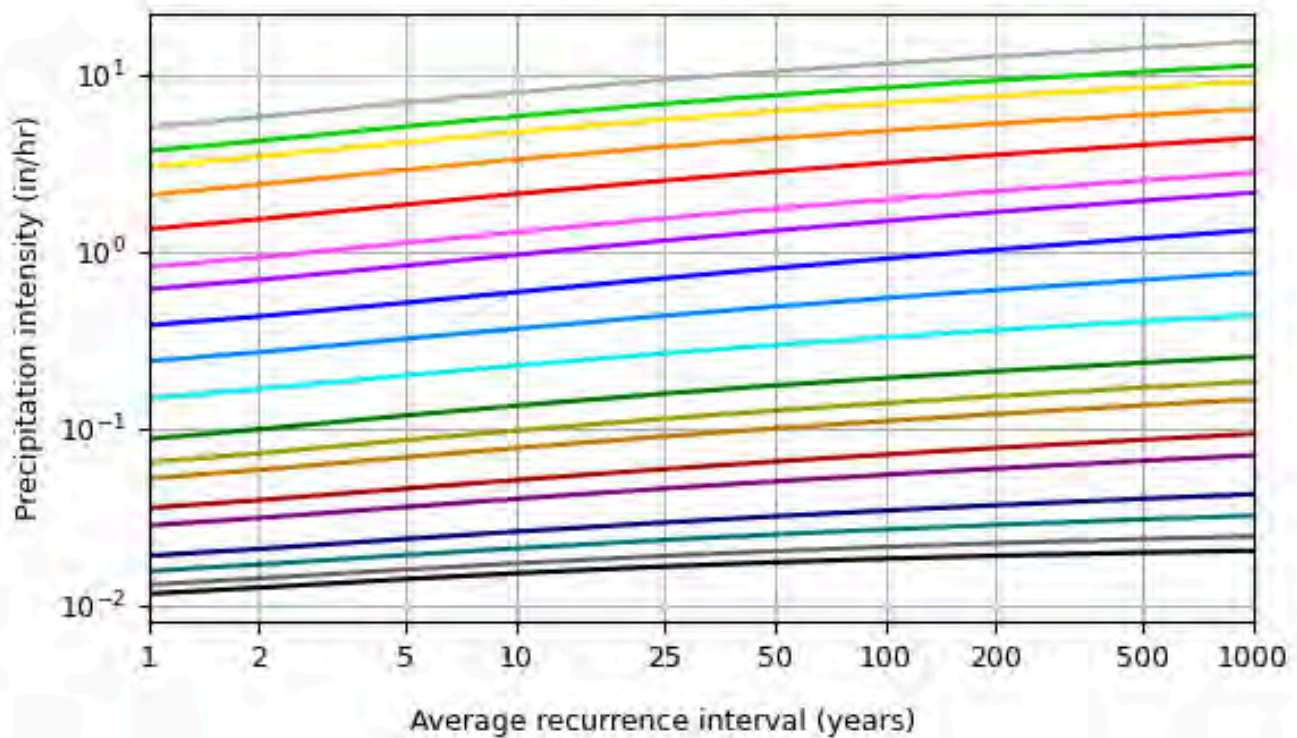
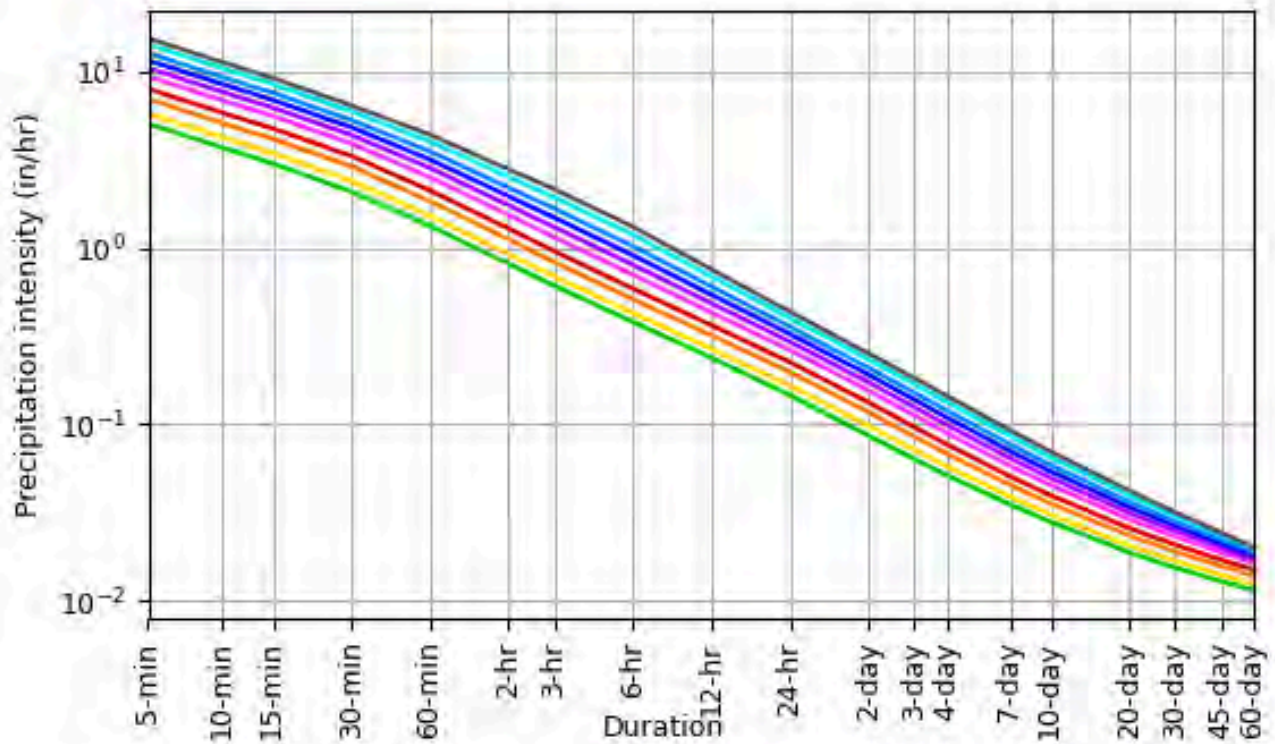
Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

PDS-based intensity-duration-frequency (IDF) curves

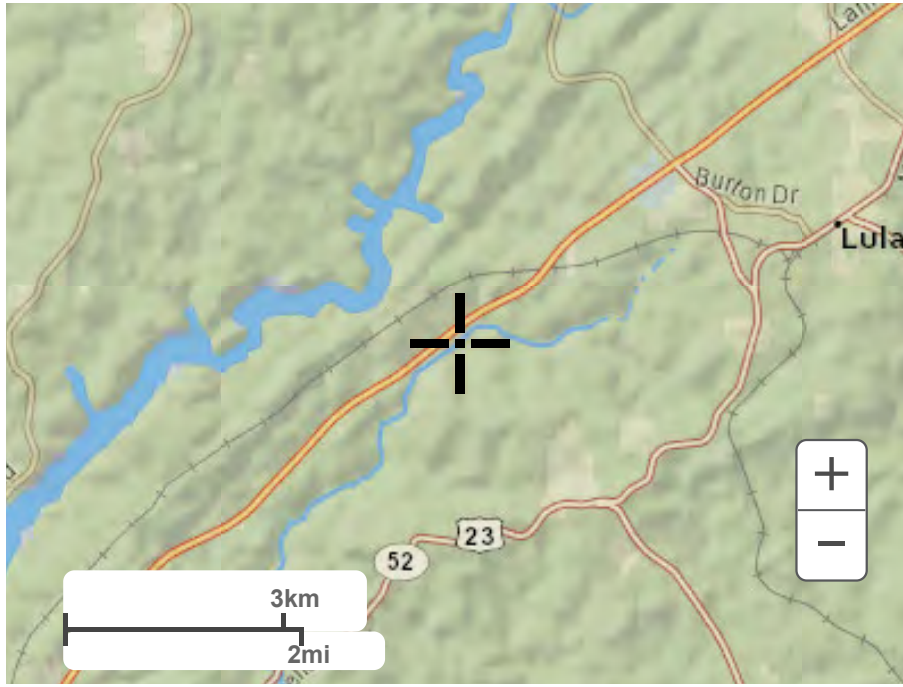
Latitude: 34.3726°, Longitude: -83.7237°



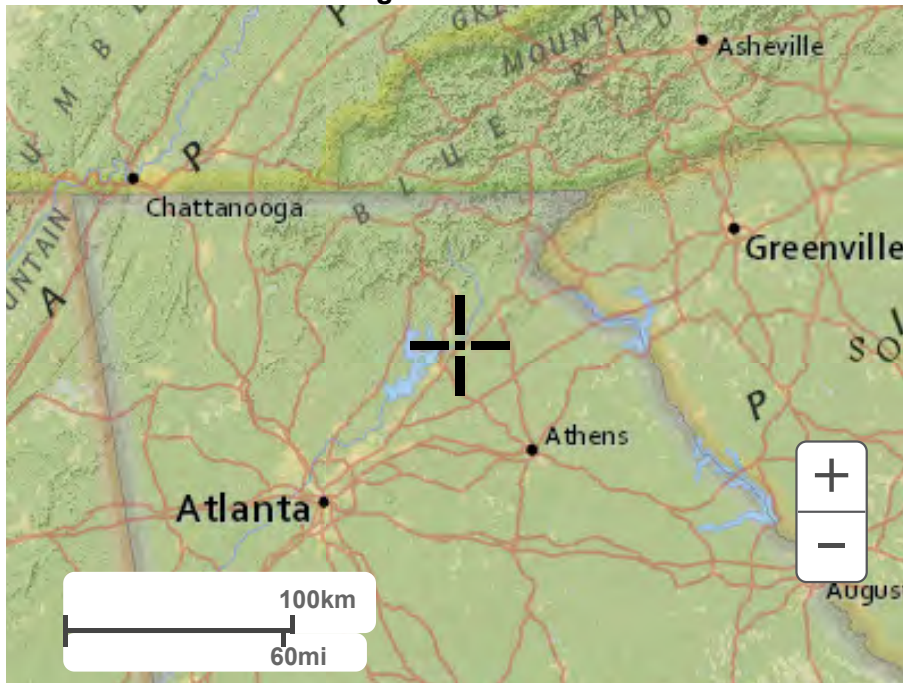
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Maps & aerials

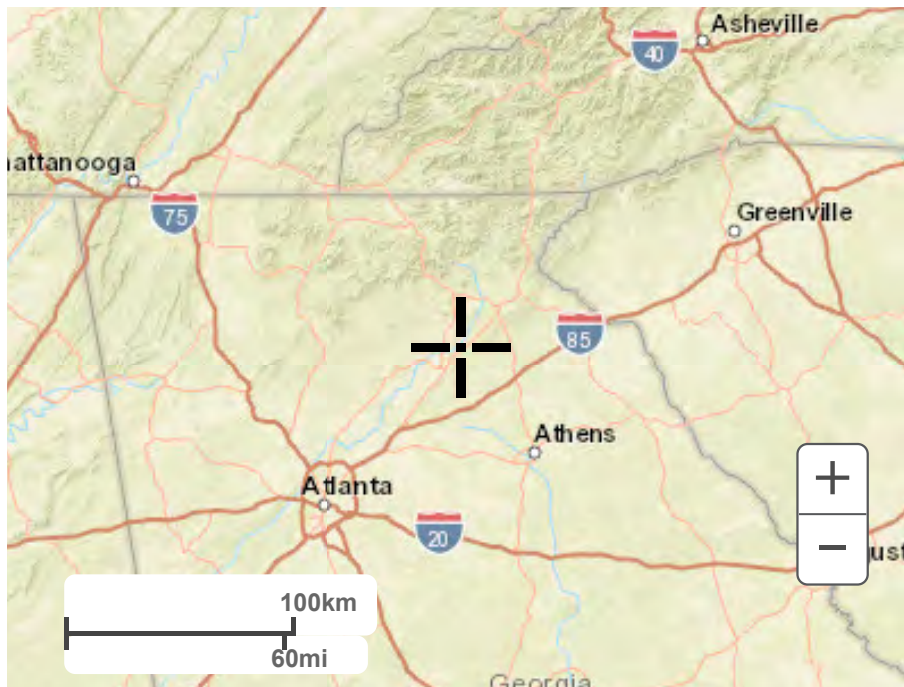
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



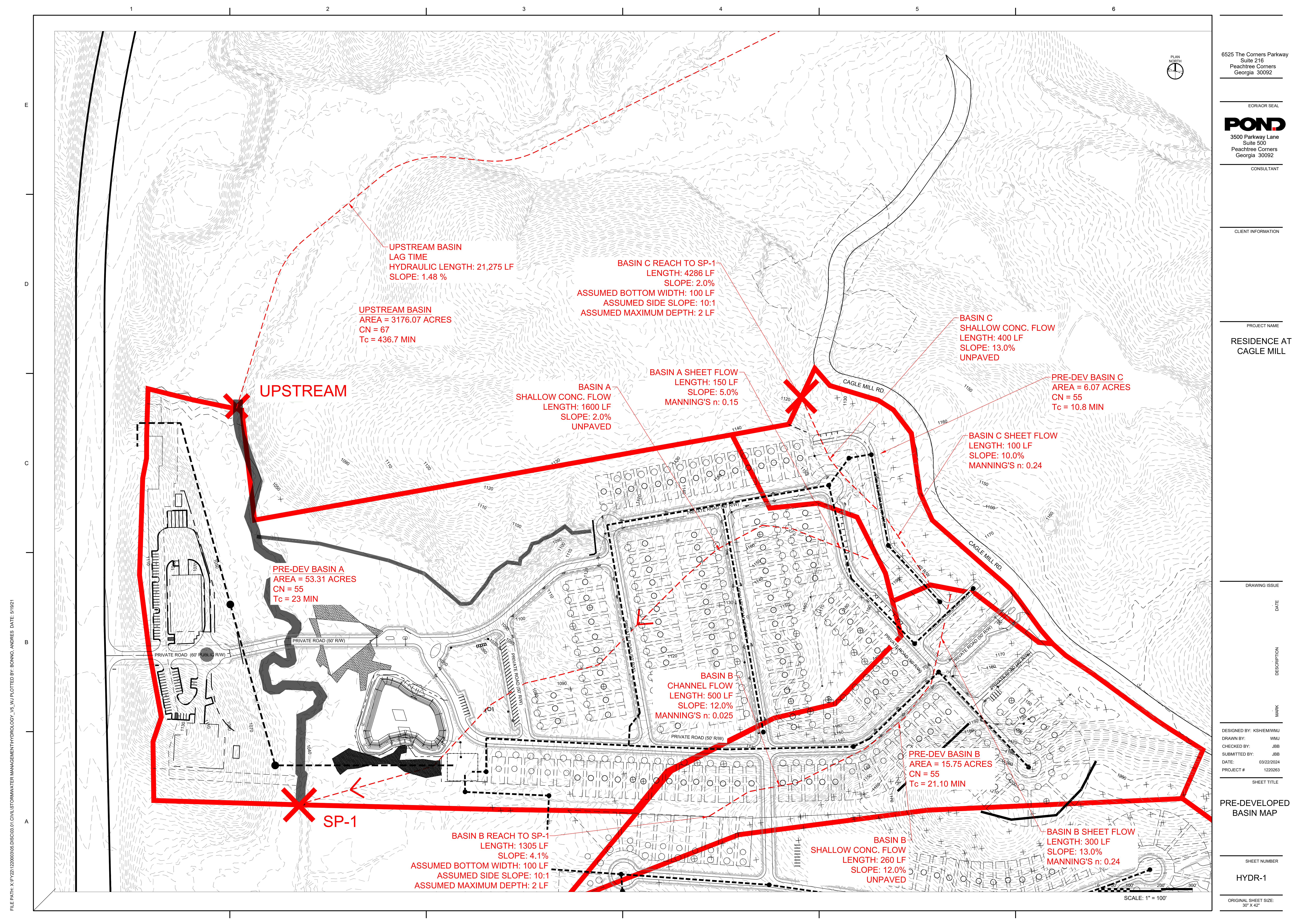
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[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

Appendix B

Appendix C



FILE PATH: X:\F\21122000\306\DISC\03_01\CIVIL\STORMWATER\MANAGEMENT\HYDROLOGY_V5_VUJ_PLOTTED BY BONNO, ANDRES DATE: 5/19/21

6525 The Corners Parkway
Suite 216
Peachtree Corners
Georgia 30092

EOR/AOR SEAL
POND
3500 Parkway Lane
Suite 500
Peachtree Corners
Georgia 30092
CONSULTANT

CLIENT INFORMATION

PROJECT NAME
**RESIDENCE AT
CAGLE MILL**

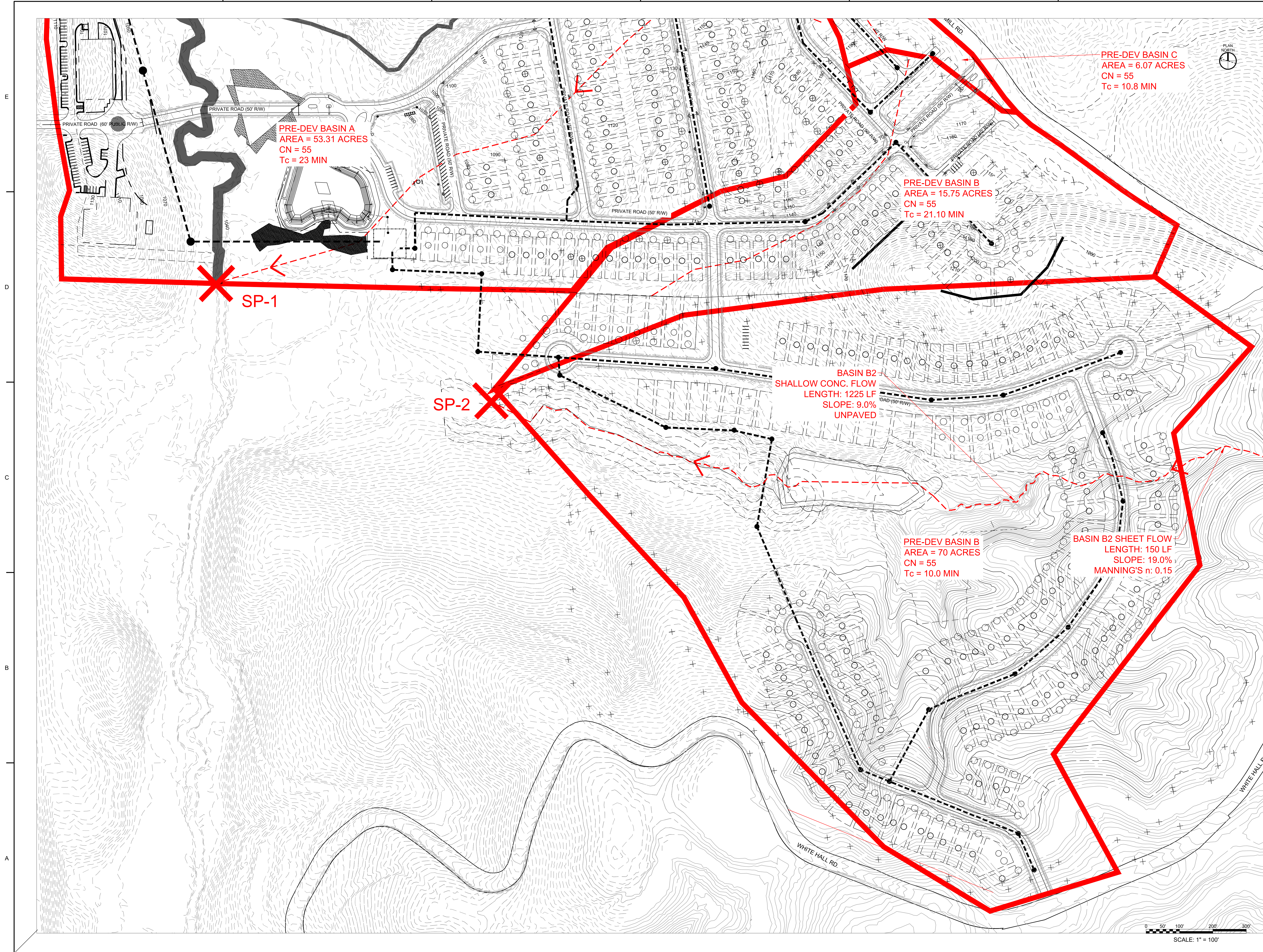
| DRAWING ISSUE | DATE | DESCRIPTION | MARK |
|-----------------------|------|-------------|------|
| DESIGNED BY: KSHIEMWJ | | | |
| DRAWN BY: WMJ | | | |
| CHECKED BY: JBB | | | |
| SUBMITTED BY: JBB | | | |
| DATE: 03/22/2024 | | | |
| PROJECT #: 1220263 | | | |
| SHEET TITLE | | | |

**PRE-DEVELOPED
BASIN MAP**

SHEET NUMBER
HYDR-1

ORIGINAL SHEET SIZE:
30" X 42"

FILE PATH: X:\F\2211220003\GDISC\03.01\CIVIL\STORMWATER\MANAGEMENT\HYDROLOGY_V5_WU1_PLOTTED BY BONNO, ANDRES DATE: 5/19/21



6525 The Corners Parkway
 Suite 216
 Peachtree Corners
 Georgia 30092

EOR/AOR SEAL
POND
 3500 Parkway Lane
 Suite 500
 Peachtree Corners
 Georgia 30092
 CONSULTANT

CLIENT INFORMATION

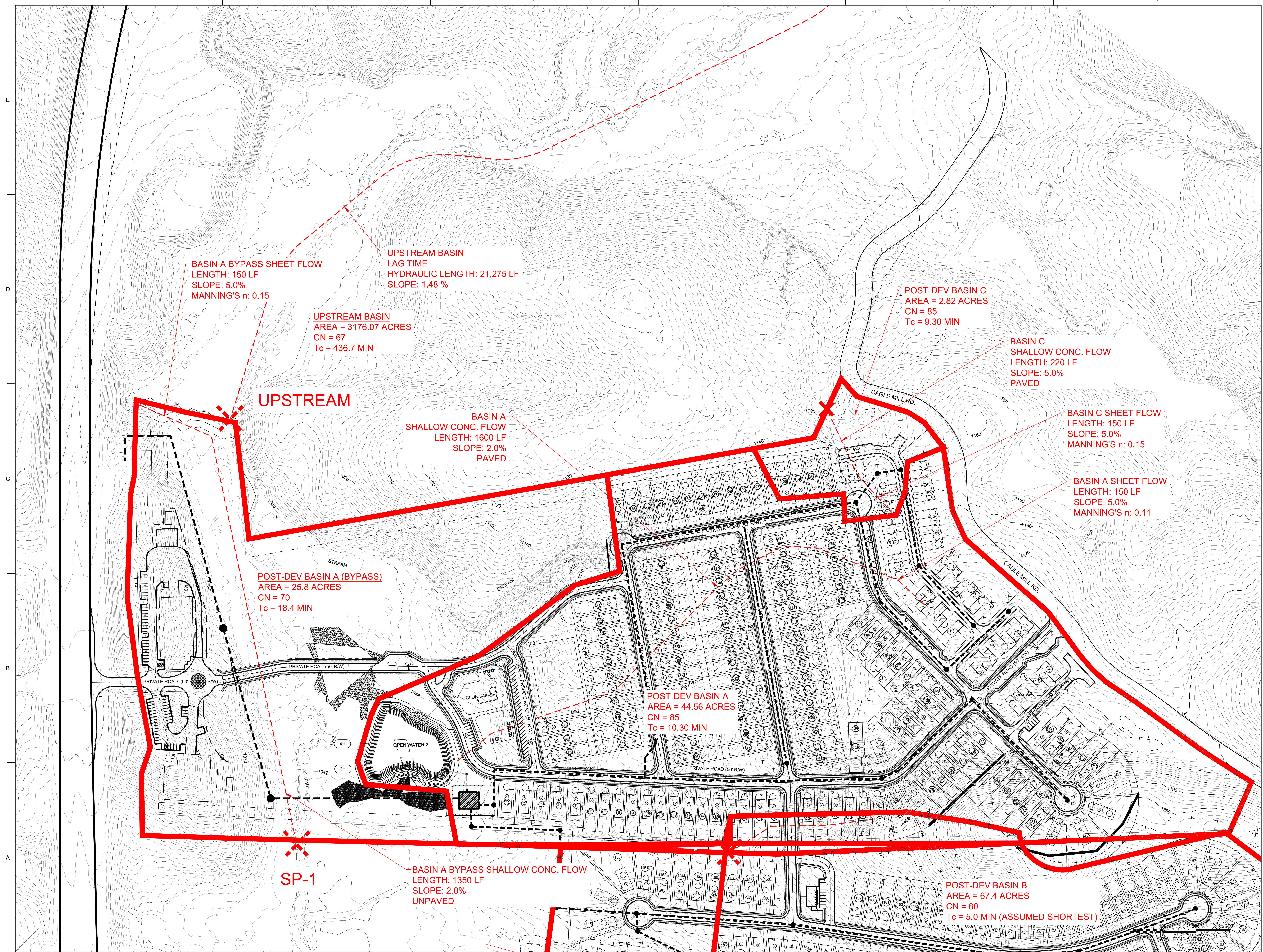
PROJECT NAME
**RESIDENCE AT
 CAGLE MILL**

| DRAWING ISSUE | |
|------------------------|-------------|
| DATE | DESCRIPTION |
| | |
| | |
| | |
| DESIGNED BY: KSHIEMWUJ | |
| DRAWN BY: WMJ | |
| CHECKED BY: JBB | |
| SUBMITTED BY: JBB | |
| DATE: 03/22/2024 | |
| PROJECT #: 1220263 | |
| SHEET TITLE | |

**PRE-DEVELOPED
 BASIN MAP**

SHEET NUMBER
HYDR-2
 ORIGINAL SHEET SIZE:
 30" X 42"

FILE PATH: X:\FY22\12200303\06.DISC\03.01.CIVIL\STORMWATER\MANAGEMENT\HYDROLOGY_V5_MJ_PLOTTED BY: BONNO, ANDRES DATE: 5/19/21



BASIN A BYPASS SHEET FLOW
LENGTH: 150 LF
SLOPE: 5.0%
MANNING'S n: 0.15

UPSTREAM BASIN
LAG TIME
HYDRAULIC LENGTH: 21,275 LF
SLOPE: 1.48 %

UPSTREAM BASIN
AREA = 3176.07 ACRES
CN = 67
Tc = 436.7 MIN

UPSTREAM

BASIN A
SHALLOW CONC. FLOW
LENGTH: 1600 LF
SLOPE: 2.0%
PAVED

POST-DEV BASIN C
AREA = 2.82 ACRES
CN = 85
Tc = 9.30 MIN

BASIN C
SHALLOW CONC. FLOW
LENGTH: 220 LF
SLOPE: 5.0%
PAVED

BASIN C SHEET FLOW
LENGTH: 150 LF
SLOPE: 5.0%
MANNING'S n: 0.15

BASIN A SHEET FLOW
LENGTH: 150 LF
SLOPE: 5.0%
MANNING'S n: 0.11

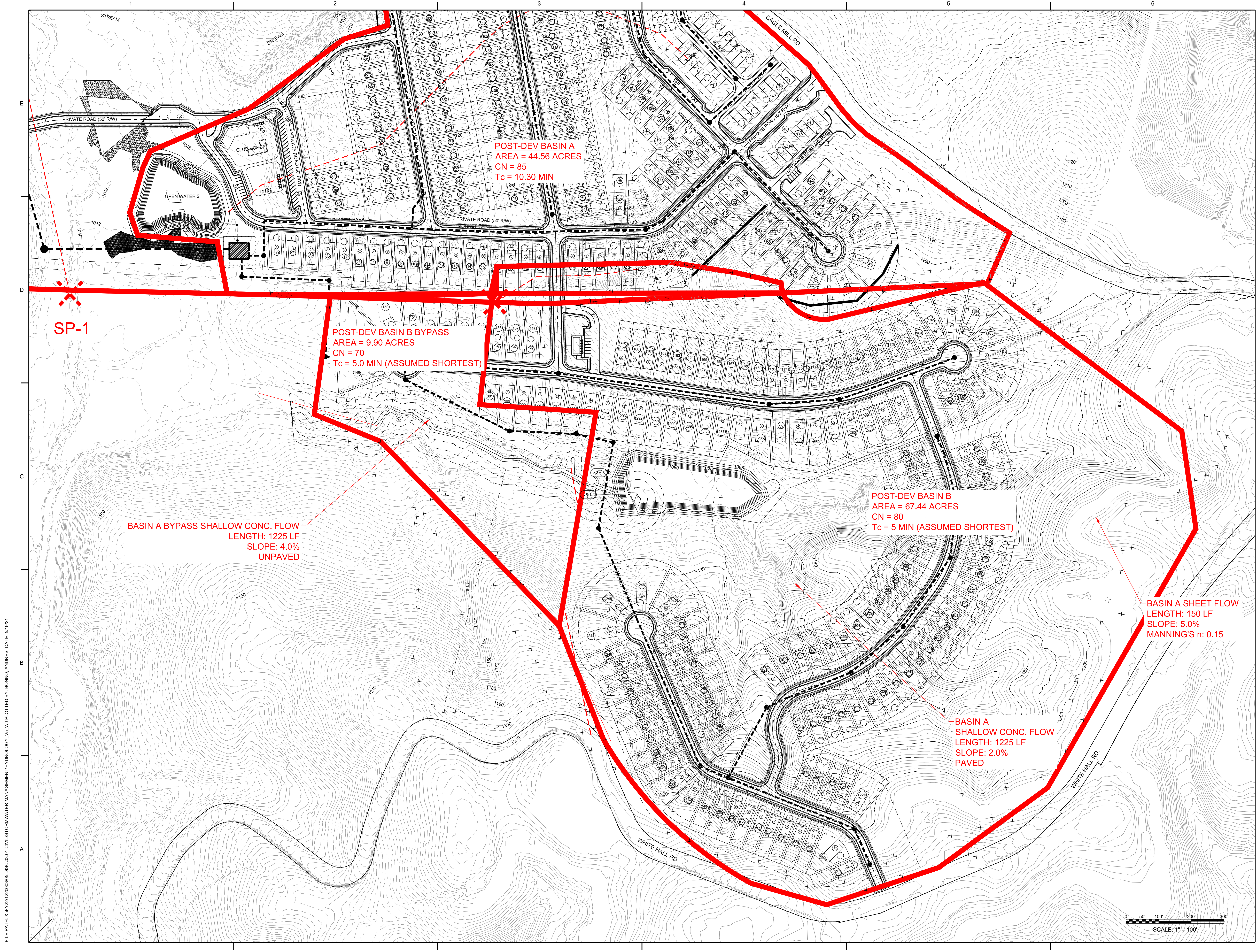
POST-DEV BASIN A (BYPASS)
AREA = 25.8 ACRES
CN = 70
Tc = 18.4 MIN

POST-DEV BASIN A
AREA = 44.56 ACRES
CN = 85
Tc = 10.30 MIN

POST-DEV BASIN B
AREA = 67.4 ACRES
CN = 80
Tc = 5.0 MIN (ASSUMED SHORTEST)

BASIN A BYPASS SHALLOW CONC. FLOW
LENGTH: 1350 LF
SLOPE: 2.0%
UNPAVED

SP-1



FILE PATH: X:\FY22\122003\06.DISC\03.01.CIVIL\STORMWATER\MANAGEMENT\HYDROLOGY_V5_MJU_PLOTTED BY BONNO ANDRES DATE: 5/19/21

6525 The Corners Parkway
Suite 216
Peachtree Corners
Georgia 30092

EOR/AOR SEAL
POND
3500 Parkway Lane
Suite 500
Peachtree Corners
Georgia 30092
CONSULTANT

CLIENT INFORMATION

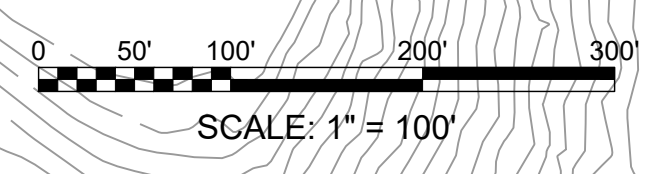
PROJECT NAME
**RESIDENCE AT
CAGLE MILL**

| DRAWING ISSUE | DATE | DESCRIPTION | MARK |
|-------------------------|------|-------------|------|
| DESIGNED BY: KSHIEM/MWJ | | | |
| DRAWN BY: WMJ | | | |
| CHECKED BY: JBB | | | |
| SUBMITTED BY: JBB | | | |
| DATE: 03/22/2024 | | | |
| PROJECT #: 1220263 | | | |
| SHEET TITLE | | | |

**POST DEVELOPED
BASIN MAP**

SHEET NUMBER
HYDR-4

ORIGINAL SHEET SIZE:
30" X 42"



Cagle Mill Phase 2- StreamStats Report

Region ID: GA

Workspace ID: GA20240228150937256000

Clicked Point (Latitude, Longitude): 34.36732, -83.72267

Time: 2024-02-28 10:09:59 -0500



 Collapse All

➤ Basin Characteristics

| Parameter Code | Parameter Description | Value | Unit |
|----------------|---|--------|--------------|
| BSLDEM10M | Mean basin slope computed from 10 m DEM | 15.896 | percent |
| CSL10_85 | Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known | 315 | feet per mi |
| DRNAREA | Area that drains to a point on a stream | 0.12 | square miles |
| ELEV | Mean Basin Elevation | 1180 | feet |

| Parameter Code | Parameter Description | Value | Unit |
|-----------------------|--|--------------|-------------|
| ELEVMAX | Maximum basin elevation | 1261 | feet |
| GWHEAD | Mean basin elevation minus minimum basin elevation | 106 | feet |
| I24H100Y | Maximum 24-hour precipitation that occurs on average once in 100 years | 7.76 | inches |
| I24H10Y | Maximum 24-hour precipitation that occurs on average once in 10 years | 5.38 | inches |
| I24H25Y | Maximum 24-hour precipitation that occurs on average once in 25 years | 6.3 | inches |
| I24H50Y | Maximum 24-hour precipitation that occurs on average once in 50 years | 7.02 | inches |
| LC06AGRI | Percent agriculture computed as total of grass, pasture, and crops, NLCD classes 71, 81 and 82 | 1.153 | percent |
| LC06DEV | Percentage of land-use from NLCD 2006 classes 21-24 | 12.536 | percent |
| LC06FOREST | Percentage of forest from NLCD 2006 classes 41-43 | 85.253 | percent |
| LC06IMP | Percentage of impervious area determined from NLCD 2006 impervious dataset | 1.12 | percent |
| LC11DEV | Percentage of developed (urban) land from NLCD 2011 classes 21-24 | 13.1 | percent |
| LC11IMP | Average percentage of impervious area determined from NLCD 2011 impervious dataset | 1.49 | percent |
| MINBELEV | Minimum basin elevation | 1074 | feet |
| PCTREG1 | Percentage of drainage area located in Region 1 - Piedmont / Ridge and Valley | 100 | percent |
| PCTREG2 | Percentage of drainage area located in Region 2 - Blue Ridge | 0 | percent |
| PCTREG3 | Percentage of drainage area located in Region 3 - Sandhills | 0 | percent |
| PCTREG4 | Percentage of drainage area located in Region 4 - Coastal Plains | 0 | percent |
| PCTREG5 | Percentage of drainage area located in Region 5 - Lower Tifton Uplands | 0 | percent |

| Parameter Code | Parameter Description | Value | Unit |
|-----------------------|---|--------------|---------------|
| PRECPRIS00 | Basin average mean annual precipitation for 1971 to 2000 from PRISM | 57.2 | inches |
| RELIEF | Maximum - minimum elevation | 187 | feet |
| RRMEAN | Relief ratio defined as $(ELEV-MINBELEV)/(ELEVMAX-MINBELEV)$ | 0.569 | dimensionless |

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.19.4

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

Custom Soil Resource Report Soil Map



Map Scale: 1:12,900 if printed on A landscape (11" x 8.5") sheet.


0 150 300 600 900 Meters
0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Barrow, Hall, and Jackson Counties, Georgia
 Survey Area Data: Version 18, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 19, 2022—Apr 20, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------------|----------------|
| Cc | Cartecay and Chewacla soils | 18.0 | 2.5% |
| MdD | Madison sandy loam, 10 to 15 percent slopes | 9.6 | 1.3% |
| MdE | Madison sandy loam, 15 to 25 percent slopes | 232.6 | 32.5% |
| MIC2 | Madison sandy clay loam, 6 to 10 percent slopes, moderately eroded | 19.6 | 2.7% |
| MID2 | Madison sandy clay loam, 10 to 15 percent slopes, moderately eroded | 225.0 | 31.5% |
| MuF | Musella cobbly clay loam, 15 to 35 percent slopes | 54.2 | 7.6% |
| PaE | Pacolet sandy loam, 15 to 25 percent slopes | 25.7 | 3.6% |
| PTF | Pacolet-Tallapoosa association, steep | 66.0 | 9.2% |
| To | Toccoa soils | 63.6 | 8.9% |
| W | Water | 0.8 | 0.1% |
| Totals for Area of Interest | | 715.0 | 100.0% |

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different

Custom Soil Resource Report

management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Appendix D

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 1

PRE-DEV BASIN A

| <u>Description</u> | <u>A</u> | <u>B</u> | <u>C</u> | <u>Totals</u> |
|------------------------------------|----------------|---------------|---------------|------------------|
| Sheet Flow | | | | |
| Manning's n-value | = 0.150 | 0.011 | 0.011 | |
| Flow length (ft) | = 150.0 | 0.0 | 0.0 | |
| Two-year 24-hr precip. (in) | = 2.20 | 0.00 | 0.00 | |
| Land slope (%) | = 5.00 | 0.00 | 0.00 | |
| Travel Time (min) | = 11.33 | + 0.00 | + 0.00 | = 11.33 |
| Shallow Concentrated Flow | | | | |
| Flow length (ft) | = 1600.00 | 0.00 | 0.00 | |
| Watercourse slope (%) | = 2.00 | 0.00 | 0.00 | |
| Surface description | = Unpaved | Paved | Paved | |
| Average velocity (ft/s) | =2.28 | 0.00 | 0.00 | |
| Travel Time (min) | = 11.69 | + 0.00 | + 0.00 | = 11.69 |
| Channel Flow | | | | |
| X sectional flow area (sqft) | = 0.00 | 0.00 | 0.00 | |
| Wetted perimeter (ft) | = 0.00 | 0.00 | 0.00 | |
| Channel slope (%) | = 0.00 | 0.00 | 0.00 | |
| Manning's n-value | = 0.015 | 0.015 | 0.015 | |
| Velocity (ft/s) | =0.00 | 0.00 | 0.00 | |
| Flow length (ft) | ({0})0.0 | 0.0 | 0.0 | |
| Travel Time (min) | = 0.00 | + 0.00 | + 0.00 | = 0.00 |
| Total Travel Time, Tc | | | | 23.00 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 2

PRE-DEV-BASIN B

| <u>Description</u> | <u>A</u> | <u>B</u> | <u>C</u> | <u>Totals</u> |
|------------------------------------|----------------|---------------|---------------|------------------|
| Sheet Flow | | | | |
| Manning's n-value | = 0.240 | 0.011 | 0.011 | |
| Flow length (ft) | = 300.0 | 0.0 | 0.0 | |
| Two-year 24-hr precip. (in) | = 2.20 | 0.00 | 0.00 | |
| Land slope (%) | = 13.00 | 0.00 | 0.00 | |
| Travel Time (min) | = 19.60 | + 0.00 | + 0.00 | = 19.60 |
| Shallow Concentrated Flow | | | | |
| Flow length (ft) | = 260.00 | 0.00 | 0.00 | |
| Watercourse slope (%) | = 12.00 | 0.00 | 0.00 | |
| Surface description | = Unpaved | Paved | Paved | |
| Average velocity (ft/s) | =5.59 | 0.00 | 0.00 | |
| Travel Time (min) | = 0.78 | + 0.00 | + 0.00 | = 0.78 |
| Channel Flow | | | | |
| X sectional flow area (sqft) | = 4.00 | 0.00 | 0.00 | |
| Wetted perimeter (ft) | = 8.00 | 0.00 | 0.00 | |
| Channel slope (%) | = 10.00 | 0.00 | 0.00 | |
| Manning's n-value | = 0.025 | 0.015 | 0.015 | |
| Velocity (ft/s) | =11.85 | 0.00 | 0.00 | |
| Flow length (ft) | 500.0 | 0.0 | 0.0 | |
| Travel Time (min) | = 0.70 | + 0.00 | + 0.00 | = 0.70 |
| Total Travel Time, Tc | | | | 21.10 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 3

PRE-DEV-BASIN C

| <u>Description</u> | <u>A</u> | | <u>B</u> | | <u>C</u> | | <u>Totals</u> |
|------------------------------------|---------------|----------|-------------|----------|-------------|----------|------------------|
| Sheet Flow | | | | | | | |
| Manning's n-value | = 0.240 | | 0.011 | | 0.011 | | |
| Flow length (ft) | = 100.0 | | 0.0 | | 0.0 | | |
| Two-year 24-hr precip. (in) | = 2.20 | | 0.00 | | 0.00 | | |
| Land slope (%) | = 10.00 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 9.04 | + | 0.00 | + | 0.00 | = | 9.04 |
| Shallow Concentrated Flow | | | | | | | |
| Flow length (ft) | = 600.00 | | 0.00 | | 0.00 | | |
| Watercourse slope (%) | = 13.00 | | 0.00 | | 0.00 | | |
| Surface description | = Unpaved | | Paved | | Paved | | |
| Average velocity (ft/s) | =5.82 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 1.72 | + | 0.00 | + | 0.00 | = | 1.72 |
| Channel Flow | | | | | | | |
| X sectional flow area (sqft) | = 0.00 | | 0.00 | | 0.00 | | |
| Wetted perimeter (ft) | = 0.00 | | 0.00 | | 0.00 | | |
| Channel slope (%) | = 0.00 | | 0.00 | | 0.00 | | |
| Manning's n-value | = 0.015 | | 0.015 | | 0.015 | | |
| Velocity (ft/s) | =0.00 | | 0.00 | | 0.00 | | |
| Flow length (ft) | ({0})0.0 | | 0.0 | | 0.0 | | |
| Travel Time (min) | = 0.00 | + | 0.00 | + | 0.00 | = | 0.00 |
| Total Travel Time, Tc | | | | | | | 10.80 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 11

POST-DEV BASIN A

| <u>Description</u> | <u>A</u> | | <u>B</u> | | <u>C</u> | | <u>Totals</u> |
|------------------------------------|---------------|----------|-------------|----------|-------------|----------|------------------|
| Sheet Flow | | | | | | | |
| Manning's n-value | = 0.011 | | 0.011 | | 0.011 | | |
| Flow length (ft) | = 150.0 | | 0.0 | | 0.0 | | |
| Two-year 24-hr precip. (in) | = 3.89 | | 0.00 | | 0.00 | | |
| Land slope (%) | = 5.00 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 1.05 | + | 0.00 | + | 0.00 | = | 1.05 |
| Shallow Concentrated Flow | | | | | | | |
| Flow length (ft) | = 1600.00 | | 0.00 | | 0.00 | | |
| Watercourse slope (%) | = 2.00 | | 0.00 | | 0.00 | | |
| Surface description | = Paved | | Paved | | Paved | | |
| Average velocity (ft/s) | =2.87 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 9.28 | + | 0.00 | + | 0.00 | = | 9.28 |
| Channel Flow | | | | | | | |
| X sectional flow area (sqft) | = 2.00 | | 0.00 | | 0.00 | | |
| Wetted perimeter (ft) | = 4.00 | | 0.00 | | 0.00 | | |
| Channel slope (%) | = 5.00 | | 0.00 | | 0.00 | | |
| Manning's n-value | = 0.015 | | 0.015 | | 0.015 | | |
| Velocity (ft/s) | =13.96 | | 0.00 | | 0.00 | | |
| Flow length (ft) | ({0})0.0 | | 0.0 | | 0.0 | | |
| Travel Time (min) | = 0.00 | + | 0.00 | + | 0.00 | = | 0.00 |
| Total Travel Time, Tc | | | | | | | 10.30 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 12

POST-DEV BASIN A (BYPASS)

| <u>Description</u> | <u>A</u> | | <u>B</u> | | <u>C</u> | | <u>Totals</u> |
|------------------------------------|---------------|----------|-------------|----------|-------------|----------|------------------|
| Sheet Flow | | | | | | | |
| Manning's n-value | = 0.150 | | 0.011 | | 0.011 | | |
| Flow length (ft) | = 150.0 | | 0.0 | | 0.0 | | |
| Two-year 24-hr precip. (in) | = 3.89 | | 0.00 | | 0.00 | | |
| Land slope (%) | = 5.00 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 8.52 | + | 0.00 | + | 0.00 | = | 8.52 |
| Shallow Concentrated Flow | | | | | | | |
| Flow length (ft) | = 1350.00 | | 0.00 | | 0.00 | | |
| Watercourse slope (%) | = 2.00 | | 0.00 | | 0.00 | | |
| Surface description | = Unpaved | | Paved | | Paved | | |
| Average velocity (ft/s) | =2.28 | | 0.00 | | 0.00 | | |
| Travel Time (min) | = 9.86 | + | 0.00 | + | 0.00 | = | 9.86 |
| Channel Flow | | | | | | | |
| X sectional flow area (sqft) | = 2.00 | | 0.00 | | 0.00 | | |
| Wetted perimeter (ft) | = 4.00 | | 0.00 | | 0.00 | | |
| Channel slope (%) | = 10.00 | | 0.00 | | 0.00 | | |
| Manning's n-value | = 0.150 | | 0.015 | | 0.015 | | |
| Velocity (ft/s) | =1.97 | | 0.00 | | 0.00 | | |
| Flow length (ft) | ({0})0.0 | | 0.0 | | 0.0 | | |
| Travel Time (min) | = 0.00 | + | 0.00 | + | 0.00 | = | 0.00 |
| Total Travel Time, Tc | | | | | | | 18.40 min |

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 14

POST-DEV BASIN C

| <u>Description</u> | <u>A</u> | | <u>B</u> | | <u>C</u> | | <u>Totals</u> | |
|------------------------------------|---------------|----------|-------------|----------|-------------|----------|---------------|-----------------|
| Sheet Flow | | | | | | | | |
| Manning's n-value | = 0.150 | | 0.011 | | 0.011 | | | |
| Flow length (ft) | = 150.0 | | 0.0 | | 0.0 | | | |
| Two-year 24-hr precip. (in) | = 3.89 | | 0.00 | | 0.00 | | | |
| Land slope (%) | = 5.00 | | 0.00 | | 0.00 | | | |
| Travel Time (min) | = 8.52 | + | 0.00 | + | 0.00 | = | 8.52 | |
| Shallow Concentrated Flow | | | | | | | | |
| Flow length (ft) | = 220.00 | | 0.00 | | 0.00 | | | |
| Watercourse slope (%) | = 5.00 | | 0.00 | | 0.00 | | | |
| Surface description | = Paved | | Paved | | Paved | | | |
| Average velocity (ft/s) | =4.55 | | 0.00 | | 0.00 | | | |
| Travel Time (min) | = 0.81 | + | 0.00 | + | 0.00 | = | 0.81 | |
| Channel Flow | | | | | | | | |
| X sectional flow area (sqft) | = 0.00 | | 0.00 | | 0.00 | | | |
| Wetted perimeter (ft) | = 0.00 | | 0.00 | | 0.00 | | | |
| Channel slope (%) | = 0.00 | | 0.00 | | 0.00 | | | |
| Manning's n-value | = 0.015 | | 0.015 | | 0.015 | | | |
| Velocity (ft/s) | =0.00 | | 0.00 | | 0.00 | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Flow length (ft) | ({0})0.0 | | 0.0 | | 0.0 | | | |
| Travel Time (min) | = 0.00 | + | 0.00 | + | 0.00 | = | 0.00 | |
| Total Travel Time, Tc | | | | | | | = | 9.30 min |

Appendix E

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

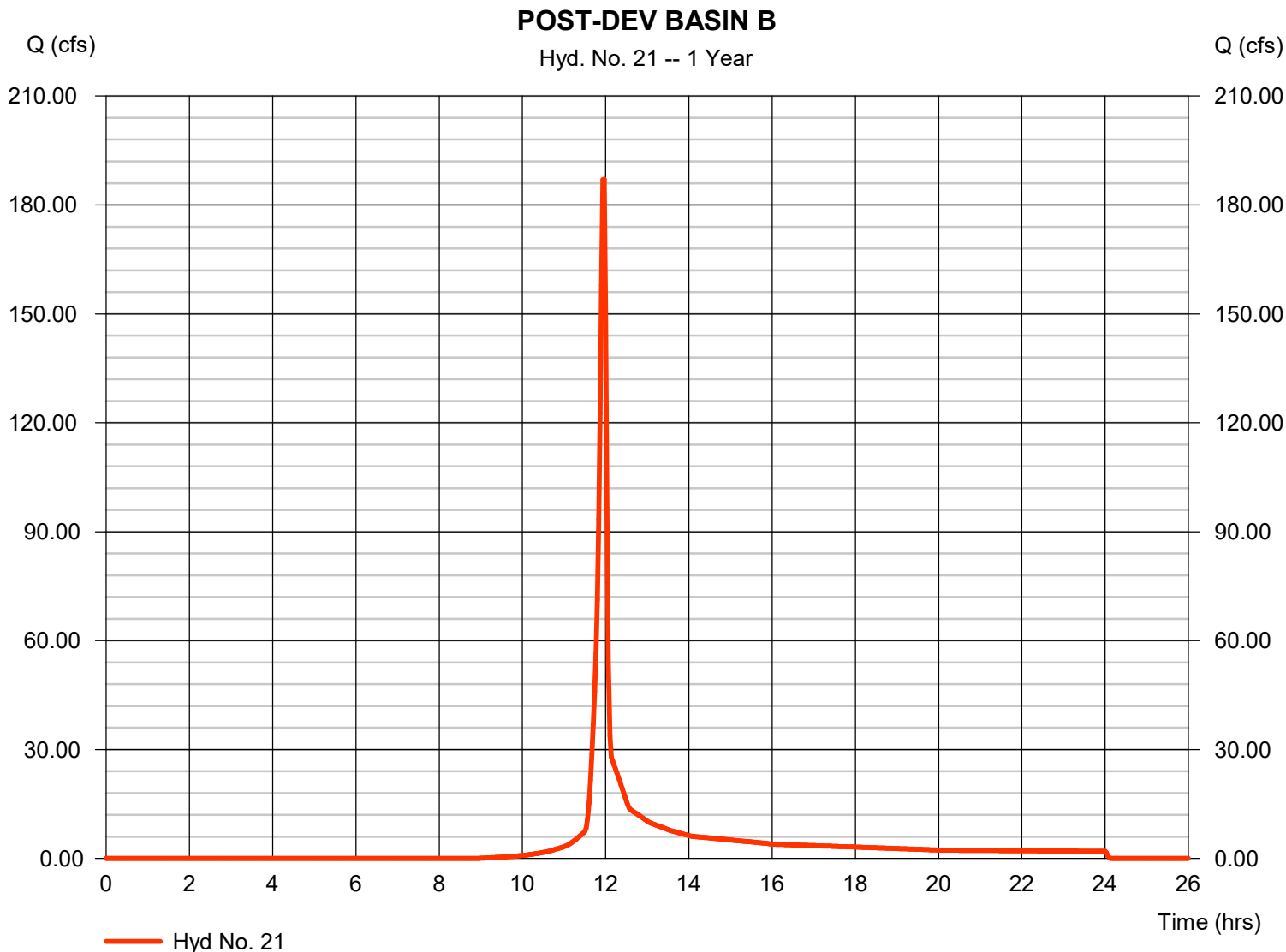
Wednesday, 02 / 28 / 2024

Hyd. No. 21

POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 187.09 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 377,378 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 3.51 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440



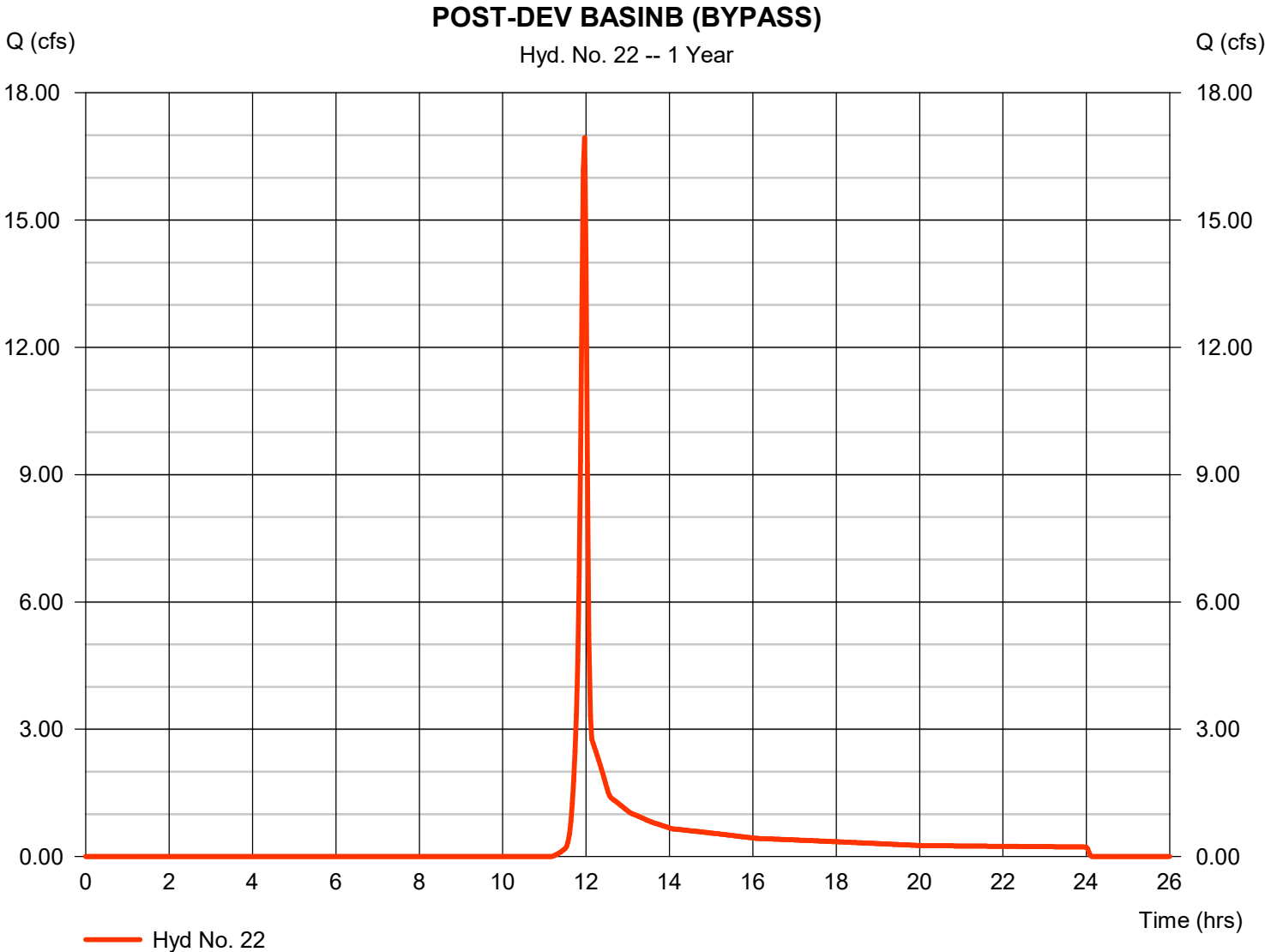
Hydrograph Report

Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 16.94 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 34,172 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 3.51 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 23

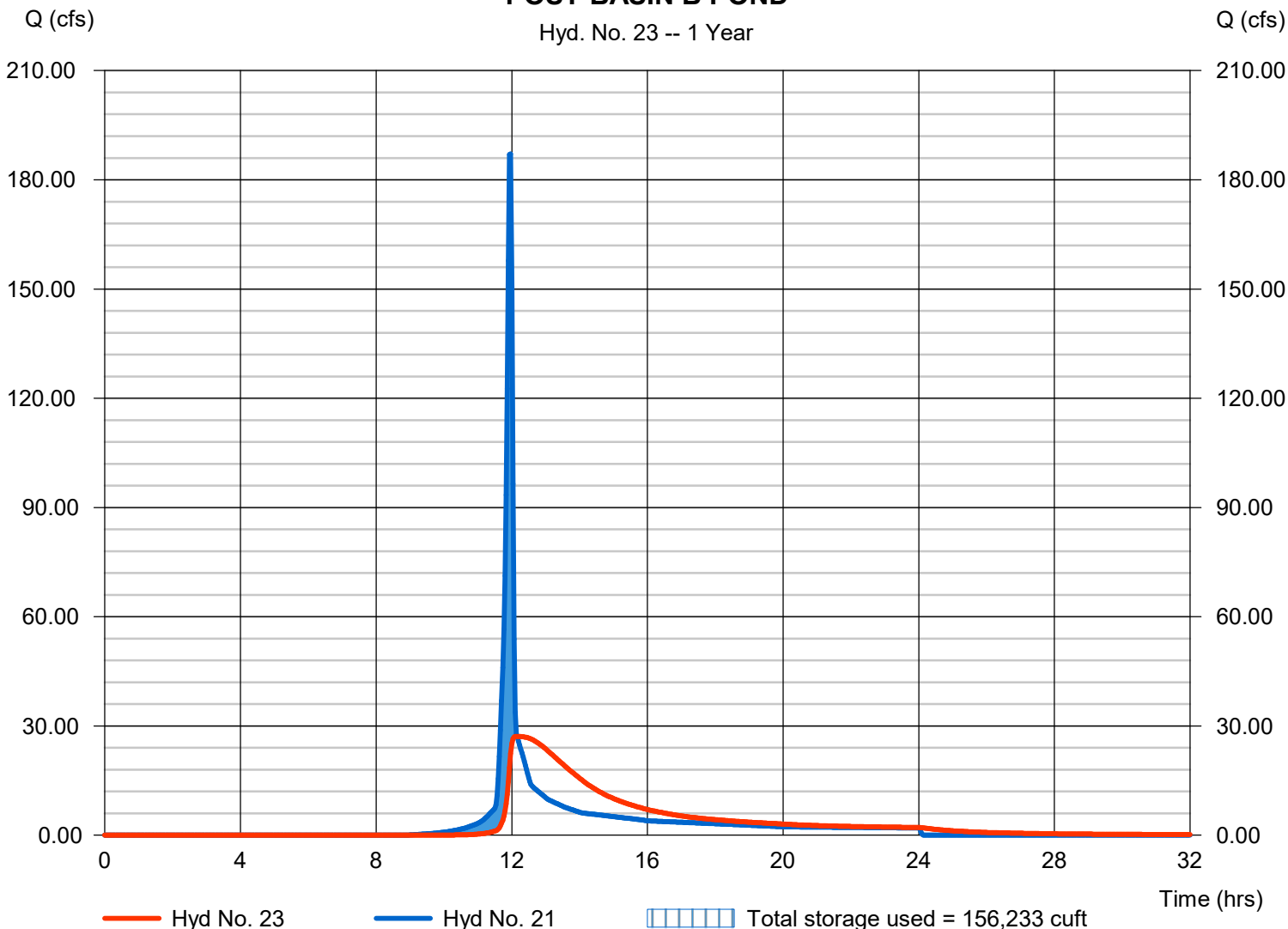
POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 27.08 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 12.17 hrs |
| Time interval | = 2 min | Hyd. volume | = 377,329 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1083.43 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 156,233 cuft |

Storage Indication method used.

POST-BASIN B POND

Hyd. No. 23 -- 1 Year



Pond No. 4 - WET POND 2

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 1080.00 ft

Stage / Storage Table

| Stage (ft) | Elevation (ft) | Contour area (sqft) | Incr. Storage (cuft) | Total storage (cuft) |
|------------|----------------|---------------------|----------------------|----------------------|
| 0.00 | 1080.00 | 40,453 | 0 | 0 |
| 1.00 | 1081.00 | 43,362 | 41,895 | 41,895 |
| 2.00 | 1082.00 | 46,333 | 44,835 | 86,730 |
| 3.00 | 1083.00 | 49,368 | 47,838 | 134,567 |
| 4.00 | 1084.00 | 52,465 | 50,904 | 185,471 |
| 5.00 | 1085.00 | 55,624 | 54,031 | 239,502 |
| 6.00 | 1086.00 | 62,132 | 58,842 | 298,345 |
| 7.00 | 1087.00 | 68,890 | 65,475 | 363,820 |
| 8.00 | 1088.00 | 75,899 | 72,359 | 436,179 |
| 9.00 | 1089.00 | 83,159 | 79,494 | 515,672 |

Culvert / Orifice Structures

| | [A] | [B] | [C] | [PrfRsr] |
|-----------------|-----------|------|------|----------|
| Rise (in) | = 42.00 | 0.00 | 0.00 | 0.00 |
| Span (in) | = 42.00 | 0.00 | 0.00 | 0.00 |
| No. Barrels | = 1 | 0 | 0 | 0 |
| Invert El. (ft) | = 1080.00 | 0.00 | 0.00 | 0.00 |
| Length (ft) | = 20.00 | 0.00 | 0.00 | 0.00 |
| Slope (%) | = 1.00 | 0.00 | 0.00 | n/a |
| N-Value | = .013 | .013 | .013 | n/a |
| Orifice Coeff. | = 0.60 | 0.60 | 0.60 | 0.60 |
| Multi-Stage | = n/a | No | No | No |

Weir Structures

| | [A] | [B] | [C] | [D] |
|----------------|-----------|---------------|------|---------|
| Crest Len (ft) | Inactive | Inactive | 0.00 | 35.00 |
| Crest El. (ft) | = 1087.00 | 1083.50 | 0.00 | 1088.50 |
| Weir Coeff. | = 3.33 | 3.33 | 3.33 | 3.33 |
| Weir Type | = 1 | Rect | --- | Ciplti |
| Multi-Stage | = Yes | Yes | No | No |
| Exfil.(in/hr) | = 0.000 | (by Wet area) | | |
| TW Elev. (ft) | = 0.00 | | | |

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

| Stage ft | Storage cuft | Elevation ft | Civ A cfs | Civ B cfs | Civ C cfs | PrfRsr cfs | Wr A cfs | Wr B cfs | Wr C cfs | Wr D cfs | Exfil cfs | User cfs | Total cfs |
|----------|--------------|--------------|-----------|-----------|-----------|------------|----------|----------|----------|----------|-----------|----------|-----------|
| 0.00 | 0 | 1080.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 0.000 |
| 1.00 | 41,895 | 1081.00 | 6.26 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 6.256 |
| 2.00 | 86,730 | 1082.00 | 16.11 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 16.11 |
| 3.00 | 134,567 | 1083.00 | 24.98 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 24.98 |
| 4.00 | 185,471 | 1084.00 | 50.79 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 50.79 |
| 5.00 | 239,502 | 1085.00 | 79.15 oc | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 79.15 |
| 6.00 | 298,345 | 1086.00 | 95.49 ic | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 95.49 |
| 7.00 | 363,820 | 1087.00 | 106.13 ic | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 106.13 |
| 8.00 | 436,179 | 1088.00 | 115.80 ic | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | --- | --- | 115.80 |
| 9.00 | 515,672 | 1089.00 | 124.72 ic | --- | --- | --- | 0.00 | 0.00 | --- | 41.21 | --- | --- | 165.93 |

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

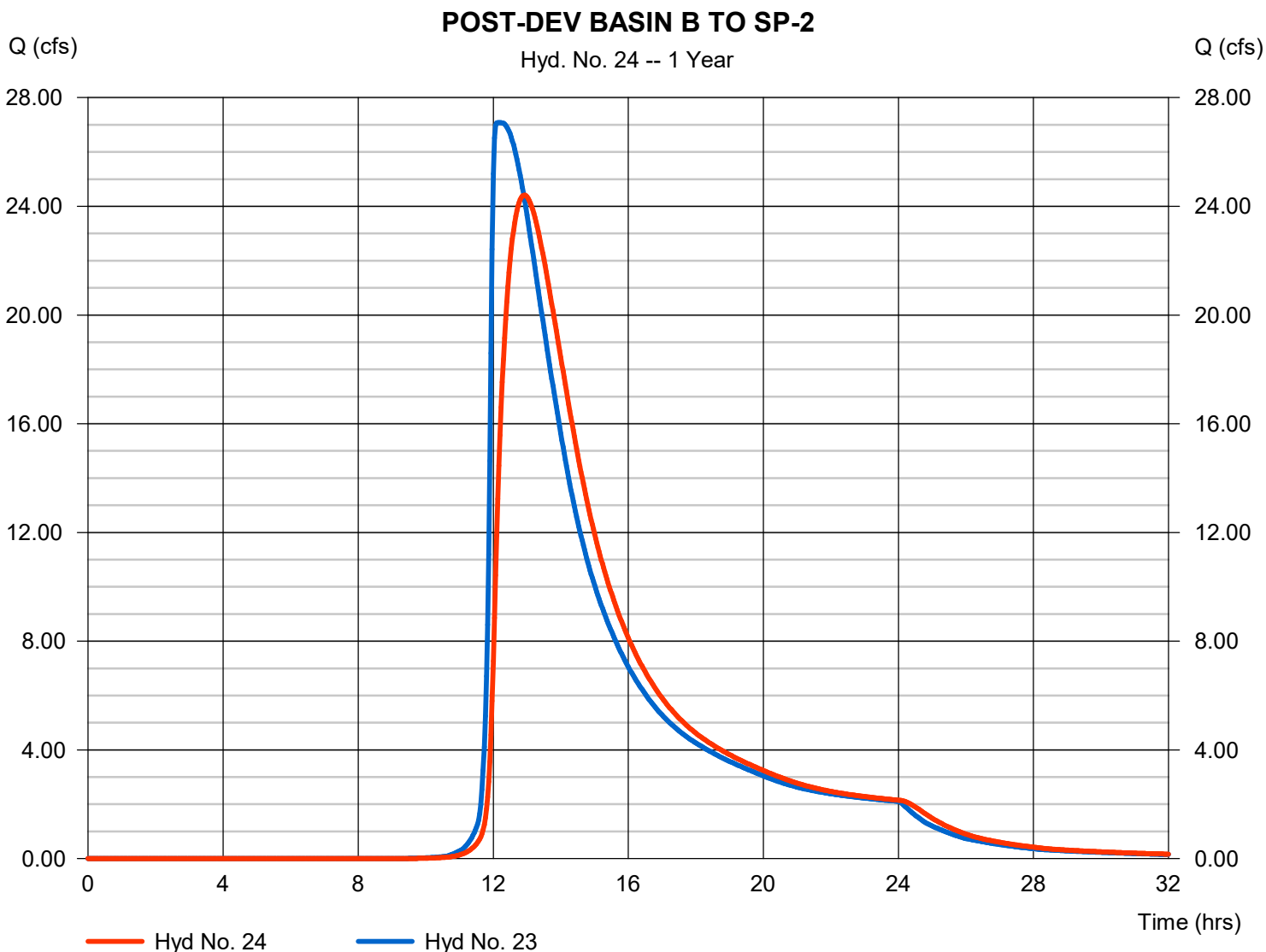
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 24.41 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 12.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 376,886 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 0.78 ft/s | Routing coeff. | = 0.0887 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

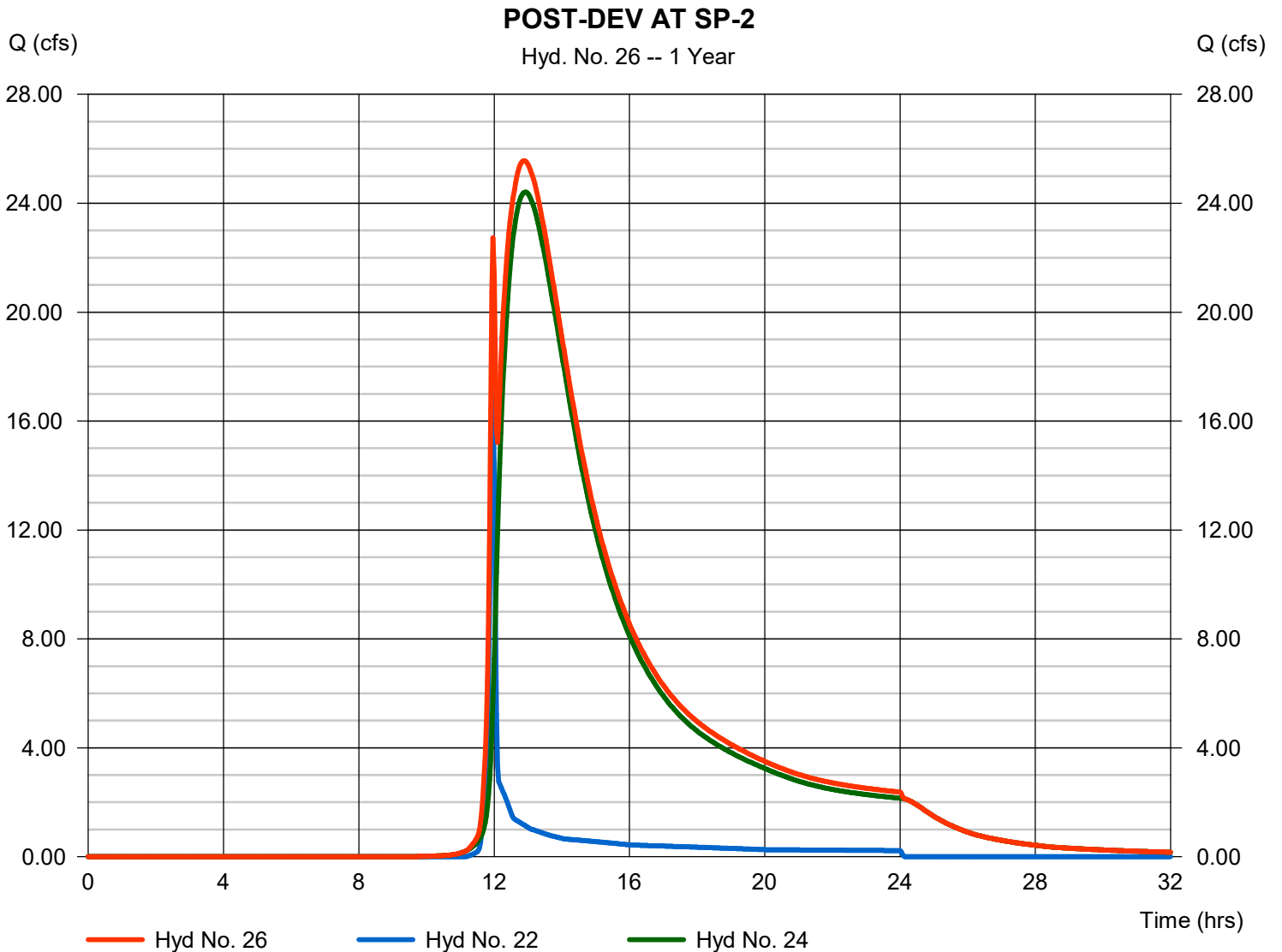
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 1 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 25.56 cfs
Time to peak = 12.90 hrs
Hyd. volume = 411,058 cuft
Contrib. drain. area = 9.900 ac



Hydrograph Report

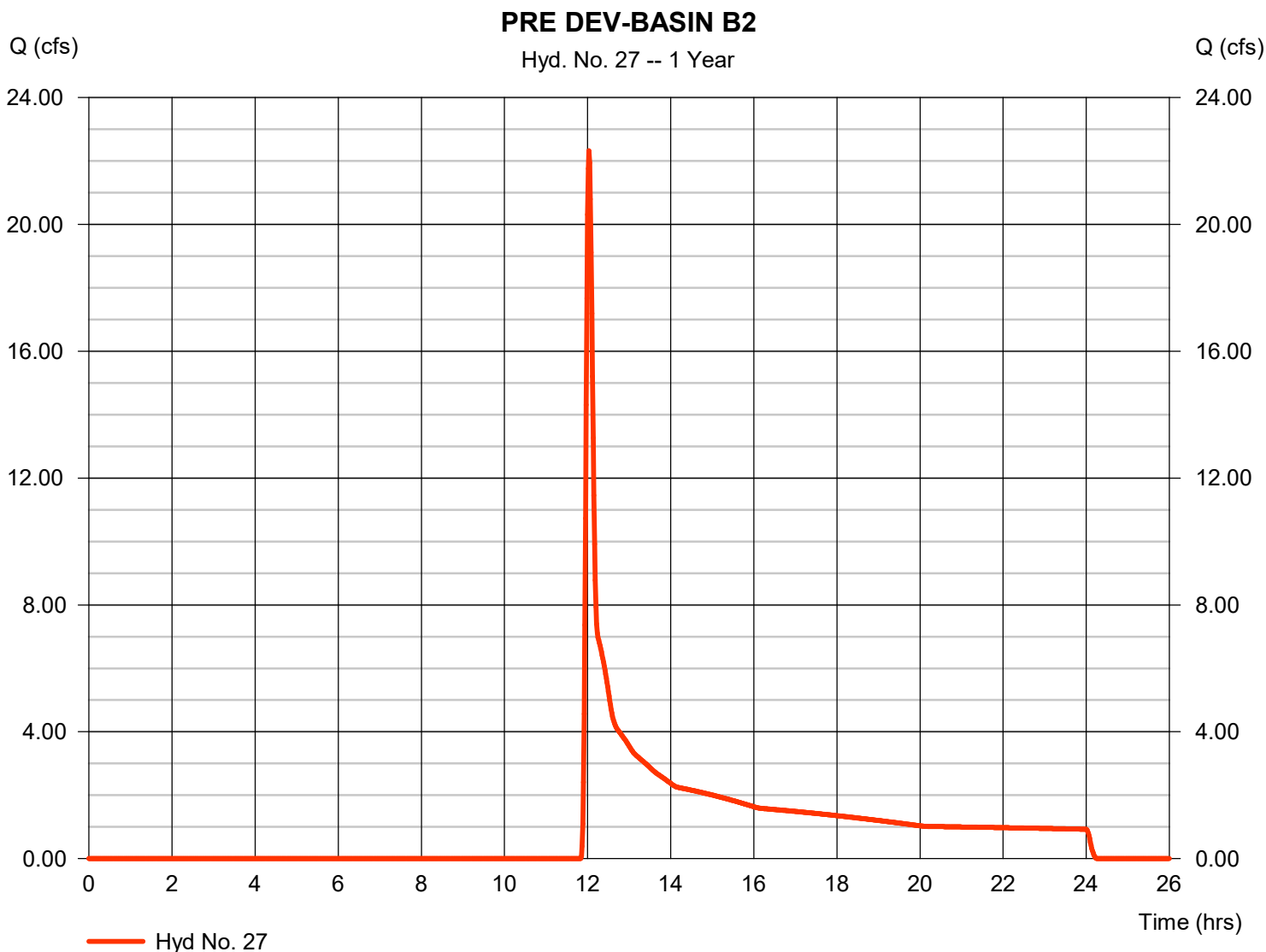
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 22.32 cfs |
| Storm frequency | = 1 yrs | Time to peak | = 12.03 hrs |
| Time interval | = 1 min | Hyd. volume | = 88,707 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 3.51 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

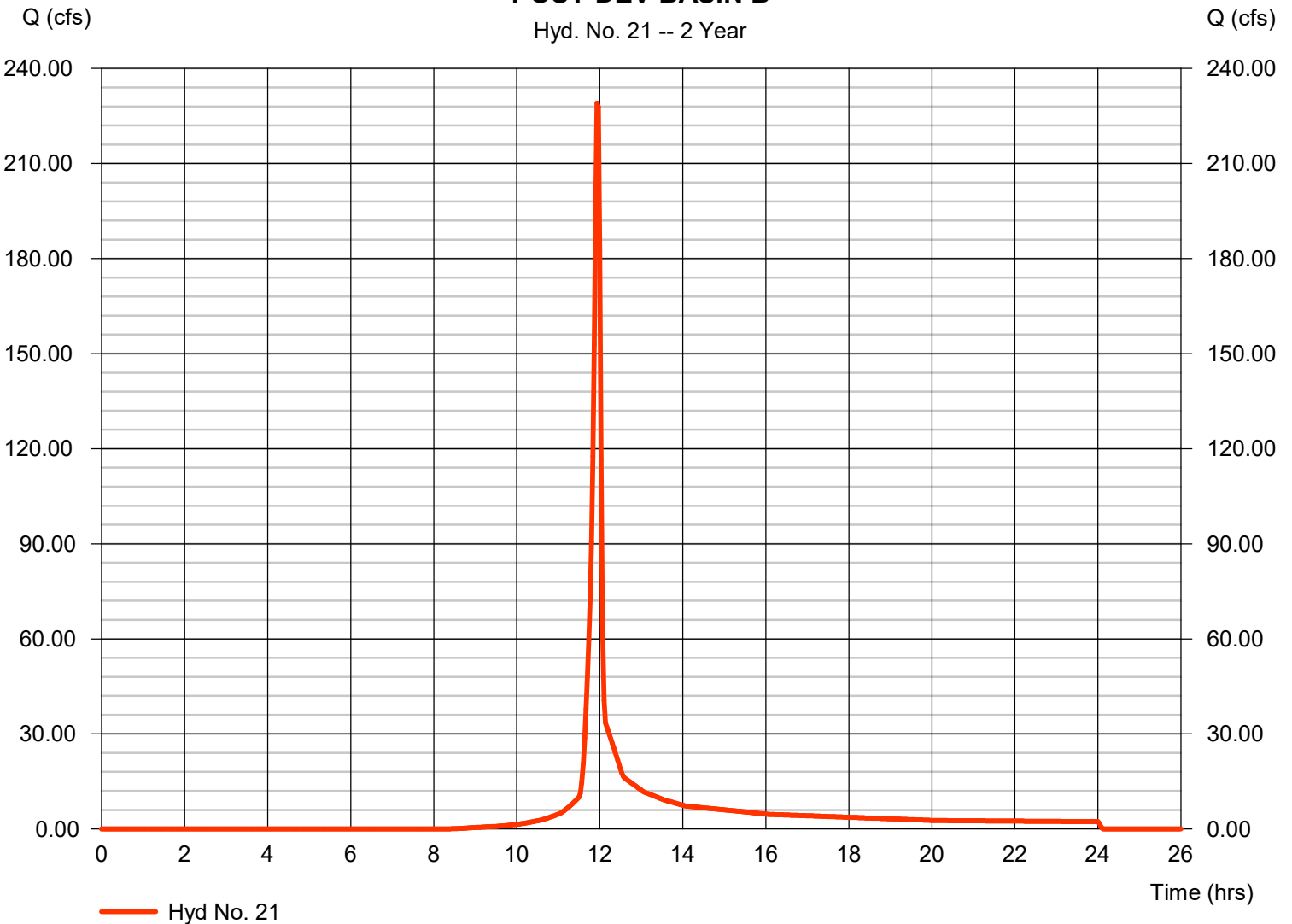
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 229.10 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 462,892 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 3.97 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 2 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

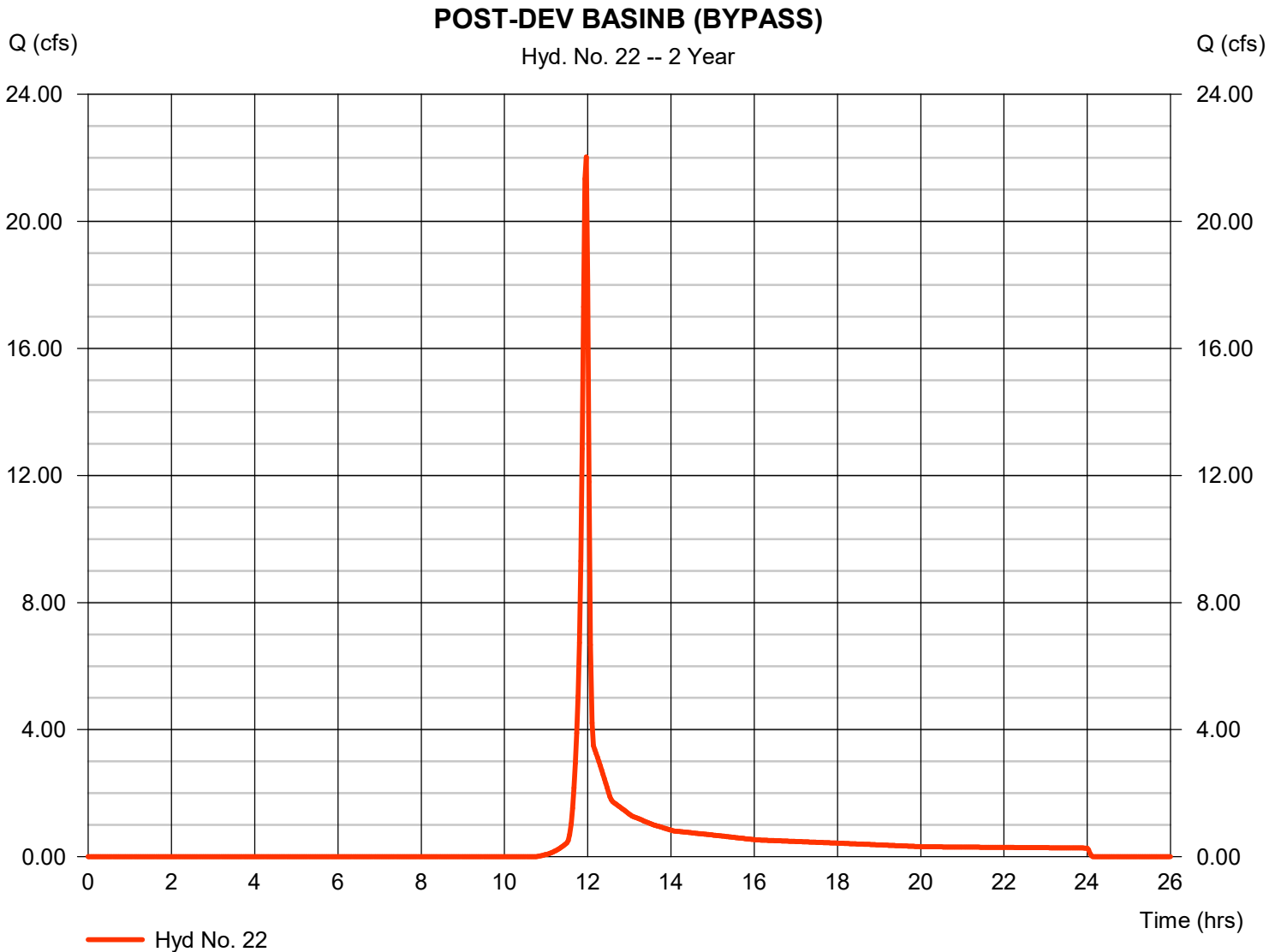
Wednesday, 02 / 28 / 2024

Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 22.03 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 44,125 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 3.97 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 23

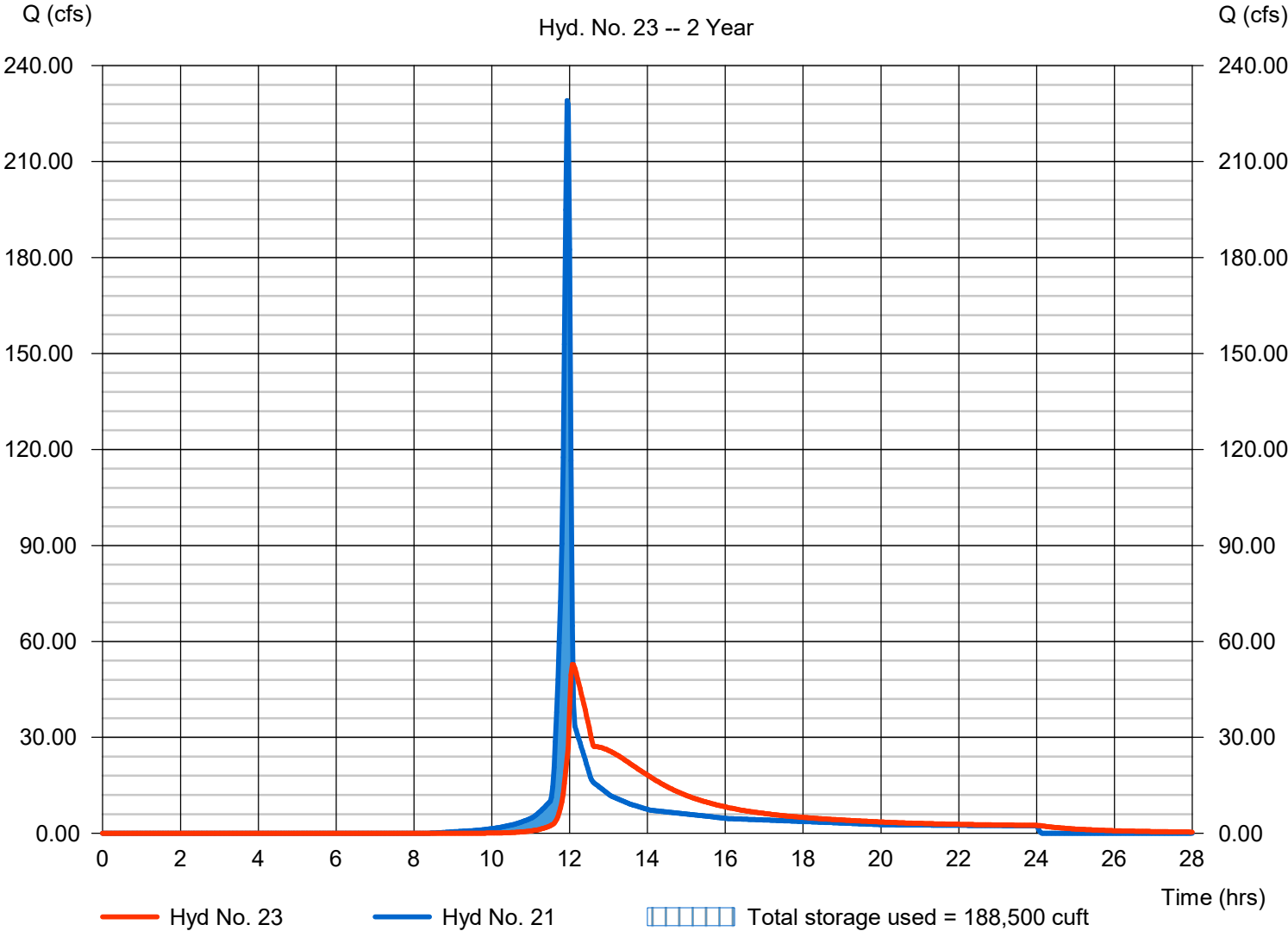
POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 52.76 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 462,843 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1084.06 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 188,500 cuft |

Storage Indication method used.

POST-BASIN B POND

Hyd. No. 23 -- 2 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

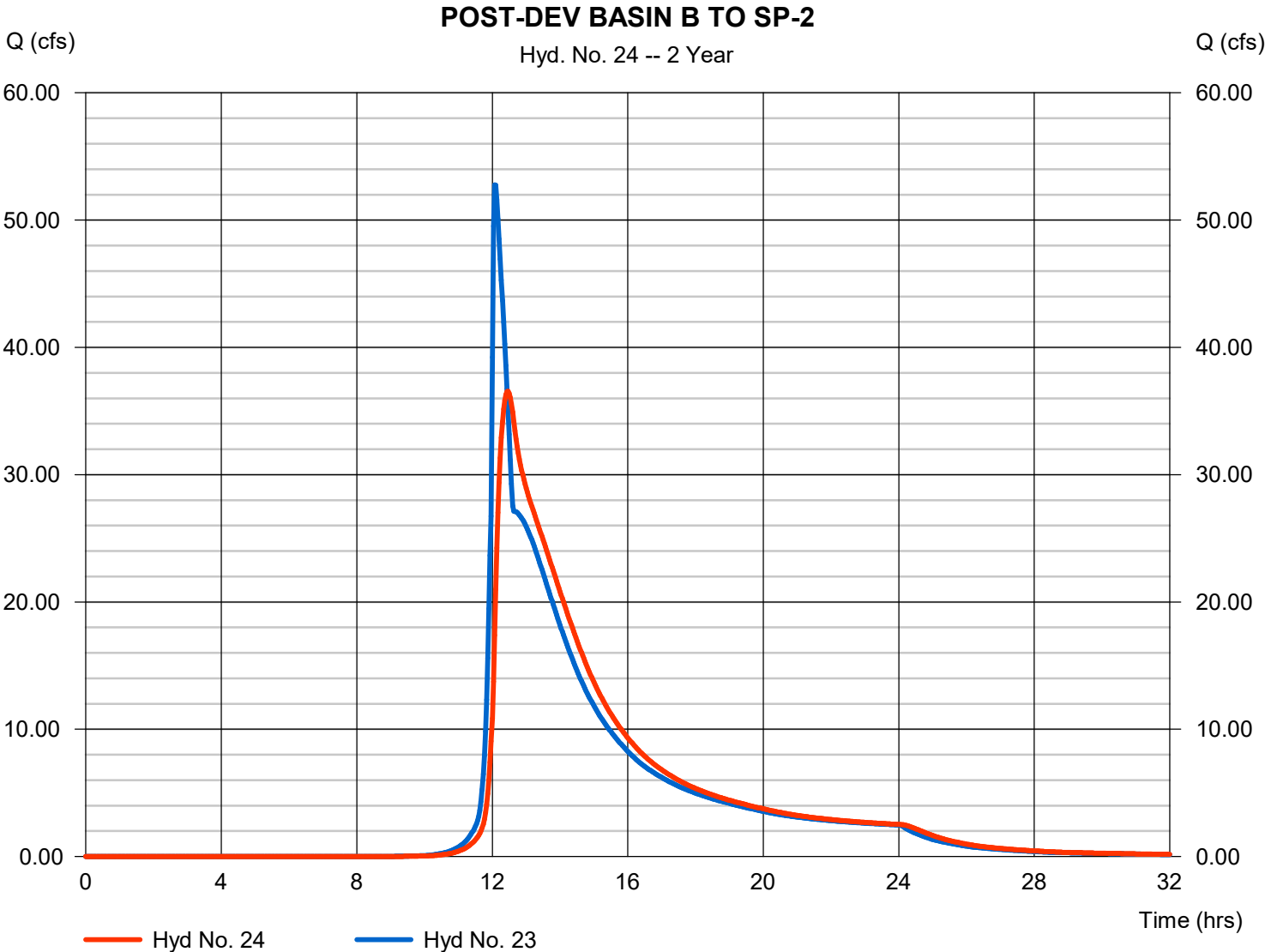
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 36.54 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 12.47 hrs |
| Time interval | = 2 min | Hyd. volume | = 462,400 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 0.90 ft/s | Routing coeff. | = 0.1019 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

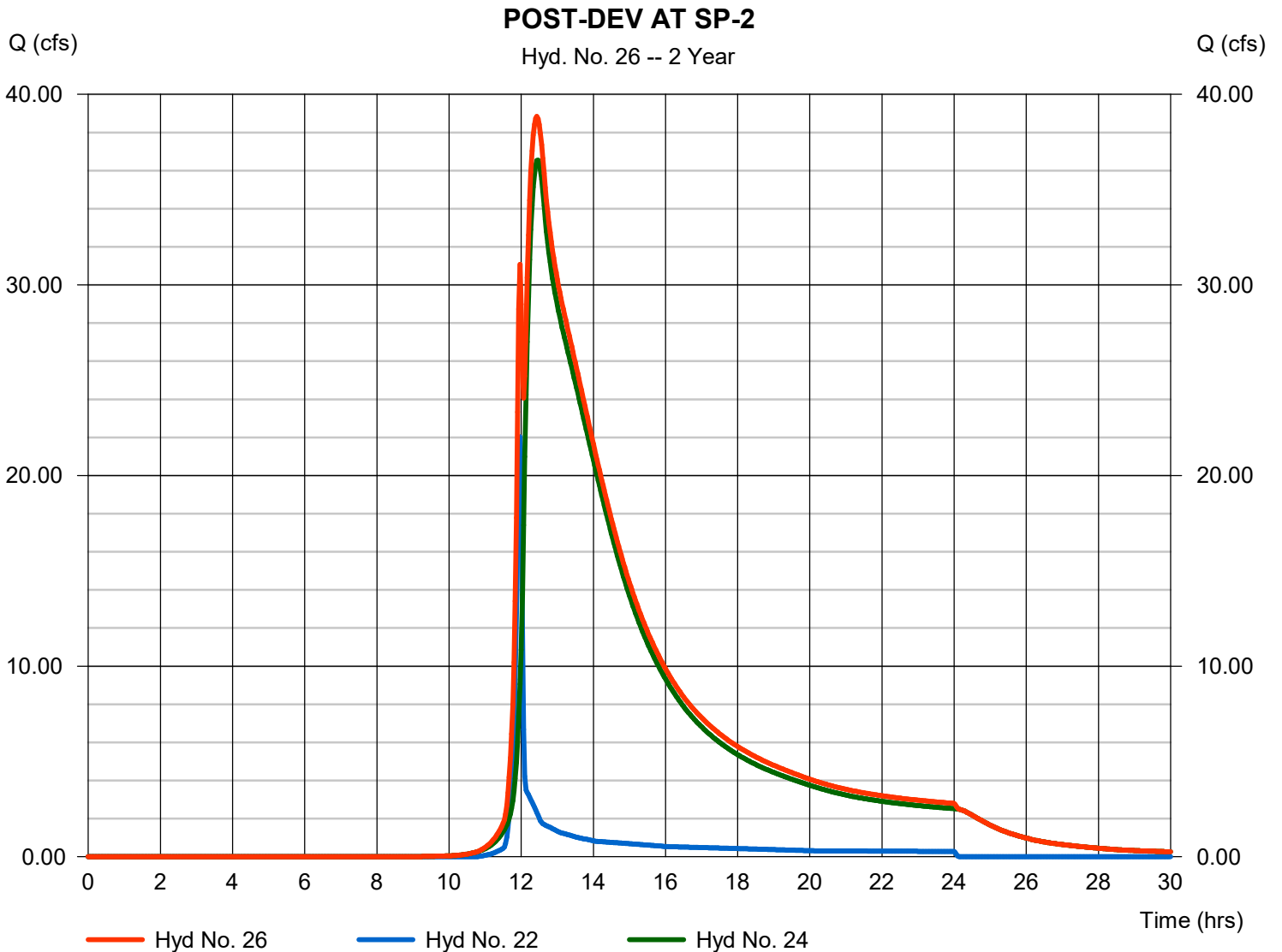
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 38.84 cfs
Time to peak = 12.43 hrs
Hyd. volume = 506,525 cuft
Contrib. drain. area = 9.900 ac



Hydrograph Report

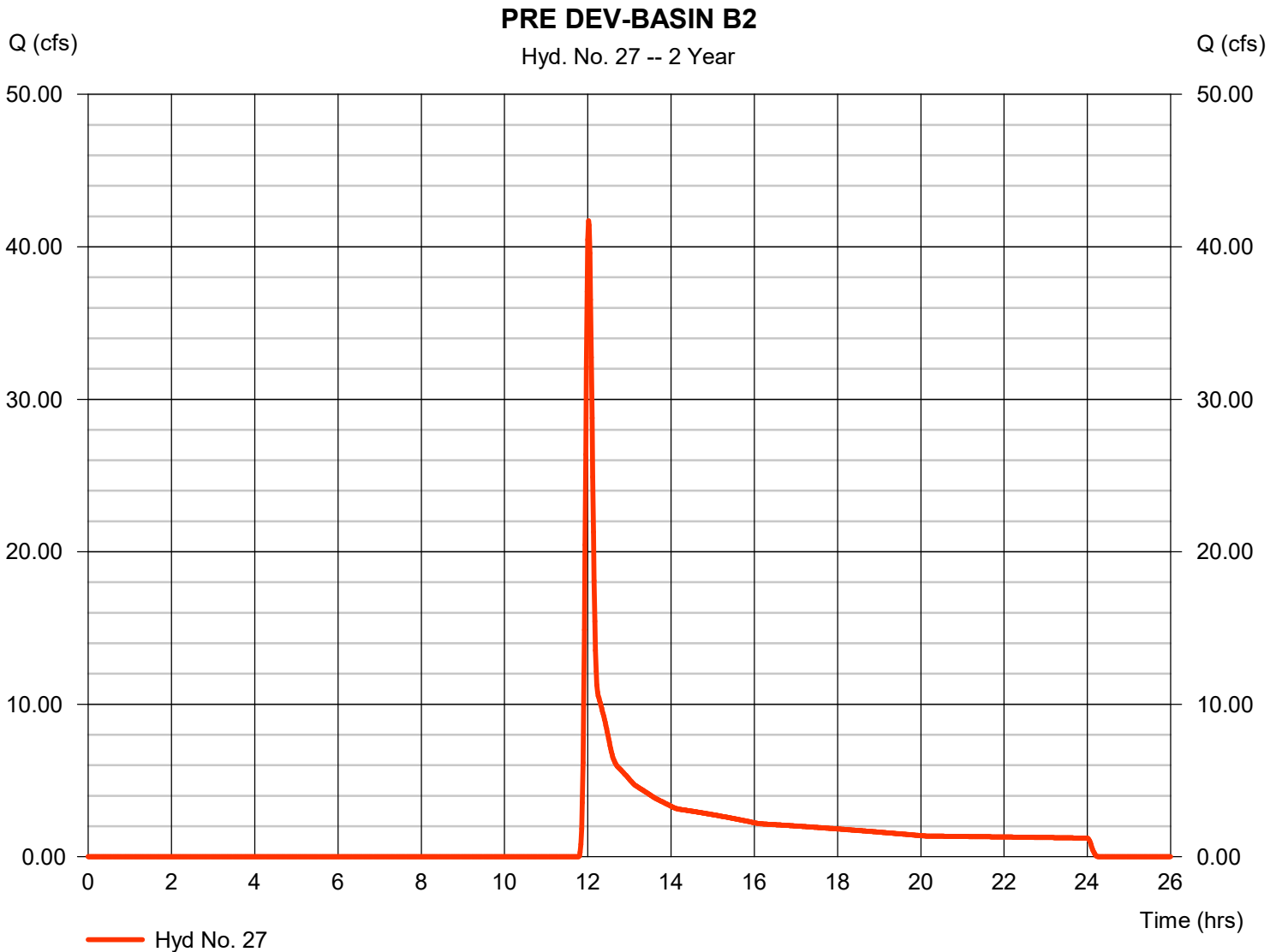
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 41.71 cfs |
| Storm frequency | = 2 yrs | Time to peak | = 12.02 hrs |
| Time interval | = 1 min | Hyd. volume | = 131,594 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 3.97 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

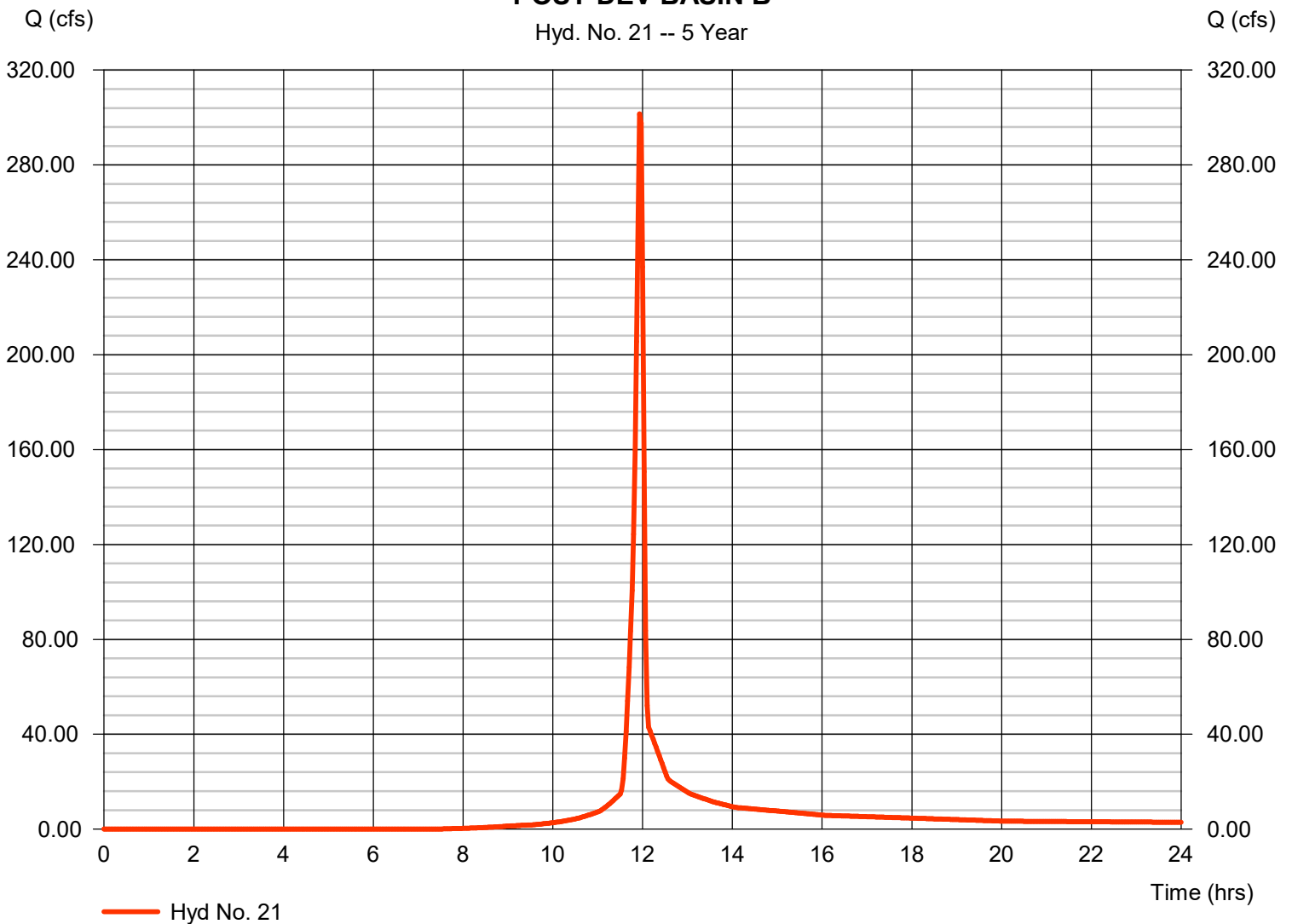
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 301.57 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 612,163 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 4.74 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 5 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 22

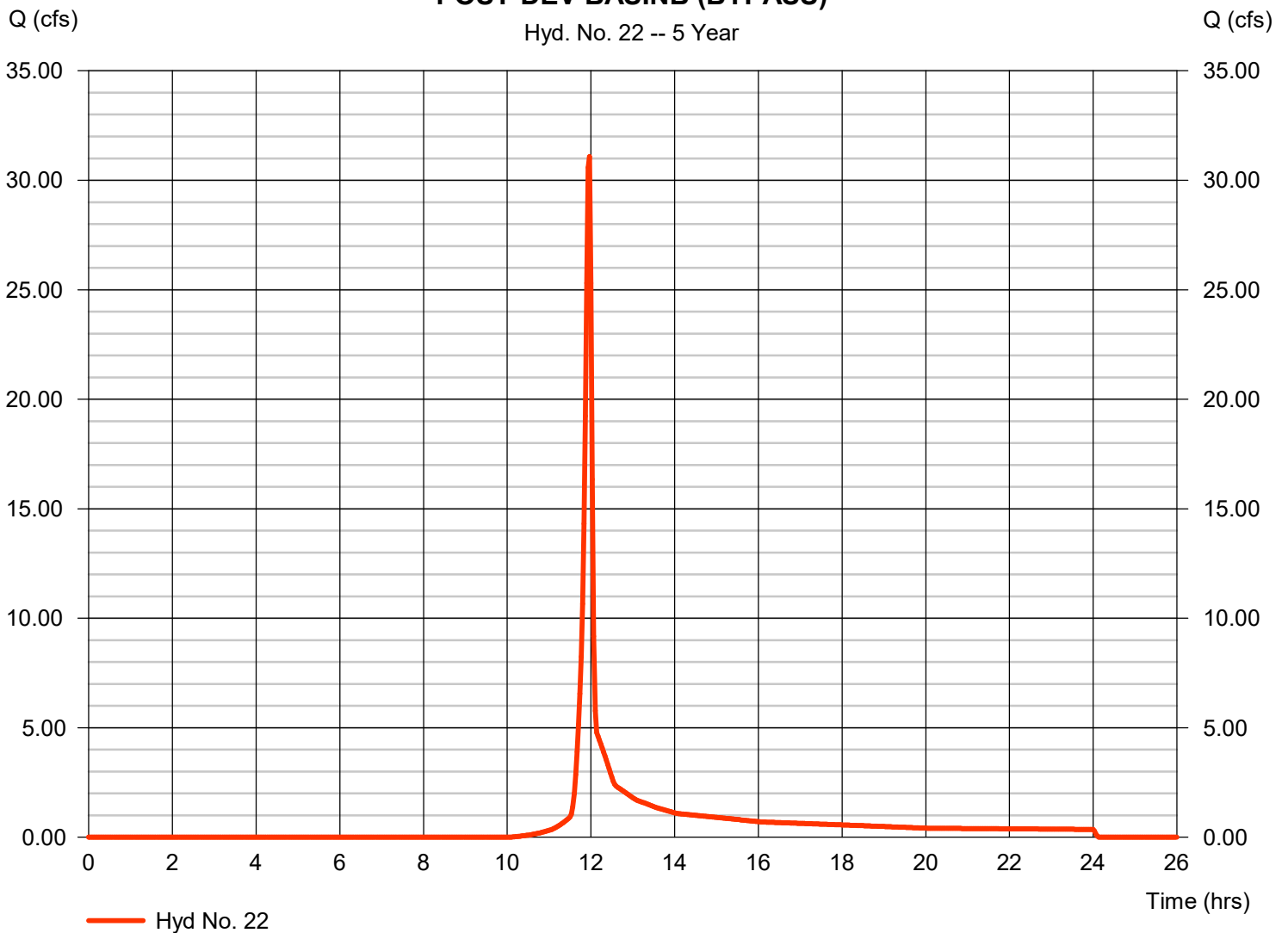
POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 31.08 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 62,183 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 4.74 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900

POST-DEV BASINB (BYPASS)

Hyd. No. 22 -- 5 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

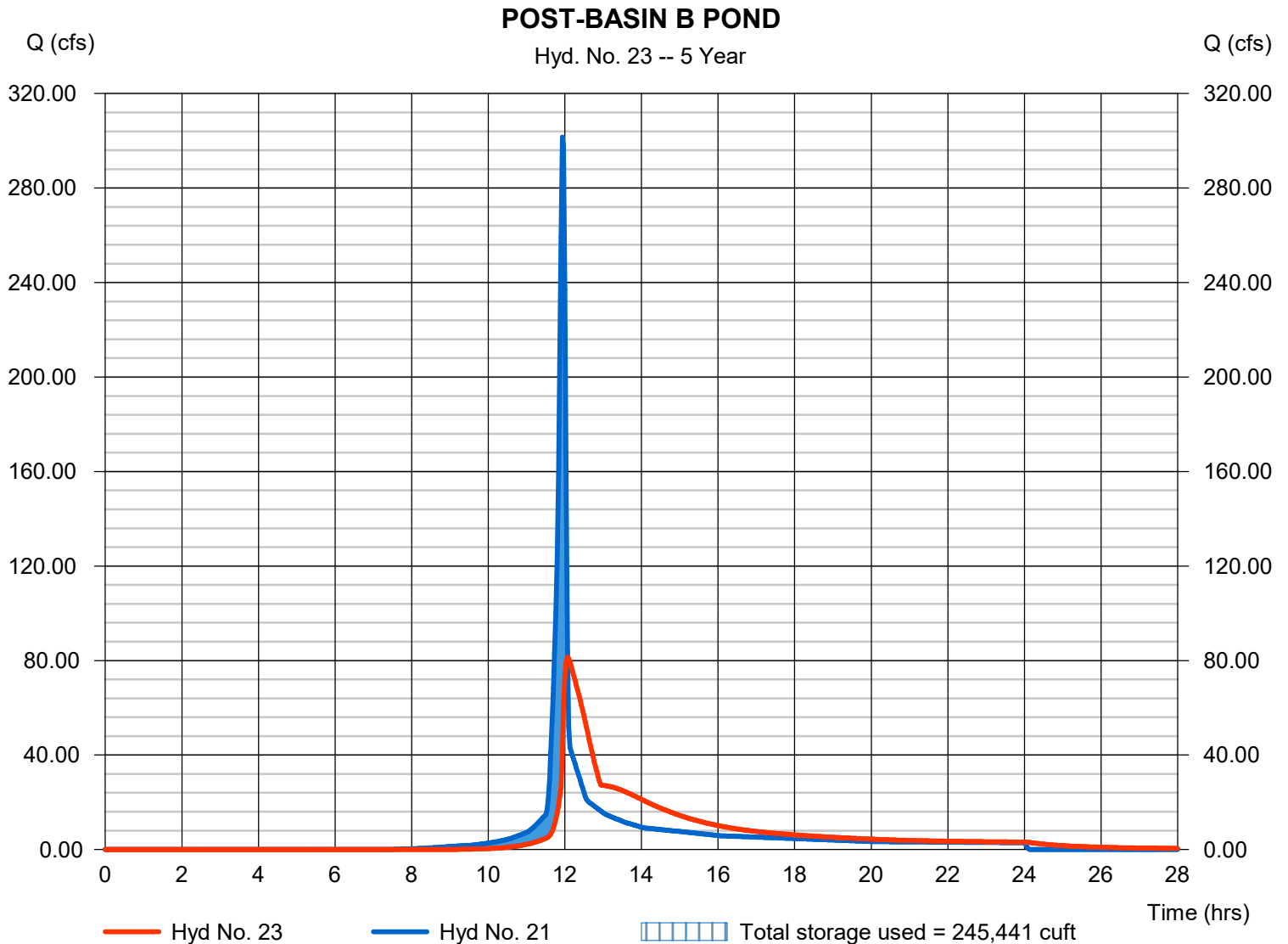
Wednesday, 02 / 28 / 2024

Hyd. No. 23

POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 81.47 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 612,112 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1085.10 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 245,441 cuft |

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

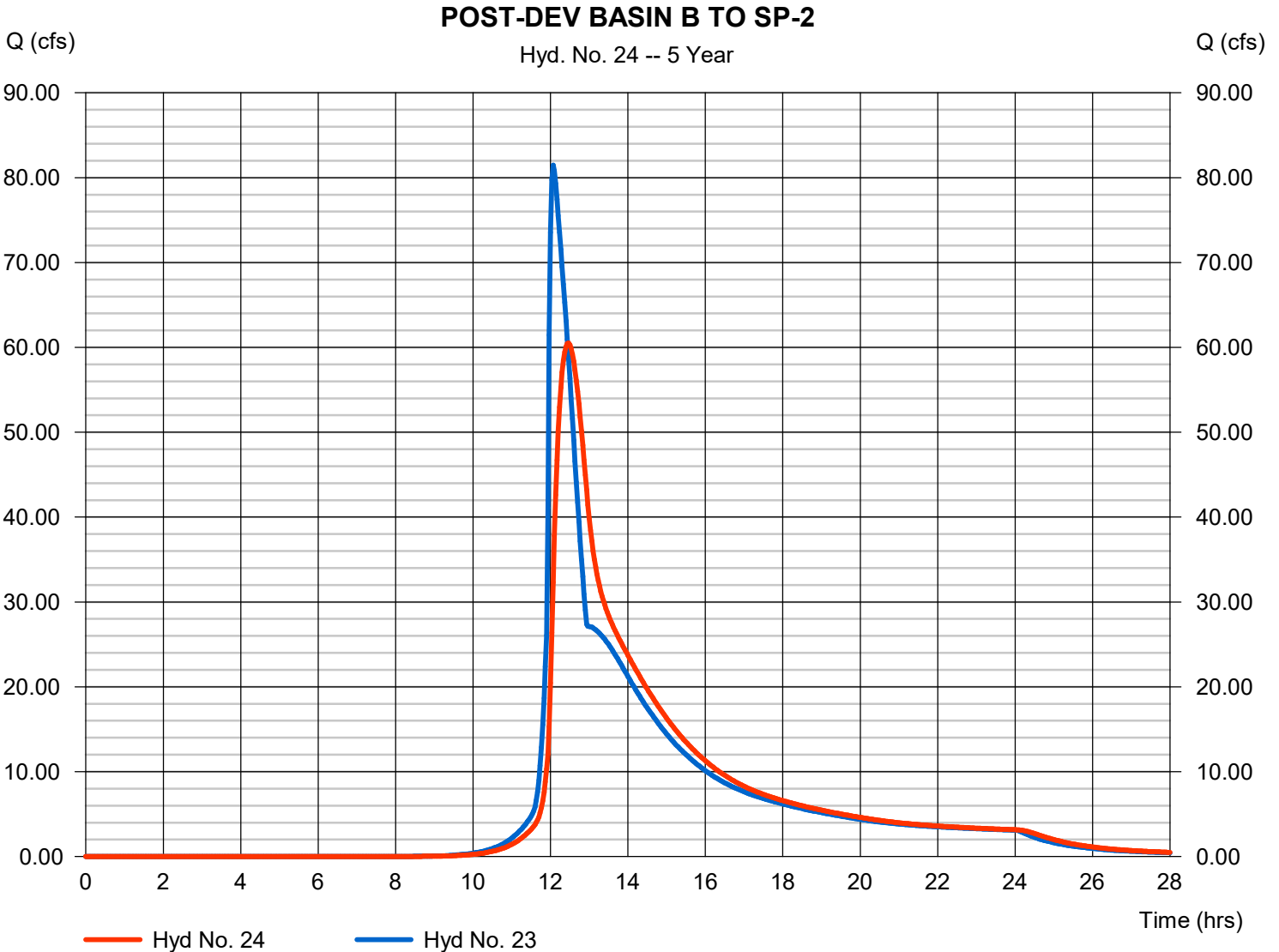
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 60.51 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 12.47 hrs |
| Time interval | = 2 min | Hyd. volume | = 611,670 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.00 ft/s | Routing coeff. | = 0.1115 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

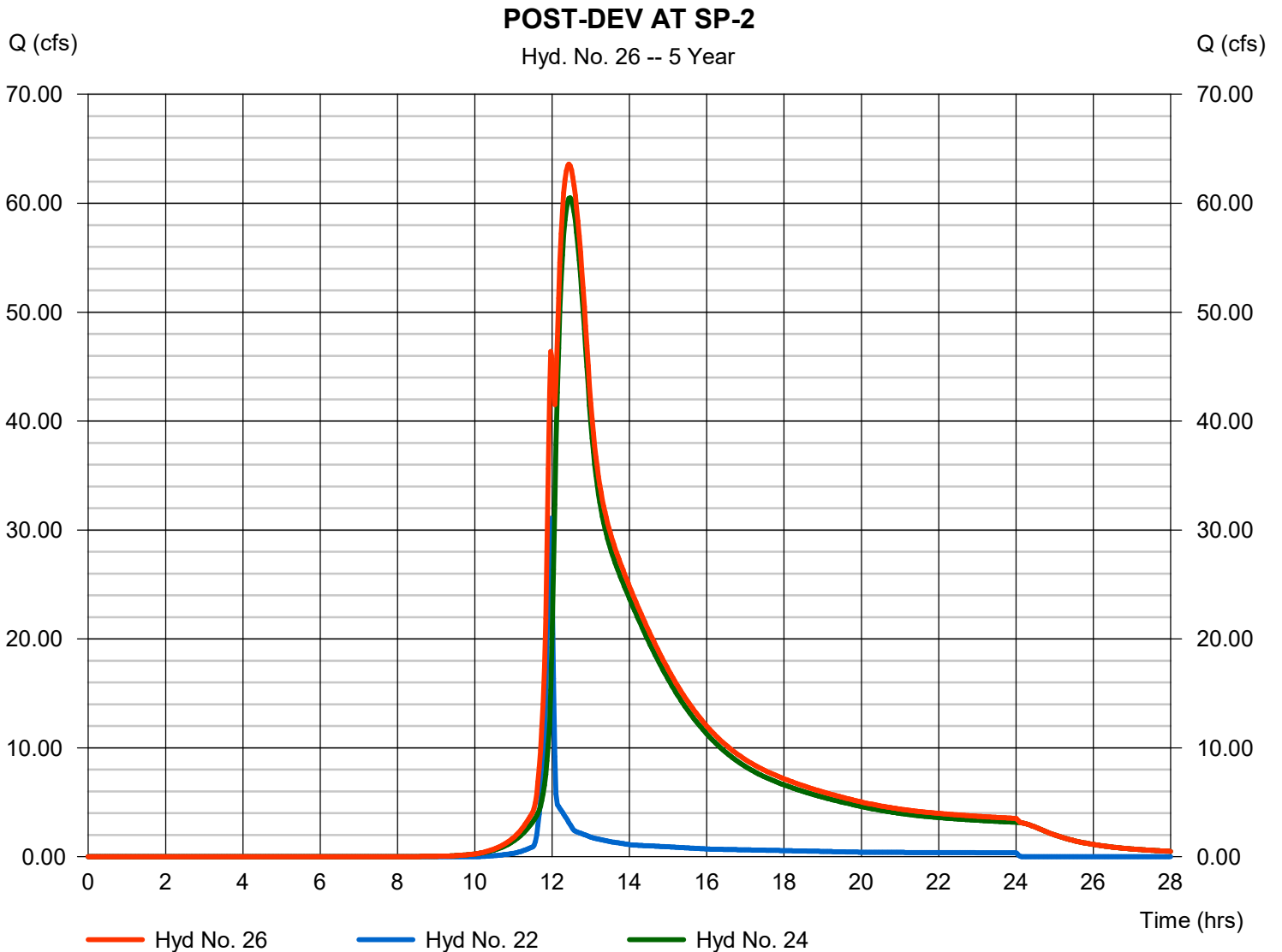
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
 Storm frequency = 5 yrs
 Time interval = 2 min
 Inflow hyds. = 22, 24

Peak discharge = 63.59 cfs
 Time to peak = 12.43 hrs
 Hyd. volume = 673,852 cuft
 Contrib. drain. area = 9.900 ac

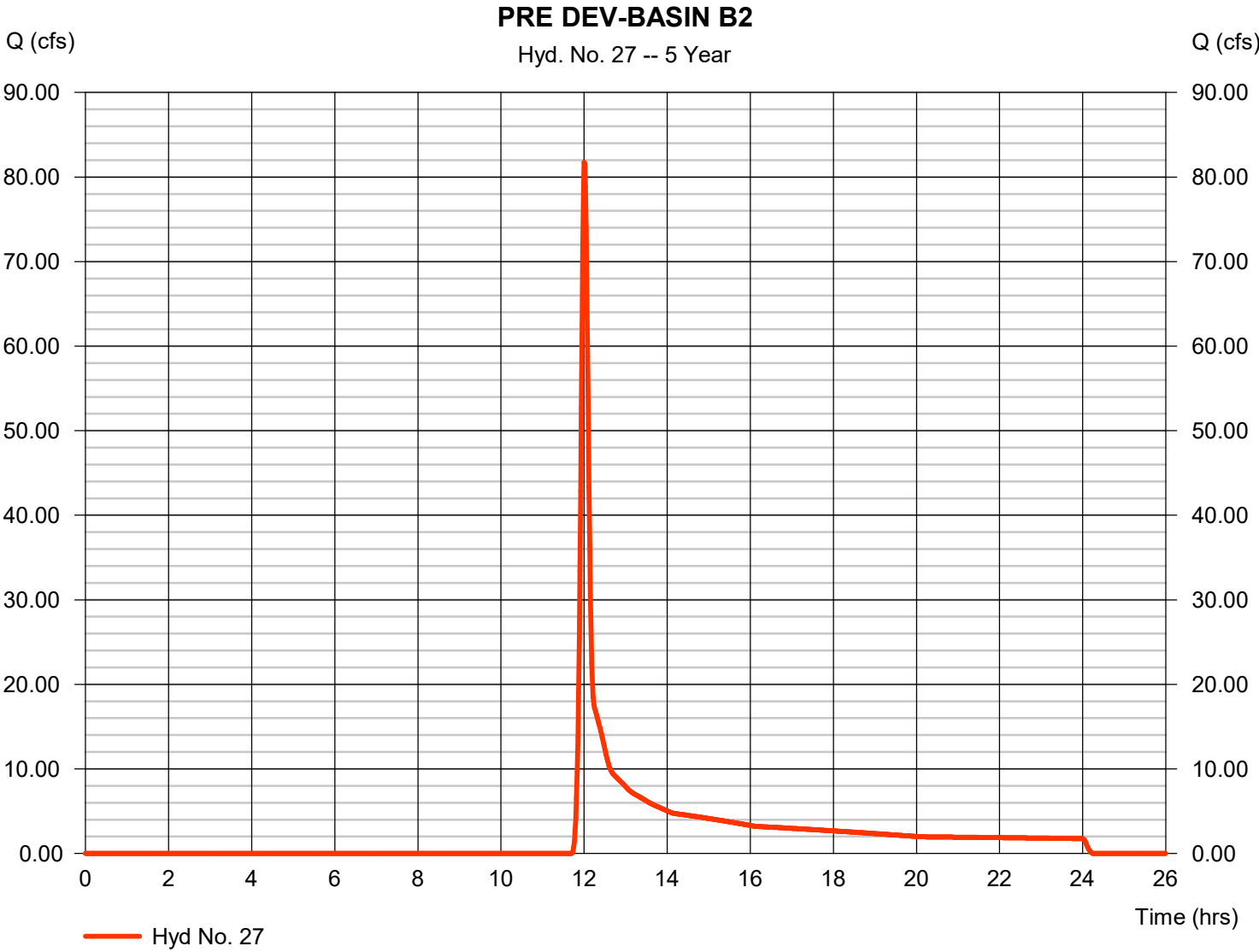


Hydrograph Report

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 81.73 cfs |
| Storm frequency | = 5 yrs | Time to peak | = 12.00 hrs |
| Time interval | = 1 min | Hyd. volume | = 216,884 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 4.74 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

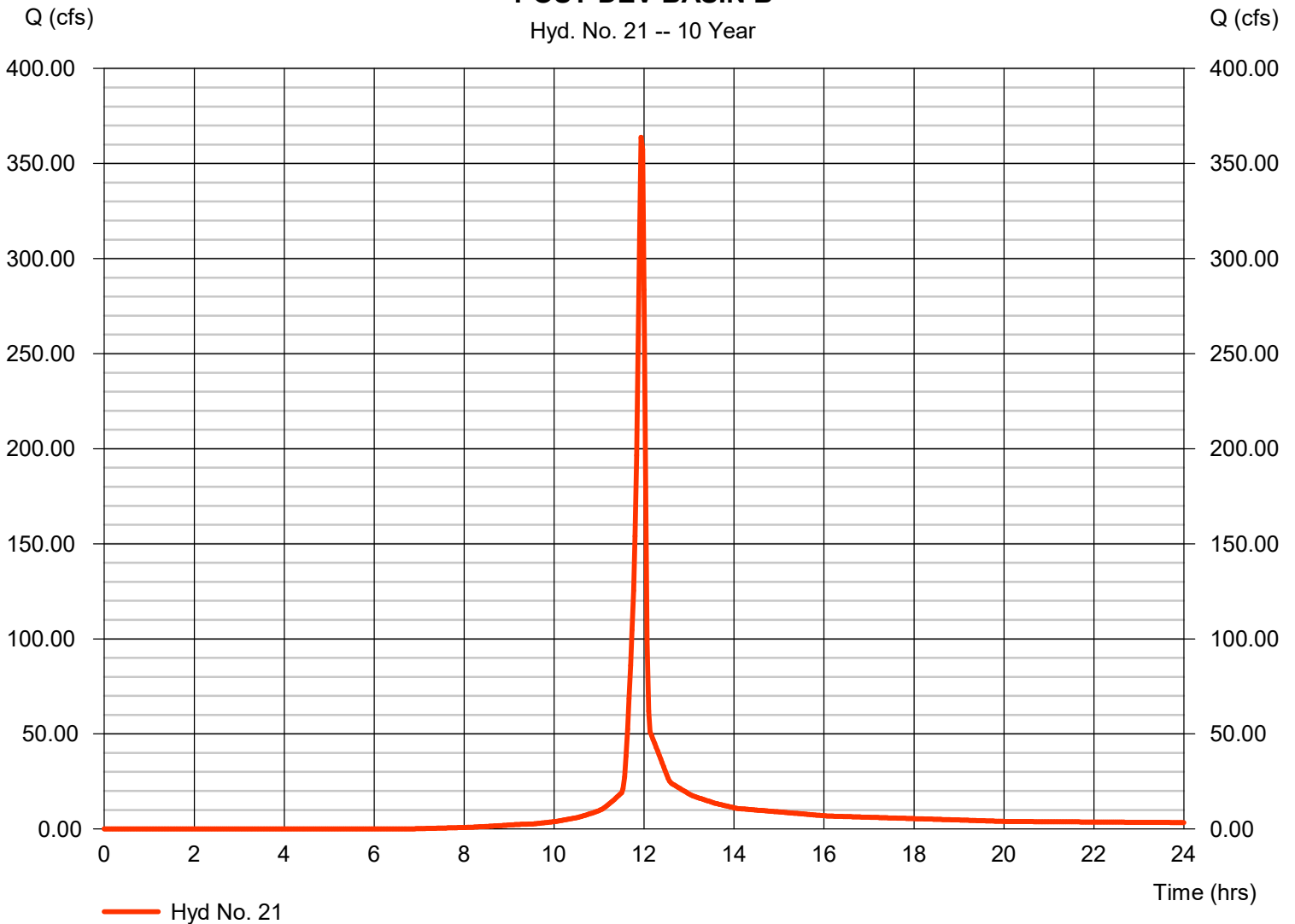
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 363.85 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 742,624 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 5.39 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 10 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

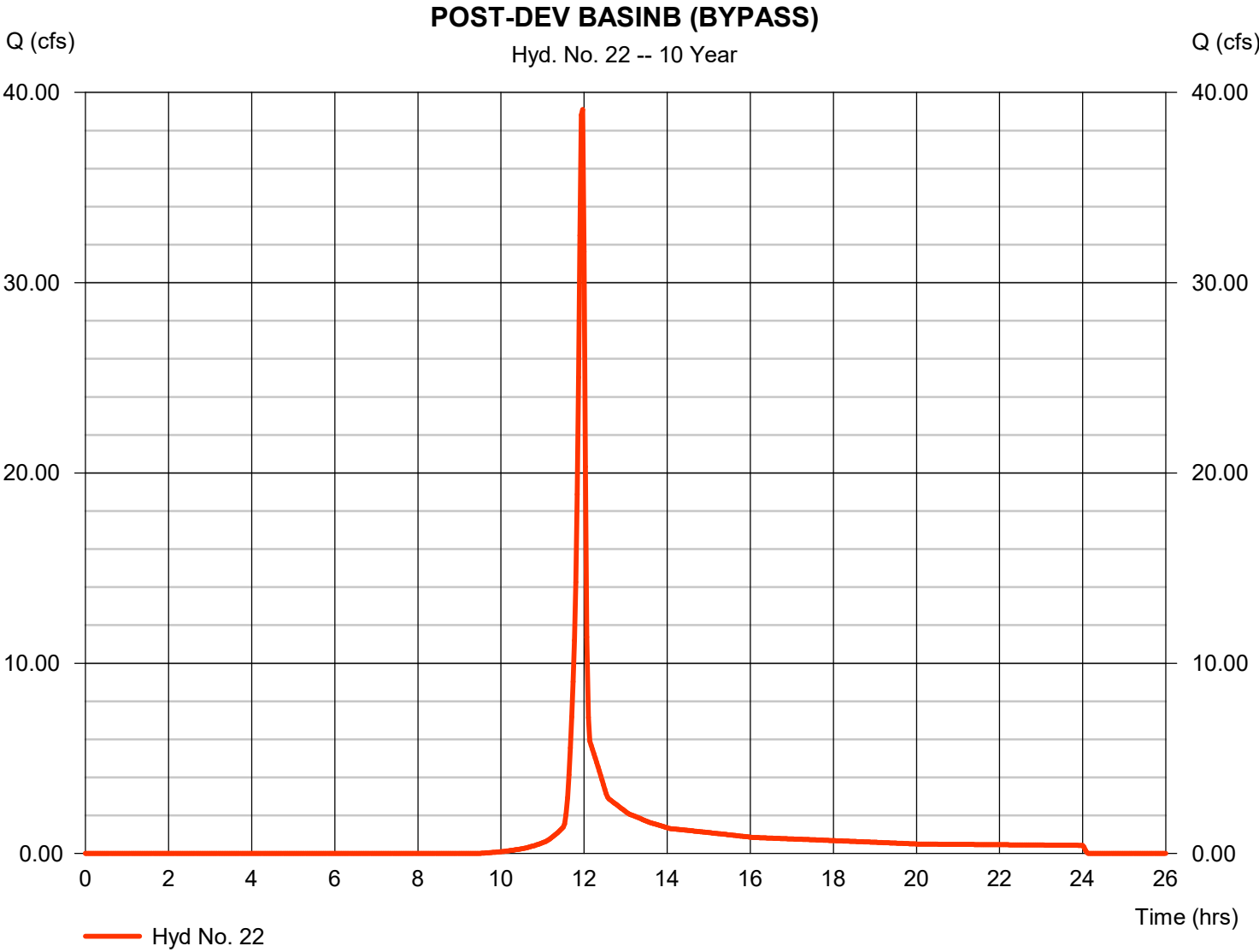
Wednesday, 02 / 28 / 2024

Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|---------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 39.11 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 11.97 hrs |
| Time interval | = 2 min | Hyd. volume | = 78,498 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 5.39 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 23

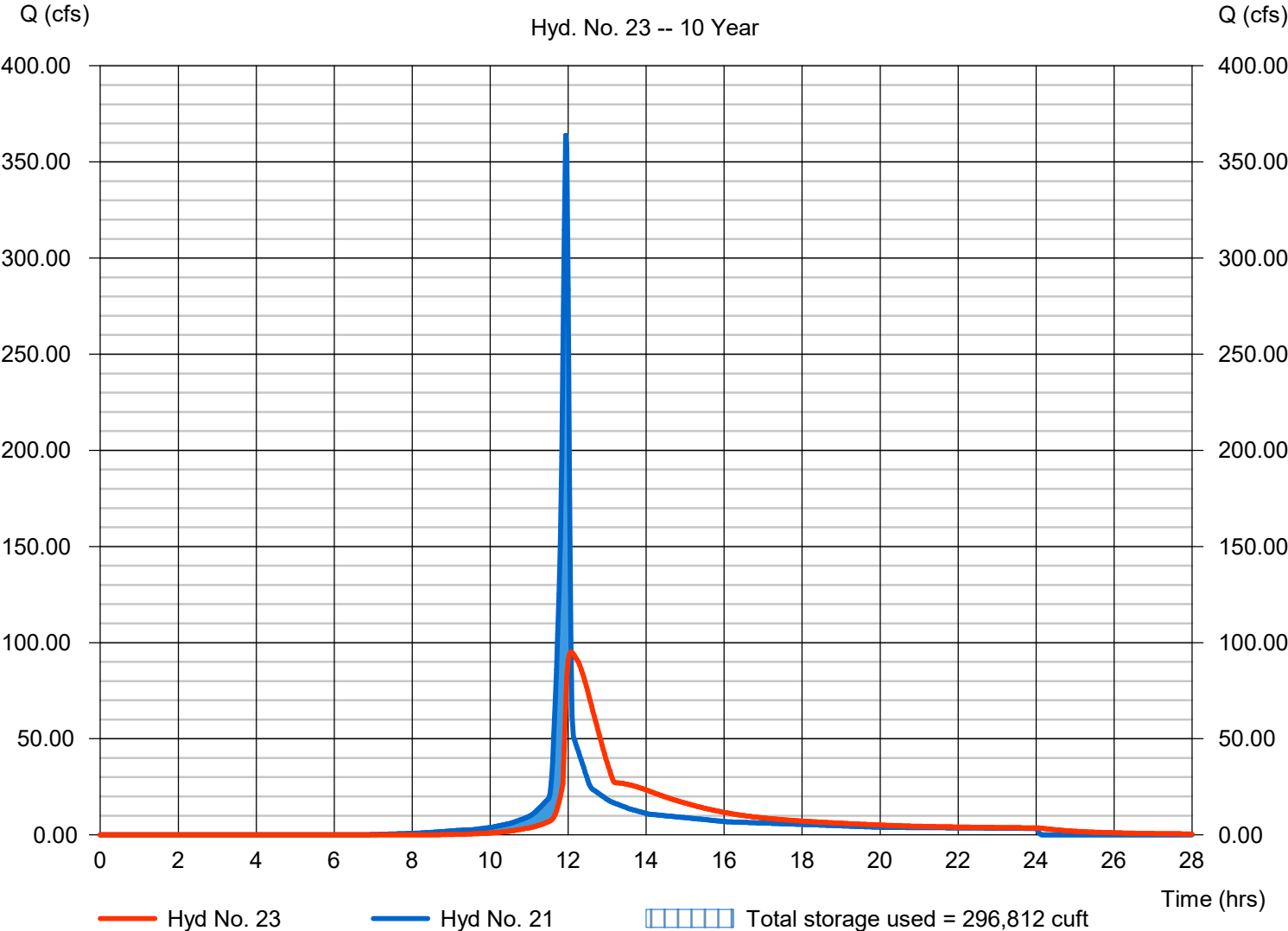
POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 95.20 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 742,573 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1085.97 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 296,812 cuft |

Storage Indication method used.

POST-BASIN B POND

Hyd. No. 23 -- 10 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 24

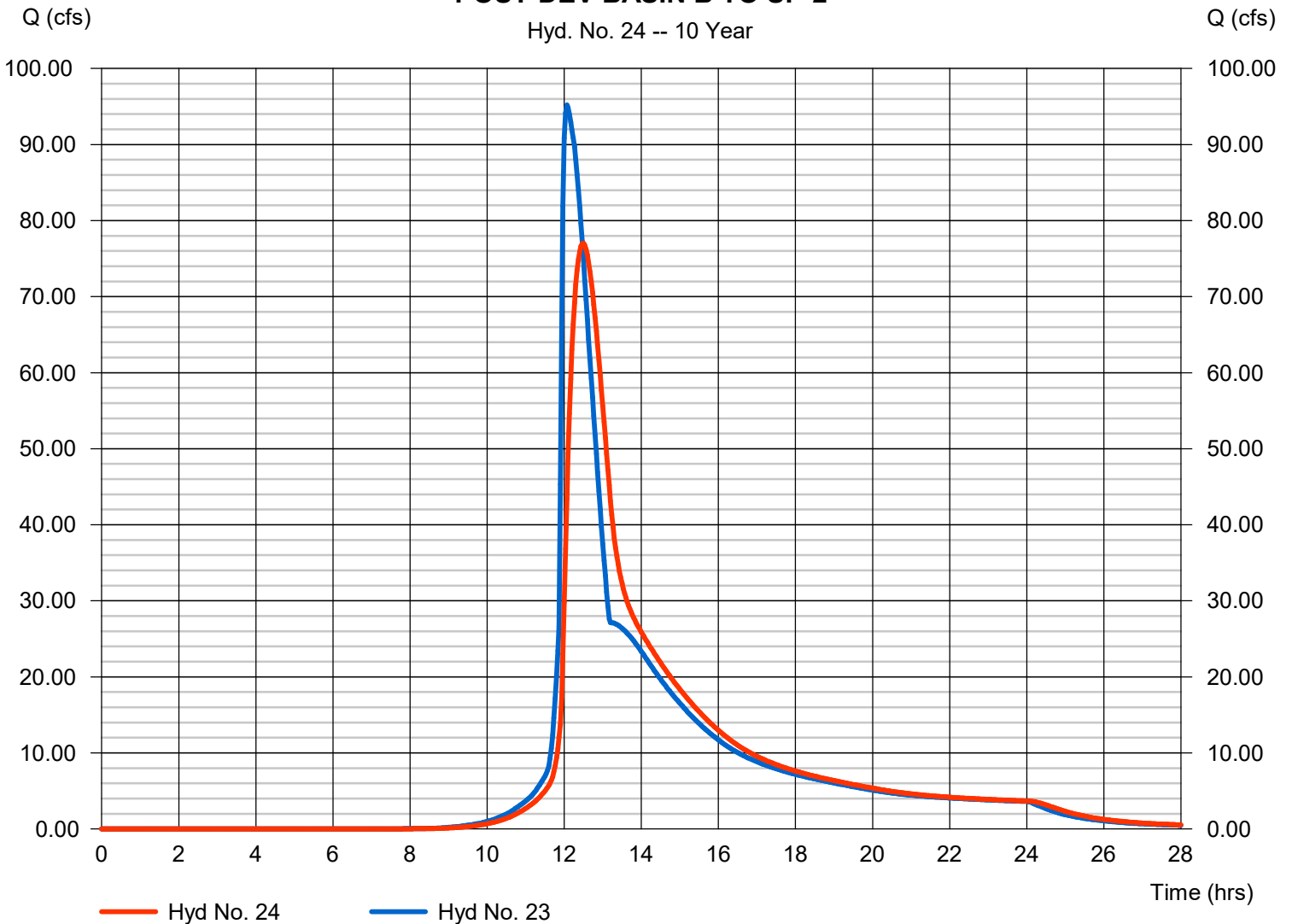
POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 77.02 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 12.50 hrs |
| Time interval | = 2 min | Hyd. volume | = 742,131 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.03 ft/s | Routing coeff. | = 0.1152 |

Modified Att-Kin routing method used.

POST-DEV BASIN B TO SP-2

Hyd. No. 24 -- 10 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

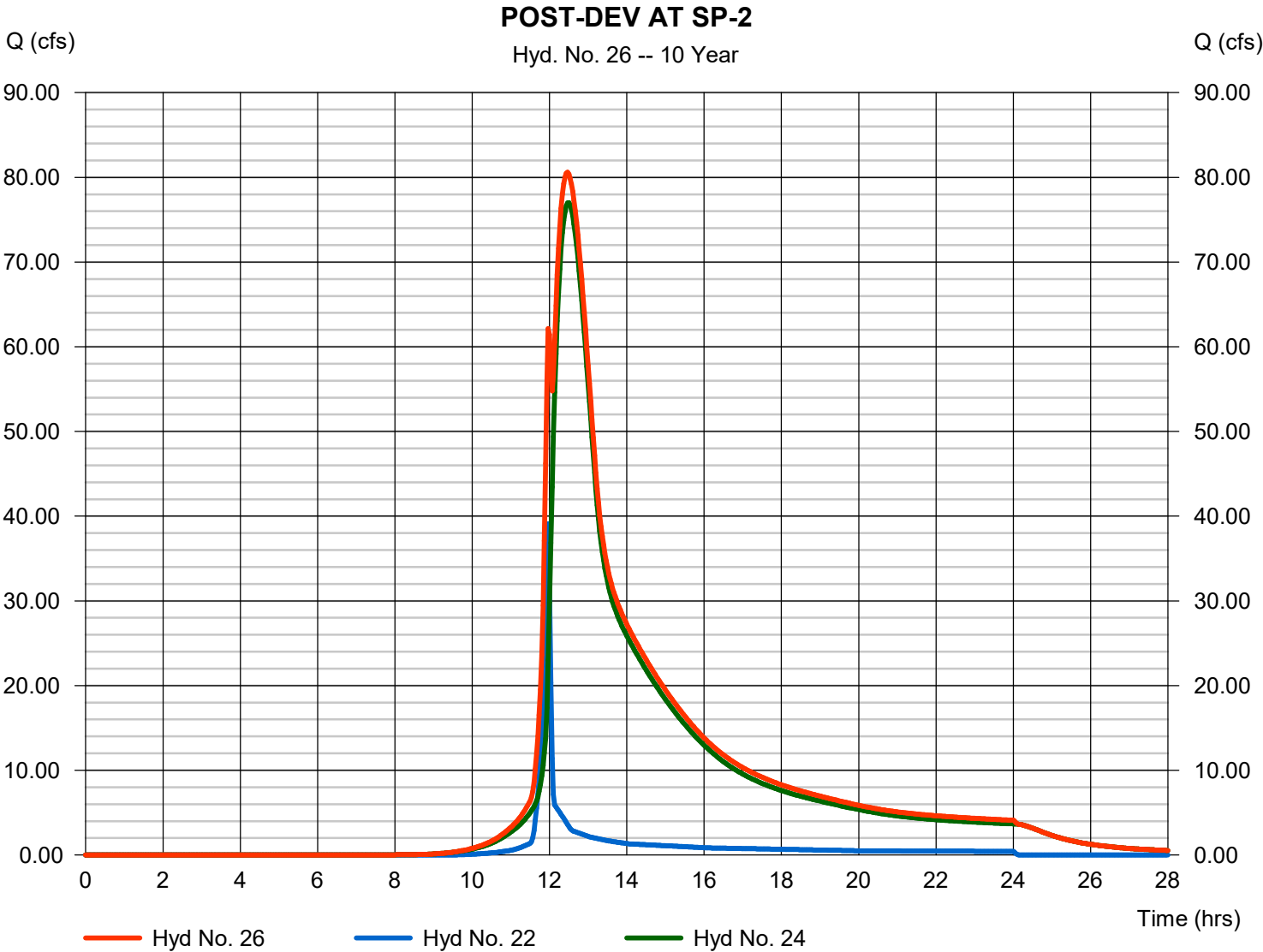
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 80.59 cfs
Time to peak = 12.47 hrs
Hyd. volume = 820,629 cuft
Contrib. drain. area = 9.900 ac



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

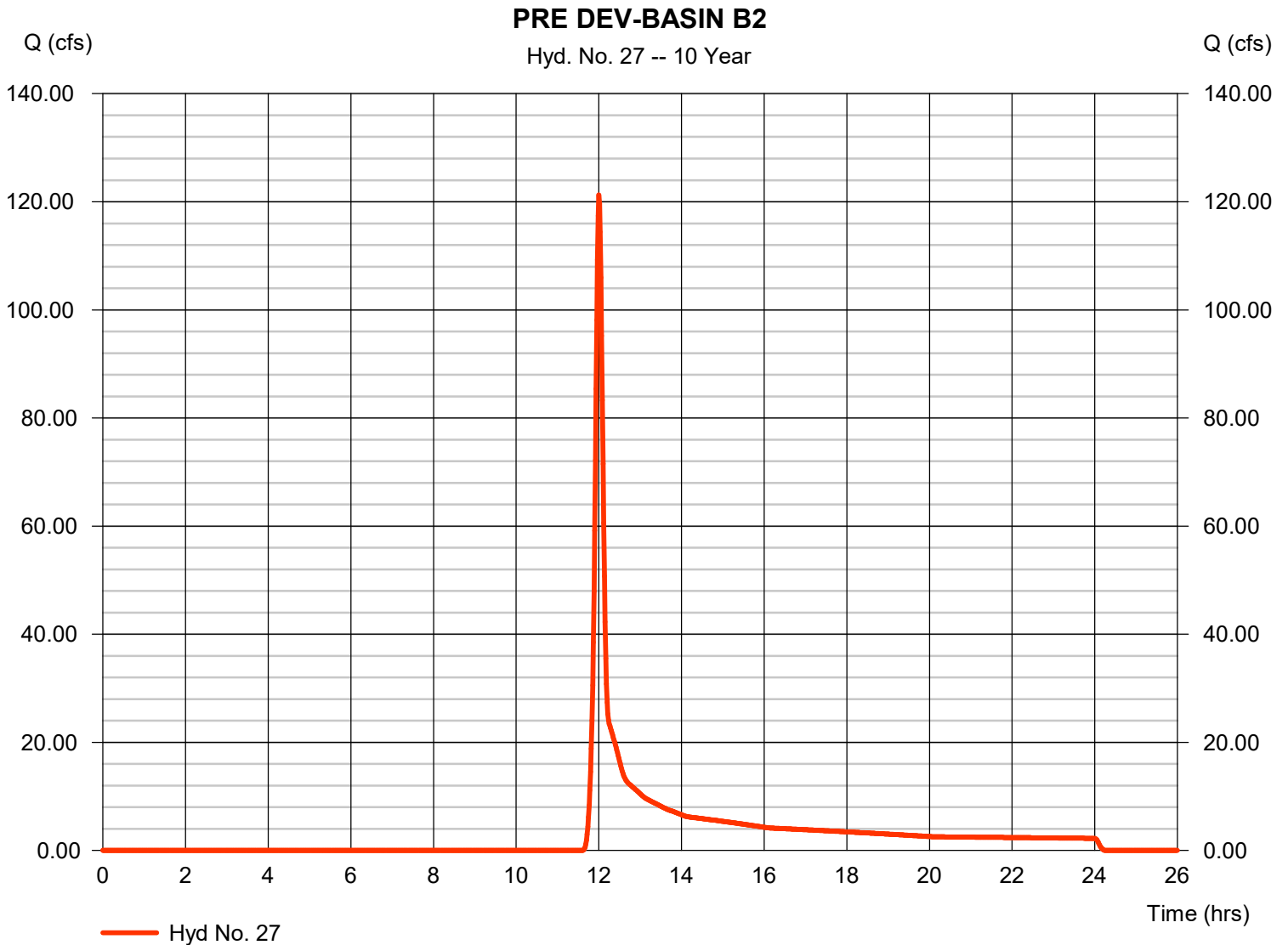
Wednesday, 02 / 28 / 2024

Hyd. No. 27

PRE DEV-BASIN B2

Hydrograph type = SCS Runoff
Storm frequency = 10 yrs
Time interval = 1 min
Drainage area = 70.000 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 5.39 in
Storm duration = 24 hrs

Peak discharge = 121.27 cfs
Time to peak = 12.00 hrs
Hyd. volume = 299,959 cuft
Curve number = 55
Hydraulic length = 0 ft
Time of conc. (Tc) = 10.00 min
Distribution = Type II
Shape factor = 484



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

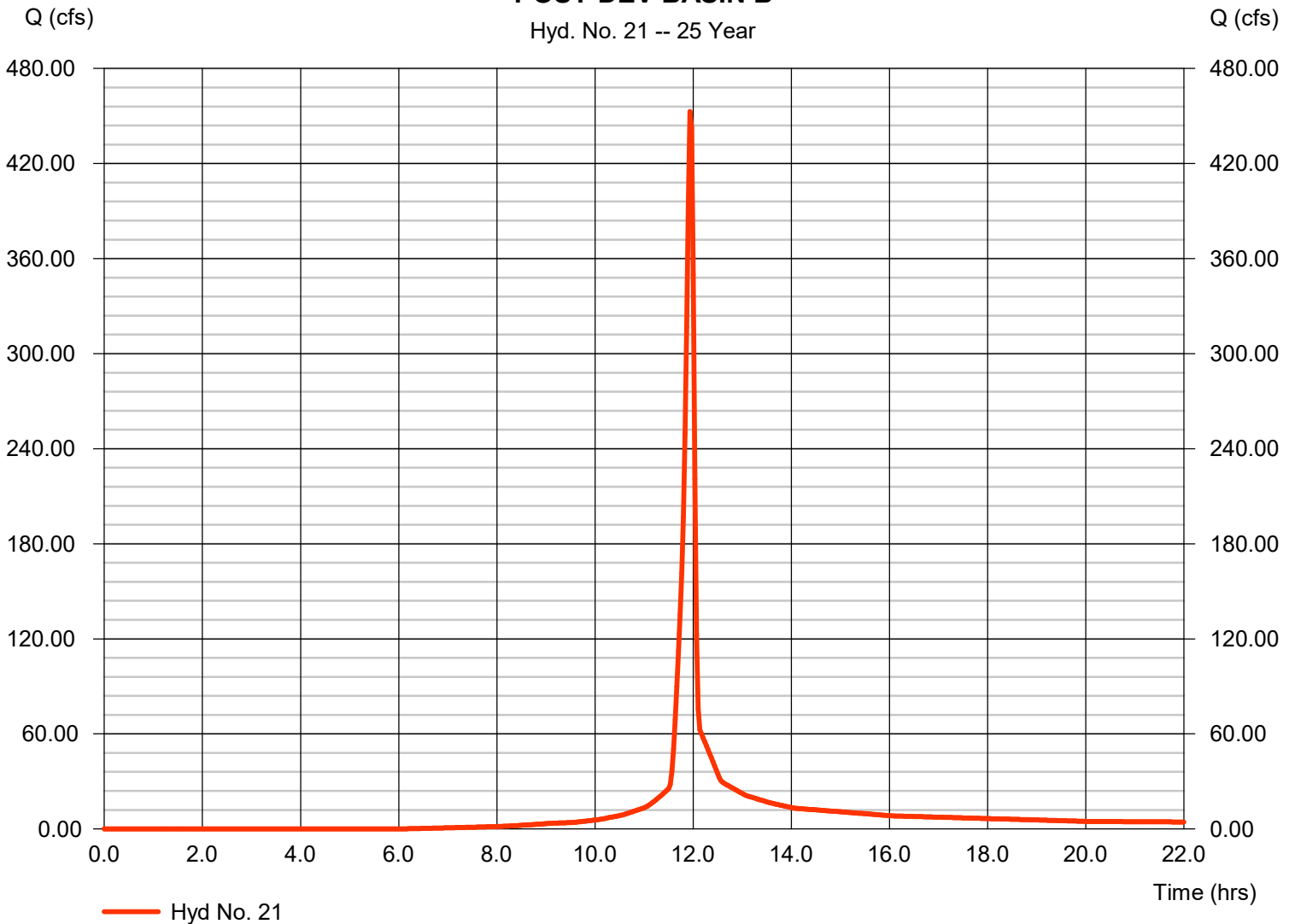
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 452.89 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 932,281 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 6.31 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 25 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

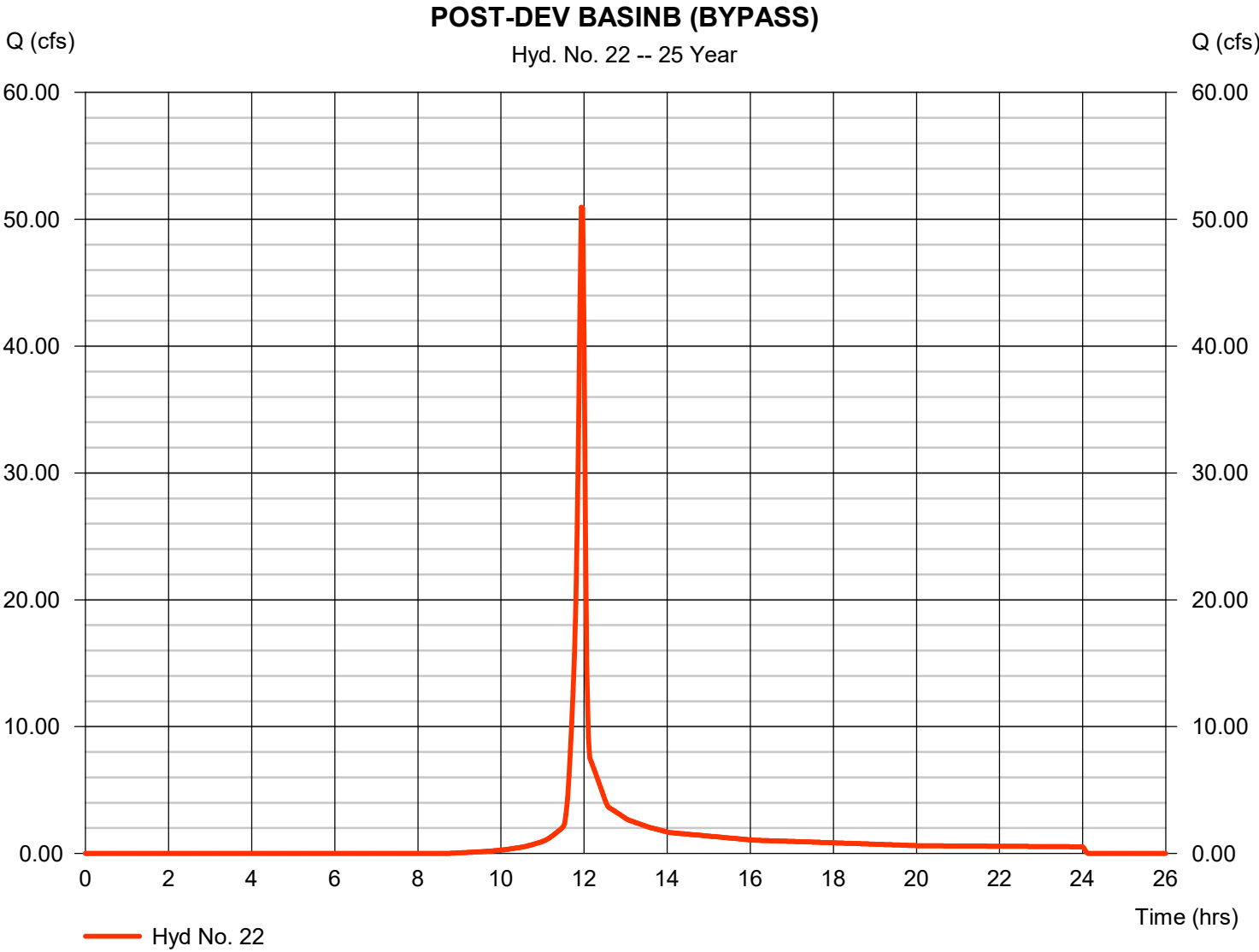
Wednesday, 02 / 28 / 2024

Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 50.95 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 102,865 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 6.31 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

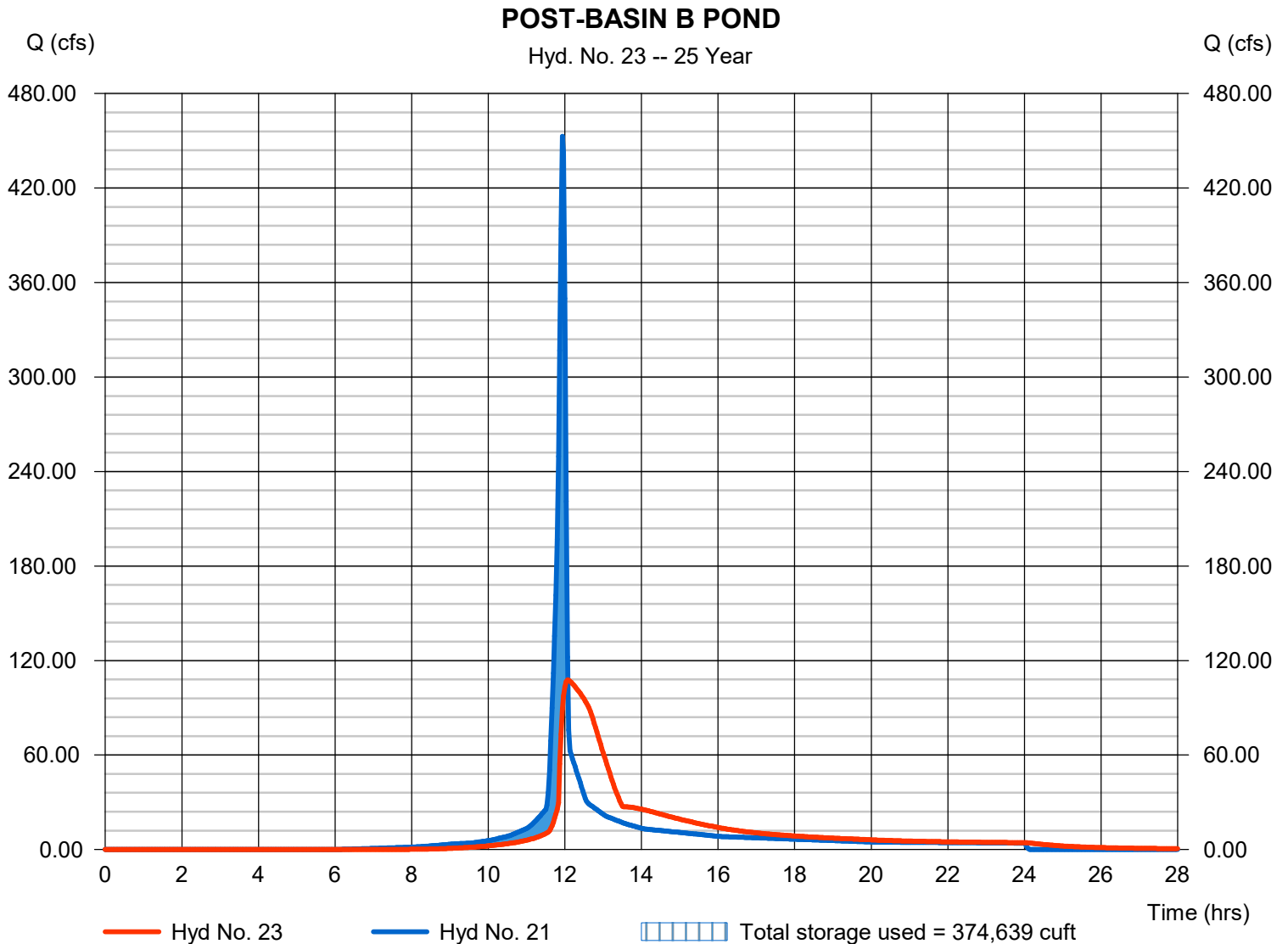
Wednesday, 02 / 28 / 2024

Hyd. No. 23

POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|----------------|
| Hydrograph type | = Reservoir | Peak discharge | = 107.63 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 932,231 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1087.15 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 374,639 cuft |

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

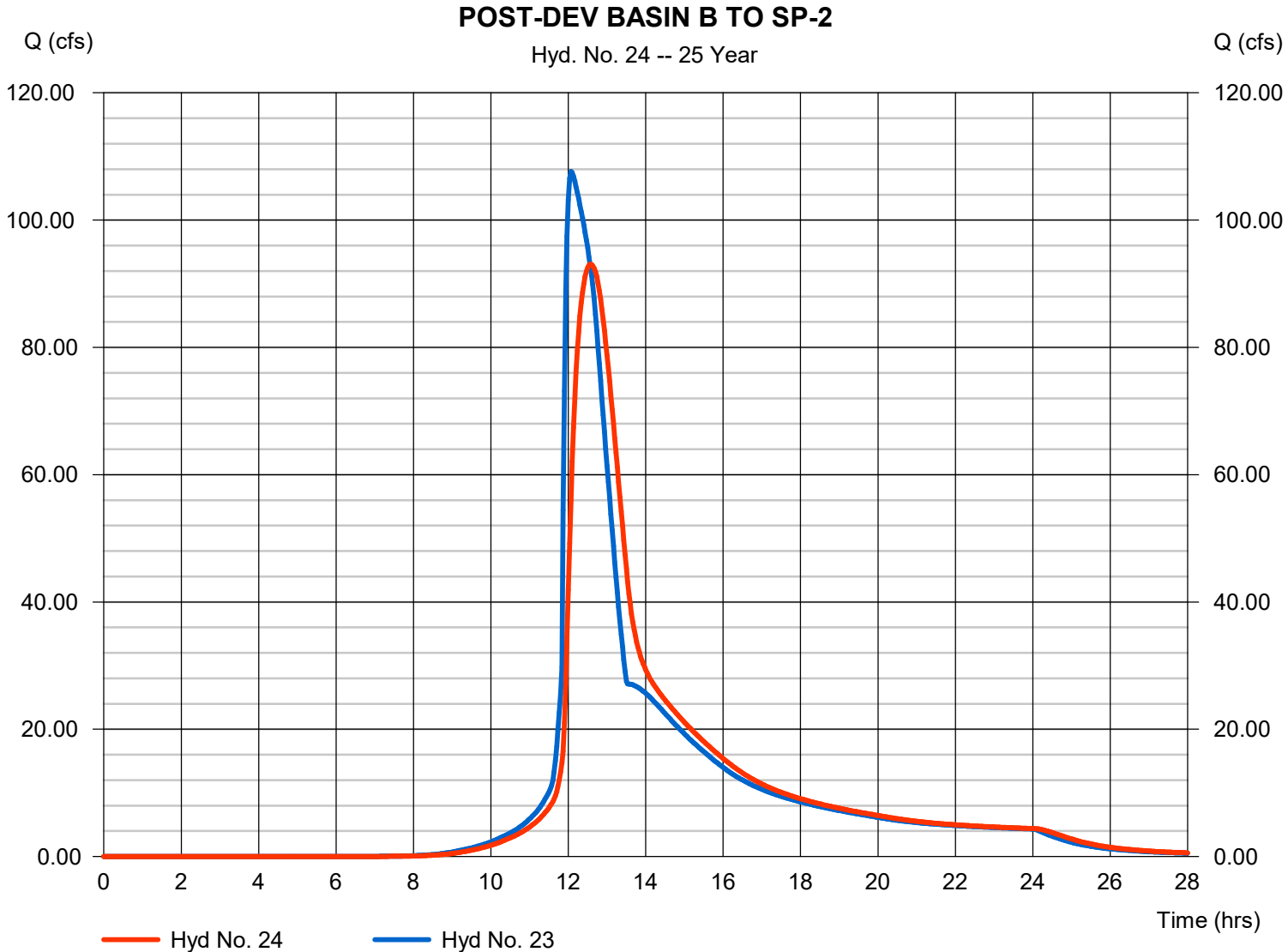
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|----------------|
| Hydrograph type | = Reach | Peak discharge | = 93.06 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 12.57 hrs |
| Time interval | = 2 min | Hyd. volume | = 931,788 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.06 ft/s | Routing coeff. | = 0.1181 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

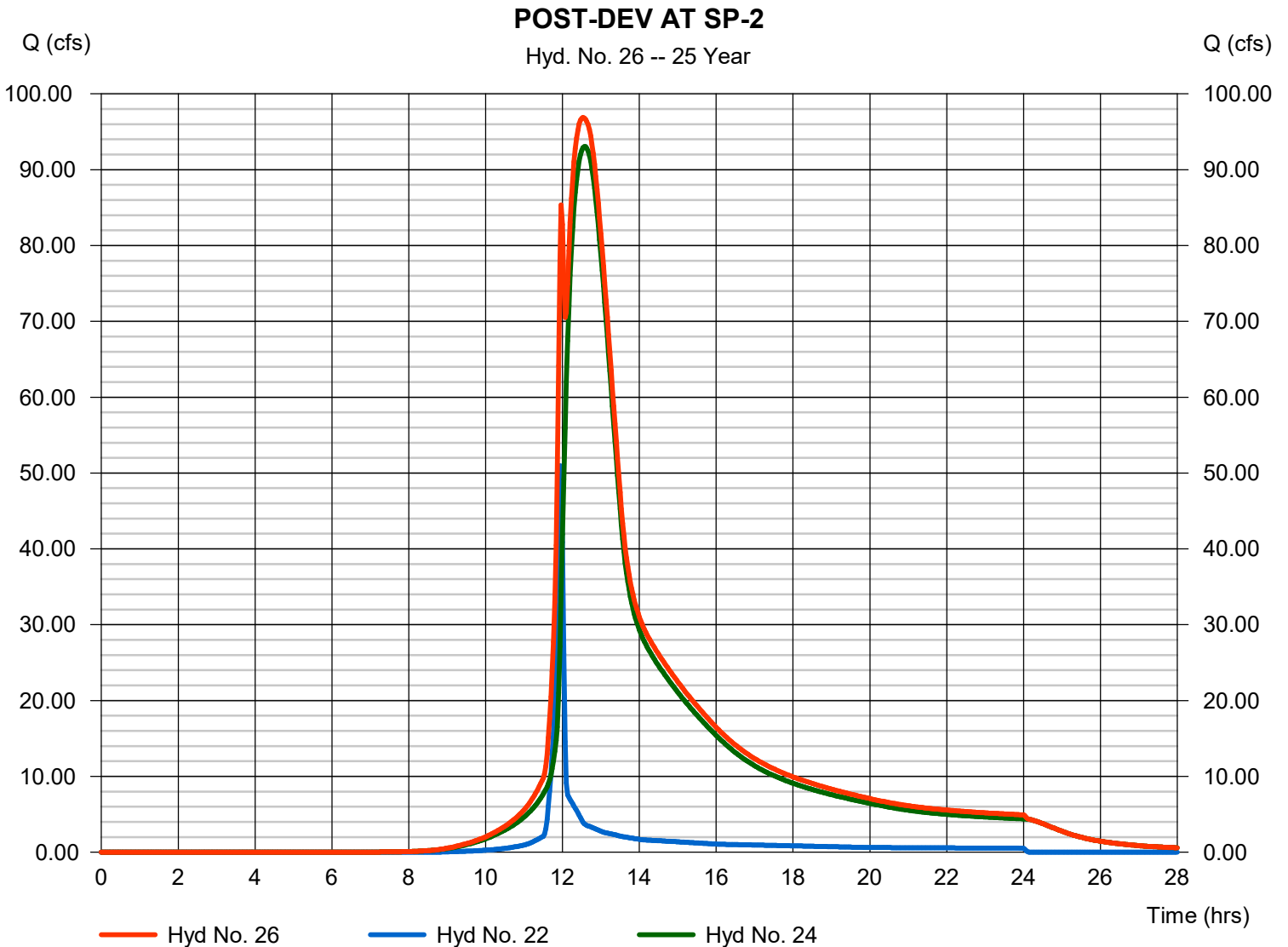
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 25 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 96.88 cfs
Time to peak = 12.53 hrs
Hyd. volume = 1,034,651 cuft
Contrib. drain. area = 9.900 ac

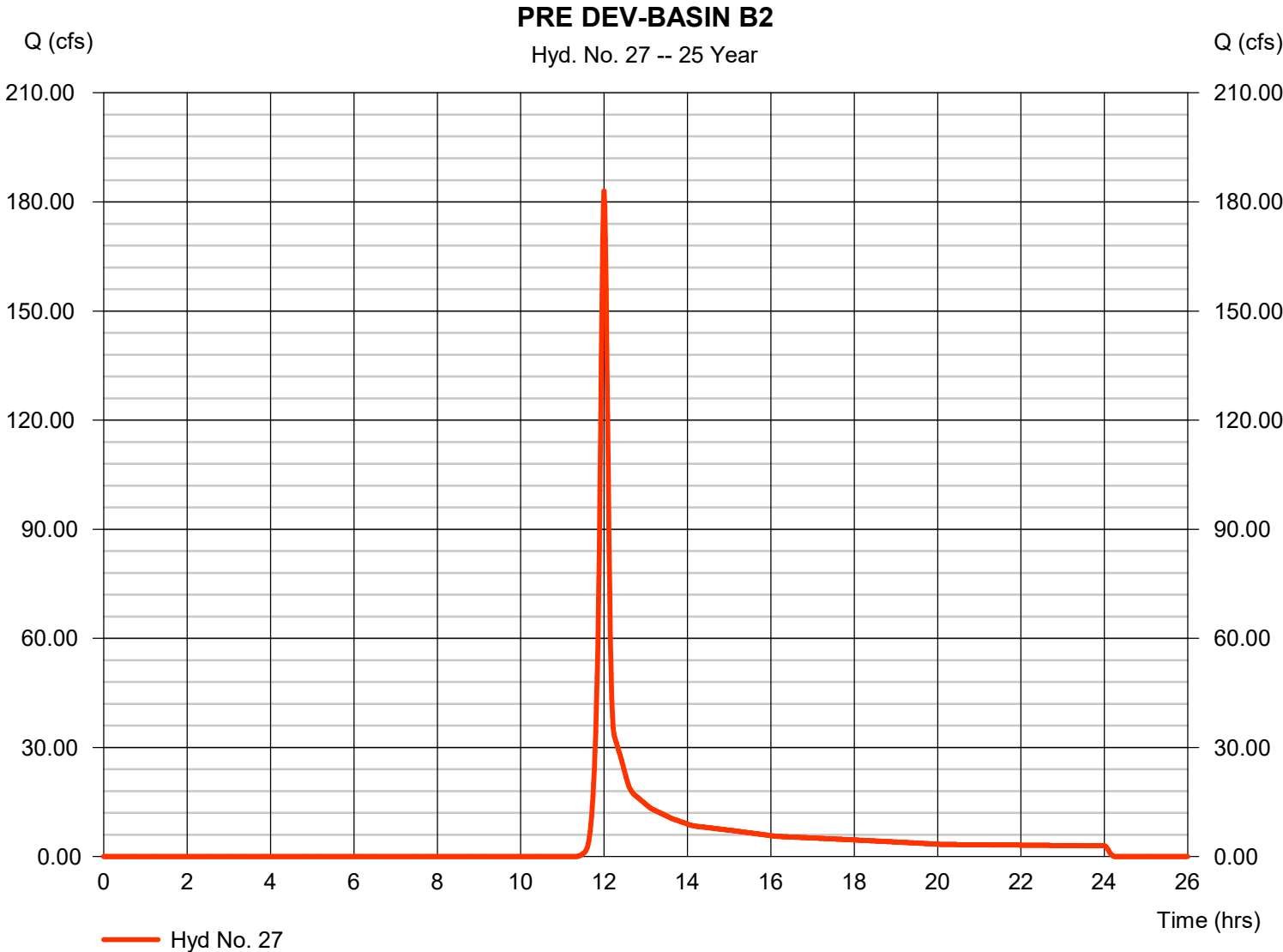


Hydrograph Report

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 183.04 cfs |
| Storm frequency | = 25 yrs | Time to peak | = 12.00 hrs |
| Time interval | = 1 min | Hyd. volume | = 431,745 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 6.31 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

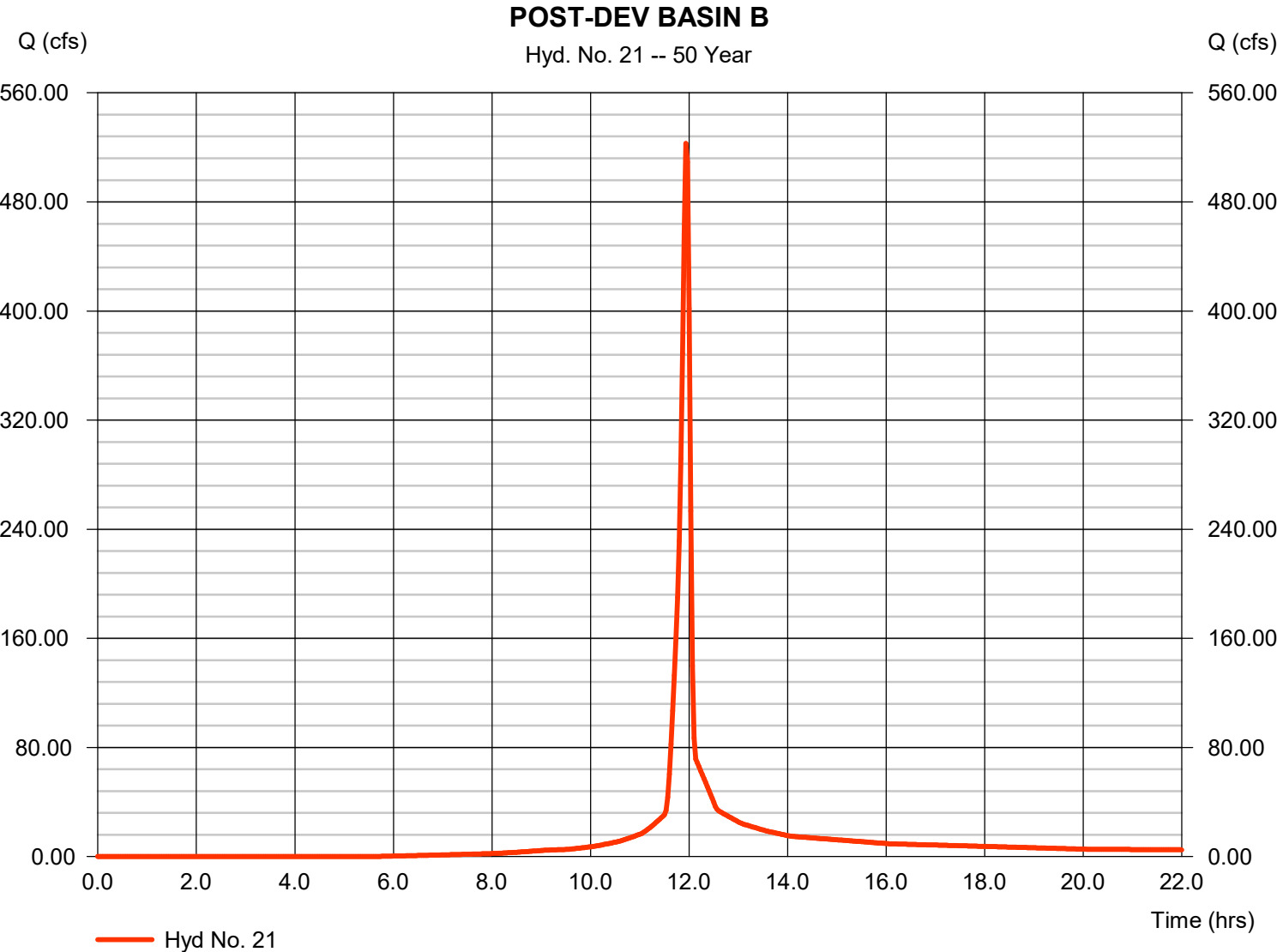
Wednesday, 02 / 28 / 2024

Hyd. No. 21

POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|------------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 522.92 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,083,763 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 7.03 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

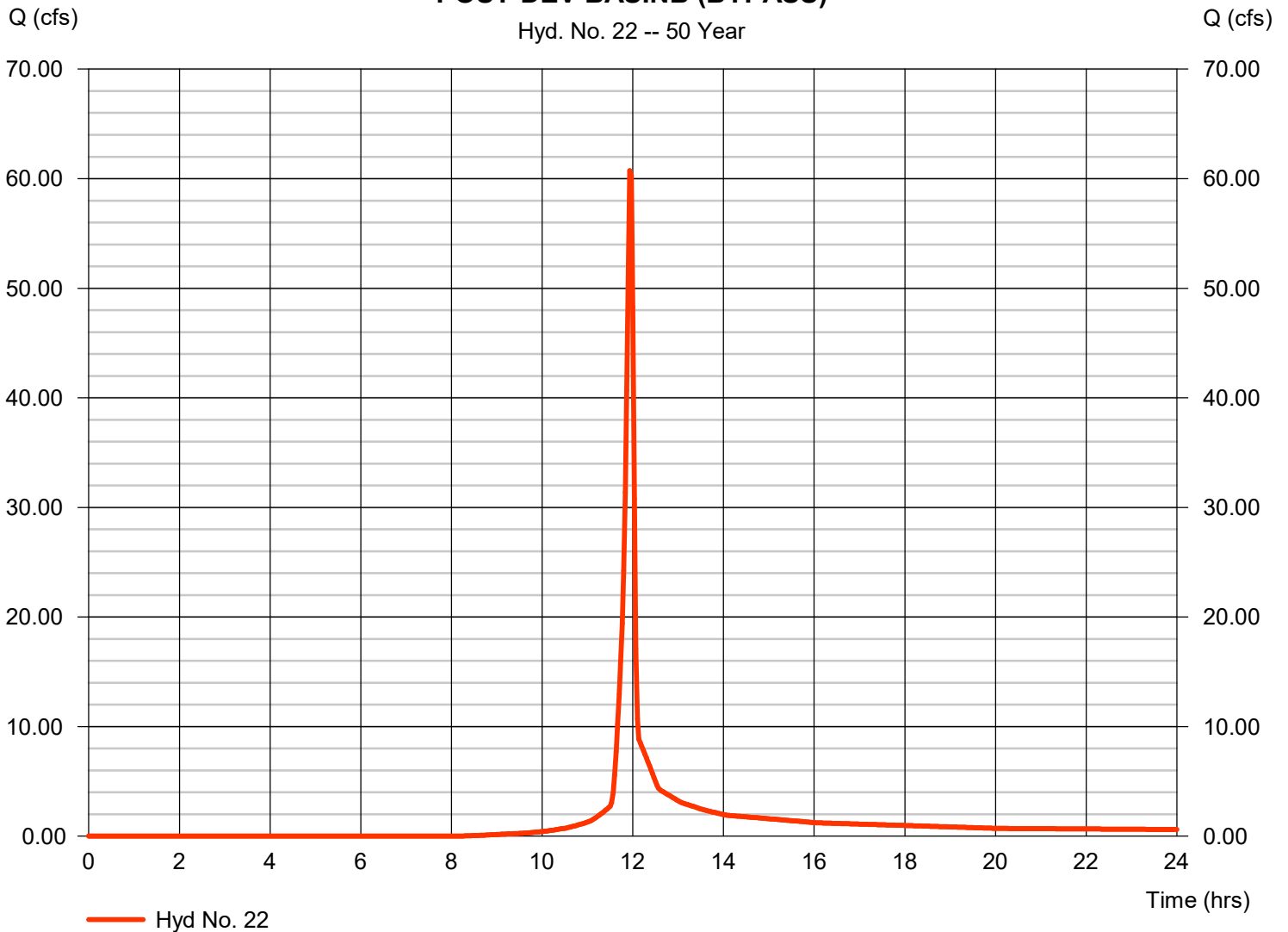
Hyd. No. 22

POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 60.72 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 122,748 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 7.03 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900

POST-DEV BASINB (BYPASS)



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 23

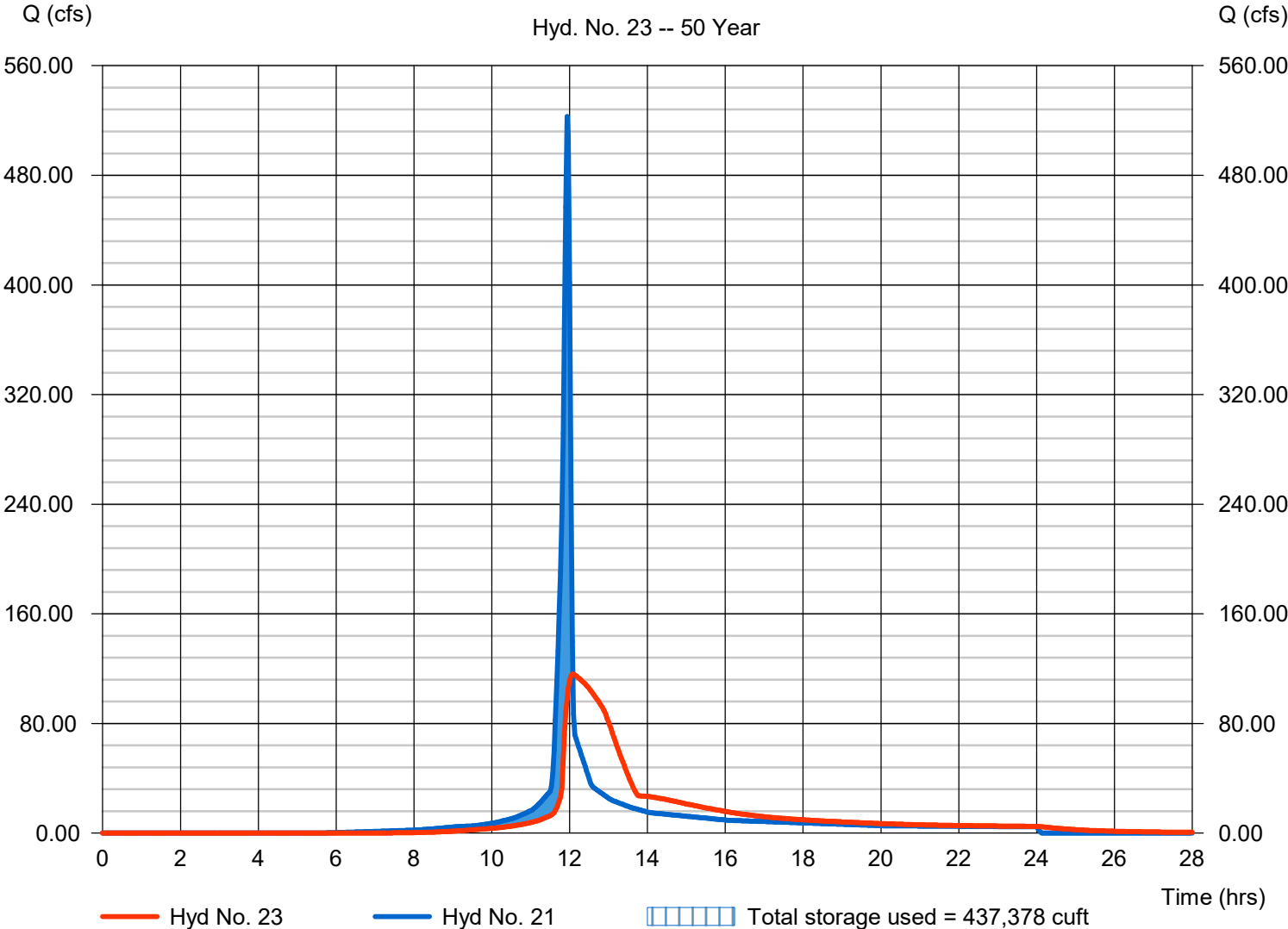
POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|------------------|
| Hydrograph type | = Reservoir | Peak discharge | = 115.94 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,083,709 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1088.02 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 437,378 cuft |

Storage Indication method used.

POST-BASIN B POND

Hyd. No. 23 -- 50 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 24

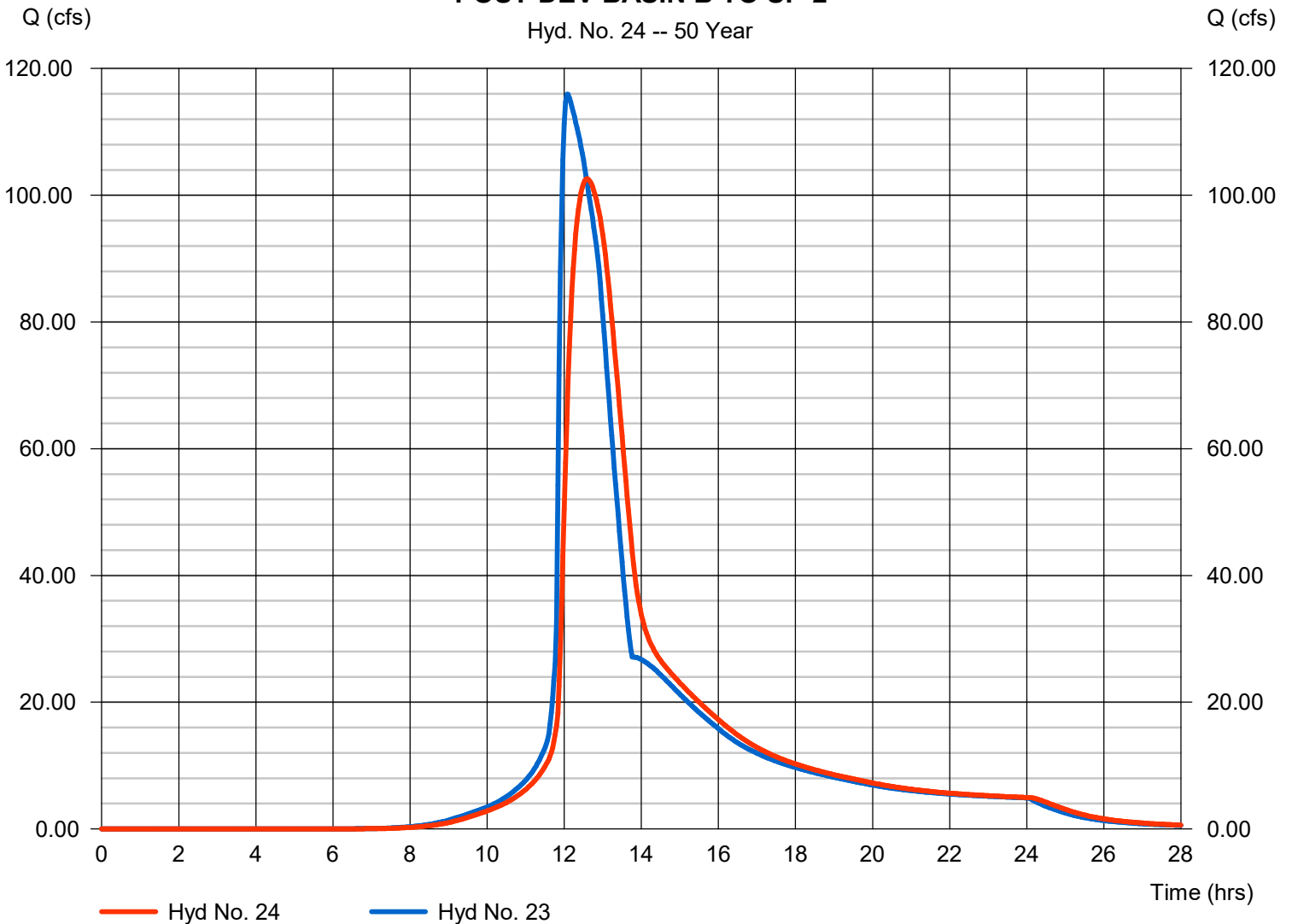
POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|------------------|
| Hydrograph type | = Reach | Peak discharge | = 102.60 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 12.60 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,083,271 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.08 ft/s | Routing coeff. | = 0.1199 |

Modified Att-Kin routing method used.

POST-DEV BASIN B TO SP-2

Hyd. No. 24 -- 50 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

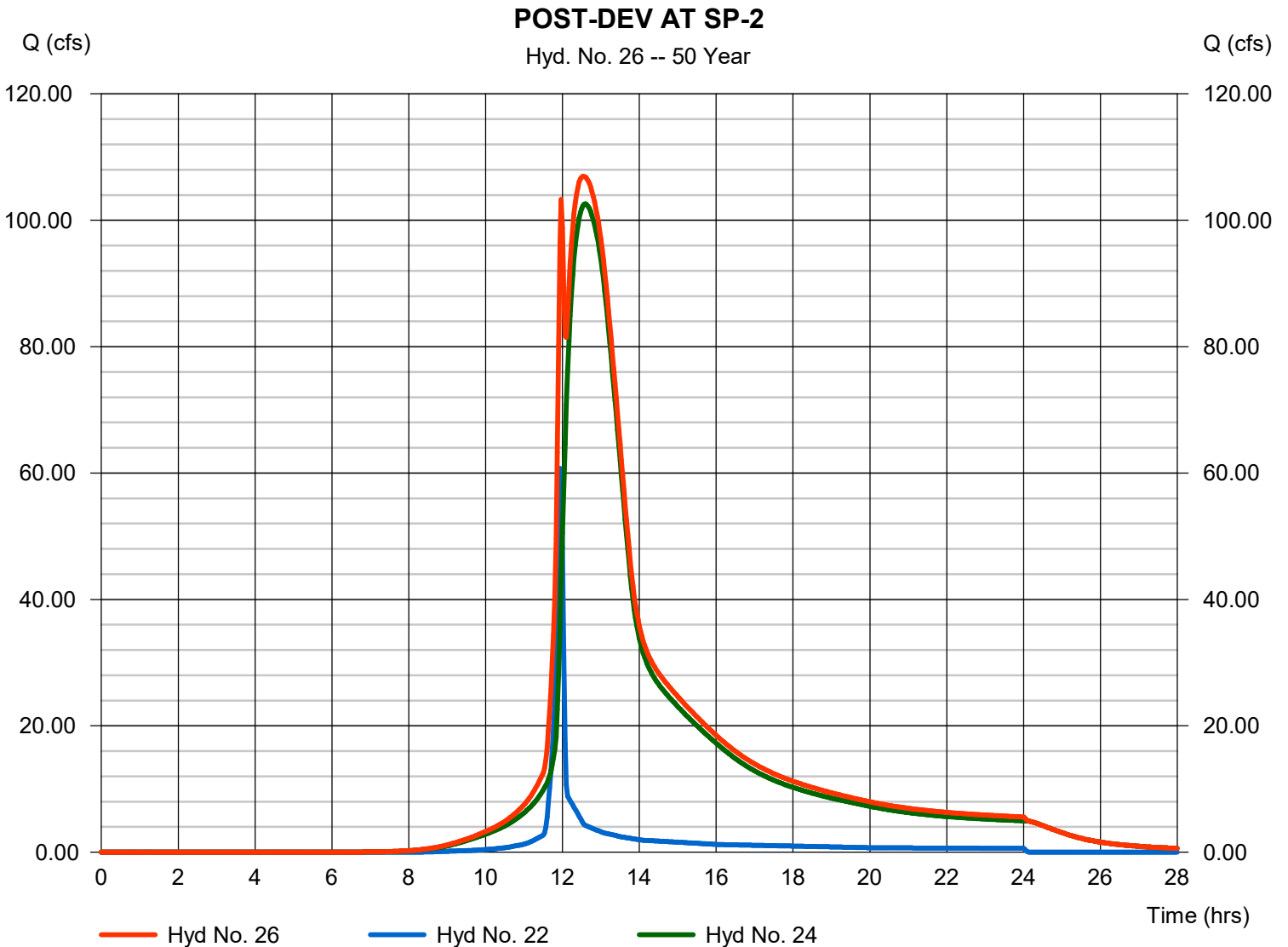
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 50 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 106.94 cfs
Time to peak = 12.53 hrs
Hyd. volume = 1,206,018 cuft
Contrib. drain. area = 9.900 ac



Hydrograph Report

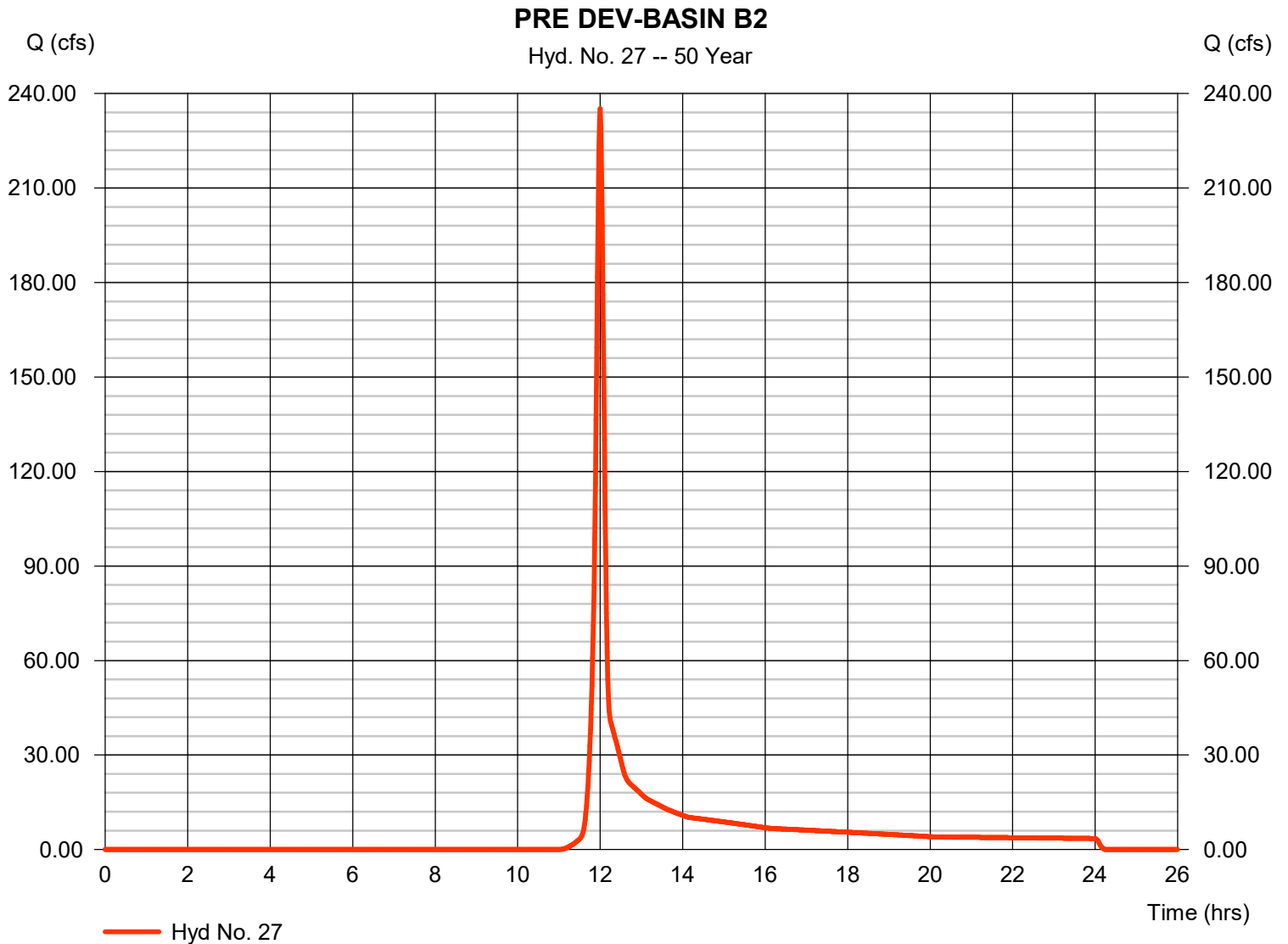
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 235.24 cfs |
| Storm frequency | = 50 yrs | Time to peak | = 12.00 hrs |
| Time interval | = 1 min | Hyd. volume | = 544,520 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 7.03 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 21

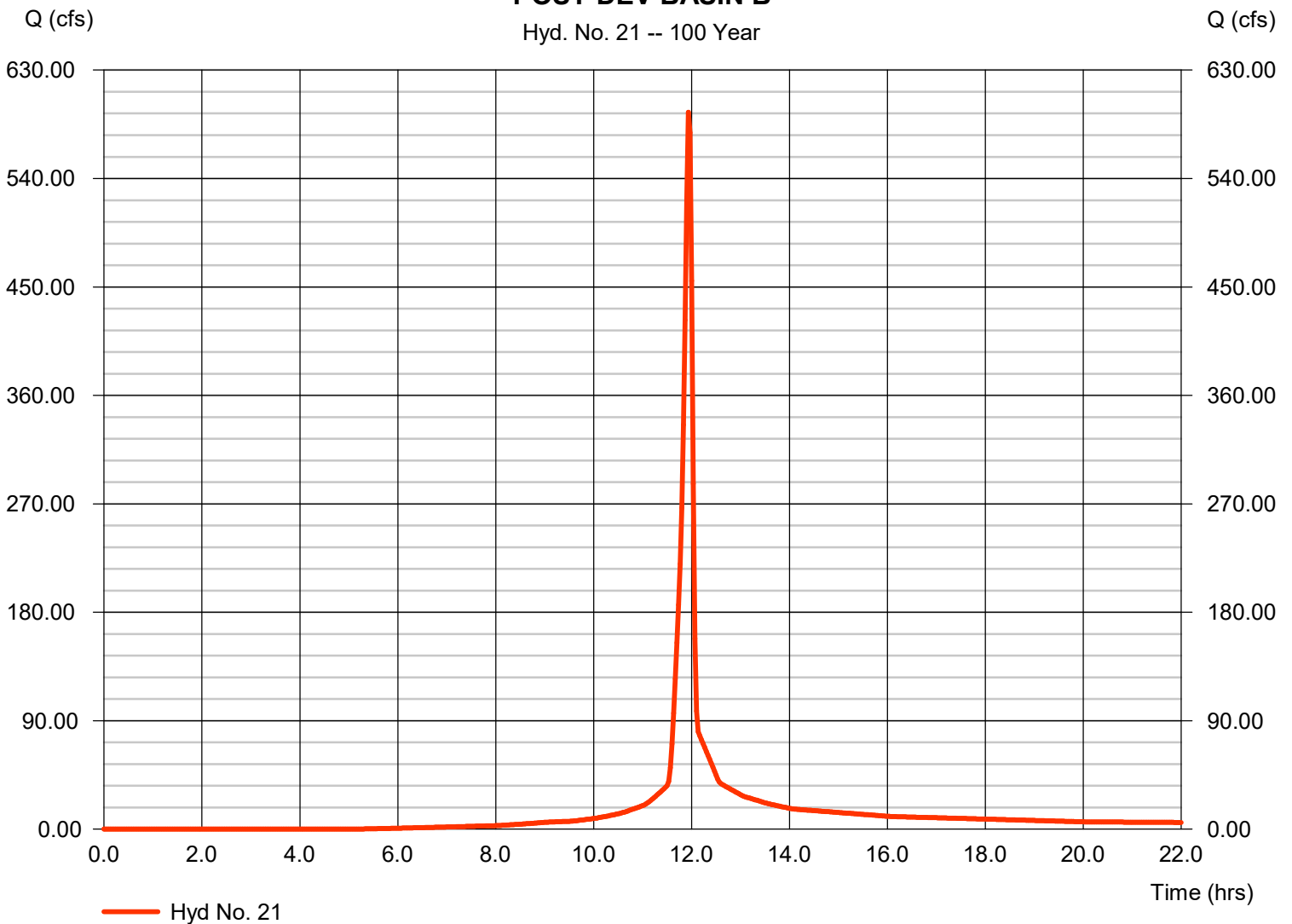
POST-DEV BASIN B

| | | | |
|-----------------|--------------|--------------------|------------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 595.01 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,241,564 cuft |
| Drainage area | = 67.440 ac | Curve number | = 80* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 7.77 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(13.210 x 55) + (16.000 x 65) + (38.230 x 95)] / 67.440

POST-DEV BASIN B

Hyd. No. 21 -- 100 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 22

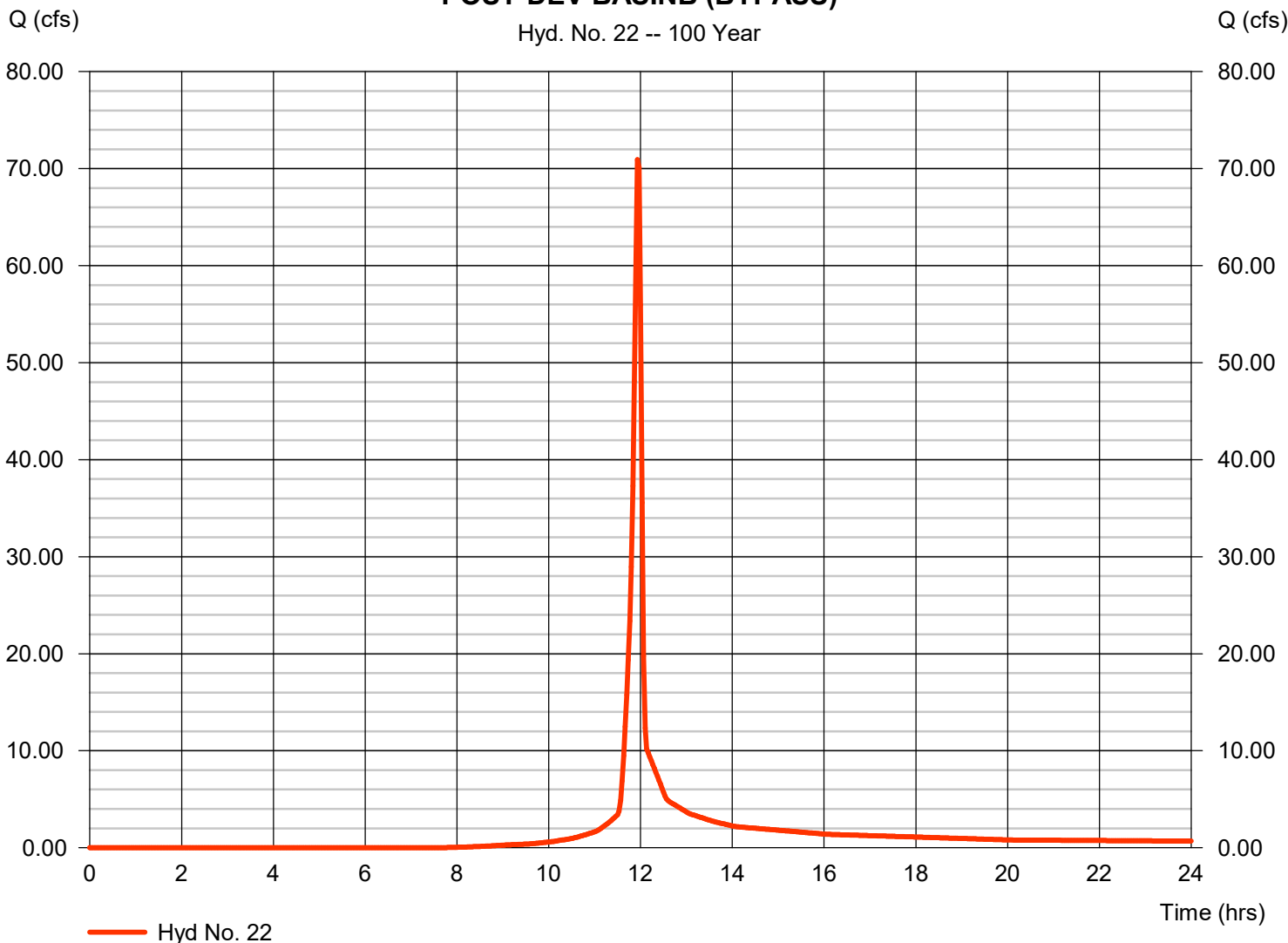
POST-DEV BASINB (BYPASS)

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 70.93 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 11.93 hrs |
| Time interval | = 2 min | Hyd. volume | = 143,769 cuft |
| Drainage area | = 9.900 ac | Curve number | = 70* |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 5.00 min |
| Total precip. | = 7.77 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |

* Composite (Area/CN) = [(3.750 x 95) + (6.150 x 55)] / 9.900

POST-DEV BASINB (BYPASS)

Hyd. No. 22 -- 100 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 02 / 28 / 2024

Hyd. No. 23

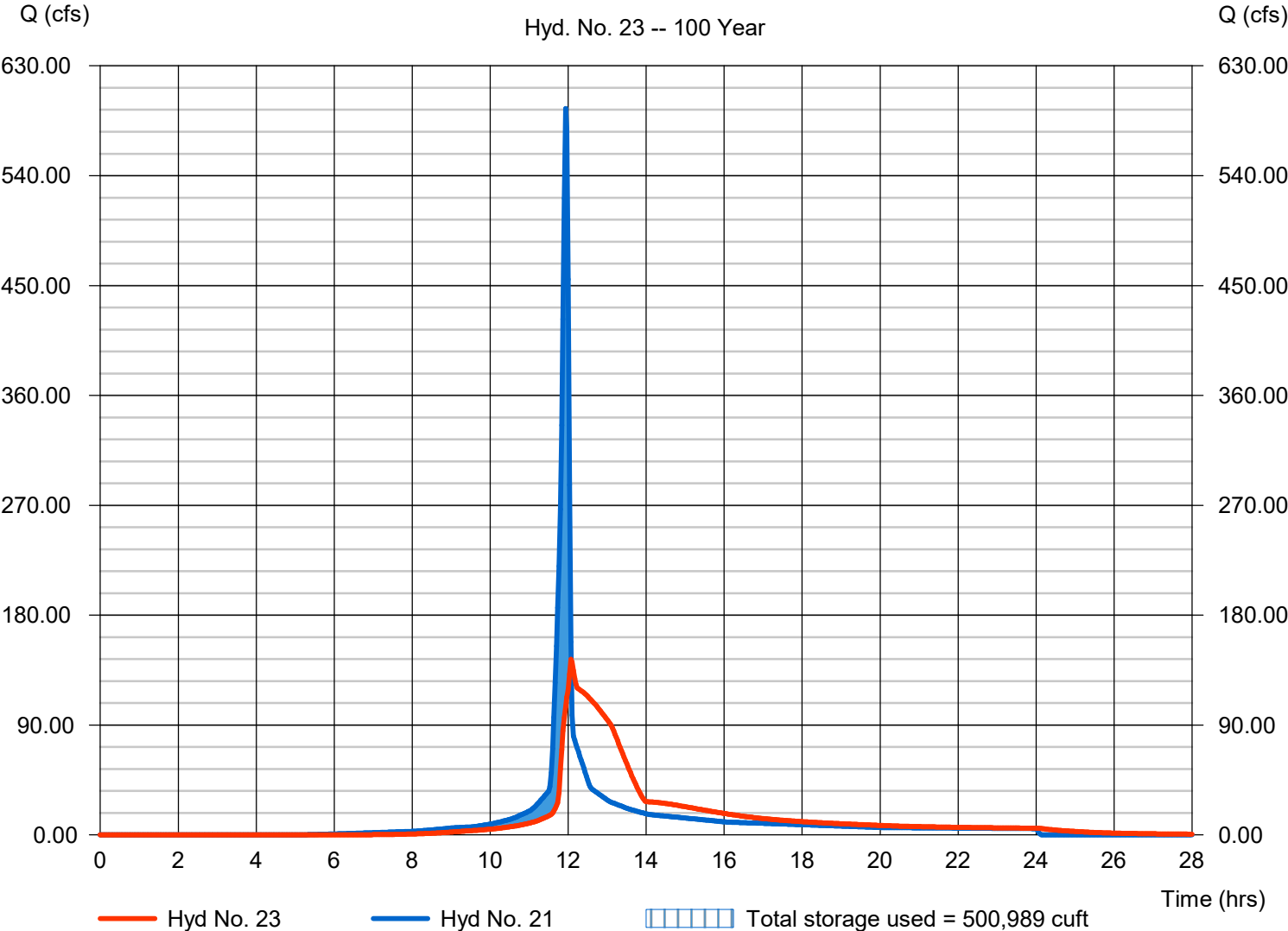
POST-BASIN B POND

| | | | |
|-----------------|-------------------------|----------------|------------------|
| Hydrograph type | = Reservoir | Peak discharge | = 143.86 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 12.07 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,241,510 cuft |
| Inflow hyd. No. | = 21 - POST-DEV BASIN B | Max. Elevation | = 1088.82 ft |
| Reservoir name | = WET POND 2 | Max. Storage | = 500,989 cuft |

Storage Indication method used.

POST-BASIN B POND

Hyd. No. 23 -- 100 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

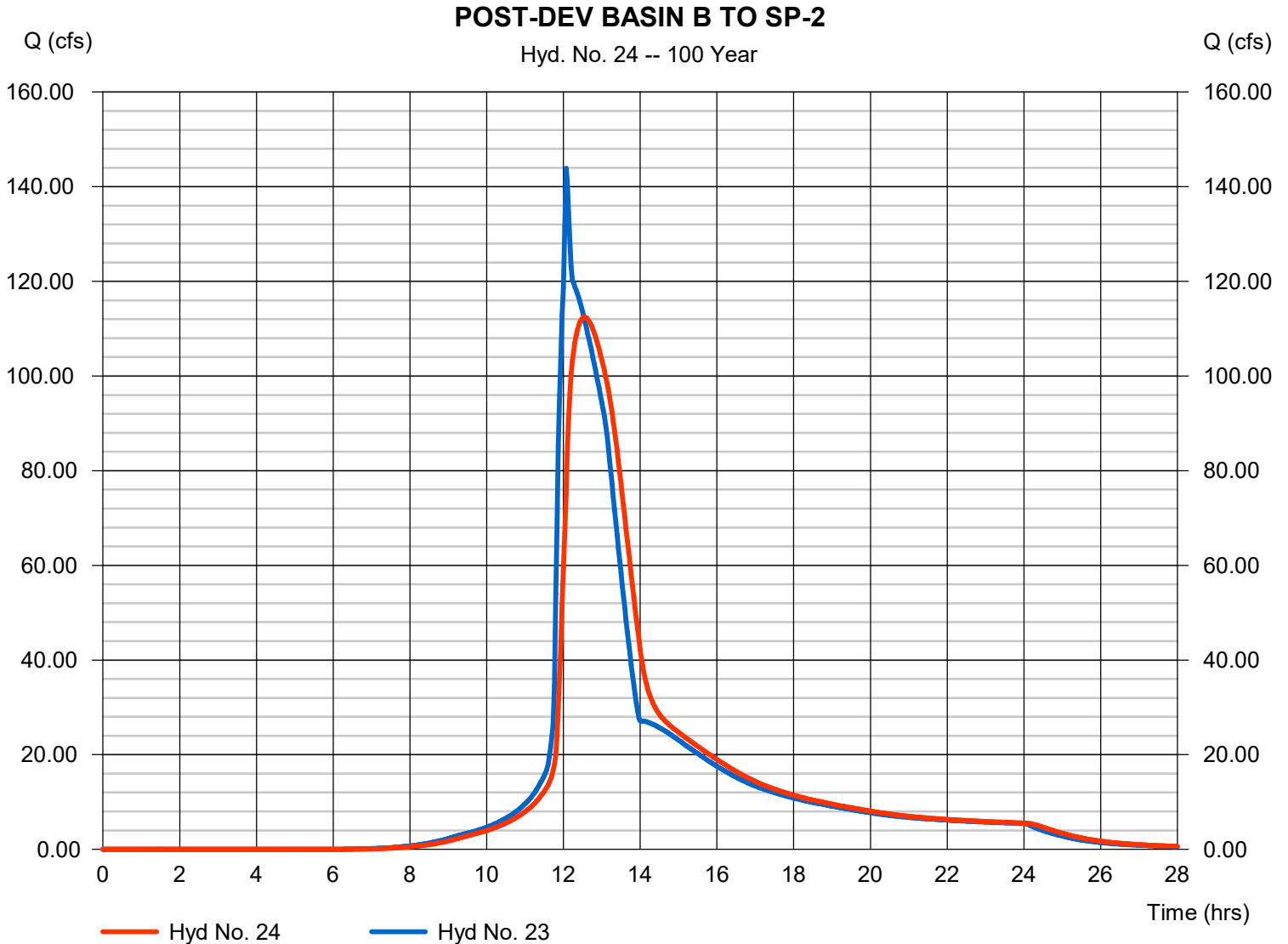
Wednesday, 02 / 28 / 2024

Hyd. No. 24

POST-DEV BASIN B TO SP-2

| | | | |
|-----------------|--------------------------|----------------|------------------|
| Hydrograph type | = Reach | Peak discharge | = 112.45 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 12.53 hrs |
| Time interval | = 2 min | Hyd. volume | = 1,241,072 cuft |
| Inflow hyd. No. | = 23 - POST-BASIN B POND | Section type | = Trapezoidal |
| Reach length | = 1295.0 ft | Channel slope | = 4.0 % |
| Manning's n | = 0.150 | Bottom width | = 18.0 ft |
| Side slope | = 10.0:1 | Max. depth | = 2.0 ft |
| Rating curve x | = 0.289 | Rating curve m | = 1.281 |
| Ave. velocity | = 1.13 ft/s | Routing coeff. | = 0.1254 |

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

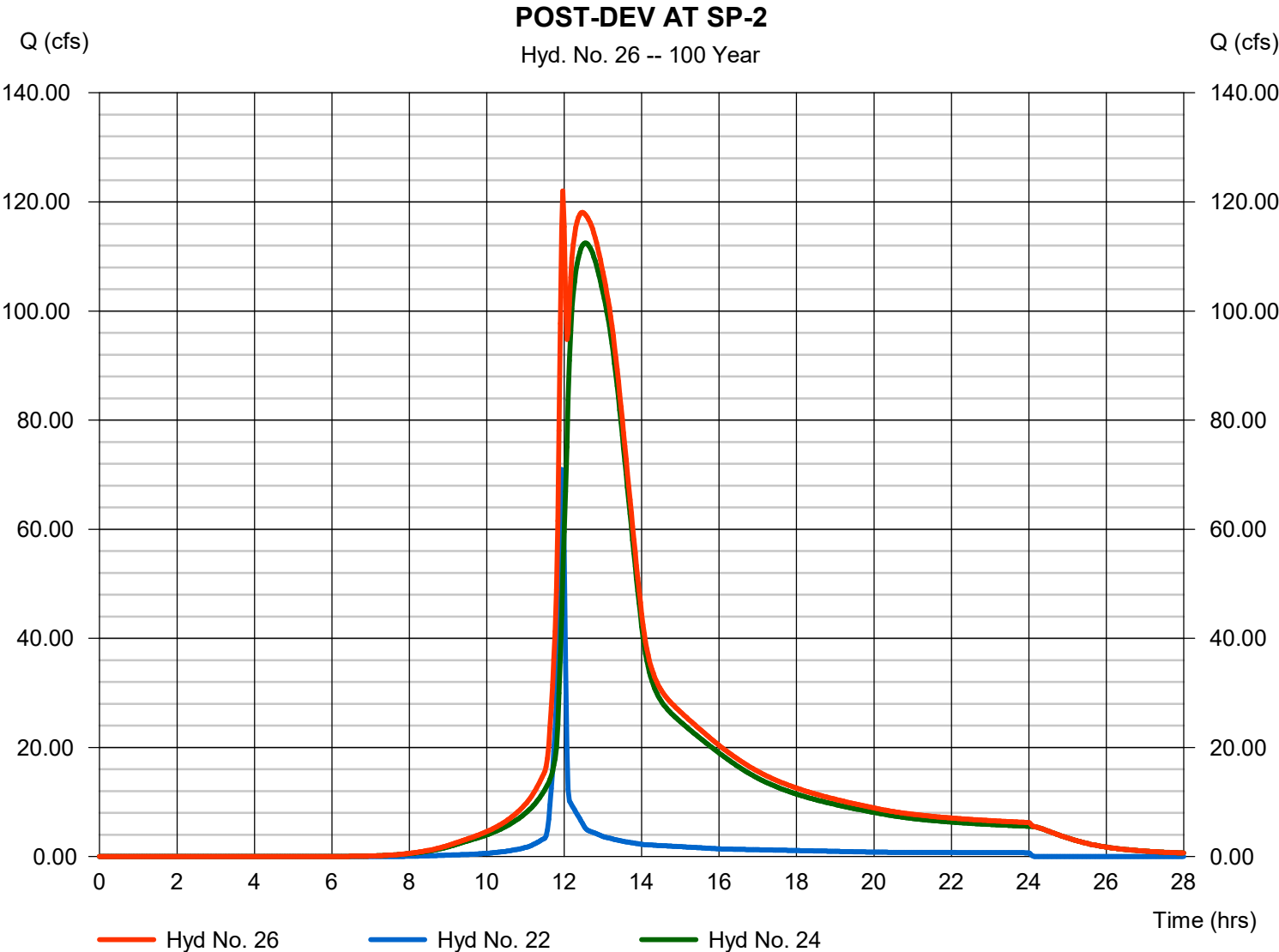
Wednesday, 02 / 28 / 2024

Hyd. No. 26

POST-DEV AT SP-2

Hydrograph type = Combine
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyds. = 22, 24

Peak discharge = 122.02 cfs
Time to peak = 11.97 hrs
Hyd. volume = 1,384,841 cuft
Contrib. drain. area = 9.900 ac

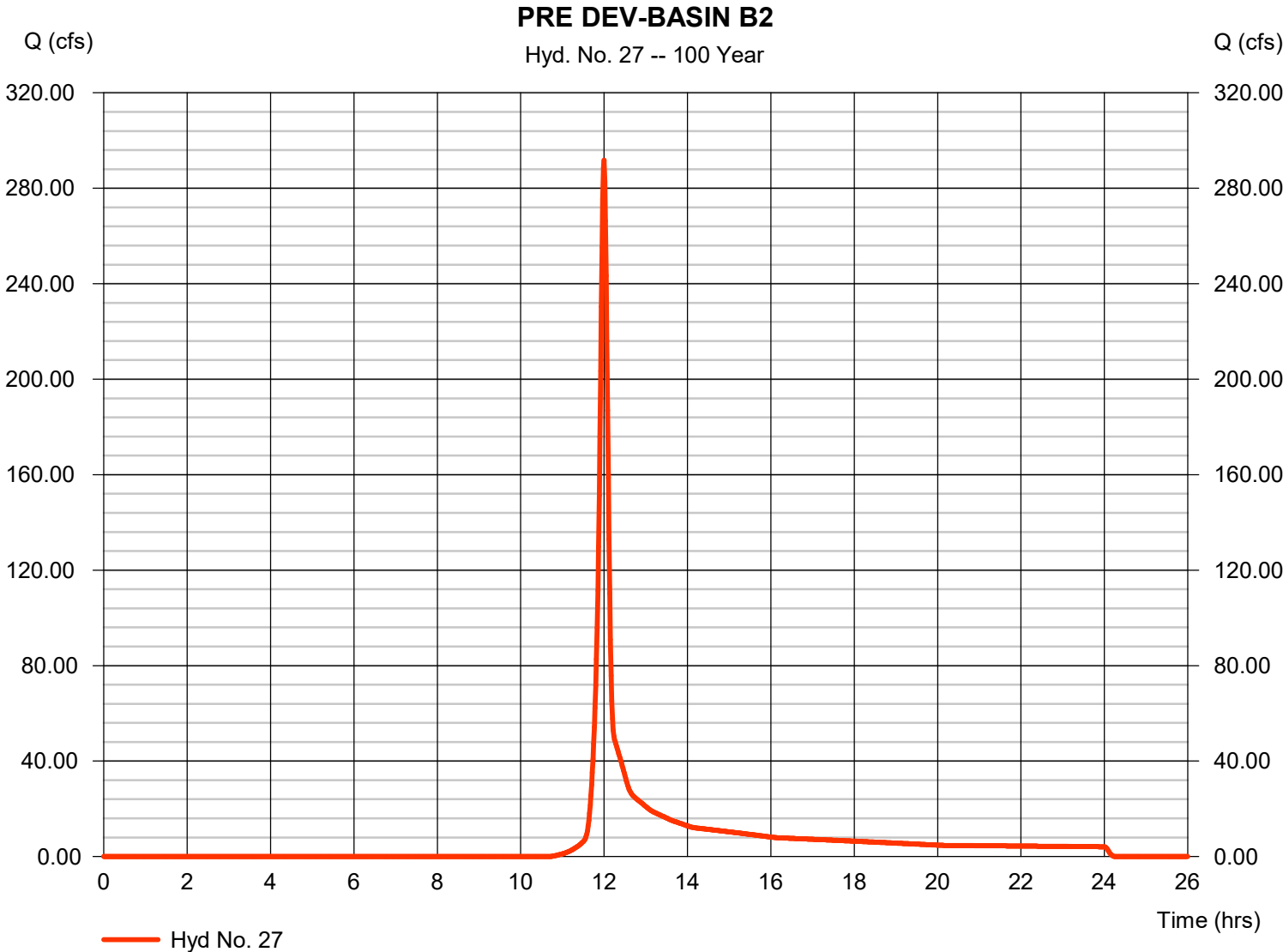


Hydrograph Report

Hyd. No. 27

PRE DEV-BASIN B2

| | | | |
|-----------------|--------------|--------------------|----------------|
| Hydrograph type | = SCS Runoff | Peak discharge | = 291.72 cfs |
| Storm frequency | = 100 yrs | Time to peak | = 12.00 hrs |
| Time interval | = 1 min | Hyd. volume | = 667,784 cuft |
| Drainage area | = 70.000 ac | Curve number | = 55 |
| Basin Slope | = 0.0 % | Hydraulic length | = 0 ft |
| Tc method | = User | Time of conc. (Tc) | = 10.00 min |
| Total precip. | = 7.77 in | Distribution | = Type II |
| Storm duration | = 24 hrs | Shape factor | = 484 |



Appendix F

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool

Version 2.2

General Information

| | | | |
|--------------------------|---------------------|-----------------------------|--|
| Name of Developer: | Audubon Development | Date Submitted: | |
| Development Name: | Cagle Mill | Permit Number: | |
| Site Location / Address: | 4745 Cagle Mill Rd | Developer Contact: | |
| | Lula, GA 30554 | Phone Number: | |
| Development Type: | | Name of Engineer(s): | |
| | | Maintenance Responsibility: | |

Site Summary

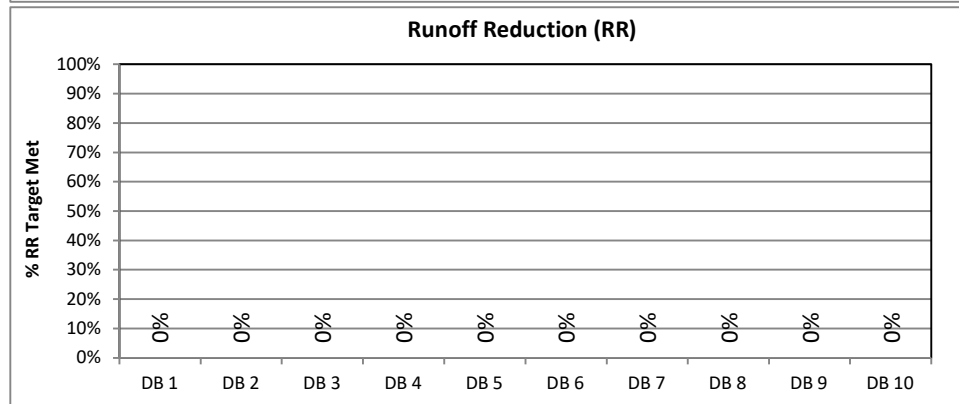
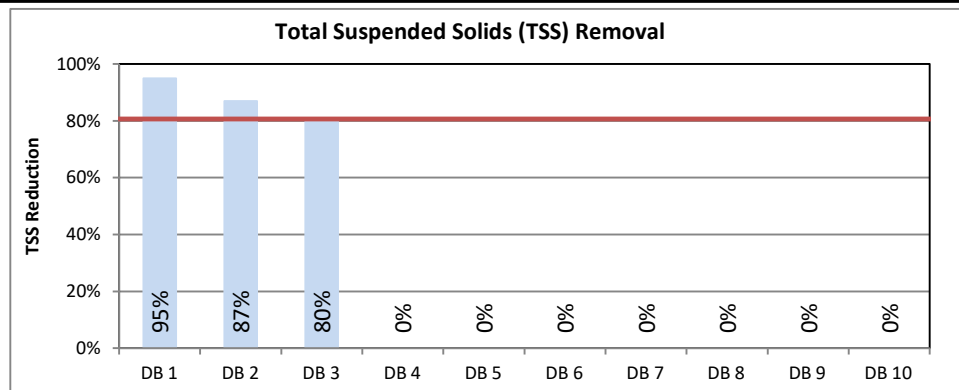
Total Pre-Development Area (ac): 129.38
Total Post-Development Area (ac): 140.62
Total Treated Area (ac): 137.31
Total Untreated Area (ac): 3.31

| | | I (ac) | P (ac) | CA (ac) |
|--------------|-------------------|--------------|--------------|-------------|
| A | DB 1 | 31.06 | 39.30 | 0.00 |
| B | DB 2 | 38.23 | 29.21 | 0.00 |
| C | DB 3 | 1.52 | 1.30 | 0.00 |
| | Drainage Basin 4 | DB 4 | 0.00 | 0.00 |
| | Drainage Basin 5 | DB 5 | 0.00 | 0.00 |
| | Drainage Basin 6 | DB 6 | 0.00 | 0.00 |
| | Drainage Basin 7 | DB 7 | 0.00 | 0.00 |
| | Drainage Basin 8 | DB 8 | 0.00 | 0.00 |
| | Drainage Basin 9 | DB 9 | 0.00 | 0.00 |
| | Drainage Basin 10 | DB 10 | 0.00 | 0.00 |
| TOTAL | | 70.81 | 69.81 | 0.00 |

I = Impervious Area, P = Pervious Area, CA = Conservation Area

Target Runoff Reduction Volume Achieved? No
Target TSS Removal Achieved? Yes

Total Target Runoff Reduction Volume (cf) 256,859
 Runoff Reduction Volume Achieved (cf) 0
 Total Target Water Quality Volume (cf) 308,231
 % TSS Removal Achieved 90%



Official Use Only

Tracking #: _____
Reviewed By: _____
Date Approved: _____

Conditions of Approval: _____

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name: **Cagle Mill**
 Drainage Basin Name: **A**

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG* A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|---|----------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Woods - Good Condition | | 30 | 53.31 | 55 | | 70 | | 77 | 53.31 | 100% |
| Impervious | | 98 | 0.00 | 98 | | 98 | | 98 | 0.00 | 0% |
| Open space - Good condition (grass cover > 75%) | | 39 | 0.00 | 61 | | 74 | | 80 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 53.31 | | 0.00 | | 0.00 | | 53.31 | 100% |

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|---|---------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Impervious | | 98 | 24.56 | 98 | | 98 | | 98 | 24.56 | 35% |
| Open space - Good condition (grass cover > 75%) | | 39 | 20.00 | 61 | | 74 | | 80 | 20.00 | 28% |
| Woods - Good Condition | | 30 | 19.30 | 55 | | 70 | | 77 | 19.30 | 27% |
| Impervious | | 98 | 6.50 | 98 | | 98 | | 98 | 6.50 | 9% |
| Open space - Good condition (grass cover > 75%) | | 39 | 0.00 | 61 | | 74 | | 80 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 70.36 | | 0.00 | | 0.00 | | 70.36 | 100% |

Impervious (ac) 31.06
 Rv 0.45
 Weighted CN 76
 Potential Max Soil Retention, S_{post} (in) 3.21

Conservation Area Credits

Scenario 1: Natural Conservation Area **See the GSMM Volume 2, Section 2.3.3.3 for more information.*

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 2: Site Reforestation/Revegetation **See the GSMM Volume 2, Section 4.22 for more information.*

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 3: Soil Restoration **See the GSMM Volume 2, Section 4.23 for more information.*

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration

*See the GSMM Volume 2, Section 4.22 and 4.23 for more information.

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name: **Cagle Mill**
 Drainage Basin Name: **A**

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in) **1.00**

| | |
|--|---------|
| Total Site Area for Water Quality Volume (acres) | 70.36 |
| Target Runoff Reduction Volume (cf) | 114,243 |
| Target Water Quality Volume (cf) | 137,092 |

Select BMPs for Runoff Reduction and Water Quality

| | | Area Draining to Each BMP | | | Storage Volume Provided by BMP (cf) | RR Conveyance Volume Provided by BMP (cf) | Down-stream BMP | Runoff Reduction Calculations | | | | | WQ Calculations | | |
|-------------------------------|-------------------------------------|-------------------------------|---------------------------------|----------------------|-------------------------------------|---|-----------------|-------------------------------------|--|--------------------------------------|--------------------|------------------|--------------------------|-------------------------------|-------------------------|
| | | On-site Pervious Area (acres) | On-site Impervious Area (acres) | Offsite Area (acres) | | | | RR Volume from Direct Drainage (cf) | RR Volume from Upstream Practices (cf) | Total RR Volume Received by BMP (cf) | Runoff Reduction % | RR Achieved (cf) | Remaining RR Volume (cf) | WQ, from Direct Drainage (cf) | Effective TSS Removal % |
| BMP 1 | Stormwater Pond | 20.00 | 24.56 | | 70,000 | | BMP 2 | 88,325 | 0 | 88,325 | 0% | 0 | 88,325 | 105,990 | 80% |
| BMP 2 | Stormwater Wetlands – Level 1 | | 0.00 | | | 88,325 | | 0 | 88,325 | 88,325 | 0% | 0 | 88,325 | 0 | 80% |
| BMP 3 | Bioretention Basin (w/o underdrain) | | 2.50 | | | | | 8,621 | 0 | 8,621 | 100% | 0 | 8,621 | 10,346 | 100% |
| BMP 4 | Bioretention Basin (w/o underdrain) | | 2.50 | | | | | 8,621 | 0 | 8,621 | 100% | 0 | 8,621 | 10,346 | 100% |
| BMP 5 | Regenerative Stormwater Conveyance | 19.30 | 1.50 | | | | | 8,676 | 0 | 8,676 | 0% | 0 | 8,676 | 10,411 | 80% |
| BMP 6 | Select a BMP... | | 0.00 | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 7 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 8 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 9 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 10 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| TOTAL | | 39.30 | 31.06 | 0.00 | | | | 114,243 | | | | 0 | | 137,092 | |
| UNTREATED AREA (acres) | | 0.00 | 0.00 | | | | | | | | | | | | |

| | |
|--|---------|
| Target Runoff Reduction Volume (cf) | 114,243 |
| Target Achieved? | No |
| Remaining Runoff Reduction Volume (cf) | 114,243 |

| | |
|----------------------------------|---------|
| Target Water Quality Volume (cf) | 137,092 |
| % TSS Removal Achieved | 95% |
| Target Achieved? | Yes! |
| Remaining TSS Removal % | 0% |

Channel and Flood Protection Calculations

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|----------------------------|-------------------|-------------------|--------------------|---------------------|
| Target Rainfall Event (in) | | | | |

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|--|-------------------|-------------------|--------------------|---------------------|
| Pre-Development Runoff Volume (in) | 0.00 | 0.00 | 0.00 | 0.00 |
| Post Development Runoff Volume (in) with no BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Post-Development Runoff Volume (in) with BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted CN | 0 | 0 | 0 | 0 |

*See Stormwater Management Standards to Determine Detention Requirements.

Comments

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name: **Cagle Mill**
 Drainage Basin Name: **B**

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG* A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|-----------------------------|----------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Woods - Good Condition | | 30 | 70.00 | 55 | | 70 | | 77 | 70.00 | 100% |
| Select a land cover type... | | 0 | 0.00 | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 70.00 | | 0.00 | | 0.00 | | 70.00 | 100% |

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|---|---------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Woods - Good Condition | | 30 | 13.21 | 55 | | 70 | | 77 | 13.21 | 20% |
| Open space - Good condition (grass cover > 75%) | | 39 | 16.00 | 61 | | 74 | | 80 | 16.00 | 24% |
| Impervious | | 98 | 38.23 | 98 | | 98 | | 98 | 38.23 | 57% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 67.44 | | 0.00 | | 0.00 | | 67.44 | 100% |

Impervious (ac) 38.23
 Rv 0.56
 Weighted CN 81
 Potential Max Soil Retention, S_{post} (in) 2.38

Conservation Area Credits

Scenario 1: Natural Conservation Area **See the GSMM Volume 2, Section 2.3.3.3 for more information.*

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 2: Site Reforestation/Revegetation **See the GSMM Volume 2, Section 4.22 for more information.*

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 3: Soil Restoration **See the GSMM Volume 2, Section 4.23 for more information.*

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration

**See the GSMM Volume 2, Section 4.22 and 4.23 for more information.*

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name: **Cagle Mill**
 Drainage Basin Name: **B**

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in) **1.00**

| | |
|--|---------|
| Total Site Area for Water Quality Volume (acres) | 67.44 |
| Target Runoff Reduction Volume (cf) | 137,138 |
| Target Water Quality Volume (cf) | 164,565 |

Select BMPs for Runoff Reduction and Water Quality

| | | Area Draining to Each BMP | | | Storage Volume Provided by BMP (cf) | RR Conveyance Volume Provided by BMP (cf) | Down-stream BMP | Runoff Reduction Calculations | | | | | WQ Calculations | | |
|------------------------|------------------------------------|-------------------------------|---------------------------------|----------------------|-------------------------------------|---|-----------------|-------------------------------------|--|--------------------------------------|--------------------|------------------|--------------------------|-------------------------------|-------------------------|
| | | On-site Pervious Area (acres) | On-site Impervious Area (acres) | Offsite Area (acres) | | | | RR Volume from Direct Drainage (cf) | RR Volume from Upstream Practices (cf) | Total RR Volume Received by BMP (cf) | Runoff Reduction % | RR Achieved (cf) | Remaining RR Volume (cf) | WQ, from Direct Drainage (cf) | Effective TSS Removal % |
| BMP 1 | Stormwater Pond | 16.00 | 38.23 | 13.21 | | | | 134,740 | 0 | 134,740 | 0% | 0 | 134,740 | 161,688 | 80% |
| BMP 2 | Regenerative Stormwater Conveyance | 6.15 | 3.75 | | | | | 14,048 | 0 | 14,048 | 0% | 0 | 14,048 | 16,858 | 80% |
| BMP 3 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 4 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 5 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 6 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 7 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 8 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 9 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 10 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| TOTAL | | 22.15 | 41.98 | 13.21 | | | | 148,788 | | | | 0 | | 178,546 | |
| UNTREATED AREA (acres) | | 7.06 | 0.00 | | | | | | | | | | | | |

| | |
|--|---------|
| Target Runoff Reduction Volume (cf) | 137,138 |
| Target Achieved? | No |
| Remaining Runoff Reduction Volume (cf) | 137,138 |

| | |
|----------------------------------|---------|
| Target Water Quality Volume (cf) | 164,565 |
| % TSS Removal Achieved | 87% |
| Target Achieved? | Yes! |
| Remaining TSS Removal % | 0% |

Channel and Flood Protection Calculations

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|----------------------------|-------------------|-------------------|--------------------|---------------------|
| Target Rainfall Event (in) | | | | |

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|--|-------------------|-------------------|--------------------|---------------------|
| Pre-Development Runoff Volume (in) | 0.00 | 0.00 | 0.00 | 0.00 |
| Post Development Runoff Volume (in) with no BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Post-Development Runoff Volume (in) with BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted CN | 0 | 0 | 0 | 0 |

*See Stormwater Management Standards to Determine Detention Requirements.

Comments

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name: **Cagle Mill**
 Drainage Basin Name: **C**

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG* A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|-----------------------------|----------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Woods - Good Condition | | 30 | 6.07 | 55 | | 70 | | 77 | 6.07 | 100% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 6.07 | | 0.00 | | 0.00 | | 6.07 | 100% |

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

| Cover Type | HSG A (acres) | CN | HSG B (acres) | CN | HSG C (acres) | CN | HSG D (acres) | CN | Total | % Cover |
|--|---------------|----|---------------|----|---------------|----|---------------|----|-------|---------|
| Impervious | | 98 | 1.52 | 98 | | 98 | | 98 | 1.52 | 54% |
| Open space - Fair condition (grass cover 50% to 75%) | | 49 | 1.30 | 69 | | 79 | | 84 | 1.30 | 46% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Select a land cover type... | | 0 | | 0 | | 0 | | 0 | 0.00 | 0% |
| Local Jurisdiction Input | | | | | | | | | 0.00 | 0% |
| Other | | | | | | | | | 0.00 | 0% |
| Total | 0.00 | | 2.82 | | 0.00 | | 0.00 | | 2.82 | 100% |

Impervious (ac) 1.52
 Rv 0.54
 Weighted CN 85
 Potential Max Soil Retention, S_{post} (in) 1.82

Conservation Area Credits

Scenario 1: Natural Conservation Area **See the GSMM Volume 2, Section 2.3.3.3 for more information.*

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 2: Site Reforestation/Revegetation **See the GSMM Volume 2, Section 4.22 for more information.*

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 3: Soil Restoration **See the GSMM Volume 2, Section 4.23 for more information.*

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration **See the GSMM Volume 2, Section 4.22 and 4.23 for more information.*

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in)

| | |
|--|-------|
| Total Site Area for Water Quality Volume (acres) | 2.82 |
| Target Runoff Reduction Volume (cf) | 5,478 |
| Target Water Quality Volume (cf) | 6,573 |

Select BMPs for Runoff Reduction and Water Quality

| | | Area Draining to Each BMP | | | Storage Volume Provided by BMP (cf) | RR Conveyance Volume Provided by BMP (cf) | Down-stream BMP | Runoff Reduction Calculations | | | | | WQ Calculations | | |
|------------------------|-------------------------------|-------------------------------|---------------------------------|----------------------|-------------------------------------|---|-----------------|-------------------------------------|--|--------------------------------------|--------------------|------------------|--------------------------|-------------------------------|-------------------------|
| | | On-site Pervious Area (acres) | On-site Impervious Area (acres) | Offsite Area (acres) | | | | RR Volume from Direct Drainage (cf) | RR Volume from Upstream Practices (cf) | Total RR Volume Received by BMP (cf) | Runoff Reduction % | RR Achieved (cf) | Remaining RR Volume (cf) | WQ, from Direct Drainage (cf) | Effective TSS Removal % |
| BMP 1 | Stormwater Wetlands – Level 1 | 1.30 | 1.52 | | | 5,478 | | 5,478 | 0 | 5,478 | 0% | 0 | 5,478 | 6,573 | 80% |
| BMP 2 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 3 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 4 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 5 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 6 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 7 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 8 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 9 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| BMP 10 | Select a BMP... | | | | | | | 0 | 0 | 0 | N/A | 0 | 0 | 0 | N/A |
| TOTAL | | 1.30 | 1.52 | 0.00 | | | | 5,478 | | | | 0 | | 6,573 | |
| UNTREATED AREA (acres) | | 0.00 | 0.00 | | | | | | | | | | | | |

| | |
|--|-------|
| Target Runoff Reduction Volume (cf) | 5,478 |
| Target Achieved? | No |
| Remaining Runoff Reduction Volume (cf) | 5,478 |

| | |
|----------------------------------|-------|
| Target Water Quality Volume (cf) | 6,573 |
| % TSS Removal Achieved | 80% |
| Target Achieved? | Yes! |
| Remaining TSS Removal % | 0% |

Channel and Flood Protection Calculations

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|----------------------------|-------------------|-------------------|--------------------|---------------------|
| Target Rainfall Event (in) | | | | |

| | 1-yr, 24-hr storm | 2-yr, 24-hr storm | 25-yr, 24-hr storm | 100-yr, 24-hr storm |
|--|-------------------|-------------------|--------------------|---------------------|
| Pre-Development Runoff Volume (in) | 0.00 | 0.00 | 0.00 | 0.00 |
| Post Development Runoff Volume (in) with no BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Post-Development Runoff Volume (in) with BMPs | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted CN | 0 | 0 | 0 | 0 |

*See Stormwater Management Standards to Determine Detention Requirements.

Comments



3500 Parkway Lane, Suite 500
Peachtree Corners, GA 30092
T: 678.336.7740

Jason Bach, P.E.
Project Manager
Pond and Company
678-631-9522
bachj@pondco.com

April 5, 2024

Hall County Department of Public Works & Utilities
Attn: Sewer Department
2875 Browns Bridge Road
Gainesville, GA 30504-5635

RE: Letter of Intent for sewer service – Shops and Residences at Cagle Mill Project

To Whom It May Concern,

Brightside homes is proposing the development of a mixed use community across two tracts in unincorporated Hall County. The site is located between Highway 365 and Cagle Mill Road, approximately 5,200 feet northeast of the intersection of 365 and Whitehall Road.

The proposed development will consist of 348 Residential units (single family attached and detached) and approximately 38,000 SF of industrial space. The residential and industrial tracts are intended to be zoned and permitted as separate developments by the same developer/builder.

It is our intent to serve the site with gravity sewer to a centrally located, privately maintained, pump station, where it will pump via forcemain to the gravity manhole located just outside of the hall county pump station located along the Highway 365 right-of-way.

We are requesting a letter of sewer availability from your department to assist in the rezoning process, currently underway.

Calculations and maps for anticipated stormwater flow and tie-in location are included as an attachment to this letter.

Please do not hesitate to contact me at 678-631-9522 or bachj@pondco.com if you have any questions.

Thank you for your time and consideration.

Sincerely,

Jason Bach, P.E.

Application for Sewer Availability Letter

Date: 2/22/2024

Name of Applicant: Josh Boling Contact Number: 770-893-8002

Address of Applicant: 6525 The Corners Parkway Suite 216

City: Peachtree Corners State: GA Zip: 30092 E-mail: jboling@acmaps.com

Name of Agent: Jason Bach, Pond & Company Contact Number: 678-631-9522

Address of Agent: 3500 Parkway Lane, Suite 500

City: Peachtree Corners State: GA Zip: 30092 E-mail: bachj@pondco.com

THE APPLICANT NAMED ABOVE AFFIRMS THAT THEY ARE THE OWNER OR AGENT FOR THE OWNER OF THE PROPERTY DESCRIBED BELOW AND REQUESTS: (Please check the purpose of letter request and fill in all applicable information legibly and completely.)

AVAILABILITY: [] General Availability [x] Rezoning [] Conditional Use Permit

Availability letters will require a minimum of one week from the date of application submittal.

Request from Agricultural Residential III (ARIII) to Planned Residential Development (PRD)
A5-Agricultural (AR-IV) (Present Zoning) (Requested Zoning)

For the Purpose of Residential Development (Type of Development)

Address of Property: 4745 Cagle Mill Road, Lula, GA

Nearest Intersection to Property: Whitehall and Cagle Mill Rd.

Size of Tract: 146.12 ac acre(s), Lane Lot Number(s): , District(s):

Development Estimate Average Daily Sewer Flow (GPD): 71,475

Property Tax Parcel Number: 15007000254 & 15019000043 Proposed number of Lots: 348 units + amenities

(Below: For properties within protected watershed districts only)

Gross Density: units per acre Net Density: units per acre

Estimated amount of impervious surface: Minimum Lot Size:

Nicole Lynn Manuel Notary

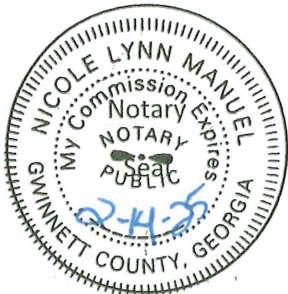
Signature of Owner(s)/Agent(s)

Jason Bach, Pond and Company

Printed Name of Owner(s)/Agent(s)

Civil Engineer of Record

Title of Agent



SEWER CAPACITY CALCULATIONS

The following sewer demand flows calculations are for the proposed single family and townhomes development located at 4745 Cagle Mill Road, Lula, GA 30554. These calculations are based on Georgia Department of Public Health On-Site Sewage Management Systems Manual – Section J. The proposed site will contain 297 single family units, 51 units townhomes, a 3,300 SF clubhouse, and a separate parcel with 38,000 SF of warehouse. An assumed peaking factor of 2.5 is used in instantaneous peak flow calculations.

1. Proposed Daily Flow

- a. Single Family (assumed 3 bedrooms / unit)

$$297 \text{ Units} * \frac{200 \text{ GPD}}{\text{Units}} = 59,400 \text{ GPD}$$

- b. Townhome (assumed 3 bedrooms / unit)

$$51 \text{ Units} * \frac{200 \text{ GPD}}{\text{Units}} = 10,200 \text{ GPD}$$

- c. Clubhouse (assumed “Fitness Center/Spa” category per GA DPH) (assumed 25 people capacity)

$$25 \text{ Persons} * \frac{50 \text{ GPD}}{\text{Person}} = 1,250 \text{ GPD}$$

- d. Warehouse (Combined 38,000 SF, approximately 25 workers, no showers or kitchen)

$$25 \text{ Persons} * \frac{25 \text{ GPD}}{\text{Person}} = 625 \text{ GPD}$$

2. Assumed Peak Factor of (2.5)

Proposed Total Usage = 71,475 GPD = 49.6 GPM

Instantaneous Peak Flow = 124.1 GPM

Consequently, this project will have an estimated daily flow of 71,475 gallons and an instantaneous peak flow of 124.1 gallons per minute.

Please do not hesitate to contact me with any questions or concerns.



Jason Bach, PE
Project Manager
Civil Engineer

POND
 3500 Peachtree Corners
 Suite 500
 Peachtree Corners
 Georgia 30092

CONTRACTOR: [Redacted]
 DATE: [Redacted]

CLIENT INFORMATION
 PROJECT NAME: RESIDENCE AT CAGLE MILL
 ADDRESS: 4736 CAGLE MILL ROAD, LULA, GA



PROJECT NAME: RESIDENCE AT CAGLE MILL

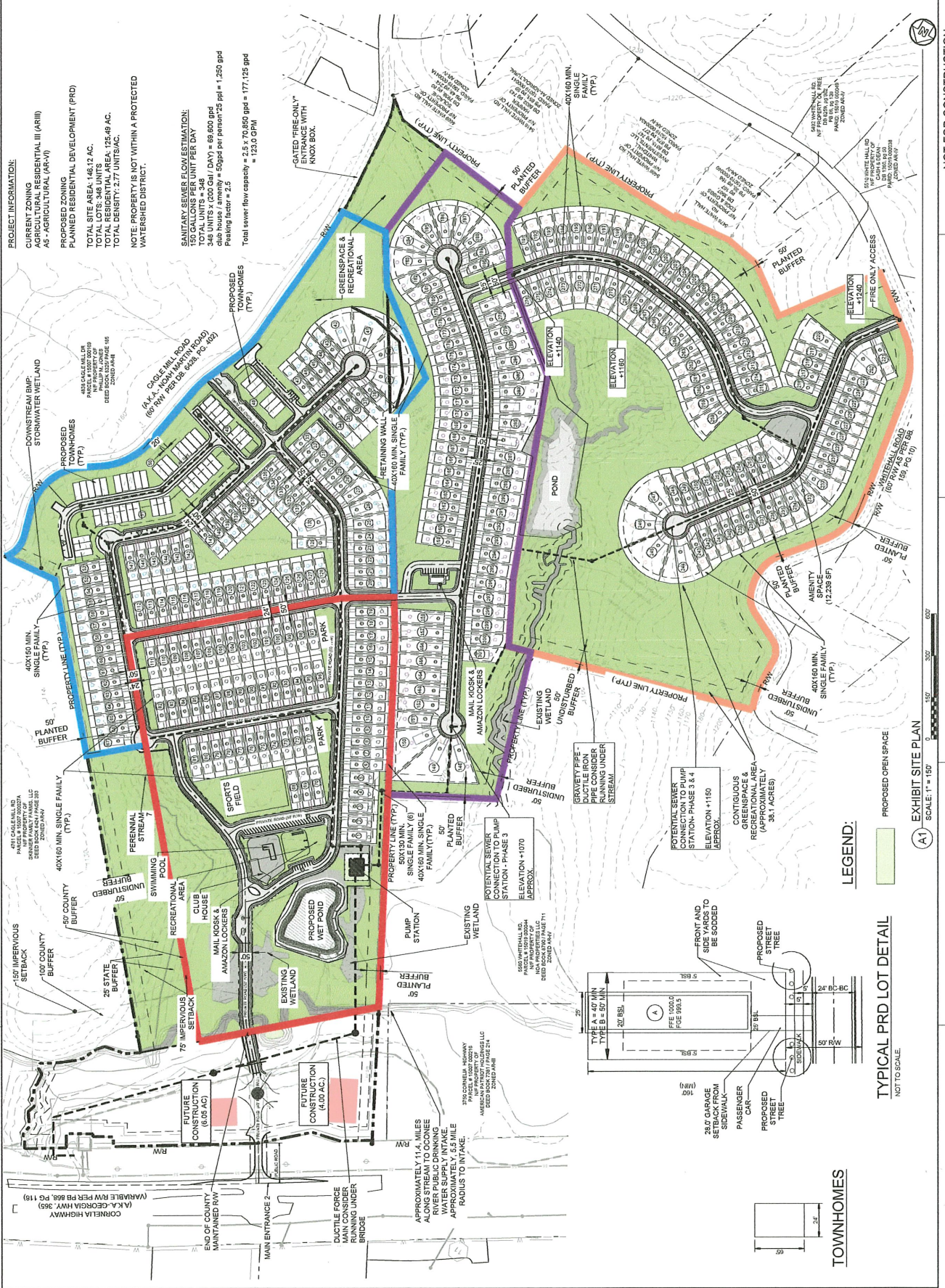
4736 CAGLE MILL ROAD, LULA, GA

DESIGNED BY: KSH
 DRAWN BY: KSH/KAS
 CHECKED BY: JBAOH
 SUBMITTED BY:
 DATE: 12 FEB 2024
 PROJECT #: 120203

SHEET TITLE: ZONING SITE PLAN

SHEET NUMBER: CS101

SHEET NUMBER: ORIGINAL SHEET FILE: 31' X 3'



NOT FOR CONSTRUCTION

| PARKING SPACES | REQUIRED | PROVIDED |
|------------------|----------|----------|
| NORTH INDUSTRIAL | 29 | 29 |
| SOUTH INDUSTRIAL | 32 | 32 |

| LOADING DOCKS | REQUIRED | PROVIDED |
|------------------|----------|----------|
| NORTH INDUSTRIAL | 2 | 2 |
| SOUTH INDUSTRIAL | 2 | 2 |

TOTAL INDUSTRIAL ZONED AREA: 10.98 AC
 REQUIRED OPEN SPACE: 10.98 AC (100%)
 PROVIDED OPEN SPACE: 10.98 AC
 RATIO (OPEN SPACE / TOTAL AREA) = 75%
 REQUIRED CONTIGUOUS OPEN SPACE (75%) = 3.2 AC
 PROVIDED CONTIGUOUS OPEN SPACE (100%) = 4.3 AC
 (AS PER 17.430.120)

EXISTING ZONING: AGRICULTURAL RESIDENTIAL III (AR-III)
PROPOSED ZONING: PLANNED INDUSTRIAL DISTRICT (PID)
CHARACTERISTICS: (HALL COUNTY REF. CODE) - 17.180.090
 A PLANNED INDUSTRIAL DEVELOPMENT SHOULD CONSIST OF LAND WHICH HAS BEEN DESIGNATED FOR A PLANNED, ORGANIZED AND CONTROLLED INDUSTRIAL USE OR FOR PLANNED INDUSTRIAL PARK. THE STANDARDS EMPLOYED SHOULD BE DESIGNED TO ENCOURAGE THE FORMATION AND CONTINUANCE OF A COMPATIBLE ENVIRONMENT FOR THE PLANNED INDUSTRIAL USES AND THE SURROUNDING LAND USES. COMMERCIAL USES AND OTHER INDUSTRIAL COMMERCIAL USES MAY BE INCORPORATED AS PART OF A PLANNED INDUSTRIAL DEVELOPMENT.

PERMITTED USES:
 RETAIL INDUSTRIAL PARKS, OFFICES AND OFFICE BUILDINGS, RADIO AND TELEVISION STUDIOS, STORAGE YARDS, FAMILY DAY CARE HOME, AND GROUP DAY CARE HOME

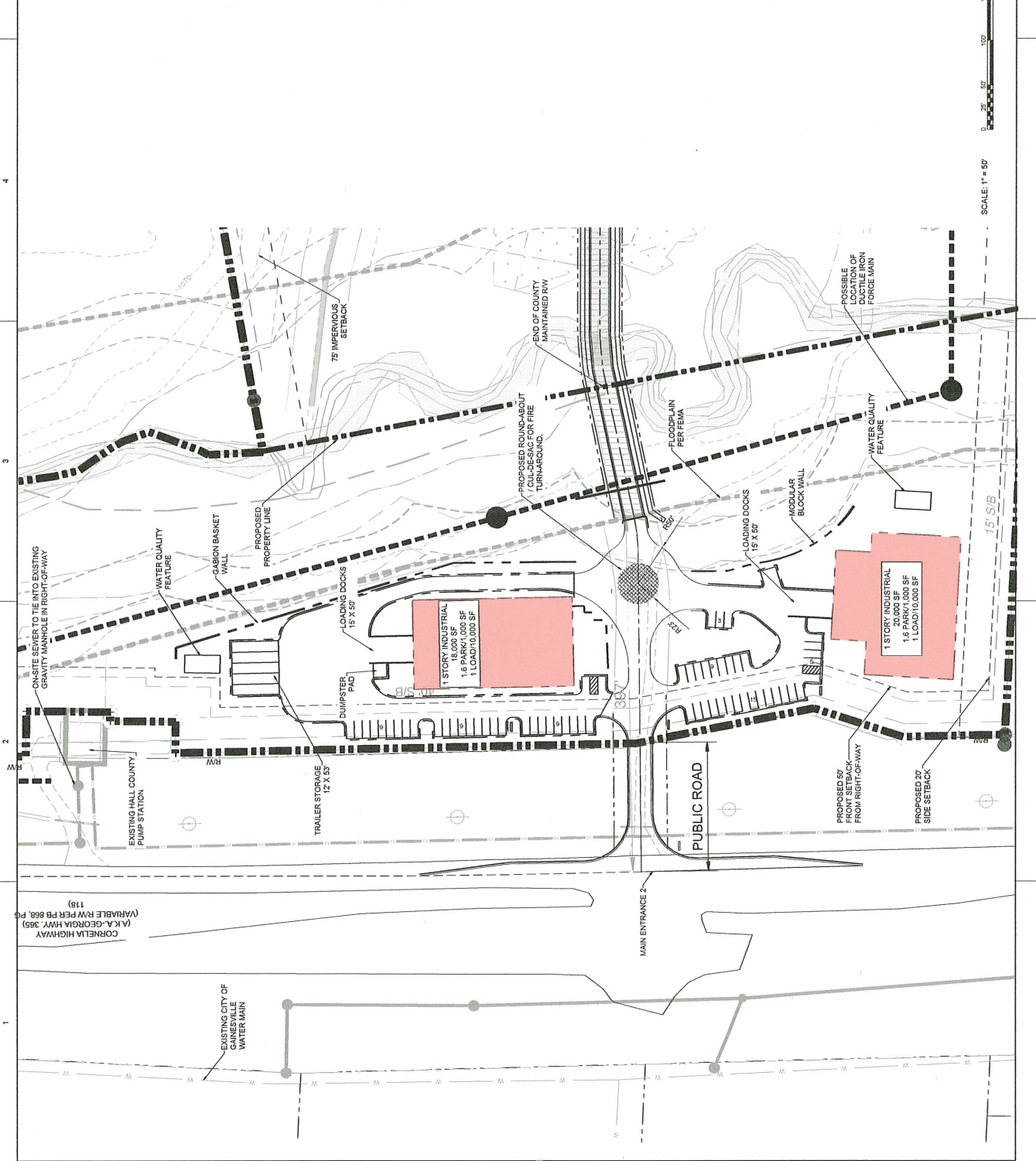
REQUIRED PLANS: (HALL COUNTY REF. CODE) - 17.180.090
 ALL OF THE GENERAL AND SPECIAL REQUIREMENTS FOR PLANNED DEVELOPMENTS SHALL BE PROVIDED. THE FOLLOWING SPECIFIC ITEMS SHALL ALSO BE ADDRESSED:

1. A SITE PLAN INDICATING THE PROPOSED SITE PREPARATION AND GRADING, STREETS AND PARKING LAYOUTS, UTILITIES, STORM DRAINAGE, WATER, GAS AND SEWAGE SYSTEMS AND ALL BUFFER AREAS.
2. THE DEVELOPMENT CONTROLS FOR THE DISTRICT SHALL BE SPECIFICALLY PROPOSED, INCLUDING BUILDING HEIGHTS, LOT SIZES, ETC., IF STANDARDS ARE NOT SPECIFICALLY PROPOSED. THEN THE APPLICABLE STANDARDS IN THE LIGHT INDUSTRIAL DISTRICT SHALL APPLY TOGETHER WITH THE SCREENING AND BUFFER REQUIREMENTS, SHALL APPLY.
3. IF OFFICE OR COMMERCIAL USES ARE PROPOSED IN CONJUNCTION WITH THE PLANNED INDUSTRIAL DEVELOPMENT, THE PLANNED INDUSTRIAL REQUIREMENTS IN THE PLANNED OFFICE DEVELOPMENT OR THE PLANNED COMMERCIAL DEVELOPMENT (DISTRICT) SHALL BE PROVIDED.
4. A PROPOSED DEVELOPMENT SCHEDULE AND LISTING OF PROPOSED USES SHALL BE PROVIDED.

SANITARY SEWER, FL GAS ESTIMATION:
 WAREHOUSE (COMBINED 35,000 SF)
 APPROXIMATELY 25 WORKERS, NO SHOWERS OR KITCHEN
 25 PERSONS X (25 GPD) = 625 GPD TOTAL
 Parking lot area = 2.5
 Total sewer flow capacity = 2.5 x 625 GPD = 1,562.5 GPD
 = 1.1 GPM

Know what's below.
 Call 811
 or Call 800-282-7411

SCALE: 1" = 50'





Hall County Government

PUBLIC WORKS AND UTILITIES

April 9, 2024

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

Jason Bach, Pond & Company
3500 Parkway Lane, Suite 500
Peachtree Corners, GA 30092

t: 770.531.6800 | f: 770.531.3945

Subject: Sanitary Sewer Letter of Availability
4745 Cagle Road
Parcel ID No: **15007 000254**
Lula, GA 30554

BILL NASH, P.E.

Director

Jorge Gomez

Assistant Director

Dear Mr. Bach,

In response to your request, this letter will serve as confirmation that Hall County has sufficient volume to serve the above development at Lula Road, (SR 52) at Cagle Road. The estimated average daily flow will be 71,475 GPD.

The existing sewer line is located near the property at Cornelia Hwy. An extension into the subject property is required to be performed by the developer at owner's cost.

Sanitary sewer capacity allocation is available on a first come, first serve basis by purchasing the sewer taps. As such, this "availability" letter does not guarantee capacity. Additionally, this letter is non-transferable. If the project design changes, this letter is void and a new "availability" letter must be obtained.

If you have any questions or need more information, please call the Hall County Public Works and Utilities Department at 770-531-6800.

Sincerely,

Bill Nash



Russell R. McMurry, P.E., Commissioner
One Georgia Center
600 West Peachtree Street, NW
Atlanta, GA 30308
(404) 631-1000 Main Office

5/12/2022
Audubon
ATTN: Josh Boiling
6525 The Corner's Parkway
Suite 216
Peachtree Corners, GA 30092

Subject: Access to Property; Hall County; Commercial Driveway at SR 365, South of Cagle Road, MP 22.27.

To whom it may concern,

Dependent upon compliance with all Department of Transportation requirements in effect at the time a permit is requested and your compliance with any current or future authorizations under Georgia Code 32-6-111, we will approve any repair needed as well as permit a drive if applicant meets all requirements.

Please contact Parker Niebauer at (770) 533-8275 if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jason Dykes".

Jason Dykes, P.E.
District Traffic Engineer

JD/af
PuckettZ@pondco.com

Anael Dominguez (CDI: Planning)

From: Emily McGahee (Environmental Health)
Sent: Wednesday, April 17, 2024 9:51 AM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning); Katie L. Greenway (CDI: Planning); Kristie Turner (Planning)
Cc: Kelly Hairston (Environmental Health); Chad Harper (Environmental Health)
Subject: HCPC Tentative Agenda 5.20.24

Please find Environmental Health comments below:

Item 1, 3634 Oakland Lane, Parra: All proposed structures must meet all residential permitting requirements and/or required setbacks to existing septic system.

Item 2, 3001 Athens Hwy, Carroll Daniel: No comment.

Item 3, 4216 Winder Hwy, Johnson: No comment. Public sewer.

Item 4, 4610/4616 Winder Hwy; Georgia South: No comment. Public sewer.

Item 5, 4549 Clarks Bridge, Allen: No comment.

Item 6, 4745 Cagle Mill Road, Boling: No comment. Public sewer.

Item 7, 4745 Cagle Mill Road, Boling: No comment. Public sewer.

Item 8, 4151 Nopone Road, Hemphill: Must meet all Environmental Health commercial septic system permitting requirements. Further determination will be made during the civil plan review process. A detailed business plan must be submitted to Hall County Environmental Health for review. Additional items, including, but not limited to: recorded plat, soil evaluation, and septic system installation may be required after review of business plan.

Item 9, 5052 Cagle Road, Poole: No comment. Public sewer.

Item 10, 5079 Old Winder Hwy, Gilliam: No comment. Public sewer.

Emily McGahee
Hall County Environmental Health
Hall County Government Center
2875 Browns Bridge Road
Mailing: PO Box 5901
Gainesville, GA 30504
(770) 531-3973 (phone)
emcgahee@hallcounty.org

<http://dph.georgia.gov/environmental-health> (State Website)
<http://www.phdistrict2.org/HallCounty.htm> (District Website)
<https://www.hallcounty.org/192/Environmental-Health> (County Website & Forms)

Anael Dominguez (CDI: Planning)

From: Chavers, Veronica E <VChavers@dot.ga.gov>
Sent: Thursday, April 18, 2024 4:52 PM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning)
Subject: RE: Tentative Planning Agenda for May 20, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

See comments in red below.

From: Anael Dominguez (CDI: Planning) <adominguez@hallcounty.org>
Sent: Thursday, April 11, 2024 12:27 PM
Subject: Tentative Planning Agenda for May 20, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon –

Here is the Tentative Agenda and Maps for the **Monday, May 20, 2024** Hall County Planning Commission Meeting.

Please use the links to review the documents and respond with comments to Hall County Planning and Development. Failure to provide comments in a timely manner may result in the information not being included in the staff report.

When submitting comments, please include the name of the applicant along with the address of the property with the corresponding comment.

Comments are due by **Thursday, April 18th**. Email comments to Beth (bgarmon@hallcounty.org) and Ana (adominguez@hallcounty.org).

CALL TO ORDER

AGENDA REVIEW

APPROVAL OF MINUTES – May 6, 2024

NEW BUSINESS

1. [3634 Oakland Lane | Variance | 17.240.010. to reduce the rear yard setback | on a 0.30± acre tract located on the west side of Oakland Lane, approximately 340 feet from its intersection with Pleasant Hill Road | Zoned R-I; Tax Parcel 08032 000045 | Proposed Use: Residential addition | * Commission District 4 | Alexandra Parra, applicant](#) **GDOT coordination not required.**
2. [3001 Athens Highway | Variance | 17.420.050.F. to allow for an internally illuminated monument sign within GCOD | on an 80.79± acre tract located on the east side of Athens Highway \(GA-11\), at its intersection with Baker Road | Zoned I-I & AR-IV \(GCOD\); Tax Parcel 15023 000040 | Propose Use: Monument sign | * Commission District 3 | Carroll Daniel Construction Co. attn: Robert Tieman, applicant](#) **GDOT coordination not required**
3. [4216 Winder Highway | Variance | 17.420.060. to allow for two wall signs within GCOD | on a 3.93± acre tract located on the west side of Winder Highway \(GA-53\), approximately 490 feet from its intersection with Martin Road | Zoned H-B \(GCOD\); Tax Parcel 15044B000011 | Propose Use: Wall sign | * Commission District 1 | Serena Johnston/The Huxton Group, LLC, applicant](#) **GDOT coordination not required.**

4. [4610 & 4616 Winder Highway | Amend Conditions of Zoning](#) | on a combined 31.64± acre tract located on the south side of Winder Highway (GA-53); at its intersection with Plantation Drive | Zoned PRD; Tax Parcels 15037A000070 & 15037A000001 | **Proposed Use: 88-unit townhome development** | ** Commission District 1 | **Georgia South Development, LLC, applicant** **Will required GDOT coordination for driveway access to SR 53/ Winder Hwy**
5. [4549 Clarks Bridge Road | Use Subject to County Commission Approval](#) | on a 11.68± acre tract located on the west side of Clarks Bridge Road (GA-284), approximately 90 feet from North Browning Bridge Road | Zoned AR-IV; Tax Parcel 12071 000052 | **Proposed Use: Equestrian center with variances from the standards** | ** Commission District 3 | **Marie Allen, applicant** **Will required GDOT coordination to ensure that added traffic volumes do not adversely impact the state route intersection**
6. [4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone](#) | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Residential Development (PRD) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 (pt.), 15019 000043 & 15019 000114 | **Proposed Use: 349-unit residential development** | ** Commission District 3 | **Josh Boling, applicant** **Will required GDOT coordination for driveway access to SR 365/ Cornelia Hwy**
7. [4745 Cagle Mill Road | Rezone](#) | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) & Gateway Corridors Overlay District (GCOD) | on a 10.59± acre tract located on the east side of Cornelia Highway (GA-365), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 (pt.) | **Proposed Use: Industrial development** | ** Commission District 3 | **Josh Boling, applicant** **Will required GDOT coordination for driveway access to SR 365/ Cornelia Hwy**
8. [4151 Nopone Road | Rezone](#) | from Agricultural Residential IV (AR-IV) & Suburban Shopping (S-S) to Planned Industrial Development (PID) | on a 14.06± acre tract located on the north side of Nopone Road, approximately 623 feet from its intersection with Cleveland Highway (GA-11) | Zoned AR-IV & S-S; Tax Parcel 12026 000004 (pt.) | **Proposed Use: Self-storage facility** | ** Commission District 3 | **John Hemphill c/o Cloudwalker Investments, LLC, applicant** **GDOT coordination not required**
9. [5052 Cagle Road | Rezone](#) | from Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) & Gateway Corridors Overlay District (GCOD) | on a 20.98± acre tract located on the south side of Cagle Road, at its intersection with Lula Road (GA-52) | Zoned AR-IV; Tax Parcel 09084 000003 | **Proposed Use: Industrial development** | ** Commission District 3 | **Gregg Poole, applicant** **Will required GDOT coordination for driveway access to SR 52**
10. [5079 Old Winder Highway | Rezone](#) | from Residential I (R-I) to Planned Residential Development (PRD) | on a 20.02± acre tract located on the east side of Old Winder Highway, approximately 1,496 feet from its intersection with Daylily Drive | Zoned R-I; Tax Parcel 15038 000059 | **Proposed Use: 105-unit townhome development** | ** Commission District 1 | **Steven P. Gilliam, applicant** **Will required GDOT coordination for driveway access to state route**

*The Planning Commission's decision will be the final action taken unless appealed to the Board of Commissioners. To do so, file an application with the Planning Department within five working days of the Planning Commission's decision.

The Hall County Board of Commissioners will hear appeals at a public hearing **Thursday, June 27, 2024**, at 6:00 p.m. at the Hall County Government Center, 2nd Floor Meeting Room, 2875 Browns Bridge Road, Gainesville, Georgia.

The Planning Commission's recommendation will be forwarded to the Board of Commissioners for final action at a public hearing on **Thursday, June 27, 2024. The Board will meet at 6:00 p.m. at the Hall County Government Center, 2nd Floor Meeting Room, 2875 Browns Bridge Road, Gainesville, Georgia.

Thank you,
 Ana Dominguez
 Planning Commission Clerk
 Hall County Community Development and Infrastructure
 (770) 531-6810 | www.hallcounty.org



Hall County Government
COMMUNITY DEVELOPMENT AND INFRASTRUCTURE
PUBLIC WORKS AND UTILITIES

MEMORANDUM

To: Randi Doveton, Director of Planning and Development

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

From: Bill Nash, Director of Public Works and Utilities

Date: April 18, 2024

t: 770.531.6800 | f: 770.531.3945

Subject: May 20, 2024 - Hall County Planning Commission Agenda

PUBLIC WORKS AND
UTILITIES DIRECTOR
Bill Nash, P.E.

Please be advised that our office has reviewed the Hall County Planning Commission agenda for the May 20, 2024 meeting. Upon review, we provide the following comments.

NEW BUSINESS

1. [3634 Oakland Lane | Variance | 17.240.010. to reduce the rear yard setback | on a 0.30± acre tract located on the west side of Oakland Lane, approximately 340 feet from its intersection with Pleasant Hill Road | Zoned R-I; Tax Parcel 08032 000045 | Proposed Use: Residential addition | * Commission District 4 | Alexandra Parra, applicant](#)

- a. **Engineering:** No comment.
- b. **Traffic:** No comment.
- c. **Utilities:** No comment.

2. [3001 Athens Highway | Variance | 17.420.050.F. to allow for an internally illuminated monument sign within GCOD | on an 80.79± acre tract located on the east side of Athens Highway \(GA-11\), at its intersection with Baker Road | Zoned I-I & AR-IV \(GCOD\); Tax Parcel 15023 000040 | Propose Use: Monument sign | * Commission District 3 | Carroll Daniel Construction Co. attn: Robert Tieman, applicant](#)

- a. **Engineering:** No comment
- b. **Traffic:** No comment.
- c. **Utilities:** No comment

3. [4216 Winder Highway | Variance | 17.420.060. to allow for two wall signs within GCOD | on a 3.93± acre tract located on the west side of Winder Highway \(GA-53\), approximately 490 feet from its intersection with Martin Road | Zoned H-B \(GCOD\); Tax Parcel 15044B000011 | Propose Use: Wall sign | * Commission District 1 | Serena Johnston/The Huxton Group, LLC, applicant](#)

- a. **Engineering:** No comment.
- b. **Traffic:** No comment
- c. **Utilities:** No comment

4. [4610 & 4616 Winder Highway | Amend Conditions of Zoning | on a combined 31.64± acre tract located on the south side of Winder Highway \(GA-53\); at its intersection with Plantation Drive | Zoned PRD; Tax Parcels 15037A000070 & 15037A000001 | Proposed Use: 88-unit townhome development | ** Commission District 1 | Georgia South Development, LLC, applicant](#)
 - a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage.
Show FEMA and Hall County studied Flood plains that are present on site
Roads should be private
 - b. **Traffic:** GDOT access permit required
Recommend internal roadways be private and maintained by an HOA or property management company.
Unit driveways are shown as 22 feet in length to the sidewalk parked vehicles may protrude onto the right-of-way. Larger vehicles may protrude over the sidewalk. Recommend a minimum of 22 feet driveways to the proposed right-of-way and not to the sidewalk.
 - c. **Utilities:** Sanitary sewer located adjacent to site.

5. [4549 Clarks Bridge Road | Use Subject to County Commission Approval | on a 11.68± acre tract located on the west side of Clarks Bridge Road \(GA-284\), approximately 90 feet from North Browning Bridge Road | Zoned AR-IV; Tax Parcel 12071 000052 | Proposed Use: Equestrian center with variances from the standards | ** Commission District 3 | Marie Allen, applicant](#)
 - a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage.
 - b. **Traffic:** No comment
 - c. **Utilities:** No comment

6. [4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Residential Development \(PRD\) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 \(pt.\), 15019 000043 & 15019 000114 | Proposed Use: 349-unit residential development | ** Commission District 3 | Josh Boling, applicant](#)
 - a. **Engineering:** Property is in major flood area
Show FEMA and Hall County studied Flood plains that are present on site
Property is in north Oconee WPD
Show N. Oconee WPD buffers
No rise study required for construction in flood zone
Roads should be private
 - b. **Traffic:** Roadways are shown as private, however, this should be required.

Access from Cornelia Hwy (SR 365) is shown as private, however, Label indicates “end of county maintained right-of-way” internally. Clarify. Additional comments may be necessary after clarification.

Fire only access on White Hall Road must be gated and no ability for internal traffic to turn around is provided

Recommend the gravel section of Cagle Mill Road be improved to county paved standards to White Hall Road in order to facilitate site traffic to and from Old Cornelia Hwy.

Site plan indicates a fire only access on Cagle Mill Road labeled as “Gated fire only entrance with Knox Box” However no access is shown. Clarify.

GDOT permit required for Cornelia Hwy (SR 365) access.

- c. **Utilities:** Hall County lift station on GA 365

- 7. [4745 Cagle Mill Road | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Industrial Development \(PID\) & Gateway Corridors Overlay District \(GCOD\) | on a 10.59± acre tract located on the east side of Cornelia Highway \(GA-365\), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 \(pt.\) | Proposed Use: Industrial development | ** Commission District 3 | Josh Boling, applicant](#)

- a. **Engineering:** See #6 comments

- b. **Traffic:** GDOT permit required for Cornelia Hwy (SR365) access.

- Very short section of entrance is proposed to be county maintained but should be a private driveway.

- c. **Utilities:** Hall county lift station on GA 365

- 8. [4151 Nopone Road | Rezone | from Agricultural Residential IV \(AR-IV\) & Suburban Shopping \(S-S\) to Planned Industrial Development \(PID\) | on a 14.06± acre tract located on the north side of Nopone Road, approximately 623 feet from its intersection with Cleveland Highway \(GA-11\) | Zoned AR-IV & S-S; Tax Parcel 12026 000004 \(pt.\) | Proposed Use: Self-storage facility | ** Commission District 3 | John Hemphill c/o Cloudwalker Investments, LLC, applicant](#)

- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage..

- b. **Traffic:** Access must meet Hall County Commercial standards

- A trip generation report and turn lane analysis must be completed to determine if improvements to Nopone Road are warranted.

- c. **Utilities:** No gravity sewer lift station adjacent to site

- 9. [5052 Cagle Road | Rezone | from Agricultural Residential IV \(AR-IV\) to Planned Industrial Development \(PID\) & Gateway Corridors Overlay District \(GCOD\) | on a 20.98± acre tract located on the south side of Cagle Road, at its intersection with Lula Road \(GA-52\) | Zoned AR-IV; Tax Parcel 09084 000003 | Proposed Use: Industrial development | ** Commission District 3 | Gregg Poole, applicant](#)

- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage. Show stream buffer and impervious setback from wretched vegetation not centerline of stream.
- b. **Traffic:** GDOT permit required for access to Lula Road (SR 52) Internal road should be private and not County maintained. No access to Cagle Road is shown on the site plan, however, recommend a condition that access to Cagle Road is prohibited.
- c. **Utilities:** No sanitary sewer lines available.

10. [5079 Old Winder Highway | Rezone | from Residential I \(R-I\) to Planned Residential Development \(PRD\) | on a 20.02± acre tract located on the east side of Old Winder Highway, approximately 1,496 feet from its intersection with Daylily Drive | Zoned R-I; Tax Parcel 15038 000059 | Proposed Use: 105-unit townhome development | ** Commission District 1 | Steven P. Gilliam, applicant](#)

- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage. Show stream buffer and impervious setback from wretched vegetation not centerline of stream. Roads should be private
- b. **Traffic:** GDOT approval / permit required for Old Winder Hwy (SR211) Internal roadways shown on site plan will not meet county standards and no variances were requested. If approved as shown, recommend roadways be private and not county maintained. Unit driveways are shown as 22 feet in length to the sidewalk. Parked vehicles may protrude onto the right-of-way. Larger vehicles may protrude over the sidewalk. Recommend a minimum of 22 feet driveways to proposed right-of-way and not to the sidewalk.
- c. **Utilities:** No sanitary sewer adjacent to site

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT:

JOSH BOLING

REQUEST:

REZONE FROM AR-III & AR-IV TO PRD
FOR A 349-UNIT RESIDENTIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date: August 19 2024

Time: 5:15 p.m.

COUNTY COMMISSION

Date: Sept 24 2024

Time: 6:00 p.m.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

Jun 16, 2024 12:12:16

4690 Cagle Mill Road

Lula

Hall County

Georgia

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT:

JOSH BOLING

REQUEST:

REZONE FROM AR-III & AR-IV TO PID
FOR AN INDUSTRIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date: August 19, 2024

Time: 5:15 p.m.

COUNTY COMMISSION

Date: Sept. 24, 2024

Time: 6:00 p.m.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT:

JOSH BOLING

REQUEST:

REZONE FROM AR-III & AR-IV TO PRD
FOR A 349-UNIT RESIDENTIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date: August 19, 2024

Time: 5:15 p.m.

COUNTY COMMISSION

Date: Sept. 24, 2024

Time: 6:00 p.m.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809



Jul 16, 2024 12:10:30

5416 Whitehall Road

Lula

Hall County

Georgia

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT:

JOSH BOLING

REQUEST:

REZONE FROM AR-III & AR-IV TO PRD
FOR A 349-UNIT RESIDENTIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date: August 19, 2024

Time: 5:15 p.m.

COUNTY COMMISSION

Date: Sept. 24, 2024

Time: 6:00 p.m.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

Jul 16, 2024 12:13:44
4673 Noah Martin Drive
Lula
Hall County
Georgia

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO
THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT:

JOSH BOLING

REQUEST:

REZONE FROM AR-III & AR-IV TO PRD
FOR A 349-UNIT PRESIDENTIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date August 19 2024
Time: 5:15 p.m.

COUNTY COMMISSION

Date: Sept. 24 2024
Time: 6:00 p.m.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

Jul 16, 2024 12:04:04
5569 Whitehall Road
Gainesville
Hall County
Georgia



AGENDA ITEM

Planning & Zoning

REPORT TO: Work Session (09/23/24)

REPORT TO: Voting Meeting (09/24/24)

ITEM NO: 504/2024

SUBJECT: **2052 Spring Road | Reestablishment of a Nonconforming Use** | on a 0.19± acre tract located on the north side of Spring Road, approximately 237 feet from its intersection with Skelton Road | Zoned H-B, Tax Parcel 00122 002010 | **Proposed Use: Single-family residence** | Commission District 4 | **Ashley Xitlaly Ruelas, applicant**

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: BG

Recommendation:

Approval, with conditions:

1. The property shall be developed in accordance with the site plan dated June 6, 2024, and as described in the project narrative submitted on June 11, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The Residential-II (R-II) setback standards, per section 17.240.10 shall be applicable.
3. Further residential development of the property beyond the features indicated on the site plan is allowed provided all improvements comply with all county standards and ordinances, supplemental regulations, and all other requirements as established by the Official Code of Hall County enforced at the time of development. It shall be the responsibility of the property owner to determine if permits are required for any future improvements.
4. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.

Purpose of Request:

2052 Spring Road | Reestablishment of a Nonconforming Use | on a 0.19± acre tract located on the north side of Spring Road, approximately 237 feet from its intersection with Skelton Road | Zoned H-B, Tax Parcel 00122 002010 | **Proposed Use: Single-family residence** | Commission District 4 | **Ashley Xitlaly Ruelas, applicant**

History:

Facts and Issues:

Options:

Funding Requested \$ 0.00
Are funds within current budget? No
Source of Funds
Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? No
Has it been reviewed by the County Attorney? Yes
Is there a deadline for this item?

Approvals:

| Submit | Approve | Attorney | Administration |
|--------------|---------|----------|----------------|
| KE | BG | WLI | CR |
| Clerk | | | |
| JR | | | |

Attachments:

Board Memo
Recommendation Report
Application
Narrative
Site Plan
Maps
Survey
Residential Structure to be Relocated
Septic Record
Gainesville Water/Sewer Avail.
2019 BOC Letter
Environmental Health Comment
GDOT Comment
Public Works Comment
Fire Comment
Notice Sign Photo



Hall County Government

COMMUNITY DEVELOPMENT & INFRASTRUCTURE
PLANNING AND ZONING

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6809 | f: 770.531.3902

PLANNING AND ZONING
DIRECTOR
Beth Garmon

To: Richard Higgins, Chairman
Kathy Cooper, District 1 Commissioner
Billy Powell, District 2 Commissioner
Gregg Poole, District 3 Commissioner
Jeff Stowe, District 4 Commissioner

From: Beth Garmon, Director of Planning & Zoning

Date: September 9, 2024

Subject: **2052 Spring Rd | Reestablishment of a Nonconforming Use |** on a 0.19± acre tract located on the north side of Spring Rd, approximately 237 from its intersection with Skelton Road | **Proposed Use: Single Family Residence | Ashley Xitlaly Ruelas, applicant**

The request before you is the request of Ashley Xitlaly Ruelas for a use subject to County Commission approval to allow a single-family residence. This item is located within Commission District 4.

At their August 19, 2024 meeting, the Hall County Planning Commission voted to recommend approval, with four (4) conditions **(5-0)**.

Staff recommendation: **Approval**, as a hardship exists pursuant to the criterion of 17.340.020.

There were **no comments submitted** in advance of the Planning Commission meeting and **no one spoke during the public hearing**.

Planning Commission Conditions:

1. The property shall be developed in accordance with the site plan dated June 6, 2024, and as described in the project narrative submitted on June 11, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The Residential-II (R-II) setback standards, per section 17.240.10 shall be applicable.
3. Further residential development of the property beyond the features indicated on the site plan is allowed provided all improvements comply with all county standards and ordinances, supplemental regulations, and all other requirements as established by the Official Code of Hall County enforced at the time of development. It shall be the responsibility of the property owner to determine if permits are required for any future improvements.

4. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision

**HALL COUNTY PLANNING COMMISSION
RECOMMENDATION REPORT**

Applicant Ashley Xitlaly Ruelas

Request Use Subject to County Commission Approval |
Reestablishment of a Nonconforming Use

Proposed Use Single-family residence

Size 0.19± acres

Zoning Highway Business (H-B, 17.150)

Location **2052 Spring Road** | Tax Parcels 00122 002010

Commission District Four

Planning Commission Date August 5, 2024

Staff Recommendation **Approval**, as hardship exists pursuant to the
criterion of 17.340.020.

Record Number..... HZCU24-0023

Planning Commission Recommendation..... **Approval, with conditions**

Vote: 5-0

Planning Commission Conditions:

1. The property shall be developed in accordance with the site plan dated June 6, 2024, and as described in the project narrative submitted on June 11, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The Residential-II (R-II) setback standards, per section 17.240.10 shall be applicable.
3. Further residential development of the property beyond the features indicated on the site plan is allowed provided all improvements comply with all county standards and ordinances, supplemental regulations, and all other requirements as established by the Official Code of Hall County enforced at the time of development. It shall be the responsibility of the property owner to determine if permits are required for any future improvements.
4. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.

Excerpts from the August 19, 2024 Planning Commission Meeting:

Applicant's Presentation:

Katie Greenway, Planning and Zoning Administrator, presented a summary of the request.

Carla Walker, 340 Jesse Jewell Highway, Gainesville, presented the request. The applicant stated there was a home on the property many years ago that burned down. The applicant further stated that they are requesting that the building be held to Residential II (R-II) setback standards and that they agree with staff recommended conditions.

Public Forum:

There were no comments in support or opposition.

Planning Commission Comments:

No Comments.

Motion: A motion to approve, with conditions was made by Mr. Hunt and seconded by Ms. Pilcher. Vote: 5-0

Conditions:

1. The property shall be developed in accordance with the site plan dated June 6, 2024, and as described in the project narrative submitted on June 11, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The Residential-II (R-II) setback standards, per section 17.240.10 shall be applicable.
3. Further residential development of the property beyond the features indicated on the site plan is allowed provided all improvements comply with all county standards and ordinances, supplemental regulations, and all other requirements as established by the Official Code of Hall County enforced at the time of development. It shall be the responsibility of the property owner to determine if permits are required for any future improvements.
4. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.

Staff recommends APPROVAL of the applicant's request with the following conditions:

1. The property shall be developed in accordance with the site plan dated June 6, 2024, and as described in the project narrative submitted on June 11, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The Residential-II (R-II) setback standards, per section 17.240.10 shall be applicable.
3. Further residential development of the property beyond the features indicated on the site plan is allowed provided all improvements comply with all county standards and ordinances,

supplemental regulations, and all other requirements as established by the Official Code of Hall County enforced at the time of development. It shall be the responsibility of the property owner to determine if permits are required for any future improvements.

4. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.

Summary Analysis

The applicant is seeking to re-establish a nonconforming use for a single-family residence on a 0.19± acre tract zoned Highway Business (H-B). Residential uses are not permitted within Highway Business (H-B) zoning districts; however, the property does not qualify for rezoning as it lacks the size required for any residential zoning district. The property is currently vacant and undeveloped; however, the applicant provided a document from the Hall County Board of Assessors, which has a note that a home was removed in 1992 from the property.

On July 25, 2019, the Board of Commissioners (BOC) voted to approve the re-establishment of a nonconforming use with Residential-II setback standards for the construction of a residence on the subject property. The BOC action letter references Section 17.380.013, which previously stated that any application for a use subject to the approval of the County Commission would be effective for no longer than 12 months from the date of approval. To maintain the application's validity, the applicant needed to implement the proposed use by obtaining the necessary permit and/or license, securing development plat approval, and proceeding with the building, occupancy, or establishment of the business within that period. Because no action was taken by the applicant, they must reapply. Since then, Section 17.380.013 has been removed, and this 12-month restriction will not be applicable if this request is approved.

Per the submitted narrative, the applicant is requesting to reestablish a nonconforming use for a single-family residence with Residential-II setback standards. The applicant states that due to logistics with building and the Covid-19 pandemic, the new residential structure was not built within the previously approved period.

Per the submitted site plan and narrative, the applicant states that they plan to relocate a 1,216 square foot one-story single-family residence currently located at 2036 Spring Street, approximately 475 feet away, to the subject parcel. The narrative states the applicant will connect to City of Gainesville water and sewer services.

Zoning Analysis

Per Planning Commission and Hall County Commission consideration and decision (17.380.060), the Planning Commission shall study the need and justification for the change based on a determination of the facts applicable to the particular case, and the following general lines of inquiry shall be considered, to wit:

1. Whether the zoning proposal will permit a use that is suitable in view of the use, development and zoning of adjacent and nearby property; **The proposed use is not consistent with the majority of nearby properties. The surrounding properties are mainly Highway Business uses with a few other remaining residential uses.**

2. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property; **No, it is not anticipated that the proposed residential use will adversely affect adjacent properties.**
3. Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned; **Yes, the property has reasonable economic use as currently zoned Highway Business (H-B, 17.150).**
4. Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, or utilities; **It is not anticipated that the proposed use will result in an excessive or burdensome use.**
5. Whether the zoning proposal is in conformity with the policy and intent of the future land use plan for the physical development of the area; **The use is consistent with the Comprehensive Plan's future land use classification of "Lake Area Residential". The Comprehensive Plan does not accurately depict the existing commercial development of the area.**
6. The extent to which property values are diminished by the existing zoning restrictions; **Staff is unable to determine the extent to which property values are diminished by the existing zoning restrictions.**
7. The extent to which the destruction of the subject property's value under the existing zoning promotes the health, safety, morals or general welfare of the public; **Staff is unable to comment on the impact of property values without a full market analysis. Multiple factors impact property value including construction types, proposed uses, and maintenance. Often it is difficult to determine the effect of a development on adjacent properties until the development is completed.**
8. The relative gain to the public as compared to the hardship imposed upon the individual property owner; **Staff has not identified a hardship imposed on the property owner as the property is currently zoned.**
9. The length of time the property has been vacant as zoned considered in the context of land development in the area in the vicinity of the property; **The property is currently vacant and undeveloped.**
10. Whether there are other existing or changing conditions affecting the use or development of the property which give supporting grounds for either approval or disapproval of the zoning proposal; **Staff is not aware of any changing conditions that affect the use and development of the property.**
11. Whether the change would create an isolated district unrelated to the surrounding districts; **This question is not applicable as there are no proposed changes to the zoning classification.**
12. Whether the present zoning district boundaries are illogically drawn in relation to existing conditions in the area; **There is no evidence that the present zoning district boundaries are illogically drawn.**

13. Whether the change requested is out of scale with the needs of the county as a whole or the immediate neighborhood; **No, the request is not out of scale with the needs of the county as a whole.**
14. Whether it is impossible to find adequate sites for the proposed use in districts permitting such use and already appropriately zoned; **Residential uses are not permitted in Highway Business (H-B) zoning districts. Therefore, the establishment of the nonconforming residential use is subject to approval by the Board of Commissioners.**
15. Whether the need for rezoning could be handled instead by a variance request to the zoning board of adjustment; **The request could not be handled alternatively as a variance.**
16. Whether there would be an ecological or pollution impact resulting from major modifications to the land if the request is granted; **Any land disturbance activities on the property shall be required to go through the land development permitting process, and as a result are subject to local, state, and federal regulations. As a result, there are no anticipated ecological or pollution impacts resulting from any modification to the land if the request is granted.**
17. Whether there is reasonable evidence based upon existing and anticipated land use that would indicate a mistake was made in the original zoning of the property; **There is no indication that a mistake was made in the original zoning.**

17.380.050. - Submission requirements

- A. Any person or persons requesting a change in the official zoning map or use subject to approval of the county commission shall file an application with a plat or map of the property attached thereto, together with payment of such fees set forth in chapter 17.30 to cover administrative and advertising costs, in the planning department office. Such person or persons or their authorized agent shall appear in person at the public hearing held to consider the district change. **The proposal meets the requirement, and the applicant understands that someone must be present at both the Hall County Planning Commission meeting and the voting meeting of the Hall County Board of Commissioners.**
- B. All applications for a change of zoning classification or use subject to approval of the county commission shall include:
 1. A narrative statement identifying the existing and proposed use of the property and addressing each of the criteria set forth in section 17.380.060.C of this section [chapter]. **The applicant has submitted a narrative and site plan but did not specifically address the criteria listed in 17.380.060.c.**
 2. A site plan drawn to scale designating the area covered by the application and identifying existing and proposed buildings and uses, adjacent existing land uses, zoning on contiguous parcels, including those across an abutting public right-of-way, and any other significant site improvements proposed to accommodate the proposed use or buffer adjacent uses, etc., or a plat of the subject property where no specific land use is proposed. In cases where only a plat or map is provided and no land use is

proposed, the planning commission and county commission shall evaluate the application based on the most intense possible land use permitted in the proposed district. **The proposal meets the requirement.**

- C. For any application for a slow rate land treatment system (see chapter 17.20), the following additional requirements apply. **This is not applicable as the property will utilize a municipal sewer system.**

- D. For any application proposing the development of 100 or more residential dwelling units, a traffic impact study shall be submitted prior to consideration of the application by the planning commission. At the applicant's expense, the traffic impact study shall be prepared by a professional engineer in accordance with requirements established by the Hall County Engineering Department. The engineering department shall review the traffic impact study and forward any comments to the Hall County Planning Commission. **This is not applicable to the applicant's request.**

Development Support and Constraints

Hall County Environmental Health

In an email dated June 28, 2024, Emily McGahee stated, "No comment. Public Sewer."

Hall County Fire Marshal

In an email dated July 02, 2024, John Hornick, NPQ Fire Service Plans Examiner 1, Lieutenant stated, "The Hall County Fire Marshal's Office has no comments as proposed."

Hall County Public Works and Utilities

In a memorandum from Public Works and Utilities dated July 05, 2024, Bill Nash, Director, stated the following:

Engineering:

No comment

Traffic:

No comment

Utilities:

No comment

Georgia Department of Transportation

In an email dated July 3, 2024, Veronica Chavers stated that GDOT coordination is not required.

PLANNING AND DEVELOPMENT DEPARTMENT
 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA, 30504
 MAILING ADDRESS: PO BOX 1435, GAINESVILLE, GA 30503
 T: 770-531-6809 | F: 770-531-3902



CONDITIONAL USE APPLICATION

| | |
|---|--|
| Applicant (Name & Mailing Address) | Property Owner (Name & Mailing Address) |
| Ashley Xitlaly Ruelas | Ludivina Gallardo Lopez |
| 2030 Spring Road | 535 W 49th St 5FE |
| Gainesville, Georgia 30504 | New York, NY 10019 |
| Phone 770-878-7920 | Phone 770-878-7920 |
| Email Address ashleyruelas@icloud.com | Email Address ludyg77@ |

Proposed Use Re-establish a non-conforming use of a residential home where the prior residential structure existed with Residential - II (R-II) building setbacks.

| | | |
|--|---|--|
| Contact Person (Name & Mailing Address) | Status of Applicant | Requested Action |
| Walker, Ball & Dimo, LLC | <input checked="" type="checkbox"/> Owner | Permissive Use: |
| Attn: Carla J. Walker, Esq. | <input type="checkbox"/> Option to Purchase | <input type="checkbox"/> HCPC <input type="checkbox"/> HCC |
| 340 Jesse Jewell Pkwy, Suite 650, Gainesville, GA 30501 | <input type="checkbox"/> Area Resident | Fee:\$ _____ |
| Phone 404-210-6271 | <input type="checkbox"/> Other | Receipt #: _____ |
| Email Address carla@wbdlawfirm.com | Zoning: <u>H-B</u> | Check #: _____ |
| Tax Parcel Number 00122 002010 | Acreage <u>0.187 acres</u> | |
| Location Address <u>2052 Spring Road, Gainesville, Georgia</u> | | |

I hereby certify that the above information and all attached information are true and correct.

Sign [Signature] Date: 06/07/24

Applicant must complete all information above. Failure to complete this section will result in the refusal of the application. The Planning Department has 15 days to review all applications and will set the dates for each application. If the application is found insufficient, an agenda date will not be set until the required information is submitted. Please note that the Planning Commission and County Commission dates are tentative.

Application Withdrawal: I hereby withdraw the application.

Sign _____ Date: _____

Staff Use Only

Application Date: _____ Taken by: _____
 Tentative Planning Commission Date: _____ Tentative County Commission Date: _____
 County Commission District: _____

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AUTHORIZATION OF PROPERTY OWNERS

Note: If the applicant is the property owner, please disregard this form.

Name of owner(s) Ludivina Gallardo Lopez
Address 535 W 49th St 5FE
New York, NY 10019
Phone Number 770-878-7920

Name of applicant(s) Ashley Xitlaly Ruelas
Address 2030 Spring Road
Gainesville, Georgia 30504
Phone Number 770-878-7920

I swear that I am the owner of the property which is the subject matter of the attached applications as shown in the records of Hall County, Georgia.

I authorize the person named above to act as applicant in the pursuit of a rezoning, permissive use, or variance of this property.

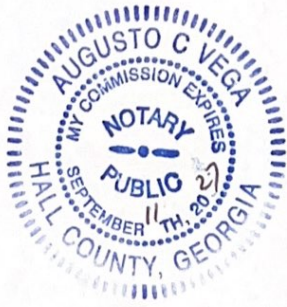
Signature of Owner(s)
[Handwritten Signature]

Personally appeared before me
[Handwritten Signature]

who swears that the information contained in this authorization is true and correct to the best of his/her knowledge and belief.

[Handwritten Signature]
Notary Public

6/7/24
Date



PLANNING AND DEVELOPMENT DEPARTMENT
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CAMPAIGN CONTRIBUTIONS DISCLOSURE FORM

This form must be completed by the applicant and property owner, or person representing the property owner, for all zoning actions.

OCGA § 36-67A-3[C] Disclosure of campaign contributions:

- (b) When any applicant for zoning action has made, within two years immediately preceding the filing of the applicant's application for the zoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:
- (3) The name and official position of the local government official to whom the campaign contribution was made; and
- (4) The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution.
- (b) The disclosures required by subsection (a) of this Code section shall be filed within ten days after the application for the zoning action is first filed. (Code 1981, Section OCGA § 36-67A-3[C], enacted by GA L. 1986, page 1269, Section 1, GA L. 1991, page 1365, Section 1).

I hereby certify that I have read the above and that:

I have** _____ I have not

within the two years immediately preceding this date, made any contribution(s) aggregating \$250.00 or more to any local government official involved in the review or consideration of this application.

****If you have made such contributions, you must provide the data required below within ten (10) days of filing this application.**

Name of Official(s): _____

Office: _____

Dollar Amount: _____

Date of Contribution: _____

Applicant's/Owner's Signature: *Ashley Xitlaly Ruelas*

Date: 06/07/24

Applicant's/Owner's Name (Printed): Ashley Xitlaly Ruelas

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****If you have made such contributions, you must provide the data required below within ten (10) days of filing this application.**

Name of Official(s): _____ Office: _____

Dollar Amount: _____ Date of Contribution: _____

Applicant's/Owner's Signature: *Ludivina Gallardo Lopez* Date: 6/7/24

Applicant's/Owner's Name (Printed): Ludivina Gallardo Lopez

RECEIVED

JUN 11 2024

Planning & Zoning Department

Narrative:

On July 25, 2019, this Applicant received approval to re-establish a residential structure on the subject parcel with residential-II setback standards. A copy of the approval letter is enclosed herewith for convenience. However, due to logistics with building and then the Covid pandemic in 2020, Applicant was not able to have a new residential structure built within the twelve (12) months following the above-described approval. For that reason, the approval was deemed expired, and a building permit was denied when it was later requested in 2021. **Applicant now requests for the prior approval to be granted again so that the original intent can be carried out as originally requested.** The structure that Applicant wishes to relocate on this vacant lot is a one-story single-family residence being 38 x 32 feet. This is an existing structure that would be relocated from 2036 Spring Street to 2052 Spring Street (*approx. 460-475 feet down the road*).

NOTES:

- Current Zoning District: H-B Highway Business (Commission District 4)
- Proposed Use: Re-establishment of a residential structure for residential purposes
- Development: An existing structure (being 1216 heated square feet) to be relocated
- Signs: No signs
- Lighting: No lighting except for standard house lighting
- Water/Sewer: City of Gainesville Water and Sewer
- Other: Standard setbacks consistent with R-II setback requirements
- **PROPOSED SITE PLAN SHOWING SETBACKS IS ENCLOSED**
- **DETAILS ABOUT THE EXISTING STRUCTURE IS ENCLOSED**

RESIDENTIAL STRUCTURE TO BE RELOCATED
from 2036 Spring Street to 2052 Spring Street
(approx. 460-475' move in a straight line)



| | |
|---------------------------|--------------------------|
| Style | 1 Single Family Detached |
| Heated Square Feet | 1216 |
| Interior Walls | Sheetrock |
| Exterior Walls | Cement Fiber |
| Foundation | Crawl/Masonry |
| Attic Square Feet | 0 |
| Basement Square Feet | 0 |
| Year Built | 2020 |
| Roof Type | Architectural (310) |
| Flooring Type | Carpet/Hardwood |
| Heating Type | Central Heat/AC |
| Number Of Rooms | 0 |
| Number Of Bedrooms | 2 |
| Number Of Full Bathrooms | 1 |
| Number Of Half Bathrooms | 0 |
| Number Of Plumbing Extras | 0 |

PROJECT DESCRIPTION:

TOTAL AREA= 0.187 ACRES

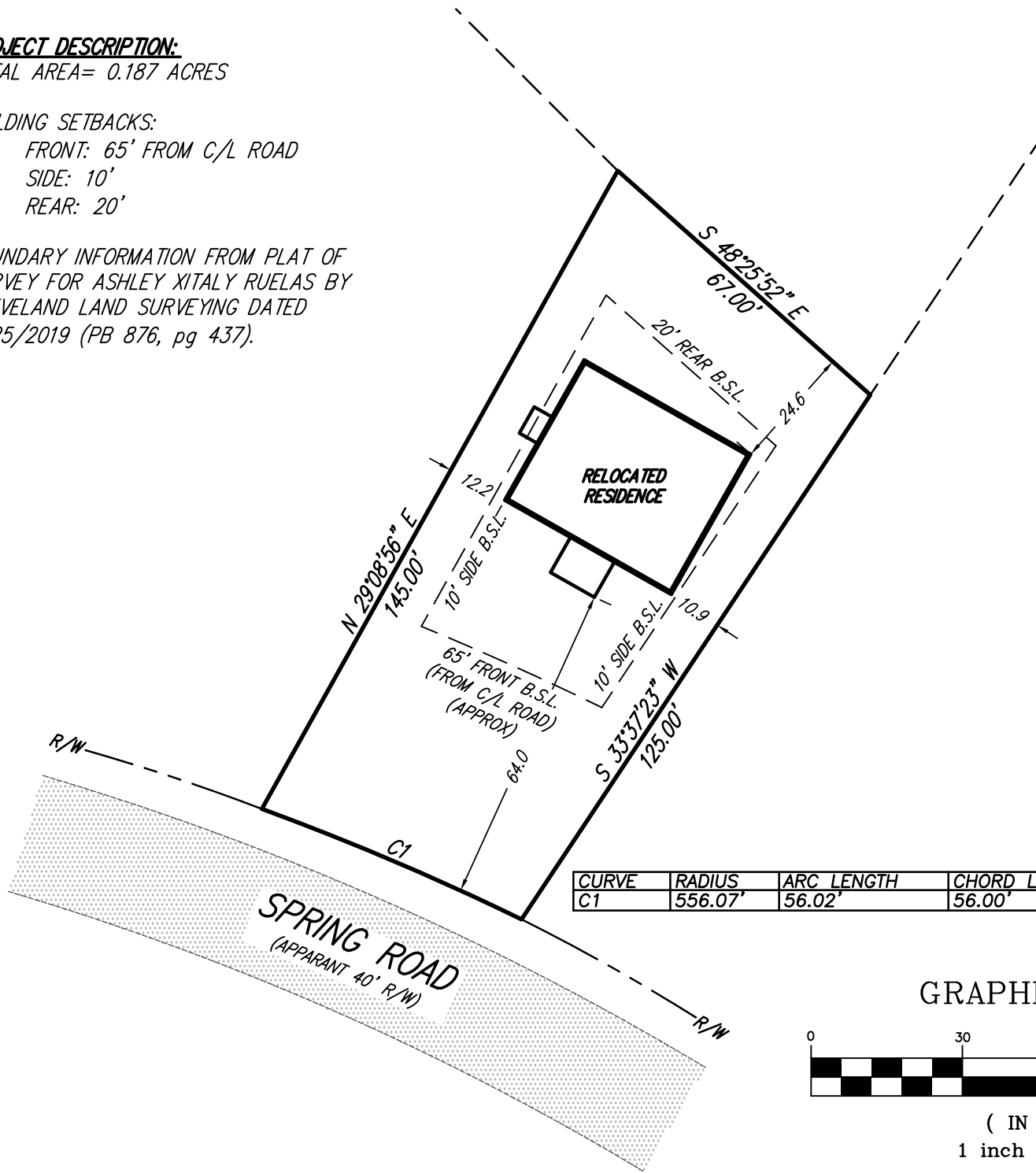
BUILDING SETBACKS:

FRONT: 65' FROM C/L ROAD

SIDE: 10'

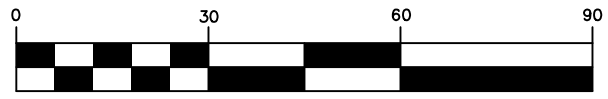
REAR: 20'

BOUNDARY INFORMATION FROM PLAT OF SURVEY FOR ASHLEY XITALY RUELAS BY CLEVELAND LAND SURVEYING DATED 2/25/2019 (PB 876, pg 437).



| CURVE | RADIUS | ARC LENGTH | CHORD LENGTH | CHORD BEARING |
|-------|---------|------------|--------------|---------------|
| C1 | 556.07' | 56.02' | 56.00' | N 66°58'19" W |

GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.

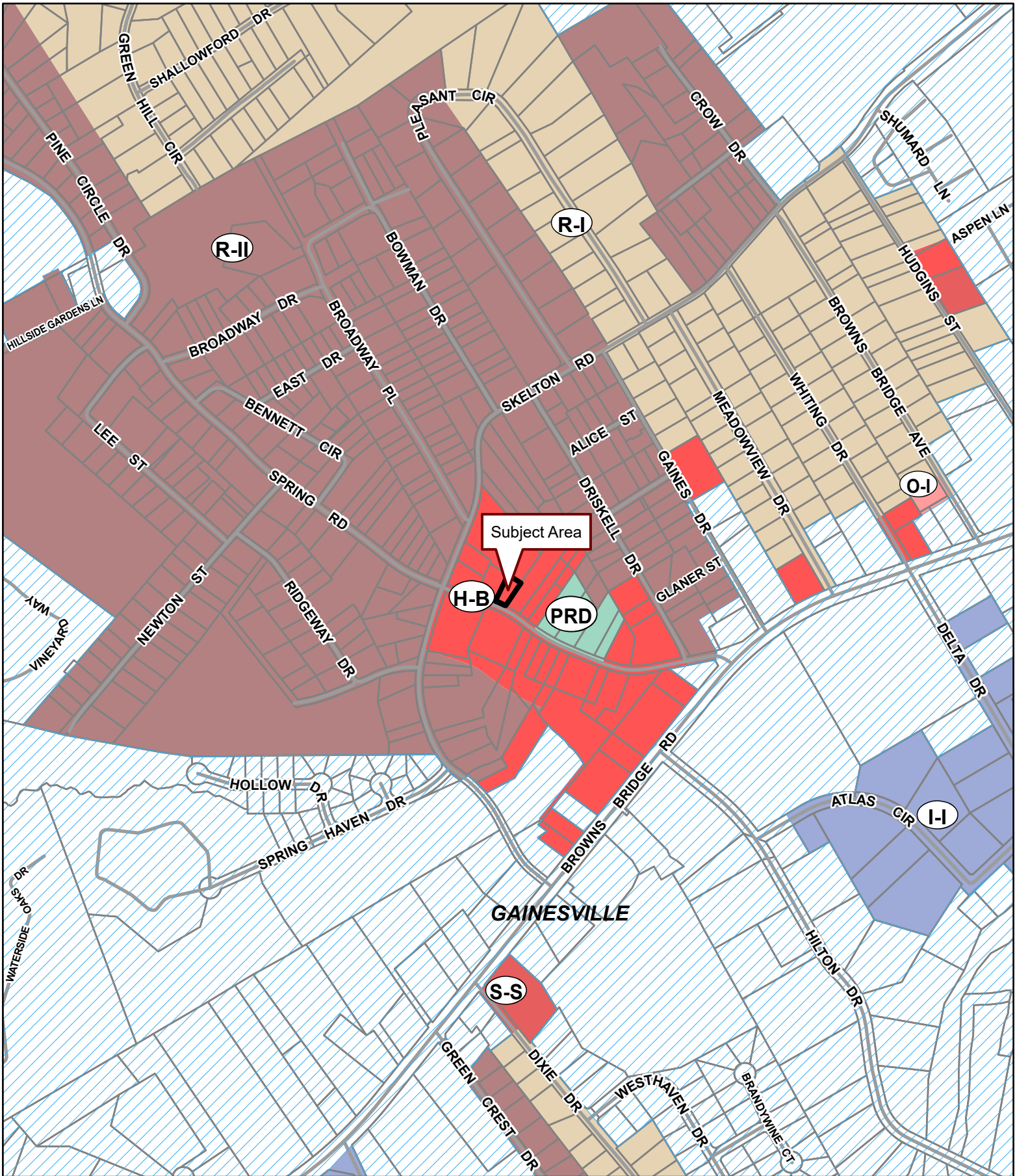
PREPARED BY
DES DAVIS
 ENGINEERING & SURVEYING
 24 DAWSON VILLAGE WAY SOUTH
 DAWSONVILLE, GA 30534
 PHONE: (706) 265-1234
 DAVISENGINEERS.COM

HOUSE PLAN FOR:
LUDI GALLADO
 LAND LOT 170
 9th DISTRICT
 HALL COUNTY

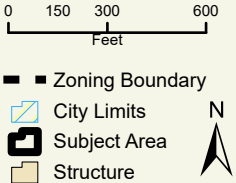
| | |
|----------------|----------|
| REVISIONS BY: | - |
| REVISION DATE: | - |
| DRAWN BY: | NAP |
| PLAT DATE: | 6/6/2024 |
| FIELD WORK BY: | - |
| FIELD DATE: | - |

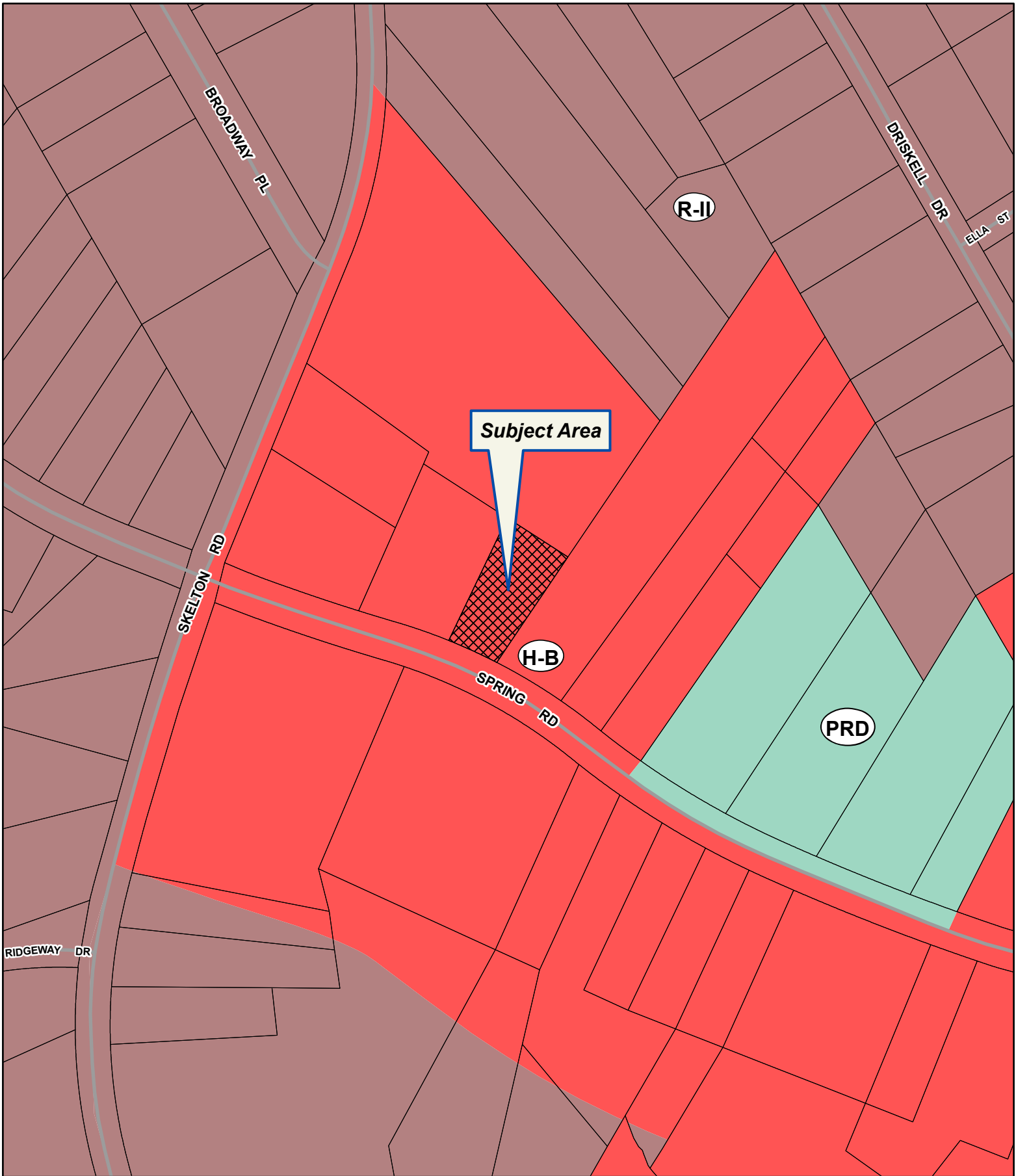
SHEET NO.
1 OF 1

PROJECT NO.
23-457

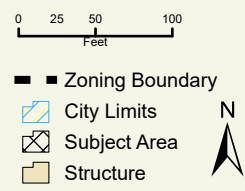


Applicant: ASHLEY XITLALY RUELAS
Tax Parcel #: 00122 002010
Location: 2052 SPRING ROAD, GAINESVILLE, GA 30504
Commission District 4 **PC Mtg. Date:** 08/05/2024





Applicant: ASHLEY XITLALY RUELAS
Tax Parcel #: 00122 002010
Location: 2052 SPRING ROAD, GAINESVILLE, GA 30504
Commission District 4 **PC Mtg. Date: 08/05/2024**





Applicant: ASHLEY XITLALY RUELAS

Tax Parcel #: 00122 002010

Location: 2052 SPRING ROAD, GAINESVILLE, GA 30504

Commission District 4

PC Mtg. Date: 08/05/2024

0 25 50 100
Feet

- Zoning Boundary
- City Limits
- Subject Area



eFiled & eRecorded
 DATE: 3/6/2019
 TIME: 8:31 AM
 PLAT BOOK: 00876
 PAGE: 00437
 RECORDING FEE: 8.00
 PARTICIPANT ID: 8105354572
 CLERK: Charles Baker
 Hall County, GA
 NOTE: by ch

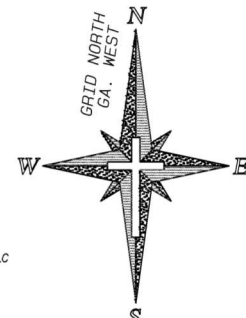
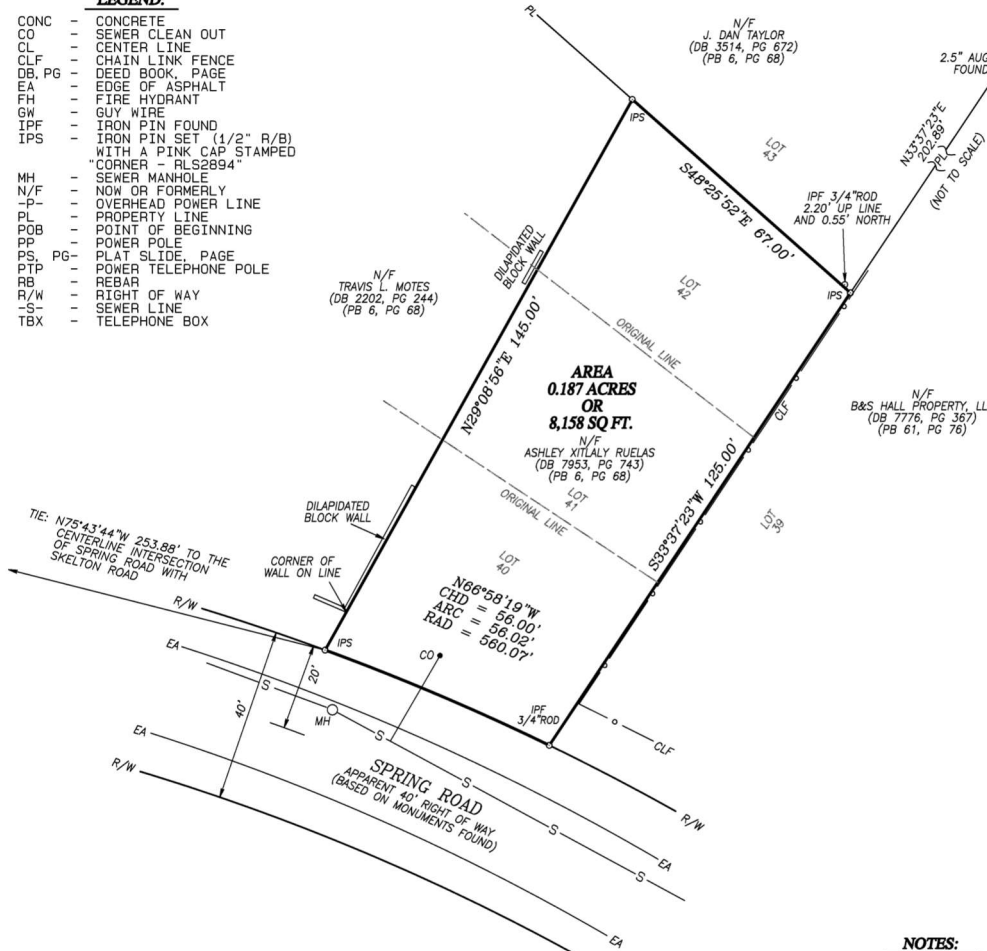
HALL COUNTY NOTES:

"ANY STREAM OR STATE WATER LOCATED ON THIS PROPERTY MAY BE SUBJECT TO A 50 FEET UNDISTURBED NATURAL VEGETATIVE BUFFER AND A 75 FEET IMPERVIOUS SURFACE SETBACK. (HALL COUNTY CODE 8.170.070)"
 "IF PROPERTY IS LOCATED IN THE NORTH OCONEE WATERSHED DISTRICT, THEN ADDITIONAL STREAM BUFFERS AND IMPERVIOUS SETBACKS MAY BE REQUIRED FOR COMPLIANCE. (HALL COUNTY CODE 17.225.040)"
 "THIS PROPERTY IS NOT LOCATED IN FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAP 13139C0186F, HALL COUNTY, GEORGIA, DATED SEPTEMBER 29, 2006."
 "THIS PROPERTY IS NOT LOCATED IN THE HALL COUNTY FUTURE FLOOD ZONE PER HALL COUNTY GIS"

THIS BLOCK RESERVED FOR THE CLERK OF THE SUPERIOR COURT

LEGEND:

- CONC - CONCRETE
- CO - SEWER CLEAN OUT
- CL - CENTER LINE
- CLF - CHAIN LINK FENCE
- DB, PG - DEED BOOK, PAGE
- EA - EDGE OF ASPHALT
- PH - FIRE HYDRANT
- GW - GUY WIRE
- IPF - IRON PIN FOUND
- IPS - IRON PIN SET (1/2" R/B) WITH A PINK CAP STAMPED "CORNER - RL52894"
- MH - SEWER MANHOLE
- N/F - NOW OR FORMERLY
- P- OVERHEAD POWER LINE
- PL - PROPERTY LINE
- POB - POINT OF BEGINNING
- PP - POWER POLE
- PS, PG- PLAT SLIDE, PAGE
- PTP - POWER TELEPHONE POLE
- RB - REBAR
- R/W - RIGHT OF WAY
- S- SEWER LINE
- TBX - TELEPHONE BOX



NOTES:

1. THE FIELD DATA DATED 2/25/2019 UPON WHICH THIS PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 12,936 FEET AND AN ANGULAR ERROR OF 27" PER ANGLE POINT, AND WAS ADJUSTED USING LEAST SQUARES. THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 1,737,614 FEET. THE EQUIPMENT USED TO OBTAIN THE LINEAR AND ANGULAR MEASUREMENTS HEREIN WAS A TOPCON GTS-225.
2. THE UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM ABOVE GROUND, VISIBLE EVIDENCE. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
3. THIS SURVEY IS FOR THE EXCLUSIVE USE OF THE ENTITIES SHOWN HEREON, ANY USE BY THIRD PARTIES IS AT THEIR OWN RISK.
4. THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, RIGHTS OF WAY OR RESTRICTIONS WHICH MAY EXIST AND NOT SHOWN HEREON. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT.
5. ALL DISTANCES AS SHOWN ARE HORIZONTAL, GROUND DISTANCES IN U.S. SURVEY FEET (39.37 INCHES = 1 METER).
6. THE BEARINGS SHOWN HEREON WERE CALCULATED FROM ANGLES TURNED.



SURVEYOR'S CERTIFICATE

This survey is a retracement of an existing parcel or parcels of land and does not subdivide or create a new parcel or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated hereon. RECORDATION OF THIS SURVEY DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. 15-6-67.

Shane Cleveland
 Shane Cleveland
 Registration No. 2894
 shane_cleveland@bellsouth.net
 2/25/2019
 Date:

RETRACEMENT SURVEY FOR:
ASHLEY XITALY RUELAS

BEING A PORTION OF LOTS 40, 41, & 42 OF THE S.C. MOON AND FRED STRINGER SUBDIVISION LOCATED IN LAND LOT 170, 9TH DISTRICT HALL COUNTY, GEORGIA

Cleveland Land Surveying

3637 Rocky Ford Terrace, Gainesville, Georgia 30506
 Office (678) 936-6163

| | | | |
|-----------------|-----------------|---------------------------------|-----------------------|
| DRAWN BY: RSC | SCALE: 1" = 20' | GRAPHIC SCALE 0' 10' 20' 40' | SHEET 1 OF 1 |
| DATE: 2/25/2019 | JOB# G219015 | | |
| PDF: G219015 | | | |

RESIDENTIAL STRUCTURE TO BE RELOCATED from
2036 Spring Road to 2052 Spring Road
(approx. 460-475' move in a straight line)



| | |
|---------------------------|--------------------------|
| Style | 1 Single Family Detached |
| Heated Square Feet | 1216 |
| Interior Walls | Sheetrock |
| Exterior Walls | Cement Fiber |
| Foundation | Crawl/Masonry |
| Attic Square Feet | 0 |
| Basement Square Feet | 0 |
| Year Built | 2020 |
| Roof Type | Architectural (310) |
| Flooring Type | Carpet/Hardwood |
| Heating Type | Central Heat/AC |
| Number Of Rooms | 0 |
| Number Of Bedrooms | 2 |
| Number Of Full Bathrooms | 1 |
| Number Of Half Bathrooms | 0 |
| Number Of Plumbing Extras | 0 |

Possible
Record
ONLY

? 2052 Spring Rd?

DEPARTMENT OF PUBLIC HEALTH - SEWAGE RECORD

Construction Permit Number

HALL
County

4-11-73
Date Completed

MANDY DAY
Owner's Name

SPRING Rd
Road

Subdivision & Lot Number

Howard Lee
Contractor's Signature

Rt 4# Gainesville, GA.
Address

WATER SUPPLY: Public Individual

NUMBER OF FIELD LINES 5

HOUSE STRUCTURE: New Existing

TOTAL LENGTH: 140 feet

TYPE OF FACILITY RESIDENTS

WIDTH OF TRENCH: 36 inches

SEWAGE INSTALLATION: New Existing

DEPTH OF TRENCH: 30 inches

NUMBER OF BEDROOMS: 2 Gallons

DISTANCE FROM FOUNDATION: 5 feet

BUILDING LINE FROM ROAD: 70

NEAREST PROPERTY LINE: 10 feet

LOT SIZE: Depth: 150 Width: 100

DISTANCE FROM WELL: _____ feet

SEPTIC TANK CAPACITY: 750

FILTER MATERIAL: Size 5" Depth 2 FT

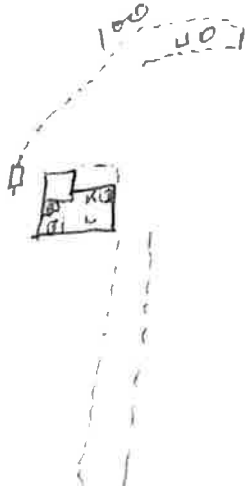
DISTANCE TANK FROM WELL: _____

SHOW LOCATION BELOW OF: facility, septic tank, field lines, well, spring, or public water line, nearest lot line, drive way, and distribution box, dosing tank and pump (if used)

Represents field line

_____ Represents solid line and sewers

SKETCH



Received 4/27/73
H. W. [Signature]

SPRING Rd. ROAD

AS BUILT PLOT PLAN

CITY OF
GAINESVILLE

WATER RESOURCES

July 11, 2024

Walker, Ball & Dimo, LLC
Attn: Taylor Ewing
340 Jesse Jewell Pkwy SE, Suite 650
Gainesville, GA 30501

Re: Water & Sanitary Sewer Availability
Proposed Residential Development
2052 Spring Road
PIN: 00122 002010

Dear Taylor,

The purpose of this letter is to confirm the availability of water and sanitary sewer service to the above referenced property.

The City of Gainesville owns and operates an existing 6-inch water main in the right-of-way of Spring Road along the frontage of the subject property. The City of Gainesville also owns and operates an existing 24-inch DIP gravity sanitary sewer on the South side of the subject property.

The City of Gainesville currently has adequate domestic water and sanitary sewer capacity for your proposed residential development, which we understand will generate an anticipated average sewage flow of 250 GPD and a peak flow of 625 GPD. Since this property is not currently contiguous to the City limits of Gainesville, an annexation agreement will be required in order to connect to the City's public sanitary sewer system.

This confirmation of water and sewer availability is good for one year from the date of this letter at which time, it will become null and void unless construction has commenced.

Please call me at (770) 538-2452 should you have any questions.

Sincerely,

Nick Swafford

Nick Swafford
Permitting Services and GIS Manager

cc: Tracy Robar, P.E., Engineering and Construction Division Manager
Chris Thornhill, Project Manager



Hall County Government
BOARD OF COMMISSIONERS

July 29, 2019

Ashley Ruelas
2529 Hollow Drive
Gainesville, GA 30504

RE: Use Subject Application

Dear Ms. Ruelas:

Please be advised that in its Voting Meeting on July 25, 2019, the Hall County Board of Commissioners voted to approve the following item:

- Application of Ashley Ruelas for a Use Subject to County Commission approval and to establish Residential-II setback standards on a 0.187± acre tract located on the north side of Spring Road, approximately 250 feet from its intersection with Skelton Road; a.k.a. 2052 Spring Road; Zoned H-B; Tax Parcel 00122 002010. Proposed Use: Construct a residence. Commission District 4.

“Pursuant to section 17.380.13- of the Official Code of Hall County, the approval of any application for a use subject to approval of the County Commission shall be effective for a period of no longer than 12 months from the date of approval unless action is taken by the applicant to implement the use proposed in the application by obtaining the proper permit and/or license, and development plat approval, and proceeding with the building, occupancy or establishment of business.”

Please contact me if you have questions or if you require any additional information concerning this action of the Board.

Sincerely,

Lisa A. Ritchie
Hall County Commission Clerk

CC: Srikanth Yamala, Planning Director

POST OFFICE DRAWER 1435
GAINESVILLE, GEORGIA 30503

t: 770.535.8288 | f: 770.531.3972

CHAIRMAN
Richard P. Higgins

Kathy L. Cooper, District 1
Billy Powell, District 2
Shelly Echols, District 3
Jeff Stowe, District 4

COUNTY ADMINISTRATOR
Jock A. Connell

ASSISTANT
COUNTY ADMINISTRATOR
Marty Nix

ASSISTANT
COUNTY ADMINISTRATOR
Lisa Johns

COMMISSION CLERK
Lisa A. Ritchie

Anael Dominguez (CDI: Planning)

From: Emily McGahee (Environmental Health)
Sent: Friday, June 28, 2024 10:26 AM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning); Katie L. Greenway (CDI: Planning)
Cc: Kelly Hairston (Environmental Health); Chad Harper (Environmental Health)
Subject: HCPC Tentative Agenda 8.5.24

Please find Environmental Health comments below:

Item 1, 0/3454 Gillsville Hwy, Chowdhury: All proposed lots must meet Hall County Board of Health Lot Size Resolution requirements. Please note that Zoning approval does not imply approval from other county departments. Further determination will be made during the plat review process.

Item 2A,B,C, 1954 Mountain View Road, Matheny: Must meet all residential permitting requirements.

Item 3A,B, 3193 Wallace Road, Del Toro: Must meet all residential permitting requirements.

Item 4A,B,C, 5248 Byers Road, Villeda: All proposed structures must meet all residential permitting requirements and/or required setbacks to existing septic system.

Item 5, 3117 Athens Hwy, Agile Cold Storage: No comment.

Item 6, 5820 McEver Road, Nabeel: If public sewer not available, development must meet all Environmental Health commercial septic system permitting requirements if able to be permitted by Environmental Health. Wastewater treatment and disposal may be required to be permitted through EPD. Further determination will be made during the civil plan review process. A detailed business plan must be submitted to Hall County Environmental Health for review. Tourist Accommodation permit/plan review and/or Food Service permit/plan review may be required after review of business plan.

Item 7, 2052 Spring Road, Ruelas: No comment. Public sewer.

Item 8A,B, 5181 Dudley Hill Road, Campbell: All proposed lots must meet Hall County Board of Health Lot Size Resolution requirements. Please note that Zoning approval does not imply approval from other county departments. Further determination will be made during the plat review process.

Item 9, 4518/4520 Cagle Road, Rochester: If public sewer not available, development must meet all Environmental Health commercial septic system permitting requirements if able to be permitted by Environmental Health. Further determination will be made during the civil plan review process. A detailed business plan must be submitted to Hall County Environmental Health for review.

Item 10, 5991 Swansey Road, Abernathy: No comment. Public sewer

Emily McGahee
Hall County Environmental Health
Hall County Government Center

2875 Browns Bridge Road
Mailing: PO Box 5901
Gainesville, GA 30504
(770) 531-3973 (phone)
emcgahee@hallcounty.org

<http://dph.georgia.gov/environmental-health> (State Website)
<http://www.phdistrict2.org/HallCounty.htm> (District Website)
<https://www.hallcounty.org/192/Environmental-Health> (County Website & Forms)

EMAIL Reader Advisory Notice: Email to and from a Georgia state agency is generally public record, except for content that is confidential under specific laws. Security by encryption is applied to all confidential information sent by email from the Georgia Department of Public Health (DPH). This message is only intended for specific recipient(s) and may contain privileged, private, or sensitive information. If you received this message in error, please delete it, and contact me.

Anael Dominguez (CDI: Planning)

From: Chavers, Veronica E <VChavers@dot.ga.gov>
Sent: Wednesday, July 3, 2024 1:56 PM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning)
Subject: RE: Tentative Planning Agenda for August 5, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

See responses in red, below.

From: Anael Dominguez (CDI: Planning) <adominguez@hallcounty.org>
Sent: Thursday, June 27, 2024 10:48 AM
Subject: Tentative Planning Agenda for August 5, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning –

Here is the Tentative Agenda and Maps for the **Monday, August 5, 2024** Hall County Planning Commission Meeting.

Please use the links to review the documents and respond with comments to Hall County Planning and Development. Failure to provide comments in a timely manner may result in the information not being included in the staff report.

When submitting comments, please include the name of the applicant along with the address of the property with the corresponding comment.

Comments are due by **Friday, July 5th**. Email comments to Beth (bgarmon@hallcounty.org) and Ana (adominguez@hallcounty.org).

CALL TO ORDER

AGENDA REVIEW

APPROVAL OF MINUTES – July 15, 2024

OLD BUSINESS

1. [0 & 3454 Gillsville Highway | Rezone | from Agricultural Residential IV \(AR-IV\) to Planned Residential Development \(PRD\) | on a combined 30.78± acre tract located on the south side of Gillsville Highway \(GA-323\), approximately 370 feet from its intersection with East Hall Road | Zoned AR-IV; Tax Parcels 15016 000158A & 000028C | Proposed Use: 20-lot residential subdivision | ** Commission District 3 | Sabina Chowdhury, applicant](#) Access on SR 323 will require GDOT coordination.

NEW BUSINESS

2. [\(A\) 1954 Mountain View Road | Variance | 17.240.010. to reduce the front yard setback along Memorial Park Place | on a 0.37± acre tract located on the east side of Mountain View Road at its intersection with Memorial Park Place | Zoned R-II; Tax Parcel 08009 007001 | Proposed Use: Single-family residence | * Commission District 4 | Randy L. Matheny, applicant](#) No GDOT coordination required

- (B) 1954 Mountain View Road | Variance | 17.240.010. to reduce the front yard setback along Mountain View Road | on a 0.37± acre tract located on the east side of Mountain View Road at its intersection with Memorial Park Place | Zoned R-II; Tax Parcel 08009 007001 | Proposed Use: Single-family residence | * Commission District 4 | Randy L. Matheny, applicant No GDOT coordination required**
- (C) 1954 Mountain View Road | Variance | 17.240.010. to reduce the rear yard setback | on a 0.37± acre tract located on the east side of Mountain View Road at its intersection with Memorial Park Place | Zoned R-II; Tax Parcel 08009 007001 | Proposed Use: Single-family residence | * Commission District 4 | Randy L. Matheny, applicant No GDOT coordination required**
3. **(A) 3193 Wallace Road | Variance | 17.240.010. to reduce the front yard setback | on a 0.49± acre tract located on the east side of Wallace Road at its intersection with Baker Road | Zoned AR-IV; Tax Parcel 15024 000058 | Proposed Use: Single-family residence | * Commission District 3 | Julia Del Toro, applicant**
(B) 3193 Wallace Road | Variance | 17.240.010. to reduce the rear yard setback | on a 0.49± acre tract located on the east side of Wallace Road at its intersection with Baker Road | Zoned AR-IV; Tax Parcel 15024 000058 | Proposed Use: Single-family residence | * Commission District 3 | Julia Del Toro, applicant No GDOT coordination required
4. **(A) 5248 Byers Road | Variance | 17.240.010. to reduce the right side yard setback | on a 0.61± acre tract located west side of Byers Road, approximately 941 feet from its intersection with Flat Creek Road | Zoned AR-III; Tax Parcel 08077 001017 | Proposed Use: Detached garage | * Commission District 2 | Hector J & Teresa Villeda, applicant No GDOT coordination required**
(B) 5248 Byers Road | Variance | 17.240.010. to reduce the rear yard setback | on a 0.61± acre tract located west side of Byers Road, approximately 941 feet from its intersection with Flat Creek Road | Zoned AR-III; Tax Parcel 08077 001017 | Proposed Use: Detached garage | * Commission District 2 | Hector J & Teresa Villeda, applicant No GDOT coordination required
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5. **3117 Athens Highway | Variance | 17.420.060. to allow for additional wall signs | on a 34.52± acre tract located on the north side of Athens Highway (GA-129) at its intersection with Roy Parks Road | Zoned I-I (GCOD); Tax Parcel 15024 000036 | Purpose: Wall sign | * Commission District 3 | Agile Cold Storage c/o John Blan, applicant No GDOT coordination required**
6. **5820 McEver Road | Amend Conditions of Zoning | on a 3.57± acre tract located on the west side of McEver Road at its intersection with Lights Ferry Road | Zoned H-B, Tax Parcel 08119 000003 | Proposed Use: Gas station and convenience store | ** Commission District 2 | Nabeel Group of Companies, Inc, applicant No GDOT coordination required**
7. **2052 Spring Road | Reestablishment of a Nonconforming Use | on a 0.19± acre tract located on the north side of Spring Road, approximately 237 feet from its intersection with Skelton Road | Zoned H-B, Tax Parcel 00122 002010 | Proposed Use: Single-family residence | ** Commission District 4 | Ashley Xitlaly Ruelas, applicant No GDOT coordination required**
8. **(A) 5181 Dudley Hill Road | Rezone | from Agricultural Residential III (AR-III) to Residential-I-Low-Density (R-I-L) | on a 47.61± acre tract located on the west side of Dudley Hill Road at its intersection with Waterwood Drive | Zoned AR-III; Tax Parcel 11131 000001A | Proposed Use: 20-lot single-family development | ** Commission District 2 | Blum & Campbell, LLC c/o Jody Campbell, applicant No GDOT coordination required**
(B) 5181 Dudley Hill Road | Use Subject to County Commission Approval | 17.70.040 for a subdivision | on a 47.61± acre tract located on the west side of Dudley Hill Road at its intersection with Waterwood Drive | Zoned AR-III; Tax Parcel 11131 000001A | Proposed Use: 20-lot single-family development | ** Commission District 2 | Blum & Campbell, LLC c/o Jody Campbell, applicant No GDOT coordination required
(C) 5181 Dudley Hill Road | Variance | 12.40.180. to allow for a common access drive to serve more than five lots | on a 47.61± acre tract located on the west side of Dudley Hill Road at its intersection with Waterwood Drive | Zoned AR-III; Tax Parcel 11131 000001A | Proposed Use: 20-lot single-family development | ** Commission District 2 | Blum & Campbell, LLC c/o Jody Campbell, applicant No GDOT coordination required

9. [\(A\) 4518 & 4520 Cagle Road | Rezone | from Agricultural Residential III \(AR-III\) to Light Industrial \(I-I\) & Gateway Corridors Overlay District \(GCOD\) | on a 16.61± combined tract located on the west side of Cornelia Highway, approximately 870 feet from its intersection with Cagle Road | Zoned AR-IV, Tax Parcel 15007 000030 & 15007 000031 | Proposed Use: Permitted uses in light industrial zoning district | ** Commission District 3 | Rochester|DCCM, applicant](#) Access on SR 365 will require GDOT coordination.
10. [\(B\) 4518 & 4520 Cagle Road | Use Subject to County Commission | 17.420.050 for outdoor storage within GCOD | on a 16.61± combined tract located on the west side of Cornelia Highway, approximately 870 feet from its intersection with Cagle Road | Zoned AR-IV, Tax Parcel 15007 000030 & 15007 000031 | Proposed Use: Outdoor storage | ** Commission District 3 | Rochester|DCCM, applicant](#) Access on SR 365 will require GDOT coordination.

[5991 Swansey Road | Amend Conditions of Zoning | on a 38.45 ± acre tract located on the south side of Swansey Road approximately 476 feet from its intersection with Circle Four Ranch | Zoned PRD, Tax Parcel 15048 000034 | Proposed Use: 100-lot subdivision | ** Commission District 1 | Abernathy Engineering Group, applicant](#) No GDOT coordination required

*The Planning Commission's decision will be the final action taken unless appealed to the Board of Commissioners. To do so, file an application with the Planning Department within 30 days of the Planning Commission's decision.

The Hall County Board of Commissioners will hear appeals at a public hearing **Thursday, September 12, 2024**, at 6:00 p.m. at the Hall County Government Center, 2nd Floor Meeting Room, 2875 Browns Bridge Road, Gainesville, Georgia.

The Planning Commission's recommendation will be forwarded to the Board of Commissioners for final action at a public hearing on **Thursday, September 12, 2024. The Board will meet at 6:00 p.m. at the Hall County Government Center, 2nd Floor Meeting Room, 2875 Browns Bridge Road, Gainesville, Georgia.

Thank you,
 Ana Dominguez
 Planning Commission Clerk
 Hall County Community Development and Infrastructure
 (770) 531-6810 | www.hallcounty.org



Human trafficking impacts every corner of the globe, including our state and local communities. Georgia DOT is committed to end human trafficking in Georgia through education enabling its employees and the public to recognize the signs of human trafficking and how to react in order to help make a change. To learn more about the warning signs of human trafficking, visit <https://doas.ga.gov/human-resources-administration/human-trafficking-awareness/trafficking-in-georgia>. To report any suspicious activity, call the Georgia Human Trafficking Hotline at 866-363-4842. Let's band together to end human trafficking in Georgia.



Hall County Government
COMMUNITY DEVELOPMENT AND INFRASTRUCTURE
PUBLIC WORKS AND UTILITIES

MEMORANDUM

To: Randi Doveton, Director of Planning and Development

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

From: Bill Nash, Director of Public Works and Utilities

Date: July 5, 2024

t: 770.531.6800 | f: 770.531.3945

Subject: August 5, 2024 - Hall County Planning Commission Agenda

PUBLIC WORKS AND
UTILITIES DIRECTOR
Bill Nash, P.E.

Please be advised that our office has reviewed the Hall County Planning Commission agenda for the August 5, 2024 meeting. Upon review, we provide the following comments.

OLD BUSINESS

1. [0 & 3454 Gillsville Highway | Rezone | from Agricultural Residential IV \(AR-IV\) to Planned Residential Development \(PRD\) | on a combined 30.78± acre tract located on the south side of Gillsville Highway \(GA-323\), approximately 370 feet from its intersection with East Hall Road | Zoned AR-IV; Tax Parcels 15016 000158A & 000028C | Proposed Use: 20-lot residential subdivision | ** Commission District 3 | Sabina Chowdhury, applicant](#)
 - a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage. Show stream buffer and impervious setback from wrested vegetation not centerline of stream Show FEMA and Hall County studied Flood plains that are present on site.
 - b. **Traffic:** GA DOT driveway permit required
 - c. **Utilities:** NO sanitary sewer in area.

NEW BUSINESS

2. [\(A\) 1954 Mountain View Road | Variance | 17.240.010. to reduce the front yard setback along Memorial Park Place | on a 0.37± acre tract located on the east side of Mountain View Road at its intersection with Memorial Park Place | Zoned R-II; Tax Parcel 08009 007001 | Proposed Use: Single-family residence | * Commission District 4 | Randy L. Matheny, applicant](#)
[\(B\) 1954 Mountain View Road | Variance | 17.240.010. to reduce the front yard setback along Mountain View Road | on a 0.37± acre tract located on the east side of Mountain View Road at its intersection with Memorial Park Place | Zoned R-II; Tax Parcel 08009 007001 | Proposed Use: Single-family residence | * Commission District 4 | Randy L. Matheny, applicant](#)
[\(C\) 1954 Mountain View Road | Variance | 17.240.010. to reduce the rear yard setback | on a 0.37± acre tract located on the east side of Mountain View Road at its intersection with Memorial Park Place | Zoned R-II; Tax Parcel 08009 007001 | Proposed Use: Single-family residence | * Commission District 4 | Randy L. Matheny, applicant](#)

- a. **Engineering:** No comment
 - b. **Traffic:** No comment.
 - c. **Utilities:** No comment.
3. [\(A\) 3193 Wallace Road | Variance | 17.240.010. to reduce the front yard setback | on a 0.49± acre tract located on the east side of Wallace Road at its intersection with Baker Road | Zoned AR-IV; Tax Parcel 15024 000058 | Proposed Use: Single-family residence | * Commission District 3 | Julia Del Toro, applicant](#)
[\(B\) 3193 Wallace Road | Variance | 17.240.010. to reduce the rear yard setback | on a 0.49± acre tract located on the east side of Wallace Road at its intersection with Baker Road | Zoned AR-IV; Tax Parcel 15024 000058 | Proposed Use: Single-family residence | * Commission District 3 | Julia Del Toro, applicant](#)
- a. **Engineering:** No comment
 - b. **Traffic:** No comment.
 - c. **Utilities:** No comment.
4. [\(A\) 5248 Byers Road | Variance | 17.240.010. to reduce the right side yard setback | on a 0.61± acre tract located west side of Byers Road, approximately 941 feet from its intersection with Flat Creek Road | Zoned AR-III; Tax Parcel 08077 001017 | Proposed Use: Detached garage | * Commission District 2 | Hector J & Teresa Villeda, applicant](#)
[\(B\) 5248 Byers Road | Variance | 17.240.010. to reduce the rear yard setback | on a 0.61± acre tract located west side of Byers Road, approximately 941 feet from its intersection with Flat Creek Road | Zoned AR-III; Tax Parcel 08077 001017 | Proposed Use: Detached garage | * Commission District 2 | Hector J & Teresa Villeda, applicant](#)
[\(C\) 5248 Byers Road | Variance | 17.240.010. to reduce the rear yard setback | on a 0.61± acre tract located west side of Byers Road, approximately 941 feet from its intersection with Flat Creek Road | Zoned AR-III; Tax Parcel 08077 001017 | Proposed Use: Single-family residence | * Commission District 2 | Hector J & Teresa Villeda, applicant](#)
- a. **Engineering:** Drainage easement may be changed, but must enter and exit in the place as the final plat PB:40 PG:242.
 - b. **Traffic:** No comment.
 - c. **Utilities:** No comment.
5. [3117 Athens Highway | Variance | 17.420.060. to allow for additional wall signs | on a 34.52± acre tract located on the north side of Athens Highway \(GA-129\) at its intersection with Roy Parks Road | Zoned I-I \(GCOD\); Tax Parcel 15024 000036 | Purpose: Wall sign | * Commission District 3 | Agile Cold Storage c/o John Blan, applicant](#)
- a. **Engineering:** No comment
 - b. **Traffic:** No comment.
 - c. **Utilities:** No comment.

6. [5820 McEver Road | Amend Conditions of Zoning | on a 3.57± acre tract located on the west side of McEver Road at its intersection with Lights Ferry Road | Zoned H-B, Tax Parcel 08119 000003 | Proposed Use: Gas station and convenience store | ** Commission District 2 | Nabeel Group of Companies, Inc, applicant](#)
 - a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage.
 - b. **Traffic:** Driveway to be reviewed during plan review
 - c. **Utilities:** No Hall County sewer in area.

7. [2052 Spring Road | Reestablishment of a Nonconforming Use | on a 0.19± acre tract located on the north side of Spring Road, approximately 237 feet from its intersection with Skelton Road | Zoned H-B, Tax Parcel 00122 002010 | Proposed Use: Single-family residence | ** Commission District 4 | Ashley Xitlaly Ruelas, applicant](#)
 - a. **Engineering:** No comment
 - b. **Traffic:** No comment.
 - c. **Utilities:** No comment.

8. [\(A\) 5181 Dudley Hill Road | Rezone | from Agricultural Residential III \(AR-III\) to Residential-I-Low-Density \(R-I-L\) | on a 47.61± acre tract located on the west side of Dudley Hill Road at its intersection with Waterwood Drive | Zoned AR-III; Tax Parcel 11131 000001A | Proposed Use: 20-lot single-family development | ** Commission District 2 | Blum & Campbell, LLC c/o Jody Campbell, applicant](#)
 - a. **Engineering:** Show stream buffer and impervious setback from wooded vegetation not centerline of stream.
As this subdivision is greater than 6 lots on an existing road a stormwater management report prepared by a professional engineer will be required.
Show FEMA and Hall County studied Flood plains that are present on site.
 - b. **Traffic:** Provide sight distance for each drive
Common access drive will need to meet County standards and go through the development review process.
 - c. **Utilities:** No comment.

9. [\(A\) 4518 & 4520 Cagle Road | Rezone | from Agricultural Residential III \(AR-III\) to Light Industrial \(I-I\) & Gateway Corridors Overlay District \(GCOD\) | on a 16.61± combined tract located on the west side of Cornelia Highway, approximately 870 feet from its intersection with Cagle Road | Zoned AR-IV, Tax Parcel 15007 000030 & 15007 000031 | Proposed Use: Permitted uses in light industrial zoning district | ** Commission District 3 | Rochester|DCCM, applicant](#)
[\(B\) 4518 & 4520 Cagle Road | Use Subject to County Commission 17.420.050 for outdoor storage within GCOD | on a 16.61± combined tract located on the west side of Cornelia Highway, approximately 870 feet from its intersection with Cagle Road | Zoned AR-IV, Tax Parcel 15007 000030 & 15007 000031 | Proposed Use: Outdoor storage | ** Commission District 3 | Rochester|DCCM, applicant](#)

- a. **Engineering:** Show stream buffer and impervious setback from wretched vegetation not centerline of stream
This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage
- b. **Traffic:** GA DOT permit required
- c. **Utilities:** Sanitary sewer on SR 365

10. [5991 Swansey Road | Amend Conditions of Zoning | on a 38.45 ± acre tract located on the south side of Swansey Road approximately 476 feet from its intersection with Circle Four Ranch | Zoned PRD, Tax Parcel 15048 000034 | Proposed Use: 100-lot subdivision | ** Commission District 1 | Abernathy Engineering Group, applicant](#)

- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage
Show stream buffer and impervious setback from wretched vegetation not centerline of stream
Show FEMA and Hall County studied Flood plains that are present on site.
- b. **Traffic:** Needs to be reviewed by legal
- c. **Utilities:** No comment.

Anael Dominguez (CDI: Planning)

From: John Hornick (Fire Services)
Sent: Tuesday, July 2, 2024 4:26 PM
To: Anael Dominguez (CDI: Planning)
Cc: Beth Garmon (CDI: Planning)
Subject: Fire Comments

Monday, August 5, 2024 Hall County Planning Commission Meeting.

[2052 Spring Road | Reestablishment of a Nonconforming Use](#) | on a 0.19± acre tract located on the north side of Spring Road, approximately 237 feet from its intersection with Skelton Road | Zoned H-B, Tax Parcel 00122 002010 | **Proposed Use: Single-family residence** | ** Commission District 4 | **Ashley Xitlaly Ruelas, applicant**

The Hall County Fire Marshal's Office has no comments as proposed.

Regards,

John Hornick, NPQ Fire Service Plans Examiner 1
Lieutenant, Hall County Fire Rescue
Hall County Government
Main: 770-531-6838 | Cell: 404-597-0083
Website: www.Hallcounty.org



ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT: **ASHLEY XITLALY RUELAS**

REQUEST: **REESTABLISHMENT OF A NONCONFORMING**

USE FOR A SINGLE-FAMILY RESIDENCE

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION COUNTY COMMISSION

Date: **Aug 17, 2024** Date: **SEPT 24, 2024**

Time: **5:15 PM** Time: **6:00 PM**

HALL COUNTY GOVERNMENT CENTER, 201 BROWN BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6800



AGENDA ITEM

Planning & Zoning

REPORT TO: **Work Session (09/23/24)**

REPORT TO: **Voting Meeting (09/24/24)**

ITEM NO: 505/2024

SUBJECT: **3475 Cook Road | Use Subject to County Commission Approval** | on a 13.91± acre tract located on the east side of Cook Road approximately 1,503 feet from its intersection with Davis Bridge Road | Zoned AR-III & VC; Tax Parcel 10068 000005C | **Proposed Use: 6-lot subdivision** | Commission District 2 | **Decatur Presbyterian Church, applicant**

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: BG
Recommendation:

Approval, with conditions:

1. The property shall be developed in accordance with the plat dated April 29, 2005, and as described in the project narrative dated July 1, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The property shall be subdivided into a maximum of six (6) single-family residential lots in accordance with the requirements of the Agricultural-Residential-III (AR-III, 17.60) and Vacation Cottage (V-C) zoning districts as detailed in 17.240, Area and Setback Requirements.
3. The following statement regarding the potential impacts of agricultural operations in the area shall be made a part of any plat recorded on the property: "Owners, occupants, and users of property shown on this plat are hereby informed of the impacts associated with normal farming practices which may take place on adjacent and nearby property including, but not limited to, noise, odors, dust, the operation of machinery of any kind, the storage and disposal of manure, and the application of fertilizers, herbicides, and pesticides. Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices."
4. Pursuant to 2.60.060. – effective period of approved applications, all applications approved by the board, whether a request for variance from the terms of Title 17, a request for conditional use, a request for the enlargement, change or continuance of a nonconforming use or a request to appeal a decision by an administrative official in the enforcement of Title 17, shall be effective for a period of six months. If no action is taken by the applicant to implement the purpose of the application by obtaining the proper permit and/or license and proceeding with the building, occupancy or establishment of business within six months from the date of approval by the board, said approval shall become null and void.
5. No variances or development exceptions are granted as part of this request that are not explicitly granted by Board approval. The development shall be compliant with the Official code of Hall County.
6. All conditions of zoning shall be made part of any plats created for the property.
7. The developer shall be responsible for improving Cook Road along the frontage of the subject property. The surface material used where the road is improved shall match the existing road surface of asphalt or gravel. Improvements shall meet Hall county fire services/fire Marshall standards for ingress and egress.
8. All required roadway improvements shall be completed prior to the issuance of any building permit for the proposed subdivision.

Purpose of Request:

3475 Cook Road | Use Subject to County Commission Approval
 | on a 13.91± acre tract located on the east side of Cook Road
 approximately 1,503 feet from its intersection with Davis Bridge Road
 | Zoned AR-III & VC; Tax Parcel 10068 000005C | **Proposed Use:**
6-lot subdivision | Commission District 2 | Decatur Presbyterian
Church, applicant

History:

Facts and Issues:

Options:

| | |
|--|---------|
| Funding Requested | \$ 0.00 |
| Are funds within current budget? | No |
| Source of Funds | |
| Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? | No |
| Has it been reviewed by the County Attorney? | Yes |
| Is there a deadline for this item? | |

Approvals:

| Submit | Approve | Attorney | Administration |
|--------------|---------|----------|----------------|
| KE | BG | WLI | CR |
| Clerk | | | |
| JR | | | |

Attachments:

Board Memo
Recommendation Report
Application
Narrative
Site Plan
Maps
5-6-1995 HCPC Road Determination
Environmental Health Comments
GDOT Comments
Public Works with Supplement Comments
Fire Comments
Neighborhood Meeting Memo
Notice Sign Photos



Hall County Government

COMMUNITY DEVELOPMENT & INFRASTRUCTURE
PLANNING AND ZONING

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6809 | f: 770.531.3902

PLANNING AND ZONING
DIRECTOR
Beth Garmon

To: Richard Higgins, Chairman
Kathy Cooper, District 1 Commissioner
Billy Powell, District 2 Commissioner
Gregg Poole, District 3 Commissioner
Jeff Stowe, District 4 Commissioner

From: Beth Garmon, Director of Planning & Zoning

Date: September 9, 2024

Subject: **3475 Cook Road | Use Subject to County Commission Approval | on a 13.91± acre tract | Proposed Use: 6-lot subdivision | Decatur Presbyterian Church, applicant**

The request before you is the request of Decatur Presbyterian Church for a use subject to County Commission approval to allow a 6-lot subdivision. This item is located within Commission District 2.

At their August 19, 2024 meeting, the Hall County Planning Commission voted to recommend approval, with eight (8) conditions **(5-0)**.

Staff recommendation: **Approval, with conditions**, as the proposed request is consistent with the Lake Area Residential future land use classification within the Comprehensive Plan.

There were **two (2) comments submitted** in advance of the Planning Commission meeting and **six (6) people spoke during the public hearing**.

Planning Commission Conditions:

1. The property shall be developed in accordance with the plat dated April 29, 2005, and as described in the project narrative dated July 1, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The property shall be subdivided into a maximum of six (6) single-family residential lots in accordance with the requirements of the Agricultural-Residential-III (AR-III, 17.60) and Vacation Cottage (V-C) zoning districts as detailed in 17.240, Area and Setback Requirements.
3. The following statement regarding the potential impacts of agricultural operations in the area shall be made a part of any plat recorded on the property:
"Owners, occupants, and users of property shown on this plat are hereby informed of the impacts associated with normal farming practices which may take place on adjacent and nearby property including, but not limited

to, noise, odors, dust, the operation of machinery of any kind, the storage and disposal of manure, and the application of fertilizers, herbicides, and pesticides. Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices."

4. Pursuant to 2.60.060. – effective period of approved applications, all applications approved by the board, whether a request for variance from the terms of Title 17, a request for conditional use, a request for the enlargement, change or continuance of a nonconforming use or a request to appeal a decision by an administrative official in the enforcement of Title 17, shall be effective for a period of six months. If no action is taken by the applicant to implement the purpose of the application by obtaining the proper permit and/or license and proceeding with the building, occupancy or establishment of business within six months from the date of approval by the board, said approval shall become null and void.
5. No variances or development exceptions are granted as part of this request that are not explicitly granted by Board approval. The development shall be compliant with the Official Code of Hall County.
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7. The developer shall be responsible for improving Cook Road along the frontage of the subject property. The surface material used where the road is improved shall match the existing road surface of asphalt or gravel. Improvements shall meet Hall County Fire Services/Fire Marshall standards for ingress and egress.
8. All required roadway improvements shall be completed prior to the issuance of any building permit for the proposed subdivision.

**HALL COUNTY PLANNING COMMISSION
RECOMMENDATION REPORT**

Applicant Decatur Presbyterian Church

Request Use Subject to County Commission Approval |
17.50.040.K 6-lot residential subdivision

Proposed Use 6-lot residential subdivision

Size 13.91± acres

Zoning Agricultural Residential III (AR-III, 17.110) &
Vacation Cottage (V-C, 17.50)

Location **3475 Cook Road** | Tax Parcel 10068 000005C

Commission District Two

Planning Commission Date August 19, 2024

Staff Recommendation **Approval, with conditions**, as the proposed
request is consistent with the Lake Area
Residential future land use classification within
the Comprehensive Plan.

Record Number HZCU24-0029

Planning Commission Recommendation..... **Approval, with conditions**

Vote: 5-0

Planning Commission Conditions:

1. The property shall be developed in accordance with the plat dated April 29, 2005, and as described in the project narrative dated July 1, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The property shall be subdivided into a maximum of six (6) single-family residential lots in accordance with the requirements of the Agricultural-Residential-III (AR-III, 17.60) and Vacation Cottage (V-C) zoning districts as detailed in 17.240, Area and Setback Requirements.
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4. Pursuant to 2.60.060. – effective period of approved applications, all applications approved by the board, whether a request for variance from the terms of Title 17, a request for conditional use, a request for the enlargement, change or continuance of a nonconforming use or a request to appeal a decision by an administrative official in the enforcement of Title 17, shall be effective for a period of six months. If no action is taken by the applicant to implement the purpose of the application by obtaining the proper permit and/or license and proceeding with the building, occupancy or establishment of business within six months from the date of approval by the board, said approval shall become null and void.
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8. All required roadway improvements shall be completed prior to the issuance of any building permit for the proposed subdivision.

Excerpts from the August 19, 2024 Planning Commission Meeting

Applicant's Presentation:

Katie Greenway, Planning and Zoning Administrator, presented a summary of the request.

James Irvin, 164 Professional Drive, Baldwin, presented the request. The applicant stated that the proceeds from the sale of the lots will be placed in an endowment for future ministries. He also noted that the gravel road is a public right-of-way but is privately maintained. The church plans to dedicate property along the road to facilitate widening the right of way and to create a turnaround at the end of the road for emergency vehicle access. Additionally, the applicant mentioned having met with neighbors to discuss the proposed road improvements.

Todd Speed, 205 Sycamore Street, Decatur, presented the request.

Public Forum:

Wade Baggarly, 3484 Cook Road, Gainesville, spoke in favor. Spoke about the meeting held with the neighbor's discussing improvements to the road and paving the road. He also requested that the road become a county-maintained road.

Jeff Cook, 3480 Cook Road, Gainesville, spoke in favor. Spoke about the road improvement, the applicant donating their property to widen the road, the road becoming county maintained, and having the county install fire hydrants.

Philip Martin, 3482 Cook Road, Gainesville, spoke in favor. Spoke about the driveway, road construction cost, emergency service, and safety of the road.

Tom Shepard, 3476 Cook Road, Gainesville, spoke in opposition. Concerns were losing property to road widening.

Kimberly Shepard, 3476 Cook Road, Gainesville, spoke in opposition. Concerns were losing property if the road becomes a county road.

Patsy Kilmarten, 3549 Cameron Drive, Gainesville, spoke in opposition. Concerns were the number of docks increasing, who the developer will be, and increased lake traffic.

Rebuttal

The applicant noted that upgrading an old private road to meet county standards is challenging due to various requirements. He also mentioned that there is no public water, but they could build fire wells as required by the Fire Department. The property currently has five docks, and Mr. Hunt pointed out that dock permits are managed by the U.S. Army Corps of Engineers.

Planning Commission Comments:

Mr. Braswell stated that the application is solely to allow the 6-lot subdivision of the property and the road becoming county-maintained has its own separate process. Mr. Hunt questioned the road improvements and asked about creating a condition to require that when the roadway is expanded, it should be improved with asphalt where it is currently asphalt.

Motion: A motion to approve, with conditions was made by Mr. Hunt and seconded by Mr. Varner. Vote: 5-0

Conditions:

1. The property shall be developed in accordance with the plat dated April 29, 2005, and as described in the project narrative dated July 1, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The property shall be subdivided into a maximum of six (6) single-family residential lots in accordance with the requirements of the Agricultural-Residential-III (AR-III, 17.60) and Vacation Cottage (V-C) zoning districts as detailed in 17.240, Area and Setback Requirements.
3. The following statement regarding the potential impacts of agricultural operations in the area shall be made a part of any plat recorded on the property:
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Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices."

4. Pursuant to 2.60.060. – effective period of approved applications, all applications approved by the board, whether a request for variance from the terms of Title 17, a request for conditional use, a request for the enlargement, change or continuance of a nonconforming use or a request to appeal a decision by an administrative official in the enforcement of Title 17, shall be effective for a period of six months. If no action is taken by the applicant to implement the purpose of the application by obtaining the proper permit and/or license and proceeding with the building, occupancy or establishment of business within six months from the date of approval by the board, said approval shall become null and void.
5. No variances or development exceptions are granted as part of this request that are not explicitly granted by Board approval. The development shall be compliant with the Official Code of Hall County.
6. All conditions of zoning shall be made part of any plats created for the property.
7. The developer shall be responsible for improving Cook Road along the frontage of the subject property. The surface material used where the road is improved shall match the existing road surface of asphalt or gravel. Improvements shall meet Hall County Fire Services/Fire Marshall standards for ingress and egress.
8. All required roadway improvements shall be completed prior to the issuance of any building permit for the proposed subdivision.

Staff recommends APPROVAL of the applicant’s request with the following conditions:

1. The property shall be developed in accordance with the plat dated April 29, 2005, and as described in the project narrative dated July 1, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The property shall be subdivided into a maximum of six (6) single-family residential lots in accordance with the requirements of the Agricultural-Residential-III (AR-III, 17.60) and Vacation Cottage (V-C) zoning districts as detailed in 17.240, Area and Setback Requirements.
3. The following statement regarding the potential impacts of agricultural operations in the area shall be made a part of any plat recorded on the property:

“Owners, occupants, and users of property shown on this plat are hereby informed of the impacts associated with normal farming practices which may take place on adjacent and nearby property including, but not limited to, noise, odors, dust, the operation of machinery of any kind, the storage and disposal of manure, and the application of fertilizers, herbicides, and pesticides. Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices.”
4. Pursuant to 2.60.060. – effective period of approved applications, all applications approved by the board, whether a request for variance from the terms of Title 17, a request for conditional use, a request for the enlargement, change or continuance of a nonconforming use or a request to appeal a decision by an administrative official in the enforcement of Title 17, shall be

effective for a period of six months. If no action is taken by the applicant to implement the purpose of the application by obtaining the proper permit and/or license and proceeding with the building, occupancy or establishment of business within six months from the date of approval by the board, said approval shall become null and void.

5. No variances or development exceptions are granted as part of this request that are not explicitly granted by Board approval. The development shall be compliant with the Official Code of Hall County.
6. All conditions of zoning shall be made part of any plats created for the property.

Summary Analysis

The applicant is requesting County Commission approval to subdivide a 13.91± acre parcel zoned Agricultural Residential III (AR-III, 17.110) and Vacation Cottage (V-C, 17.50) for the purpose of creating a 6-lot residential subdivision. Per the requirements of 17.50.040.K, minor subdivisions within the Vacation Cottage (V-C, 17.50) zoning district require Board of Commissioners approval.

The subject property is zoned both Agricultural -Residential -III (AR-III) and Vacation Cottage (V-C) with the majority of the property being zoned Vacation Cottage (V-C). The property is currently developed with a 2,400 square-foot single-family residence constructed in 1970, which is included on the proposed Tract 1.

Per the submitted narrative, the property and residence was previously used as a retreat for church members of Decatur Presbyterian Church; however, the frequency of use has decreased and the church would like to subdivide and sell the property. The narrative further states that the church does not intend to use any of the lots for church-owned short-term rentals.

Per the submitted site plan, all proposed lots meet the minimum lot area and frontage requirements for Agricultural Residential III (AR-III) as established in table 17.240.010(A). Furthermore, Cook Road is identified as a non-county maintained road. On March 6, 1995, the Planning Commission approved the portion of Cook Road beginning at the point where county maintenance ends and extending approximately 0.54± miles south to qualify as frontage for a public road. Per the narrative, the applicant states that each lot will use individual on-site wells and septic systems.

No variances have been submitted or identified as part of this request; therefore, any deficiencies identified as part of the plan will be required to comply with the respective zoning districts of the parcels.

The proposed subdivision plat reflects the desired layout for Lots 1-6 as follows:

| Agricultural Residential III (R-III, 17.110) & Vacation Cottage (V-C, 17.50) Standards | Required | Proposed |
|---|---|--|
| Lot Area: AR-III | 65,340 square feet | Lot 1: 177,924 sf (4.08 ac) Lot 2: 106,129 sf (2.44 ac) |
| Lot Area: V-C | 35,000 square feet | Lot 3: 94,980 sf (2.18 ac) Lot 4: 95,990 sf (2.20 ac) Lot 5: 65,365 sf (1.50 ac) Lot 6: 65,379 sf (1.50 ac) |
| Lot Frontage | Local Road: 50 feet | Lot 1: 611 feet Lot 2: 400 feet Lot 3: 75 feet Lot 4: 207 feet Lot 5: 280 feet Lot 6: 275 feet |
| Lot Width at Building Line | 75 feet | None Listed; however, each parcel is 75 feet or greater at all points. |
| Front Yard Setback: AR-III | 65 feet from centerline of road or 40 feet from property line, whichever is greater | 65 feet from centerline of road or 40 feet from property line, whichever is greater |
| Front Yard Setback: V-C | 55 feet from centerline of road or 30 feet from property line, whichever is greater | 55 feet from centerline of road or 30 feet from property line, whichever is greater |
| Side Yard Setback: AR-III | 15 feet | 15 feet |
| Side Yard Setback: V-C | 10 feet | 10 feet |
| Rear Yard Setback: (All lots back up to property controlled by the United States Army Corps of Engineers) | 0 feet | 0 feet |

Based on the future land use plan, staff finds the request is *consistent* with the Hall County Comprehensive Plan future land use designation of “Lake Area Residential”. The intent of this land use category is to preserve established neighborhoods and create opportunities for permanent and vacation residences similar in land use patterns to Residential Areas but at lower residential densities. This land use designation envisions a maximum density of 1 dwelling unit per acre. The proposed development has an overall density of 0.43 units per acre.

Zoning Analysis

Per Planning Commission and Hall County Commission consideration and decision (17.380.060), the board shall study the need and justification for the change based on a determination of the facts applicable to the particular case, and the following general lines of inquiry shall be considered, to wit:

1. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property; **The proposed use of a 6-lot subdivision is consistent with the use, development, and zoning of adjacent and nearby properties, as neighboring parcels are similarly zoned Vacation Cottage (V-C, 17.50) and/or Agricultural Residential III (AR-III, 17.110).**
2. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property; **The proposed minor subdivision of the parcel will not adversely affect the existing use or usability of adjacent and nearby property.**
3. Whether the property to be affected by the zoning proposal has reasonable economic use as currently zoned. **Yes, the property has reasonable economic use as currently zoned, Vacation Cottage (V-C, 17.50) and Agricultural Residential III (AR-III, 17.110); however, the applicant cannot subdivide the property without approval by the Board of Commissioners.**
4. Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, or utilities; **If approved, the development is not anticipated to cause an excessive or burdensome use of the existing streets, transportation facilities, etc.**
5. Whether the zoning proposal is in conformity with the policy and intent of the land use plan; **The proposed use is consistent with the Comprehensive Plan and the "Lake Area Residential" land use designation. This land use designation envisions a maximum density of 1 dwelling unit per acre. The proposed development has an overall density of 0.43 units per acre.**
6. The extent to which property values are diminished by the existing zoning restrictions; **Absent a market study, staff is unable to determine whether property values are diminished by the existing zoning restrictions.**
7. The extent to which the destruction of the subject property's value under the existing zoning promotes the health, safety, morals or general welfare of the public; **Staff is unable to comment on the impact of property values without a full market analysis. Multiple factors impact property value including construction types, proposed uses, and maintenance. Often it is difficult to determine the effect of a development on adjacent properties until the development is completed.**
8. The relative gain to the public as compared to the hardship imposed upon the individual property owner; **Staff has not identified a hardship imposed on the property owner as the property is currently zoned.**
9. The length of time the property has been vacant as zoned considered in the context of land development in the area in the vicinity of the property; **The property is currently developed with a 2,400 square-foot single-family residence constructed in 1970.**

10. Whether there are other existing or changing conditions affecting the use or development of the property which give supporting grounds for either approval or disapproval of the zoning proposal; **Staff is not aware of any changing conditions affecting the use or development of the property**
11. Whether the change would create an isolated district unrelated to the surrounding districts; **The request is for conditional use approval and is intended to allow for the subdivision of the parcel into 6 single-family residential lots. The change would not create an isolated district unrelated to the surrounding districts**
12. Whether the present zoning district boundaries are illogically drawn in relation to existing conditions in the area; **There is no evidence that the present zoning district boundaries are illogically drawn. The parcel is zoned both Agricultural Residential III (AR-III) and Vacation Cottage (V-C), although this appears to be original to the adoption of zoning regulations by Hall County.**
13. Whether the change requested is out of scale with the needs of the county as a whole or the immediate neighborhood; **No, the request is not out of scale with the needs of the county as a whole.**
14. Whether it is impossible to find adequate sites for the proposed use in districts permitting such use and already appropriately zoned; **The subdivision of land within the Vacation Cottage (V-C, 17.50) zoning district requires Board of Commissioner approval.**
15. Whether the need for rezoning could be handled instead by a variance request to the Planning Commission; **The request is for conditional use approval and is intended to subdivide the parcel into 6 single-family residential lots. This could not be handled instead by a variance.**
16. Whether there would be an ecological or pollution impact resulting from major modifications to the land if the request is granted; **Any land disturbance activities on the property shall be required to go through the land development permitting process, and as a result are subject to local, state, and federal regulations. As a result, there are no anticipated ecological or pollution impacts resulting from any modification to the land if the request is granted.**
17. Whether there is reasonable evidence based upon existing and anticipated land use that would indicate a mistake was made in the original zoning of the property; **There is no indication that a mistake was made in the original zoning. The parcel is zoned both Agricultural Residential III (AR-III) and Vacation Cottage (V-C), although this appears to be original to the adoption of zoning regulations by Hall County.**

17.380.050. - Submission requirements

- A. Any person or persons requesting a change in the official zoning map or use subject to approval of the county commission shall file an application with a plat or map of the property attached thereto, together with payment of such fees set forth in chapter 17.30 to cover administrative and advertising costs, in the planning department office. Such person or persons or their authorized agent shall appear in person at the public hearing held to consider the district change. **The proposal meets the requirement, and the applicant understands that someone must be present at both the Hall County Planning Commission meeting and the voting meeting of the Hall County Board of Commissioners.**

- B. All applications for a change of zoning classification or use subject to approval of the county commission shall include:
 - 1. A narrative statement identifying the existing and proposed use of the property and addressing each of the criteria set forth in section 17.380.060.C of this section [chapter]. **The proposal does provide a narrative outlining the intent of the request; however, the applicant has not prepared a response to each of the criteria listed in 17.380.060.C.**
 - 2. A site plan drawn to scale designating the area covered by the application and identifying existing and proposed buildings and uses, adjacent existing land uses, zoning on contiguous parcels, including those across an abutting public right-of-way, and any other significant site improvements proposed to accommodate the proposed use or buffer adjacent uses, etc., or a plat of the subject property where no specific land use is proposed. In cases where only a plat or map is provided and no land use is proposed, the planning commission and county commission shall evaluate the application based on the most intense possible land use permitted in the proposed district. **The proposal meets this requirement.**
- C. For any application for a slow rate land treatment system (see chapter 17.20), the following additional requirements apply. **This standard is not applicable to the applicant's request.**
- D. For any application proposing the development of 100 or more residential dwelling units, a traffic impact study shall be submitted prior to consideration of the application by the planning commission. At the applicant's expense, the traffic impact study shall be prepared by a professional engineer in accordance with requirements established by the Hall County Engineering Department. The engineering department shall review the traffic impact study and forward any comments to the Hall County Planning Commission. **This standard is not applicable to the applicant's request.**

Development Support and Constraints / Departmental Comments

Hall County Environmental Health

In an email dated July 17, 2024, Emily McGahee stated, "All proposed lots must meet Hall County Board of Health Lot Size Resolution requirements. Please note that Zoning approval does not imply approval from other county departments. Further determination will be made during the plat review process. All proposed plats must be submitted to the Hall County Plat Review Team for review and approval prior to submittal to Clerk of Courts for recordation."

Hall County Fire Marshal

In an email dated July 17, 2024, John Hornick, NPQ Fire Service Plans Examiner, Lieutenant provided the following comments:

- 1. International Fire Code 503.2.1, Fire apparatus roads shall have an unobstructed width of not less than 20' exclusive of shoulders. The portion of Cook Road that is not maintained by Hall County will have to meet the 20' road width requirement to all the proposed lots.

2. International Fire Code 503.2.5, Dead end fire apparatus roads in excess of 150' in length shall be provided with an approved area for turning around fire apparatus. The portion of Cook Road that is not maintained by Hall County will be required to have an approved turnaround as required by code.
3. International Fire Code 507 Fire Protection Water Supplies: 507.1 Required Water Supply, an approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into within the jurisdiction. The closest fire hydrant is 2000 feet away from the Cul-de-Sac at the end of the Hall County maintained portion of Cook Road. No expansion of the municipal water system is proposed in the concept narrative.

Hall County Public Works and Utilities

In a memo dated July 18, 2024, Bill Nash, Director of Public Works and Utilities, provided the following comments:

Engineering:

Show FEMA and Hall County studied Flood plains that are present on site.

As this subdivision is greater than 6 lots on an existing road a stormwater management report prepared by a professional engineer will be required.

Cook Drive beyond the cul-de-sac is not Hall County maintained.

Hall County should not accept partial right of way on a road that it does not maintain or have an interest in.

If they want to bring the road up to county specifications, then, as long as the other property owners agree, we would possibly accept the road.

Traffic:

Non-County maintained, "Privately maintained" roadway – see engineering comments, no additional comments.

Utilities

No sanitary sewer near the development

Georgia Department of Transportation

In an email dated July 18, 2024, Veronica Chavers stated that GDOT coordination is not required.

PLANNING AND DEVELOPMENT DEPARTMENT
 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA, 30504
 MAILING ADDRESS PO BOX 1435, GAINESVILLE, GA 30503
 t: 770-531-6809 | f: 770-531-3902



CONDITIONAL USE APPLICATION

Applicant (Name & Mailing Address)

DECATUR PRESBYTERIAN CHURCH
205 SYCAMORE ST
DECATUR, GA 30030

Phone 404-229-4257

Email Address bdowns@wmdlegal.com

Proposed Use 6 LOT MINOR SUBDIVISION

Property Owner (Name & Mailing Address)

DECATUR PRESBYTERIAN CHURCH
205 SYCAMORE ST
DECATUR, GA 30030

Phone 404-229-4257

Email Address bdowns@wmdlegal.com

Contact Person (Name & Mailing Address)

BRYAN DOWNS
125 CLAIREMONT AVE SUITE 420
DECATUR, GA 30030

Phone 404-229-4257

Email Address bdowns@wmdlegal.com

Tax Parcel Number 10068 00005C

Location Address 3475 COOK RD

Status of Applicant

- Owner
- Option to Purchase
- Area Resident
- Other

Acreage 13.91 ACRES

Requested Action

- Permissive Use:
- HCPC HCC
 - Fee: \$ _____
 - Receipt #: _____
 - Check #: _____

I hereby certify that the above information and all attached information are true and correct.

Sign *Bryan A. Downs* Date: 6-28-24

Applicant must complete all information above. Failure to complete this section will result in the refusal of the application. The Planning Department has 15 days to review all applications and will set the dates for each application. If the application is found insufficient, an agenda date will not be set until the required information is submitted. Please note that the Planning Commission and County Commission dates are tentative.

Application Withdrawal: I hereby **withdraw** the application.

Sign _____ Date: _____

Staff Use Only

Application Date: _____ Taken by: _____

Tentative Planning Commission Date: _____ Tentative County Commission Date: _____

County Commission District: _____

PLANNING AND DEVELOPMENT DEPARTMENT
2875 BROWNS BRIDGE ROAD GAINESVILLE, GA 30504
MAILING ADDRESS: PO BOX 1435 GAINESVILLE, GA 30503
t: 770-531-6809 | f: 770-531-3902



CAMPAIGN CONTRIBUTIONS DISCLOSURE FORM

This form must be completed by the applicant and property owner, or person representing the property owner, for all zoning actions.

OCGA § 36-67A-3[C] Disclosure of campaign contributions:

(b) When any applicant for zoning action has made, within two years immediately preceding the filing of the applicant's application for the zoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

(3) The name and official position of the local government official to whom the campaign contribution was made; and

(4) The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution.

(b) The disclosures required by subsection (a) of this Code section shall be filed within ten days after the application for the zoning action is first filed. (Code 1981, Section OCGA § 36-67A-3[C], enacted by GA L. 1986, page 1269, Section 1, GA L. 1991, page 1365, Section 1).

I hereby certify that I have read the above and that:

I have** I have not

within the two years immediately preceding this date, made any contribution(s) aggregating \$250.00 or more to any local government official involved in the review or consideration of this application.

****If you have made such contributions, you must provide the data required below within ten (10) days of filing this application.**

Name of Official(s): _____ Office: _____

Dollar Amount: _____ Date of Contribution: _____

Applicant's/Owner's Signature: *Byron A. Jones* Date: 6-28-21

Applicant's/Owner's Name (Printed): DECATUR PRESBYTERIAN CHURCH



DECATUR PRESBYTERIAN CHURCH

205 Sycamore Street
Decatur, GA 30030
404-378-1777 www.dpchurch.org

July 1, 2024

Planning and Development Department
Hall County
2875 Browns Bridge Road
Gainesville, GA 30503

Re: 3475 Cook Road, Gainesville, GA
 Tax parcel I.D. 10068 000005C

Dear Sir/Madam:

This letter confirms that attorney Bryan A. Downs, a long-time member and elder of our church, is fully authorized to act on behalf of Decatur Presbyterian Church, the owner of the above-referenced property, with respect to all matters concerned with the Conditional Use Permit Application submitted to the Planning and Development Department for a proposed six lot minor subdivision.

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

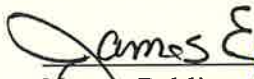
With appreciation for your assistance.

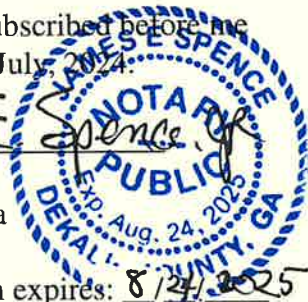
Sincerely,

Lucia Howard Sizemore

Trustee of Decatur Presbyterian Church

Sworn to and subscribed before me
this 1st day of July, 2024.


Notary Public
State of Georgia



My commission expires: 8/24/2025

cc: Dr. Todd Speed, *Senior Minister*
 Ms. Karol Eubanks, *Church Administrator*
 Mr. Tom Adams, *Trustee*
 Mr. Bill Turnipseed, *Trustee*
 Mr. James Irvin, P.E.
 Mr. Bryan Downs



NARRATIVE REPORT
REQUEST FOR CONDITIONAL USE
HALL COUNTY, GEORGIA

RE: 13.91 acres located on 3475 Cook Road, Gainesville, GA 30506
Parcel ID 10068 000005C

Decatur Presbyterian Church (the "Applicant") respectfully submits this Narrative Report to the Hall County Board of Commissioners in support for conditional use approval for a 6-lot minor subdivision in the V-C zoning district. The property currently has both V-C and AR-III zonings.

This property has been owned by Decatur Presbyterian Church for many years, being used as a retreat for the church members. One single family home is currently on the property. The property and the house are no longer used frequently; therefore, the church would like to subdivide and/or sell for residential single-family lots. This will help the church with their finances. The church does not intend to use these lots for short-term rental.

The lot configuration was prepared by Patton Land Surveying in 2005 as shown on the accompanied drawing. The lot areas considered the topography and usable soils for septic systems. The plan also shows proposed additional right-of-way along Cook Road. The lots will also be served by onsite wells. Due to the more rural nature of the surroundings, no street lights are proposed.

The use, size, and configuration of the lots fits within the surrounding area and the intent of AR-III zoning. The addition of these 6 lots should not cause any adverse effects to the adjacent properties. Please contact me if you need to discuss this conditional use request further or in more detail.

Sincerely,

A handwritten signature in black ink, appearing to read 'James Irvin', with a large, stylized flourish at the end.

James Irvin, PE
Engineer for Applicant
Foothills Land Design, LLC

RECEIVED

JUL 01 2024

Planning & Zoning Department

NOTES:
 A PORTION OF THIS PROPERTY IS LOCATED WITHIN A FLOOD HAZARD AREA AS PER FIRM FLOOD INSURANCE RATE MAP OF HALL COUNTY, GA COMMUNITY PANEL NO. 130466 0170 E EFFECTIVE DATE: MARCH 21, 2000 THE AREA BELOW THE 1085' CONTOUR LIES WITHIN A FLOOD ZONE.

AREA: 13.91 ACRES +/-

BOUNDARY INFORMATION:
 THIS CONCEPT PLAN WAS PREPARED FROM PLATS & DEEDS OF RECORD AND DOES NOT CONSTITUTE AN ACCURATE SURVEY.

THIS PLAT OR SURVEY IS FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES LISTED UNDER THE CAPTION "SURVEY FOR". ANY THIRD PARTY USE TO BE AT THEIR OWN RISK.

STATE WATERS BUFFER:
 A 50 FOOT UNDISTURBED VEGETATIVE BUFFER, ADJACENT TO ALL RUNNING STREAMS WILL BE LEFT AND MAINTAINED. THE BUFFER IS TO BE MEASURED FROM THE TOP EDGE OF THE WATERS BANK.

STORMWATER MANAGEMENT:
 SITE WILL MEET ALL HALL COUNTY WATERSHED PROTECTION ORDINANCES. DRIVEWAY DESIGN AND PLACEMENT IS SUBJECT TO APPROVAL BY THE HALL COUNTY TRAFFIC ENGINEER AND D.O.T.
 TOTAL NUMBER OF LOTS: 6
 MINIMUM LOT SIZE: 1.50 ACRE / 65,340 SQ. FT.
 PROPOSED WATER SUPPLY: INDIVIDUAL WELLS
 PROPOSED SEWAGE SYSTEM: INDIVIDUAL SEPTIC TANKS

ZONING AND SETBACKS:
 CURRENT HALL COUNTY ZONING: AGRICULTURE RESIDENTIAL-III (AR-III)
 SETBACKS:
 FRONT: 65' FROM C/L OF ROAD, OR 40' FROM P/L, WHICHEVER IS GREATER
 SIDE: 15'
 REAR: 25'
 LAKE SIDNEY LANIER: 0'
 CURRENT HALL COUNTY ZONING: VACATION COTTAGE (V-C)
 SETBACKS:
 FRONT: 35' FROM C/L OF ROAD, OR 30' FROM P/L, WHICHEVER IS GREATER
 SIDE: 10'
 REAR: 20'
 LAKE SIDNEY LANIER: 0'

REFERENCES:
 1. DEED BOOK 370, PAGES 101-103
 2. PLAT BOOK 33, PAGE 11
 3. DEED BOOK 2096, PAGE 190
 4. DEED BOOK 771, PAGE 508
 5. PLAT BOOK 47, PAGE 287
 6. DEED BOOK 4359, PAGE 508
 7. DEED BOOK 2636, PAGE 317
 8. DEED BOOK 2636, PAGE 318

WETLANDS STATEMENT:
 TO THE BEST OF MY KNOWLEDGE, THIS SITE DOES NOT CONTAIN WETLANDS. NO FORMAL WETLANDS DELINEATION HAS PERFORMED ON THIS SITE.

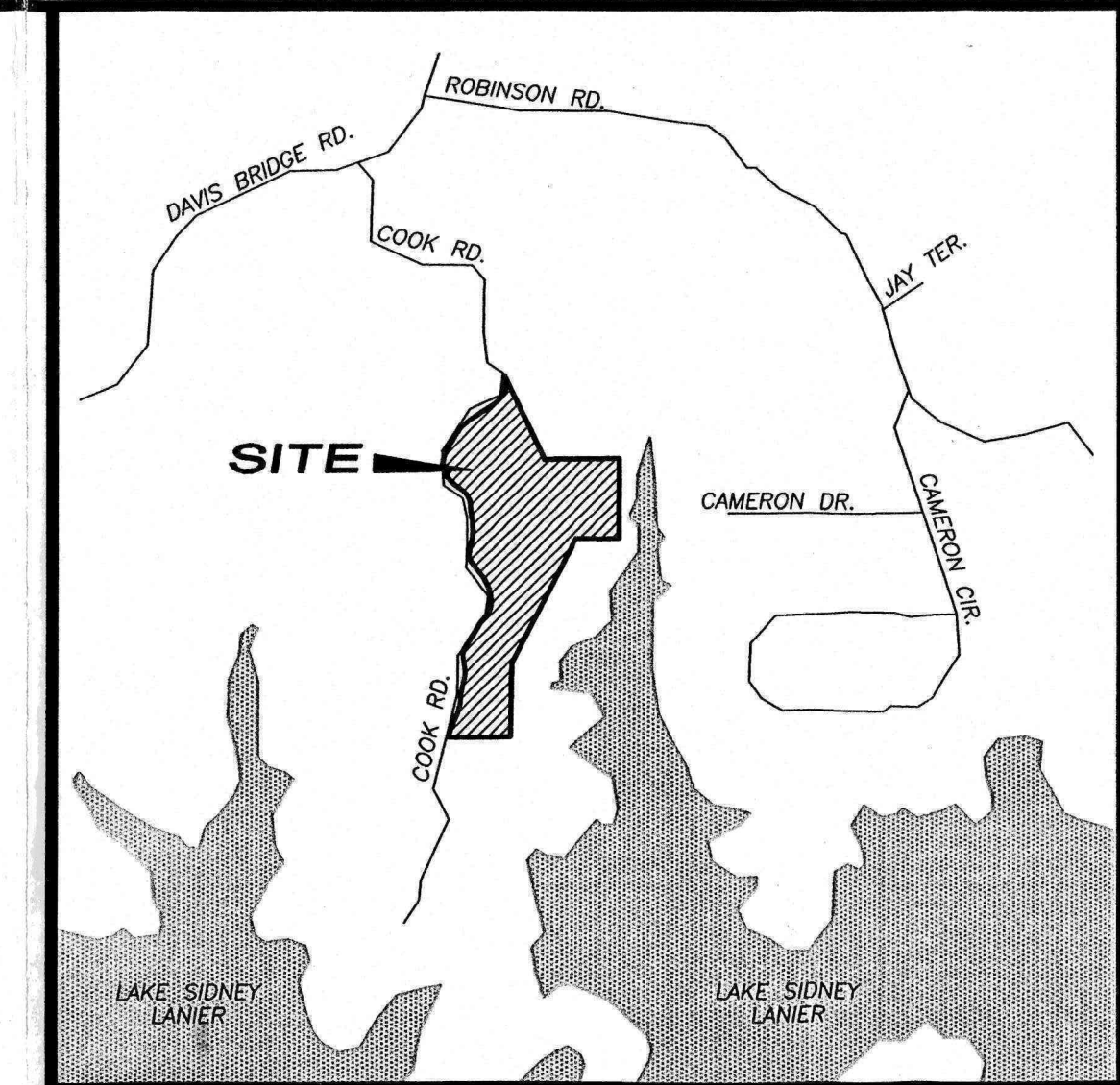
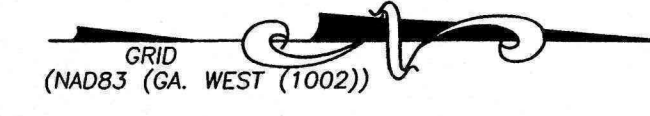
TAX MAP PARCEL NUMBER: 10-066-000-03C

CURVES ALONG COOK ROAD

| CURVE | RADIUS | ARC LENGTH | CHORD LENGTH | CHORD BEARING |
|-------|---------|------------|--------------|---------------|
| C1 | 689.06' | 38.05' | 38.05' | N 14°08'10" E |
| C2 | 332.79' | 55.90' | 55.84' | N 23°08'15" E |
| C3 | 226.84' | 69.99' | 69.71' | N 19°23'46" E |
| C4 | 229.16' | 43.15' | 43.09' | N 12°27'30" E |
| C5 | 120.16' | 69.73' | 68.75' | N 05°15'55" E |
| C6 | 46.74' | 26.58' | 26.22' | N 06°11'58" E |
| C7 | 431.35' | 69.52' | 69.45' | N 31°31'11" E |
| C8 | 123.57' | 67.25' | 66.42' | N 12°16'00" E |
| C9 | 157.32' | 64.92' | 64.46' | N 13°39'33" W |
| C10 | 296.48' | 69.40' | 69.24' | N 31°40'00" W |
| C11 | 39.90' | 27.71' | 27.16' | N 18°18'51" W |
| C12 | 537.08' | 81.35' | 81.22' | N 10°18'30" E |
| C13 | 217.25' | 64.87' | 64.63' | N 02°48'02" E |
| C14 | 268.11' | 64.90' | 64.77' | N 05°14'31" W |
| C15 | 111.90' | 75.37' | 73.95' | N 27°09'45" W |
| C16 | 115.65' | 40.25' | 40.05' | N 41°02'13" W |
| C17 | 188.61' | 46.96' | 46.83' | N 20°10'37" W |
| C18 | 85.57' | 38.27' | 37.95' | N 04°30'53" W |
| C19 | 199.92' | 47.51' | 47.40' | N 20°05'40" E |
| C20 | 548.80' | 72.14' | 72.09' | N 29°11'58" E |
| C21 | 232.52' | 50.05' | 49.96' | N 37°00'52" E |
| C22 | 269.39' | 48.16' | 48.10' | N 50°12'34" E |
| C23 | 696.40' | 70.29' | 70.26' | N 55°52'33" E |
| C24 | 210.90' | 57.00' | 56.82' | N 48°04'10" E |
| C25 | 66.76' | 42.86' | 42.12' | N 10°33'37" E |

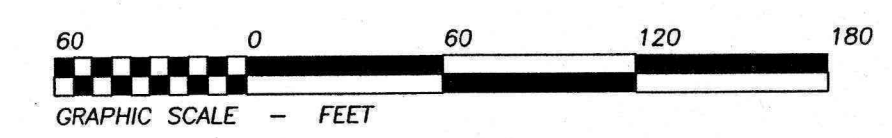
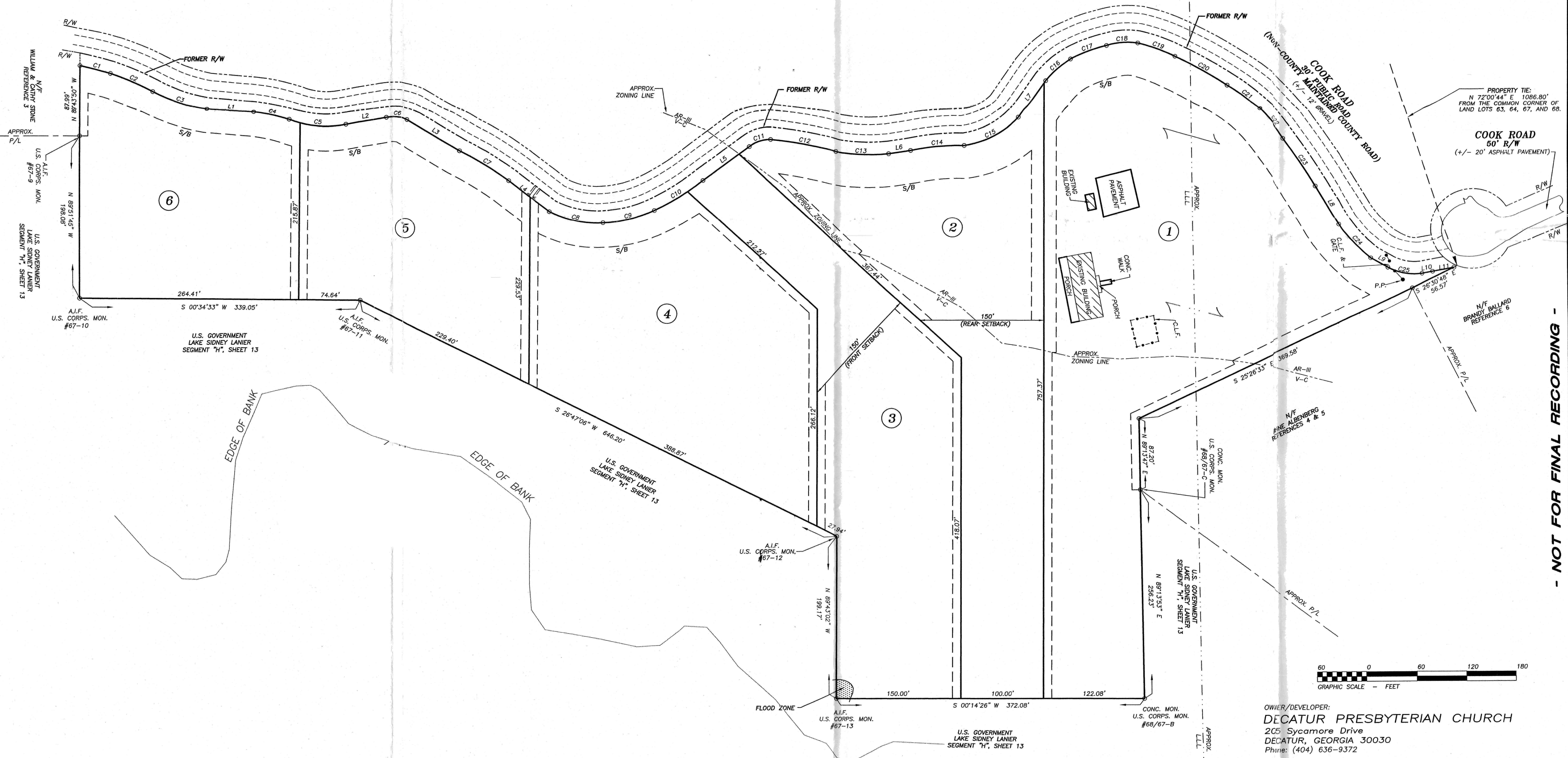
LINES ALONG COOK ROAD

| LINE | BEARING | DISTANCE |
|------|---------------|----------|
| L1 | N 04°50'24" E | 56.77' |
| L2 | N 10°03'25" W | 50.14' |
| L3 | N 31°00'38" E | 74.15' |
| L4 | N 37°35'23" E | 61.80' |
| L5 | N 36°43'53" W | 68.47' |
| L6 | N 08°35'42" W | 26.51' |
| L7 | N 64°55'41" W | 57.86' |
| L8 | N 89°14'40" E | 55.33' |
| L9 | N 30°04'15" E | 23.48' |
| L10 | N 09°50'55" W | 13.04' |
| L11 | N 11°13'19" W | 26.33' |



VICINITY MAP (NO SCALE)

| LOT AREA | | | USEABLE SOIL AREAS FOR SEPTIC TANK SYSTEMS: | | |
|----------|---------|----------|---|---------|----------|
| LOT No. | ACREAGE | SQ. FEET | LOT No. | ACREAGE | SQ. FEET |
| 1 | 4.08 | 177,924 | 1 | 1.45 | 64,547 |
| 2 | 2.44 | 106,129 | 3 | 1.50 | 65,365 |
| 3 | 2.18 | 94,980 | 4 | 1.50 | 65,379 |
| 4 | 2.20 | 95,990 | 5 | 1.50 | 65,365 |
| 5 | 1.50 | 65,365 | 6 | 1.50 | 65,379 |
| 6 | 1.50 | 65,379 | | | |



OWNER/DEVELOPER:
DECATUR PRESBYTERIAN CHURCH
 2C5 Sycamore Drive
 DECATUR, GEORGIA 30030
 Phone: (404) 636-9372

| REVISIONS: | COMMENTS: |
|------------|-----------|
| DATE | |

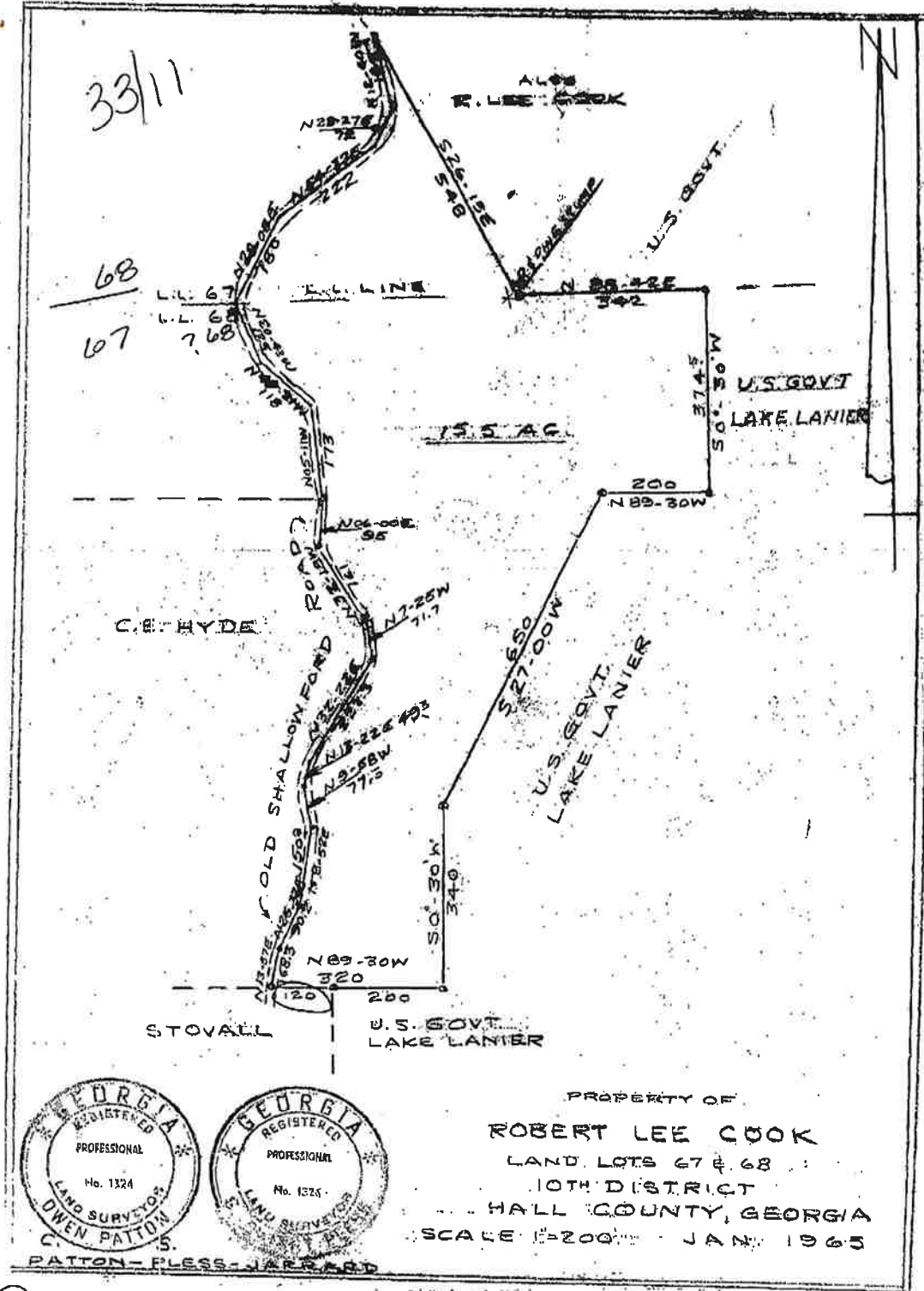
Pattison - Boyer, Inc.
 LAND SURVEYORS & ENGINEERS
 808 ATLANTA HIGHWAY 30501
 GAINESVILLE, GEORGIA
 PHONE (770) 532-6482
 FAX (770) 532-1995

CONCEPTUAL SUBDIVISION PLAN FOR:
DECATUR PRESBYTERIAN CHURCH
 LOCATED IN:
 LAND LOTS 67 AND 68, 10TH LAND DISTRICT
 HALL COUNTY, GEORGIA

- NOT FOR FINAL RECORDING -

| | |
|--------------|----------------------|
| SHEET NUMBER | 1 OF 1 |
| SCALE | 1" = 60' |
| DATE | 4 - 29 - 2005 |
| PROJECT NO. | 05-052 |

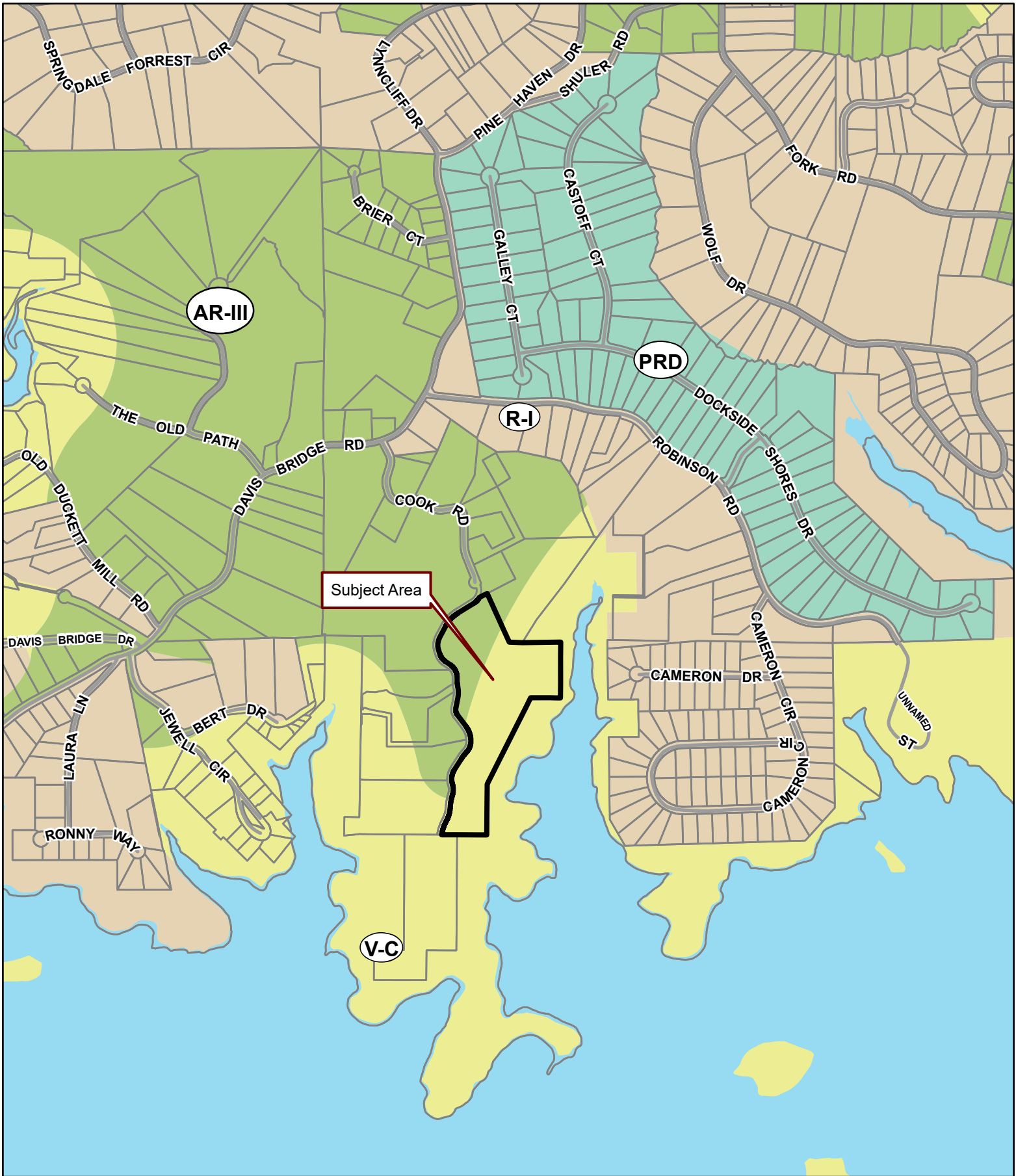
33/11



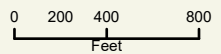
PROPERTY OF
ROBERT LEE COOK
 LAND LOTS 67 & 68
 10TH DISTRICT
 HALL COUNTY, GEORGIA
 SCALE 1" = 200' JAN. 1965

PATTON - PLESS - JARRARD

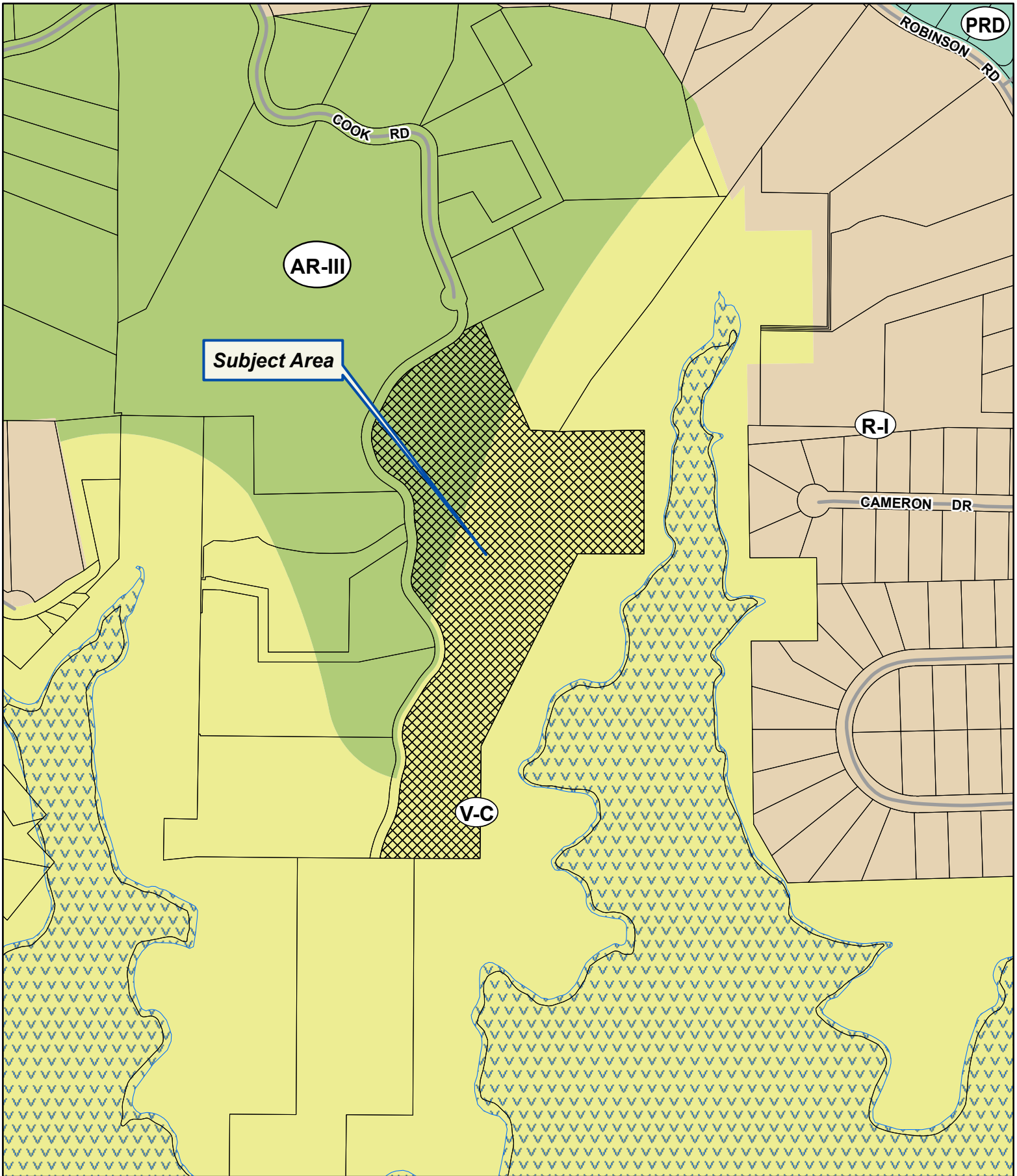
Recorded: January 22, 1965 - H. Grady Intem (c.l.k.)



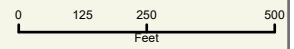
Applicant: DECATUR PRESBYTERIAN CHURCH
Tax Parcel #: 10068 000005C
Location: 3475 COOK ROAD, GAINESVILLE, GA 30506
Commission District 2 **PC Mtg. Date: 08/19/2024**



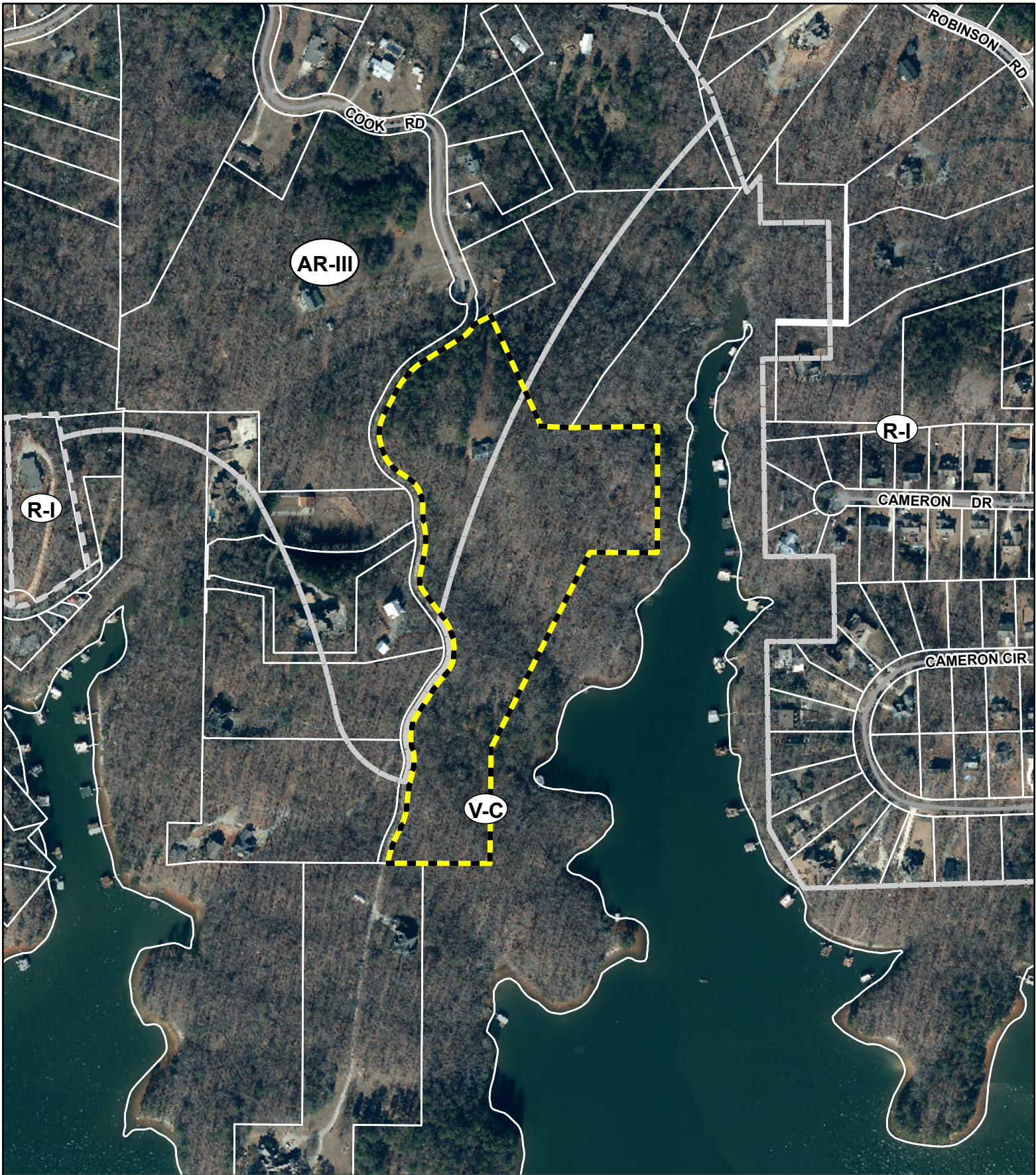
- Zoning Boundary
 - ▭ City Limits
 - ▭ Subject Area
 - ▭ Structure
- N
↑



Applicant: DECATUR PRESBYTERIAN CHURCH
Tax Parcel #: 10068 000005C
Location: 3475 COOK ROAD, GAINESVILLE, GA 30506
Commission District 2 PC Mtg. Date: 08/19/2024



- Zoning Boundary
 - ▭ City Limits
 - ▨ Subject Area
 - ▭ Structure
- N



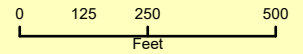
Applicant: DECATUR PRESBYTERIAN CHURCH

Tax Parcel #: 10068 000005C

Location: 3475 COOK ROAD, GAINESVILLE, GA 30506

Commission District 2

PC Mtg. Date: 08/19/2024



- Zoning Boundary
- City Limits
- Subject Area



ROADS

Robert Smith and Ron Stone present on:

Application of William R. Stone, et al to determine the status of a road, said road being approximately 0.54± mile and extending from the end of county maintenance on Cook Road; 10th District, Land Lot 67.

Applicant's presentation:

Mr. Smith and Mr. Stone presented some additional evidence that had found after submitting the application to the County Engineer. They continued to explain the history of the road and that it used to be maintained by the county.

After their presentation, Mr. Miller said that the new information would have potentially altered his report to be more favorable and that he did not take exception to any of their comments or information.

Public Forum:

There was no other parties present that wished to speak on the issue.

Planning Commission comments:

Mr. Thompson stated that the information presented seemed to indicate that the road had been a public road and had continued to retain that status over the years.

The other board members agreed with Mr. Thompson.

Mr. Dean made a motion to authorize the staff to approve plats, that meet all other requirements, using this road to fulfill the requirement for frontage on a public road. The motion was seconded by Mr. Thompson and carried unanimously.

Anael Dominguez (CDI: Planning)

From: Emily McGahee (Environmental Health)
Sent: Wednesday, July 17, 2024 11:36 AM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning); Katie L. Greenway (CDI: Planning)
Cc: Kelly Hairston (Environmental Health); Chad Harper (Environmental Health)
Subject: HCPC Tentative Agenda 8.19.24

Please find Environmental Health comments below:

Item 1, 4745 Cagle Mill Road/4673/3691 Noah Martin, Boling: No comment. Public sewer.

Item 2, 4745 Cagle Mill Road, Boling: No comment. Public sewer.

Item 3, 4336/4370/4420 Benefield Road, Edge City Properties: No comment. Public sewer.

Item 4, 3475 Cook Road, Decature Presbyterian Church: All proposed lots must meet Hall County Board of Health Lot Size Resolution requirements. Please note that Zoning approval does not imply approval from other county departments. Further determination will be made during the plat review process. All proposed plats must be submitted to the Hall County Plat Review Team for review and approval prior to submittal to Clerk of Courts for recordation.

Item 5, Short Term Rental Amendment: No comment.

Emily McGahee
Hall County Environmental Health
Hall County Government Center
2875 Browns Bridge Road
Mailing: PO Box 5901
Gainesville, GA 30504
(770) 531-3973 (phone)
emcgahee@hallcounty.org

<http://dph.georgia.gov/environmental-health> (State Website)
<http://www.phdistrict2.org/HallCounty.htm> (District Website)
<https://www.hallcounty.org/192/Environmental-Health> (County Website & Forms)

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Anael Dominguez (CDI: Planning)

From: Chavers, Veronica E <VChavers@dot.ga.gov>
Sent: Thursday, July 18, 2024 1:43 PM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning)
Subject: Re: Tentative Planning Agenda for August 19, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

See responses in red, below.

1. 4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Residential Development (PRD) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 (pt.), 15019 000043 & 15019 000114 | Proposed Use: 349-unit residential development | ** Commission District 3 | Josh Boling, applicant **No GDOT coordination required**
2. 4745 Cagle Mill Road | Rezone | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) & Gateway Corridors Overlay District (GCOD) | on a 10.59± acre tract located on the east side of Cornelia Highway (GA-365), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 (pt.) | Proposed Use: Industrial development | ** Commission District 3 | Josh Boling, applicant **No GDOT coordination required**
3. 4336, 4370, & 4420 Benefield Road | Rezone | from Agricultural Residential IV (AR-IV) and Planned Commercial Development (PCD) to Planned Residential Development (PRD) | on a combined 68.83± acre tract located on the south side of Benefield Road, approximately 900 feet from its intersection with Village South Drive | Zoned AR-IV and PCD; Tax Parcels 15028 000014, 000070, & 000090 (pt.) | Proposed Use: 302-unit residential development | ** Commission District 1 | Edge City Properties, Inc., applicant **No GDOT coordination required**
4. 3475 Cook Road | Use Subject to County Commission Approval | on a 13.91± acre tract located on the east side of Cook Road approximately 1,503 feet from its intersection with Davis Bridge Road | Zoned AR-III & VC; Tax Parcel 10068 000005C | Proposed Use: 6-lot subdivision | ** Commission District 2 | Decatur Presbyterian Church, applicant **No GDOT coordination required**
5. Public Hearing to Amend Section 17.216, Short Term Rental; to modify the standards by which the County regulates Short Term Rentals; and for other purposes. ** | Hall County Planning Staff, applicant. **No GDOT coordination required**

From: Anael Dominguez (CDI: Planning) <adominguez@hallcounty.org>
Sent: Thursday, July 11, 2024 10:04 AM
Subject: Tentative Planning Agenda for August 19, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Hall County Government
COMMUNITY DEVELOPMENT AND INFRASTRUCTURE
PUBLIC WORKS AND UTILITIES

MEMORANDUM

To: Beth Garmon, Director of Planning and Zoning
From: Bill Nash, Director of Public Works and Utilities
Date: July 18, 2024
Subject: August 19, 2024 - Hall County Planning Commission Agenda

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6800 | f: 770.531.3945

PUBLIC WORKS AND
UTILITIES DIRECTOR

Bill Nash, P.E.

Please be advised that our office has reviewed the Hall County Planning Commission agenda for the August 19, 2024 meeting. Upon review, we provide the following comments.

OLD BUSINESS

1. [4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Residential Development \(PRD\) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 \(pt.\), 15019 000043 & 15019 000114 | Proposed Use: 349-unit residential development | ** Commission District 3 | Josh Boling, applicant](#)
 - a. **Engineering:** Property is in major flood area
Show FEMA and Hall County studied Flood plains that are present on site
Property is in north Oconee WPD
Show N. Oconee WPD buffers
No rise study required for construction in flood zone
Roads should be private
 - b. **Traffic:** Roadways are shown as private, however, this should be required.
Access from Cornelia Hwy (SR 365) is shown as private, however, Label indicates “end of county maintained right-of-way” internally. Clarify.
Additional comments may be necessary after clarification.
Fire only access on White Hall Road must be gated and no ability for internal traffic to turn around is provided
Recommend the gravel section of Cagle Mill Road be improved to county paved standards to White Hall Road in order to facilitate site traffic to and from Old Cornelia Hwy.
Site plan indicates a fire only access on Cagle Mill Road labeled as “Gated fire only entrance with Knox Box” However no access is shown. Clarify.
GDOT permit required for Cornelia Hwy (SR 365) access.
 - c. **Utilities:** Hall County lift station on GA 365

2. [4745 Cagle Mill Road | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Industrial Development \(PID\) & Gateway Corridors Overlay District \(GCOD\) | on a 10.59± acre tract located on the east side of Cornelia Highway \(GA-365\), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax](#)

Parcel 15007 00254 (pt.) | Proposed Use: Industrial development | **
Commission District 3 | Josh Boling, applicant

- a. **Engineering:** See #6 comments
 - b. **Traffic:** GDOT permit required for Cornelia Hwy (SR365) access.
Very short section of entrance is proposed to be county maintained but should be a private driveway.
 - c. **Utilities:** Hall county lift station on GA 365
3. **4336, 4370, & 4420 Benefield Road | Rezone | from Agricultural Residential IV (AR-IV) and Planned Commercial Development (PCD) to Planned Residential Development (PRD) | on a combined 68.83± acre tract located on the south side of Benefield Road, approximately 900 feet from its intersection with Village South Drive | Zoned AR-IV and PCD; Tax Parcels 15028 000014, 000070, & 000090 (pt.) | Proposed Use: 302-unit residential development | ** Commission District 1 | Edge City Properties, Inc., applicant**
- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage.
Show stream buffer and impervious setback from wrested vegetation not centerline of stream.
As this subdivision is greater than 6 lots on an existing road a stormwater management report prepared by a professional engineer will be required.
 - b. **Traffic:** Recommend improvements identified in the traffic impact study be required. Some will require GDOT coordination.
Per County Code, a left turn lane and decel (right) turn lane will be required for both proposed Benefield Road access points. Recommend this be a condition.
Any design elements that do not meet County Code 16.60 will need a variance this includes proposed off-site guest parking areas, distance between intersections, curve radii, minimum length of a cul-da-sac, etc.
 - c. **Utilities:** Nearest sanitary sewer is west access Winder Hwy on howington Rd. – Hall County sewer.

NEW BUSINESS

4. **3475 Cook Road | Use Subject to County Commission Approval | on a 13.91± acre tract located on the east side of Cook Road approximately 1,503 feet from its intersection with Davis Bridge Road | Zoned AR-III & VC; Tax Parcel 10068 000005C | Proposed Use: 6-lot subdivision | ** Commission District 2 | Decatur Presbyterian Church, applicant**
- a. **Engineering:** Show FEMA and Hall County studied Flood plains that are present on site
As this subdivision is greater than 6 lots on an existing road a stormwater management report prepared by a professional engineer will be required.
Cook Drive beyond the cul-de-sac is not Hall County maintained.
Hall County should not accept partial right of way on a road that it does not maintain or have an interest in.
If they want to bring the road up to county specifications, then, as long as the other property owners agree, we would possibly accept the road.

- b. **Traffic:** Non-County maintained, “Privately maintained” roadway – see engineering comments, no additional comments.
- c. **Utilities:** No sanitary sewer near the development

5. [Public Hearing to Amend Section 17.216, Short Term Rental; to modify the standards by which the County regulates Short Term Rentals; and for other purposes. ** | Hall County Planning Staff, applicant.](#)

- a. **Engineering:** No comments
- b. **Traffic:** No comments
- c. **Utilities:** No comments

Katie L. Greenway (CDI: Planning)

From: William King (CDI: Public Works)
Sent: Tuesday, August 6, 2024 12:41 PM
To: Scott Puckett (CDI: Engineering); Katie L. Greenway (CDI: Planning)
Cc: Beth Garmon (CDI: Planning); Kristie Turner (Planning)
Subject: Re: 3475 Cook Road - Decatur Presbyterian Church

Thanks for the clarification Scott!

Get [Outlook for Android](#)

From: Scott Puckett (CDI: Engineering) <spuckett@hallcounty.org>
Sent: Tuesday, August 6, 2024 12:34:40 PM
To: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Cc: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; William King (CDI: Public Works) <wking@hallcounty.org>; Kristie Turner (Planning) <kturner@hallcounty.org>
Subject: Re: 3475 Cook Road - Decatur Presbyterian Church

Hi Katie,

The Planning Commission did determined that this section of Cook Road was a "public way" for the purposes of dividing property, however, it was never and is not currently County maintained nor would the County accept it due to current conditions. For traffic purposes, this type of roadway is private, therefore, I would not regulate any driveway access nor signage along this section. In addition, no maintenance from the County such as road surface, ditches, driveway pipes, mowing, etc. would occur.

Traffic comments should remain as stated.

Let me know if you have any questions or wish to discuss.

Thanks!

Scott

Scott Puckett
Hall County Traffic Engineer
Hall County Government Community Development and Infrastructure
(770) 531-6800 | www.hallcounty.org



From: Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Sent: Tuesday, August 6, 2024 10:17 AM
To: Scott Puckett (CDI: Engineering) <spuckett@hallcounty.org>
Cc: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; William King (CDI: Public Works) <wking@hallcounty.org>;
Kristie Turner (Planning) <kturner@hallcounty.org>
Subject: RE: 3475 Cook Road - Decatur Presbyterian Church

Scott,

Are you able to have an updated comment to me by end of day?

Thank you,

Katie Greenway
Planning and Zoning Administrator
Hall County Government
Office: 770-297-2649
Website: www.hallcounty.org



From: William King (CDI: Public Works) <wking@hallcounty.org>
Sent: Monday, August 5, 2024 8:49 AM
To: Kristie Turner (Planning) <kturner@hallcounty.org>; Scott Puckett (CDI: Engineering) <spuckett@hallcounty.org>;
John Hornick (Fire Services) <jhornick@hallcounty.org>; Michael Vieira (Fire Services) <mvieira@hallcounty.org>
Cc: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Katie L. Greenway (CDI: Planning)
<klgreenway@hallcounty.org>
Subject: RE: 3475 Cook Road - Decatur Presbyterian Church

Good catch Kristie,

Scott, please take a look and update your comments.

Thanks!

William (Bill) H. King III, P.E.
Assistant Public Works & Utility Director
Hall County Community Development and Infrastructure
(office)770-531-6800 ext. 6799
(cell)770-329-0863

From: Kristie Turner (Planning) <ktturner@hallcounty.org>
Sent: Monday, August 5, 2024 8:44 AM
To: Scott Puckett (CDI: Engineering) <spuckett@hallcounty.org>; William King (CDI: Public Works) <wking@hallcounty.org>; John Hornick (Fire Services) <jhornick@hallcounty.org>; Michael Vieira (Fire Services) <mvieira@hallcounty.org>
Cc: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Subject: 3475 Cook Road - Decatur Presbyterian Church

Good Morning All,

I want to share some information that came to my attention late last week.

We have a case scheduled for the 8-19 HCPC meeting for Decatur Presbyterian Church @ 3475 Cook Road. As I was doing some additional research, I came across a determination for this section of road from March 6, 1995. The determination was that this section of road could be used to fulfill the requirement for road frontage on a public road for plats. The section of road we are referring to is the 30 foot public right-of-way beyond the cul-de-sac/end of county maintenance on Cook Road that extends approximately .54 miles. This is the section that fronts the proposed subdivision for Decatur Presbyterian Church. I have attached the minutes for the determination to this email.

With the 1995 determination, are there any updates that need to be included in your comments? I have copied your comments below.

Hall County Fire Comments:

- 1) International Fire Code 503.2.1, Fire apparatus roads shall have an unobstructed width of not less than 20' exclusive of shoulders. The portion of Cook road that is not maintained by Hall County will have to meet the 20' road width requirement to all the proposed lots.
- 2) International Fire Code 503.2.5, Dead end fire apparatus roads in excess of 150' in length shall be provided with an approved area for turning around fire apparatus. The portion of Cook road that is not maintained by Hall County will be required to have an approved turnaround as required by code.
- 3) International Fire Code 507 Fire Protection Water Supplies: 507.1 Required Water Supply, an approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into within the jurisdiction. The closest fire hydrant is 2000 feet away from the Cul-de-Sac at the end of the Hall County maintained portion of Cook road. No expansion of the municipal water system is proposed in the concept narrative.

Engineering:

- a. Show FEMA and Hall County studied Flood plains that are present on site As this subdivision is greater than 6 lots on an existing road a stormwater management report prepared by a professional engineer will be required.
Cook Drive beyond the cul-de-sac is not Hall County maintained. Hall County should not accept partial right of way on a road that it does not maintain or have an interest in. If they want to bring the road up to county specifications, then, as long as the other property owners agree, we would possibly accept the road.
- b. Traffic: Non-County maintained, “Privately maintained” roadway – see engineering comments, no additional comments.
- b. Utilities: No sanitary sewer near the development

Thank you for your feedback.

Regards,

Kristie Turner
Principal Planner
Hall County Community Development and Infrastructure
(direct office) 770-297-6853
kturner@hallcounty.org



Anael Dominguez (CDI: Planning)

From: John Hornick (Fire Services)
Sent: Wednesday, July 17, 2024 11:28 AM
To: Anael Dominguez (CDI: Planning)
Cc: Beth Garmon (CDI: Planning); Michael Vieira (Fire Services)
Subject: Fire Comments

Monday, August 19, 2024 Hall County Planning Commission Meeting.

1. [3475 Cook Road | Use Subject to County Commission Approval | on a 13.91± acre tract located on the east side of Cook Road approximately 1,503 feet from its intersection with Davis Bridge Road | Zoned AR-III & VC; Tax Parcel 10068 000005C | Proposed Use: 6-lot subdivision | ** Commission District 2 | Decatur Presbyterian Church, applicant](#)

Hall County Fire Comments:

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- 2) International Fire Code 503.2.5, Dead end fire apparatus roads in excess of 150' in length shall be provided with an approved area for turning around fire apparatus. The portion of Cook road that is not maintained by Hall County will be required to have an approved turnaround as required by code.
- 3) International Fire Code 507 Fire Protection Water Supplies: 507.1 Required Water Supply, an approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into within the jurisdiction. The closest fire hydrant is 2000 feet away from the Cul-de-Sac at the end of the Hall County maintained portion of Cook road. No expansion of the municipal water system is proposed in the concept narrative.

Regards,

John Hornick, NPQ Fire Service Plans Examiner 1
Lieutenant, Hall County Fire Rescue
Hall County Government
Main: 770-531-6838 | Cell: 404-597-0083
Website: www.Hallcounty.org



Katie L. Greenway (CDI: Planning)

From: John Hornick (Fire Services)
Sent: Tuesday, August 6, 2024 8:52 AM
To: William King (CDI: Public Works); Kristie Turner (Planning); Scott Puckett (CDI: Engineering); Michael Vieira (Fire Services)
Cc: Beth Garmon (CDI: Planning); Katie L. Greenway (CDI: Planning)
Subject: RE: 3475 Cook Road - Decatur Presbyterian Church

Good Morning,

The fire code will apply to the proposed Cook road project unless Hall County Fire Marshal Michael Vieira determines otherwise.

Regards,

John Hornick, NPQ Fire Service Plans Examiner 1
Lieutenant, Hall County Fire Rescue
Hall County Government
Main: 770-531-6838 | Cell: 404-597-0083
Website: www.Hallcounty.org



From: William King (CDI: Public Works) <wking@hallcounty.org>
Sent: Monday, August 5, 2024 8:49 AM
To: Kristie Turner (Planning) <kturner@hallcounty.org>; Scott Puckett (CDI: Engineering) <spuckett@hallcounty.org>; John Hornick (Fire Services) <jhornick@hallcounty.org>; Michael Vieira (Fire Services) <mvieira@hallcounty.org>
Cc: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>; Katie L. Greenway (CDI: Planning) <klgreenway@hallcounty.org>
Subject: RE: 3475 Cook Road - Decatur Presbyterian Church

Good catch Kristie,

Scott, please take a look and update your comments.

Thanks!

William (Bill) H. King III, P.E.
Assistant Public Works & Utility Director
Hall County Community Development and Infrastructure
(office)770-531-6800 ext. 6799



DECATUR PRESBYTERIAN CHURCH

205 Sycamore Street
Decatur, GA 30030
404-378-1777 www.dpchurch.org

MEMORANDUM

TO: Our Neighbors on Cook Road

FROM: Trustees of Decatur Presbyterian Church

DATE: July 19, 2024

RE: Update on Church's Retreat Center property at 3475 Cook Road

In April 1968, Decatur Presbyterian Church purchased a 13+ acre site on Lake Lanier on which to build a Retreat Center. The 36-bed building was completed in 1970 and that first summer over 500 church members and guests visited this special place, enjoying recreation, study, and fellowship. The Retreat Center was used extensively for youth retreats and other gatherings in the following decades. But then use of the facility declined for a number of reasons.

In the mid-2000s, the Church had a conceptual design made of six separate parcels, and entertained the possibility of selling three of these parcels. Ultimately, the church leadership decided not to sell any of those parcels.

With ministry focus changing and under-use of the property continuing, the Congregation recently voted to accept a task force recommendation that the entire property be sold, with proceeds being redirected to future ministry programs. We are still in the very early stages of planning for a future sale. But as a part of this process, the Church needs to obtain formal approval from Hall County to subdivide the property into six separate parcels. Therefore, you will be seeing a sign providing notice of upcoming meetings of the Planning Commission and County Commission at which the Church's application for a conditional use permit will be considered.

We wanted our neighbors to know about these developments and to provide you with contact information in case you have questions. A long-time member of the Congregation, Bryan Downs, is the point person for this administrative proceeding. Please direct questions about this process to Bryan at 404-377-3638 or bdowns@wmdlegal.com. We are also planning to host a Q&A session for Cook Road neighbors and will let you know as soon as we have a set date.

For almost 60 years, Decatur Presbyterian Church has sought to be good stewards of the retreat property and to be good neighbors to those who make their homes nearby. We have every intent to continue in that spirit and look forward to keeping you informed throughout this process.

3475

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT: DECATUR PRESBYTERIAN CHURCH

REQUEST: USE SUBJECT TO COUNTY COMMISSION APPROVAL

FOR A 6-LOT RESIDENTIAL SUBDIVISION

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION
Date: AUG 14, 2024
Time: 5:15 PM

COUNTY COMMISSION
Date: SEPT 24, 2024
Time: 00 PM

HALL COUNTY GOVERNMENT CENTER, 307 BROWN BRIDGE ROAD, CUMBERLAND, GA 31809
FOR MORE INFORMATION CALL: (770) 532-4000



ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH BATA COUNTY TO REZONE THE PROPERTY SHOWN AS 100% AGRICULTURE TO RESIDENTIAL SINGLE-FAMILY. THE PROPERTY IS CURRENTLY ZONED AGRICULTURE. THE PROPERTY IS CURRENTLY OWNED BY DECATUR PRESBYTERIAN CHURCH. USE SUBJECT TO COUNTY SUPERVISOR APPROVAL FOR A 6-LOT DEVELOPMENT. SUPERVISOR APPROVAL IS REQUIRED BY 8/15/2024.

DATE: 8/15/2024 TIME: 5:00 PM. DATE: SEPT 26, 2024 TIME: 4:00 PM.

FOR MORE INFORMATION, PLEASE CONTACT THE COUNTY ENGINEER AT 706-271-1111.



AGENDA ITEM

Planning & Zoning

REPORT TO: Work Session (09/23/24)

REPORT TO: Voting Meeting (09/24/24)

ITEM NO: 510/2024

SUBJECT: **4336, 4370, & 4420 Benefield Road | Rezone** | from Agricultural Residential IV (AR-IV) and Planned Commercial Development (PCD) to Planned Residential Development (PRD) | on a combined 68.83± acre tract located on the south side of Benefield Road, approximately 900 feet from its intersection with Village South Drive | Zoned AR-IV and PCD; Tax Parcels 15028 000014, 000070, & 000090 (pt.) | **Proposed Use: 302-unit residential development** | Commission District 1 | **Edge City Properties, Inc., applicant**

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: BG

Recommendation:

Approval with conditions:

1. The property shall be developed in accordance with the site plan dated July 23, 2024, and as described in the project narrative submitted April 10, 2024 and the supplemental revisions dated July 23, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The development shall be limited to 150 detached single-family residences and 104 townhomes.
3. The minimum lot size for detached single-family residences shall be 7,000 square feet.
4. The minimum heated floor area (HFA) shall be 1,800 square feet for townhomes and single-story detached residences. Two-story detached residences shall have a minimum HFA of 2,000 square feet.
5. The amenity area shall include a recreational open areas, hiking trails, a swimming pool, a cabana, a dog park, central park area, and a mail kiosk with adjacent parking as depicted on the proposed site plan date July 23, 2024 and shall be completed before 30% of the final buildout of the entire project.
6. Both detached single-family homes as well as the townhomes shall include enclosed two-car garages. Front-entry garage orientation may be semi-flush with the garage face positioned a maximum of 8 feet past the front heated square footage plane of the residence as depicted on the renderings submitted April 19, 2024. Garage door width shall not exceed 55% of the width of the front façade of the single-family residences and a maximum garage door width of 75% of the front façade of the townhomes.
7. All residential driveways shall measure no less than 22 feet from the garage door to the right-of-way.
8. Townhome buildings shall have no more than 6 units per building and facades shall have a minimum 2 foot offset no less than every 2 units to add to the visual interest of the development.
9. The development shall be served by public sewer, with the obtainment of all required easements and other construction costs such as a lift station and force main to be the responsibility of the developer.

10. The development shall include a left turn lane and deceleration (right) turn lane for both proposed Benefield Road access points.
11. All roadways within the development shall be designed and constructed to Hall County Standards and dedicated to the county for public use.
12. The development shall be limited to a maximum of six (6) model homes prior to the recording of the final plat. Model home permits may be issued prior to Final Plat recording provided that hard surface (crusher run) access is provided and fire protection (functioning hydrant) is located within 500 feet of any structure under construction. No certificate of occupancy permits shall be issued prior to Final Plat recording.
13. There shall be a mandatory Homeowners' Association (HOA).
14. All designated open space within the development shall be commonly held, and not held by any individual homeowner(s).
15. The completed covenants for the subdivision and the documents establishing the property owner's association shall be submitted for review. These documents shall include a provision that would assure maintenance of the amenity package through adequate assessment of the subdivision property and would provide for establishing a lien against any property failing to pay said assessment. These documents shall be recorded simultaneously with the final plat and/or prior to the sale of any lots within the subdivision.
16. A 50-foot transitional buffer (planted or undisturbed) shall be maintained along all external property lines, with the exception that the property line adjacent to the racetrack shall remain undisturbed.
17. All stream buffers must be fully within Homeowners' Association common space and shall not encroach onto any individual residential building lot.
18. No variances or development exceptions are granted as part of this request that are not explicitly granted by Board approval. The development shall be compliant with the Official Code of Hall County, as well as any other agencies or reviewing departments, including, but not limited to Environmental Health, the Fire Marshal, and Hall County Engineering.
19. The following statement shall be placed upon the final plat and/or development plans for the property: "Owners and users of this property are informed of motor raceway venues nearby and should expect noise, crowds, and other effects associated with such venues."
20. The following statement regarding the potential impacts of agricultural operation in the area shall be made a part of any plat recorded on the property: "Owners, occupants, and users of property shown on this plat are hereby informed of the impacts associated with normal farming practices which may take place on adjacent and nearby property including, but not limited to, noise, odors, dust, the operation of machinery of any kind, the storage and disposal of manure, and the application of fertilizers, herbicides, and pesticides. Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices."
21. The existing single-family home at 4420 Benefield Road (part of parcel 15028 000090) shall not be considered part of the zoning request or subject to these conditions.
22. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.
23. The residences (townhomes and detached dwellings) shall be composed of brick, masonry, or a combination of the two on the front facade and sides.
24. The construction entrance for the development shall be located at the future access points and shall be clearly marked with room for stacking of vehicles and equipment and washout stations for departing vehicles. The entrance shall be regularly maintained to ensure that vehicles are not tracking mud from the development onto Benefield Road.
25. Construction traffic shall be limited to the section of Benefield Road from its intersection with Winder Highway to the westernmost corner of the subject property. Construction traffic shall only access Benefield Road from Winder Highway and should not turn west on Benefield Road when leaving the development. Only if the intersection of Benefield Road and Winder Highway is inaccessible should any construction traffic use Benefield Road beyond the subject property. Enforcement shall be the developer's responsibility.
26. Short term rentals shall be prohibited. This restriction shall be included in the HOA covenants.
27. The developer shall provide plans for a sound barrier to be presented for consideration by the Board of Commissioners at their public hearing for the rezoning request.
28. The developer shall make road improvements at the intersection of Benefield Road and Winder Highway (SR 53) as recommended in the traffic study dated March 22, 2024, performed by A&R Engineering Inc. subject to the approval of the Georgia Department of Transportation. Such improvements shall be done at the developer's expense, and the developer shall be responsible for obtaining all necessary permits and rights-of-way.

Purpose of Request:

4336, 4370, & 4420 Benefield Road | Rezone | from Agricultural Residential IV (AR-IV) and Planned Commercial Development (PCD) to Planned Residential Development (PRD) | on a combined 68.83± acre tract located on the south side of Benefield Road, approximately 900 feet from its intersection with Village South Drive | Zoned AR-IV and PCD; Tax Parcels 15028 000014, 000070, & 000090 (pt.) | **Proposed Use: 302-unit residential development** | Commission District 1 | **Edge City Properties, Inc., applicant**

History:

Facts and Issues:

Options:

Funding Requested \$ 0.00
Are funds within current budget? No
Source of Funds
Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? No
Has it been reviewed by the County Attorney? Yes
Is there a deadline for this item?

Approvals:

| Submit | Approve | Attorney | Administration |
|--------------|---------|----------|----------------|
| JR | BG | WLI | CR |
| Clerk | | | |
| JR | | | |

Attachments:

- Board Memo
- Recommendation Report
- Application
- Narrative
- Narrative - Project Supplemental
- Updated Site Plan with Aerial Imagery - rec'd 9/16/2024
- Updated Site Plan - rec'd 9/16/2024
- Updated Site Plan
- Traffic Study
- Maps
- Renderings.pdf
- Cross Section
- Deed
- Legal Description
- Previous Zoning Info
- Sewer Availability
- Gainesville City Water
- Environmental Health Comments
- GDOT Comments
- Public Works Comments
- Fire Comments
- Notice Sign Photos
- Public Comments
- Applicant Requested Changes to Conditions
- Letter of Support - from P1 Properties Group
- 9/16/2024 Email from Mike Dye - re Benefield Updated Site Plan



Hall County Government

COMMUNITY DEVELOPMENT & INFRASTRUCTURE PLANNING AND ZONING

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6809 | f: 770.531.3902

PLANNING AND ZONING
DIRECTOR
Beth Garmon

To: Richard Higgins, Chairman
Kathy Cooper, District 1 Commissioner
Billy Powell, District 2 Commissioner
Gregg Poole, District 3 Commissioner
Jeff Stowe, District 4 Commissioner

From: Beth Garmon, Director of Planning & Zoning

Date: September 9, 2024

Subject: **4336, 4370, & 4420 Benefield Road | Rezone | on a combined 68.83± acre tract | Proposed Use: 302-unit residential development | Edge City Properties, Inc., applicant**

The request before you is the request of Edge City Properties, Inc. for a use subject to County Commission approval to allow a 302-unit residential development. This item is located within Commission District 1.

At their August 19, 2024 meeting, the Hall County Planning Commission voted to recommend approval, with twenty eight (28) conditions **(3-2, Varner and Pilcher opposed)**.

Staff recommendation: **Approval, with conditions**, as the proposed request is consistent with the Lake Area Residential future land use classification within the Comprehensive Plan.

There were **four (4) comments submitted** in advance of the meeting, and **three (3) people spoke in favor and six (6) people spoke in opposition during the public hearing.**

Planning Commission Conditions:

1. The property shall be developed in accordance with the site plan dated July 23, 2024, and as described in the project narrative submitted April 10, 2024 and the supplemental revisions dated July 23, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The development shall be limited to 150 detached single-family residences and 104 townhomes.
3. The minimum lot size for detached single-family residences shall be 7,000 square feet.

4. The minimum heated floor area (HFA) shall be 1,800 square feet for townhomes and single-story detached residences. Two-story detached residences shall have a minimum HFA of 2,000 square feet.
5. The amenity area shall include recreational open areas, hiking trails, a swimming pool, a cabana, a dog park, central park area, and a mail kiosk with adjacent parking as depicted on the proposed site plan dated July 23, 2024 and shall be completed before 30% of the final buildout of the entire project.
6. Both detached single-family homes as well as the townhomes shall include enclosed two-car garages. Front-entry garage orientation may be semi-flush with the garage face positioned a maximum of 8 feet past the front heated square footage plane of the residence as depicted on the renderings submitted April 19, 2024. Garage door width shall not exceed 55% of the width of the front façade of the single-family residences and a maximum garage door width of 75% of the front façade of the townhomes.
7. All residential driveways shall measure no less than 22 feet from the garage door to the right-of-way.
8. Townhome buildings shall have no more than 6 units per building and facades shall have a minimum 2 foot offset no less than every 2 units to add to the visual interest of the development.
9. The development shall be served by public sewer, with the obtainment of all required easements and other construction costs such as a lift station and force main to be the responsibility of the developer.
10. The development shall include a left turn lane and deceleration (right) turn lane for both proposed Benefield Road access points.
11. All roadways within the development shall be designed and constructed to Hall County Standards and dedicated to the county for public use.
12. The development shall be limited to a maximum of six (6) model homes prior to the recording of the final plat. Model home permits may be issued prior to Final Plat recording provided that hard surface (crusher run) access is provided and fire protection (functioning hydrant) is located within 500 feet of any structure under construction. No certificate of occupancy permits shall be issued prior to Final Plat recording.
13. There shall be a mandatory Homeowners' Association (HOA).
14. All designated open space within the development shall be commonly held, and not held by any individual homeowner(s).
15. The completed covenants for the subdivision and the documents establishing the property owner's association shall be submitted for review. These documents shall include a provision that would assure maintenance of the amenity package through adequate assessment of the subdivision property and would provide for establishing a lien against any property failing to pay said assessment. These documents shall be recorded simultaneously with the final plat and/or prior to the sale of any lots within the subdivision.
16. A 50-foot transitional buffer (planted or undisturbed) shall be maintained along all external property lines, with the exception that the property line adjacent to the racetrack shall remain undisturbed.

17. All stream buffers must be fully within Homeowners' Association common space and shall not encroach onto any individual residential building lot.
18. No variances or development exceptions are granted as part of this request that are not explicitly granted by Board approval. The development shall be compliant with the Official Code of Hall County, as well as any other agencies or reviewing departments, including, but not limited to Environmental Health, the Fire Marshal, and Hall County Engineering.
19. The following statement shall be placed upon the final plat and/or development plans for the property:
"Owners and users of this property are informed of motor raceway venues nearby and should expect noise, crowds, and other effects associated with such venues."
20. The following statement regarding the potential impacts of agricultural operation in the area shall be made a part of any plat recorded on the property:
"Owners, occupants, and users of property shown on this plat are hereby informed of the impacts associated with normal farming practices which may take place on adjacent and nearby property including, but not limited to, noise, odors, dust, the operation of machinery of any kind, the storage and disposal of manure, and the application of fertilizers, herbicides, and pesticides. Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices."
21. The existing single-family home at 4420 Benefield Road (part of parcel 15028 000090) shall not be considered part of the zoning request or subject to these conditions.
22. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.
23. The residences (townhomes and detached dwellings) shall be composed of brick, masonry, or a combination of the two on the front facade and sides.
24. The construction entrance for the development shall be located at the future access points and shall be clearly marked with room for stacking of vehicles and equipment and washout stations for departing vehicles. The entrance shall be regularly maintained to ensure that vehicles are not tracking mud from the development onto Benefield Road.
25. Construction traffic shall be limited to the section of Benefield Road from its intersection with Winder Highway to the westernmost corner of the subject property. Construction traffic shall only access Benefield Road from Winder Highway and should not turn west on Benefield Road when leaving the development. Only if the intersection of Benefield Road and Winder Highway is inaccessible should any construction traffic use Benefield Road beyond the subject property. Enforcement shall be the developer's responsibility.
26. Short term rentals shall be prohibited. This restriction shall be included in the HOA covenants.
27. The developer shall provide plans for a sound barrier to be presented for consideration by the Board of Commissioners at their public hearing for the rezoning request.

28. The developer shall make road improvements at the intersection of Benefield Road and Winder Highway (SR 53) as recommended in the traffic study dated March 22, 2024, performed by A&R Engineering Inc. subject to the approval of the Georgia Department of Transportation. Such improvements shall be done at the developer's expense, and the developer shall be responsible for obtaining all necessary permits and rights-of-way.

**HALL COUNTY PLANNING COMMISSION
RECOMMENDATION REPORT**

Applicant Edge City Properties, Inc.

Request Rezone from Agricultural Residential IV (AR-IV, 17.120) and Planned Commercial Development (PCD, 17.180.080) to Planned Residential Development (PRD, 17.180.060)

Proposed Use 302-unit residential development

Size 68.83± acres

Zoning Current: Agricultural Residential IV (AR-IV, 17.120) and Planned Commercial Development (PCD, 17.180.080) | Proposed: Planned Residential Development (PRD, 17.180.060)

Location **4336, 4370, & 4420 Benefield Road** | 15028 000014, 000070, & 000090 (pt.)

Commission District One

Planning Commission Date August 19, 2024

Staff Recommendation **Denial**, as the development exceeds the two dwelling unit per acre recommended for the Residential future land use classification in the Comprehensive Plan

Record Number HZON24-0014

Planning Commission Recommendation.....**Approval, with conditions**

Vote: 3-2 (Varner and Pilcher opposed)

Planning Commission Conditions:

1. The property shall be developed in accordance with the site plan dated July 23, 2024, and as described in the project narrative submitted April 10, 2024 and the supplemental revisions dated July 23, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The development shall be limited to 150 detached single-family residences and 104 townhomes.
3. The minimum lot size for detached single-family residences shall be 7,000 square feet.

4. The minimum heated floor area (HFA) shall be 1,800 square feet for townhomes and single-story detached residences. Two-story detached residences shall have a minimum HFA of 2,000 square feet.
5. The amenity area shall include a recreational open areas, hiking trails, a swimming pool, a cabana, a dog park, central park area, and a mail kiosk with adjacent parking as depicted on the proposed site plan date July 23, 2024 and shall be completed before 30% of the final buildout of the entire project.
6. Both detached single-family homes as well as the townhomes shall include enclosed two-car garages. Front-entry garage orientation may be semi-flush with the garage face positioned a maximum of 8 feet past the front heated square footage plane of the residence as depicted on the renderings submitted April 19, 2024. Garage door width shall not exceed 55% of the width of the front façade of the single-family residences and a maximum garage door width of 75% of the front façade of the townhomes.
7. All residential driveways shall measure no less than 22 feet from the garage door to the right-of-way.
8. Townhome buildings shall have no more than 6 units per building and facades shall have a minimum 2 foot offset no less than every 2 units to add to the visual interest of the development.
9. The development shall be served by public sewer, with the obtainment of all required easements and other construction costs such as a lift station and force main to be the responsibility of the developer.
10. The development shall include a left turn lane and deceleration (right) turn lane for both proposed Benefield Road access points.
11. All roadways within the development shall be designed and constructed to Hall County Standards and dedicated to the county for public use.
12. The development shall be limited to a maximum of six (6) model homes prior to the recording of the final plat. Model home permits may be issued prior to Final Plat recording provided that hard surface (crusher run) access is provided and fire protection (functioning hydrant) is located within 500 feet of any structure under construction. No certificate of occupancy permits shall be issued prior to Final Plat recording.
13. There shall be a mandatory Homeowners' Association (HOA).
14. All designated open space within the development shall be commonly held, and not held by any individual homeowner(s).
15. The completed covenants for the subdivision and the documents establishing the property owner's association shall be submitted for review. These documents shall include a provision that would assure maintenance of the amenity package through adequate assessment of the subdivision property and would provide for establishing a lien against any property failing to pay said assessment. These documents shall be recorded simultaneously with the final plat and/or prior to the sale of any lots within the subdivision.
16. A 50-foot transitional buffer (planted or undisturbed) shall be maintained along all external property lines, with the exception that the property line adjacent to the racetrack shall remain undisturbed.
17. All stream buffers must be fully within Homeowners' Association common space and shall not encroach onto any individual residential building lot.
18. No variances or development exceptions are granted as part of this request that are not explicitly granted by Board approval. The development shall be compliant with the Official Code of Hall County, as well as any other agencies or reviewing departments, including, but not limited to Environmental Health, the Fire Marshal, and Hall County Engineering.

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26. Short term rentals shall be prohibited. This restriction shall be included in the HOA covenants.
27. The developer shall provide plans for a sound barrier to be presented for consideration by the Board of Commissioners at their public hearing for the rezoning request.
28. The developer shall make road improvements at the intersection of Benefield Road and Winder Highway (SR 53) as recommended in the traffic study dated March 22, 2024, performed by A&R Engineering Inc. subject to the approval of the Georgia Department of Transportation. Such improvements shall be done at the developer’s expense, and the developer shall be responsible for obtaining all necessary permits and rights-of-way.

Excerpts from the August 19, 2024 Planning Commission Meeting

Applicant’s Presentation:

Katie Greenway, Planning and Zoning Administrator, presented a summary of the request.

Michael Dye, 4280 Dove Point, Duluth, presented the request. The applicant explained that the development has been reduced by 39 lots to create more greenspace, including a central park area in the northern part of the property. He highlighted plans for 2,000 linear feet of trails as well as various amenities, including a pool cabana, dog park, and additional greenspaces. A second entrance was added

to the project due to the number of units, and the development will be naturally shielded from Benefield Road because of the topography. The applicant also mentioned that 5 acres, situated between Benefield Road and the development, will remain in the property owner's possession, currently platted as an individual lot. He further stated that the starting price for the townhomes will be \$350,000, with a one-story option designed to appeal to seniors who prefer not to live in age-restricted communities. Additionally, the applicant confirmed plans to install two left-turn lanes and deceleration lanes on Benefield Road at both entrances to ease traffic flow.

Public Forum:

Sonny Roshan, 4420 Benefield Road, Braselton, spoke in favor. He discussed how the development would enhance surrounding property values and beautify the area. He also expressed a preference for this proposed use of the property over the previously approved one.

David Dell, 5385 Winder Highway, Braselton, spoke in favor. He expressed a desire to have only one lift system for the development, either on his property or on Road Atlanta's property, due to its central location and ability to serve other properties. Mr. Sosebee inquired about how long Mr. Dell had owned his property, to which Mr. Dell responded that he has owned it for five years.

Bruce Peifke, 5301 Winder Highway, Braselton, spoke in favor. He noted that the raceway is very loud and suggested that prospective residents should be made aware of it, adding that the only way to reduce the noise would be by installing a noise barrier. Mr. Varner asked about the frequency of drifting at the raceway, to which Mr. Peifke responded that drifting occurs every Friday, weather permitting.

Martha Walker 4417 Benefield Road, Braselton, spoke in opposition. Concerns were raised about increased traffic and zoning regulations. Ms. Walker questioned why the proposed entrance to the development is not located off Highway 53.

Stephanie Davis, 4337 Benefield Road, Braselton, spoke in opposition. Concerns were raised regarding the density of the development. Mr. Davis recommended adding several conditions: limiting the project to 137 detached single-family residences with no townhomes permitted, a minimum lot size of 8,000 square feet for a density of 3.82 units per acre, ensuring that garage doors do not exceed 40% of the front façade width, and establishing an HOA with a policy prohibiting short-term rentals within the community.

Shellie Moreland, 4387 Benefield Road, Braselton, spoke in opposition. Concerns were raised about the traffic study findings, specifically issues with turning from Benefield Road onto Highway 53, frequent car accidents, the condition of road infrastructure, and the need to install a traffic light or roundabout at the intersection of Winder Highway (53) and Benefield Road.

Wes Robinson, 200 E E Butler Parkway, Gainesville, spoke in opposition. Concerns were raised about the residential development's proximity to the raceway, with suggestions to add a noise disclaimer to the plats and a condition to install a sound barrier.

Chris Campbell, 4324, Benefield Road, Braselton, spoke in opposition. Concerns were raised about wildlife migrating to his and neighboring farm properties, increased traffic, the safety of children riding the bus, and the location of entrances to the development.

Joe Ciotti, 4344 Benefield Circle, Braselton, spoke in opposition. Concerns were raised about the narrow road on Benefield Circle, increased traffic, and safety.

Rebuttal

The applicant stated that he was invited to the raceway on a Friday and is of the opinion that the existing vegetation, which will be maintained, helps buffer the noise. Mr. Varner questioned if the applicant does not believe it will be a problem. The applicant stated that he does not believe it to be an issue in this housing market. The applicant stated that adding the turn lanes will assist with the level of traffic coming with the development and the speed limit could change. The applicant also stated that the density pushes planning staff to recommend denial but it is noted in the staff report that the application tackles the housing need in the county.

Planning Commission Comments:

Mr. Braswell stated that in the public forum someone requested to not allow short term rentals in the development and asked if the applicant would agree to a condition prohibiting it. The applicant stated he would not be opposed. Mr. Sosebee questioned if the applicant would be willing to add a sound barrier for the development. The applicant stated that he has never had to install a sound barrier, but he will do some research. Ms. Pilcher stated that the noise in the area is very loud and that is a concern for her along with the density. The applicant stated that the townhomes will help decrease the noise traveling in the area and that the 50-foot buffer would be kept undisturbed to help with the noise. Mr. Sosebee questioned the lot size. The applicant stated that the minimum lot size is 6,600 square feet. Mr. Sosebee questioned if the applicant would be willing to set the minimum lot size at 7,000 square feet. The applicant agreed. Mr. Braswell questioned the number of phases for building. The applicant stated it would be built in three phases in the span of three years. Mr. Hunt questioned if the applicant agrees to complete road improvements at the intersection of Benefield Road and Highway 53. The applicant stated that was correct. Mr. Sosebee questioned if this would be at the developer's expense. The applicant agreed. Ms. Pilcher questioned if the right-of-way on Benefield Road would be dedicated from the subject property. The applicant stated that was correct. Mr. Braswell questioned the lift station. The applicant stated that a preliminary plan was already submitted and they are working with the Engineering Department. Mr. Sosebee stated that there have been many concerns from the community but he believes the development can help alleviate the housing concerns in the area.

Motion: A motion to approve, with conditions was made by Mr. Sosebee and seconded by Mr. Hunt. Vote: 3-2 (Varner and Pilcher opposed)

Conditions:

1. The property shall be developed in accordance with the site plan dated July 23, 2024, and as described in the project narrative submitted April 10, 2024 and the supplemental revisions dated July 23, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.
2. The development shall be limited to 150 detached single-family residences and 104 townhomes.
3. The minimum lot size for detached single-family residences shall be 7,000 square feet.

4. The minimum heated floor area (HFA) shall be 1,800 square feet for townhomes and single-story detached residences. Two-story detached residences shall have a minimum HFA of 2,000 square feet.
5. The amenity area shall include a recreational open areas, hiking trails, a swimming pool, a cabana, a dog park, central park area, and a mail kiosk with adjacent parking as depicted on the proposed site plan date July 23, 2024 and shall be completed before 30% of the final buildout of the entire project.
6. Both detached single-family homes as well as the townhomes shall include enclosed two-car garages. Front-entry garage orientation may be semi-flush with the garage face positioned a maximum of 8 feet past the front heated square footage plane of the residence as depicted on the renderings submitted April 19, 2024. Garage door width shall not exceed 55% of the width of the front façade of the single-family residences and a maximum garage door width of 75% of the front façade of the townhomes.
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14. All designated open space within the development shall be commonly held, and not held by any individual homeowner(s).
15. The completed covenants for the subdivision and the documents establishing the property owner's association shall be submitted for review. These documents shall include a provision that would assure maintenance of the amenity package through adequate assessment of the subdivision property and would provide for establishing a lien against any property failing to pay said assessment. These documents shall be recorded simultaneously with the final plat and/or prior to the sale of any lots within the subdivision.
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 23. The residences (townhomes and detached dwellings) shall be composed of brick, masonry, or a combination of the two on the front facade and sides.
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-

Staff recommends DENIAL of the applicant’s request. However, if the Planning Commission sees fit to approve this applicant, staff recommends the following conditions:

1. The property shall be developed in accordance with the site plan dated July 23, 2024, and as described in the project narrative submitted April 10, 2024 and the supplemental revisions dated July 23, 2024, modified as necessary for compliance with conditions herein and development standards enforced at the time of site plan approval.

2. The development shall be limited to 159 detached single-family residences and 104 townhomes.
3. The minimum lot size for detached single-family residences shall be 8,000 square feet.
4. The minimum heated floor area (HFA) shall be 1,800 square feet for townhomes and single-story detached residences. Two-story detached residences shall have a minimum HFA of 2,000 square feet.
5. The amenity area shall include a recreational open areas, hiking trails, a swimming pool, a cabana, a dog park, central park area, and a mail kiosk with adjacent parking as depicted on the proposed site plan date July 23, 2024 and shall be completed before 50% of the final buildout of the entire project.
6. Both detached single-family homes as well as the townhomes shall include enclosed two-car garages. Front-entry garage orientation may be semi-flush with the garage face positioned a maximum of 8 feet past the front heated square footage plane of the residence as depicted on the renderings submitted April 19, 2024. Garage door width shall not exceed 55% of the width of the front façade of the single-family residences and a maximum garage door width of 75% of the front façade of the townhomes.
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12. The development shall be limited to a maximum of six (6) model homes prior to the recording of the final plat. Model home permits may be issued prior to Final Plat recording provided that hard surface (crusher run) access is provided and fire protection (functioning hydrant) is located within 500 feet of any structure under construction. No certificate of occupancy permits shall be issued prior to Final Plat recording.
13. There shall be a mandatory Homeowners' Association (HOA).
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15. The completed covenants for the subdivision and the documents establishing the property owner's association shall be submitted for review. These documents shall include a provision

that would assure maintenance of the amenity package through adequate assessment of the subdivision property and would provide for establishing a lien against any property failing to pay said assessment. These documents shall be recorded simultaneously with the final plat and/or prior to the sale of any lots within the subdivision.

16. A 50-foot transitional buffer (planted or undisturbed) shall be maintained along all external property lines.
17. All stream buffers must be fully within Homeowners' Association common space and shall not encroach onto any individual residential building lot.
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21. The existing single-family home at 4420 Benefield Road (part of parcel 15028 000090) shall not be considered part of the zoning request or subject to these conditions.
22. All conditions of zoning shall be made a part of any plats or construction plans created for the subdivision.

The following should be considered as exceptions to the Official Code of Hall County, and shall warrant further determination by the Board should it choose to approve the submitted narrative and site plan:

17.180.060.B.2 – Dimensional Standards for Single Family Residences

- A) - Lot area. Minimum lot area standards of 8,000 square feet for lots served by sanitary sewer. The overall gross density not to exceed two units per acre. The minimum lot area for lots without access to sanitary sewer shall be determined by the requirements of the county environmental health department.

- The applicant is requesting a reduction of the minimum lot area from 8,000 square feet to 6,000 square feet and a density of 3.82 units per acre. **This does not meet the standard.**

17.180.060.B.9. - Architectural Standards

- B) *Single-family or two-family residence garages.* Garage placement shall match one of the following standards for lots less than one acre: (note: garage images provided in the following section are from the Roswell, Georgia Unified Development Code, Article 2. Rules of Interpretation, Section 2.2.19 Residential Garage Parking.)
 - i) *Semi-flush.* Garage doors shall be oriented towards the street. Garage doors shall be positioned between 5 and 20 feet behind the front wall plane of the residence, extending no more than 40 percent of the width of the residence.
 - For the detached single-family homes, the applicant proposes front-oriented garage placements, with renderings showing the garage doors positioned to extend past the front heated square footage plane of the residence at a maximum of 8 feet with a maximum garage door width of 55% of the front façade. **This does not meet the standard.**
- C) *Townhouse garages.* Townhouses fronting an arterial or collector street shall be rear-loaded. Townhouses fronting a minor street may be rear-loaded or front-loaded.
 - ii) *Front-loaded.* Garage doors shall constitute no more than 50 percent of the width of the individual townhouse unit. A minimum of 20 feet is required between the garage and edge of right-of-way.
 - For the townhomes, the submitted narrative and renderings showing a maximum garage door width of 75% of the front façade. **This does not meet the standard.**

Summary Analysis

The applicant is requesting to rezone a combined 68.83± acres zoned Agricultural Residential IV (AR-IV, 17.120) and Planned Commercial Development (PCD, 17.180.080) to Planned Residential Development (PRD, 17.180.060) to develop a 263-unit residential subdivision consisting of 159 detached single-family homes and 104 front-entry townhomes at a total density of 3.82 units per acre. The property includes Copper Creek, which runs along the southwestern boundary of the subject property. Further, this area is impacted by the County Studied and FEMA Flood Zones. The property is currently developed with several single-family residences and agricultural buildings. Per the submitted narrative and site plan, the existing residence located on parcel 15028 000090 is the only existing structure to remain and will sit on a separate 4.50± acre tract. This tract will not have internal access to the proposed development and will maintain its existing access to Benefield Road. The existing home is not intended to be included as part of the rezoning request.

Although the subject property does not abut Winder Highway and no access is proposed by the applicant, it should be noted that Road Atlanta occupies nearly 700 acres. Michelin Raceway is used regularly for various automobile races and the property also houses multiple businesses which support the site and industry. The race track has existed since 1970.

Parcels 15028 00070 and 000090 were previously rezoned on August 12, 2021 from Agricultural Residential IV (AR-IV, 17.120) to Planned Commercial Development (PCD, 17.180.080) as part of a larger mixed-use commercial development (HZON2021-00046). This development consists of a total of 137.17 acres and was approved for 21 car condo buildings, which would feature fee simple attached units with garage areas and optional loft living spaces; 16 race day cottages, which were detached or attached cottages primarily for use during race weeks; 34 luxury recreational vehicle parking spaces for rent; 17 single-family lots; an event center and hotel; retail buildings; a commercial center; and the main race track. When comparing the area of the proposed request with the concept plan associated with the previous rezoning, the previous zoning primarily consists of the single-family lots, car condos, race day cottages and luxury recreational vehicle parking spaces. In contrast, the new request proposes only single-family detached homes and attached townhome units. The subject request also includes a portion of an AR-IV zoned tract to the west.

The proposed development will consist of townhomes as well as one and two-story detached homes with two car-garages. Homes will be finished with brick, stone, and/or fiber-cement shake/siding on the front facades. Detached homes will range from a minimum of 1,800 to 2,000 square feet of heated floor space and the townhomes will be a minimum of 1,800 square feet of heated floor space.

The site plan indicates that two access points, with both entrances being on Benefield Road, will serve the development. The project narrative states that internal roads will be constructed according to Hall County’s development standards and acknowledges that the development will not privately own the roads and alleyways. The development also proposes 5-foot-wide sidewalks on both sides of the street for pedestrian connectivity and offers to provide 32.5% open space, which will include stream buffers, planted and undisturbed exterior buffers, stormwater management areas, a dog park, central park, and multiple open areas for passive recreational usage and hiking trails.

The rezoning request suggests that construction will occur in three phases, with approximately 101 residential units in each phase. The applicant states that final completion of the project is anticipated to take four years.

The development standards for the project are described in the table below and are compared with the PRD requirements, (17.180.060):

| Standard | PRD Requirement (17.180.060) | Proposed Development |
|----------------------|--|--|
| Site Area | 5 acre minimum | 68.83± acres |
| Number of Units | – | 263 residential units total: 159 single-family detached residences and 104 townhomes |
| Density | 2 units per acre maximum | 3.82 units per acre* |
| Min. Lot Area | 8,000 sq. ft. (Single Family) 330,425 (Townhomes) | 6,000 sq. ft. * |
| Max. Building Height | – | 35 feet |

| | | |
|---|--|---|
| Min. Open Space | 30% | 32.5% |
| Exterior Buffer | 50 feet | 50-foot planted buffer along the perimeter 50-foot undisturbed buffer along the stream buffers 6 ft. wooden fence along southeast property line |
| Front Setback (Internal) | 25 feet | 25 feet |
| Side Setback (Internal) | 5 feet | 5 feet |
| Rear Setback (Internal) | 20 feet | 20 feet |
| Parking | 2 spaces for each dwelling unit single family (17.250.020) | 2 spaces for each dwelling unit |
| Min. Heated Floor Space | – | 1,800 square feet |
| Garage – % of front façade | Single-family residences: 40% when recessed a minimum of 5 to 20 feet behind front wall plane of residence Townhouses: 50% of the width of the individual townhouse unit for front-loaded units | Single-family residence: Maximum of 55% when the garage extends a minimum of 8 feet beyond the front façade * Townhomes: Maximum of 75% * |
| Sidewalk | 5 feet wide sidewalk constructed on both sides of the streets | 5 feet wide sidewalk constructed on both side of the streets |
| Cluster Mailbox Unit (CBU) | CBU with 13 short-term parking spaces | CBU with 17 short-term parking spaces |
| Note: Items marked with an asterisk (*) do not conform to 17.180.060. | | |

The applicant has proposed amenity areas to consist of multiple recreational open areas, hiking trails, a swimming pool, a cabana, a dog park, central park, and a mail kiosk with adjacent parking, which will serve both the single-family detached homes and townhomes. Furthermore, the narrative states a mandatory Homeowner Association will be created to govern the development with regards to architectural standards, quality control, and maintenance of the common areas, signage, and amenities. The applicant further states that the subdivision will include monument residential signs that will be limited to 32 square feet each. The applicant has not provided the intended locations of the monument signage or how many signs are intended to be constructed.

A traffic impact study was prepared based on the previously proposed numbers of 186 detached single-family homes and 116 attached townhomes for a total of 302 homes.. The study found the proposed subdivision is expected to generate 186 trips in the morning peak hour, 244 trips in the evening peak hour, and 2,619 daily trips. The study recommends the access configurations for both proposed entrances as well as the intersection of Benefield Road and Winder Highway. The developer is currently proposing 159 detached single-family homes and 104 townhomes for a total of 263 homes. Coordination and approval from both GDOT and Hall County Engineering will be required for implementation of recommendations.

Per the submitted narrative, water services will be provided by City of Gainesville Department of Water Resources, and sanitary sewer services will be provided by Hall County Sewer. The developer intends to connect to utilities in the area via an onsite lift-station. The availability of the water service was confirmed in a letter dated March 26, 2024. The availability of the sanitary sewer services was confirmed in a letter dated March 27, 2024.

Several variances have been identified as part of this request. Any deficiencies identified as part of the plan will be required to comply with the requirements of the PRD unless specially granted by the board in the conditions of approval.

Based on the future land-use plan, staff finds the requested zoning designation *is inconsistent* with the Hall County Comprehensive Plan future land use designation of “Residential”. The intent of this land use category is to preserve established neighborhoods and create new residential development consistent with surrounding suburban densities. This land use designation envisions moderate density at 2 dwelling units per acre. The proposed development has an overall density of 3.82 units per acre.

Zoning Analysis

When considering a zoning amendment to the zoning maps, the following items must be considered:

1. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property; **The zoning proposal *is inconsistent* with the Hall County Comprehensive Plan future land use designation of Residential, as the proposed development has an overall density of 3.82 units per acre, while the land use designation envisions moderate density at 2 dwelling units per acre. The surrounding area consists of a variety of land uses which include residential, agricultural, industrial, and commercial uses.**
2. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property; **The proposed zoning classification of Planned Residential Development (PRD, 17.180.060) permits a higher density than that of nearby residential parcels. This development will introduce more vehicular traffic onto Benefield Road, which is a rural local road.**
3. Whether the property to be affected by the zoning proposal has reasonable economic use as currently zoned. **The property appears to have reasonable economic use as currently zoned.**
4. Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, or utilities; **Per the submitted traffic study, improvements are recommended. These include: two turn lanes at access points along Benefield Road, a deceleration lane on Highway 53 accessing Benefield Road, and a right turn lane at the intersection of Benefield Road as it approaches Winder Highway (SR 53). Coordination with GDOT and Hall County Engineering will be required for the implementation of the recommendations.**
5. Whether the zoning proposal is in conformity with the policy and intent of the land use plan; **The proposed use is not consistent with the Comprehensive Plan and the “Residential” land use designation. The recommended density for this character area is two dwelling units per acre. The proposed development is proposing a density of 3.82 dwelling units per acre.**

6. The extent to which property values are diminished by the existing zoning restrictions; **Staff is unable to determine the extent to which property values are diminished by the existing zoning restrictions.**
7. The extent to which the destruction of the subject property's value under the existing zoning promotes the health, safety, morals or general welfare of the public; **Staff is unable to comment on the impact of property values without a full market analysis. Multiple factors impact property value including construction types, proposed uses, and maintenance. Often it is difficult to determine the effect of a development on adjacent properties until the development is completed.**
8. The relative gain to the public as compared to the hardship imposed upon the individual property owner; **Staff has not identified a hardship imposed on the property owner as the property is currently zoned.**
9. The length of time the property has been vacant as zoned considered in the context of land development in the area in the vicinity of the property; **The subject properties are currently developed with single-family residences and agricultural buildings. One of the single-family residences was constructed in 1930.**
10. Whether there are other existing or changing conditions affecting the use or development of the property which give supporting grounds for either approval or disapproval of the zoning proposal; **Staff is not aware of any changing conditions that affect the use and development of the property.**
11. Whether the change would create an isolated district unrelated to the surrounding districts; **The proposed zoning is a Planned Residential Development (PRD, 17.180.060). Per the Official Code of Hall County, Planned Development Districts (17.180) are to be utilized as a "floating zone" which shall mean that areas will not be pre-designated as planned development districts but rather each such designation shall result from a specific and separate application for amendment. The proposed density is higher than that found on surrounding properties.**
12. Whether the present zoning district boundaries are illogically drawn in relation to existing conditions in the area; **There is no evidence that the present zoning district boundaries are illogically drawn.**
13. Whether the change requested is out of scale with the needs of the county as a whole or the immediate neighborhood; **The proposed density is higher than that found on immediately surrounding properties but in general the use does not appear to be out of scale with the needs of the County as a whole, as there is a need for additional and a variety of housing.**
14. Whether it is impossible to find adequate sites for the proposed use in districts permitting such use and already appropriately zoned; **There are other properties within the County that support a moderate-density single-family residential uses based on the Future Land Use Map, though the development as proposed cannot be developed in any of the existing residential or multi-family districts without Board of Commissioner approval.**
15. Whether the need for rezoning could be handled instead by a variance request to the [Planning Commission]; **The request could not be handled alternatively as a variance.**

16. Whether there would be an ecological or pollution impact resulting from major modifications to the land if the request is granted; **Any land disturbance activities on the property shall be required to go through the land development permitting process and as a result are subject to local, state, and federal regulations. As a result, there should not be an ecological or pollution impact resulting from any modification to the land if the request is granted.**
17. Whether there is reasonable evidence based upon existing and anticipated land use that would indicate a mistake was made in the original zoning of the property; **There is no indication that a mistake was made in the original zoning.**

A Planned Residential Development (PRD, 17.180.060) allows for more flexibility in the design and development of the property. This provides for a mixture of housing types and encourages maximum use of natural features through proper site planning measures. The development should conform to the existing character and development pattern of the surrounding area.

17.380.050. - Submission requirements for a rezoning request

- A. Any person or persons requesting a change in the official zoning map or use subject to approval of the county commission shall file an application with a plat or map of the property attached thereto, together with payment of such fees set forth in chapter 17.30 to cover administrative and advertising costs, in the planning department office. Such person or persons or their authorized agent shall appear in person at the public hearing held to consider the district change. **The proposal meets the requirement. The applicant has paid the appropriate fees and understands that someone must be present at both the Hall County Planning Commission meeting and the voting meeting of the Hall County Board of Commissioners.**
- B. All applications for a change of zoning classification or use subject to approval of the county commission shall include:
 1. A narrative statement identifying the existing and proposed use of the property and addressing each of the criteria set forth in section 17.380.060.C of this section [chapter]. **The proposal provides a narrative outlining the intent of the development; however, the applicant has not prepared a response to each of the criteria listed in 17.380.060.C.**
 2. A site plan drawn to scale designating the area covered by the application and identifying existing and proposed buildings and uses, adjacent existing land uses, zoning on contiguous parcels, including those across an abutting public right-of-way, and any other significant site improvements proposed to accommodate the proposed use or buffer adjacent uses, etc., or a plat of the subject property where no specific land use is proposed. In cases where only a plat or map is provided and no land use is proposed, the planning commission and county commission shall evaluate the application based on the most intense possible land use permitted in the proposed district. **The proposal meets the requirement. The applicant has provided a site plan and included much of the necessary information to properly assess the development. However, information about adjacent parcels is limited.**
- C. For any application for a slow rate land treatment system (see chapter 17.20), the following additional requirements apply. **The proposed development will utilize public water and sewer; as such, this is not applicable.**

- D. For any application proposing the development of 100 or more residential dwelling units, a traffic impact study shall be submitted prior to consideration of the application by the planning commission. At the applicant's expense, the traffic impact study shall be prepared by a professional engineer in accordance with requirements established by the Hall County Engineering Department. The engineering department shall review the traffic impact study and forward any comments to the Hall County Planning Commission. **The applicant submitted a traffic study conducted by A&R Engineering, Inc. which recommended two turn lanes at access points along Benefield Road, a deceleration lane on Highway 53 is needed entering into Benefield Road, and a right turn lane on the south of Benefield Roads approach to Highway 53.**

Development Support and Constraints – Departmental / Agency Comments

Hall County Environmental Health

In an email dated May 10, 2024, Emily McGahee stated “Public sewer. Any abandoned well shall be properly closed as per Water Well Standards Act. Any abandoned septic tank shall be pumped by a State certified pumper/hauler and crushed/filled.”

Hall County Fire Marshal

In an email dated May 23, 2024, John Hornick, NPQ Fire Inspector 1, Plans Review Lieutenant stated “The Hall County Fire Marshal’s Office considers the plan conceptual in nature, and if approved may require modifications during the development review process.”

Hall County Public Works and Utilities

In a memorandum from Public Works and Utilities dated May 16, 2024, Bill Nash, Director, stated the following:

Engineering:

This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage. Show stream buffer and impervious setback from wretched vegetation not centerline of stream.

As this subdivision is greater than 6 lots on an existing road, a stormwater management report prepared by a professional engineer will be required.

Traffic:

Recommend improvements identified in the traffic impact study be required. Some will require GDOT coordination. Per County Code, a left turn lane and decel (right) turn lane will be required for both proposed Benefield Road access points. Recommend this be a condition.

Any design elements that do not meet County Code 16.60 will need a variance this includes proposed off-site guest parking areas, distance between intersections, curve radii, minimum length of a cul-da-sac, etc.

Utilities:

Nearest sanitary sewer is west access Winder Hwy on Howington Rd. – Hall County sewer.

Hall County Tax Assessor

In an email dated May 09, 2024, Steve Watson, Director and Chief Appraiser of Hall County Board of Assessors, stated "Tax Parcel #'s 15028 000070 and 15028 000090 are in a conservation use covenant. Rezoning to PRD may potentially breach the covenant. The subdividing of the property into residential lots and homes will certainly breach the covenant. I do not see any notes where we spoke with the current property owner regarding this. The covenant was just renewed in 2022."

Georgia Department of Transportation

In an email dated May 20, 2024, Veronica Chavers, D1TO Civil Engineer 3, stated that this project will not require GDOT coordination.



PLANNING AND DEVELOPMENT DEPARTMENT 2875
 BROWNS BRIDGE ROAD, GAINESVILLE, GA, 30504 MAILING
 ADDRESS: PO BOX 1435, GAINESVILLE, GA 30503 t: 770-531-6809 f: 770-531-3902

ZONING APPLICATION

Applicant (Name & Mailing Address)

Edge City Properties, Inc.

4280 Dove Pt

Duluth, GA 30096

Phone 770-814-4500

Email Address mdye@EdgeCP.com

Proposed Use Planned Residential Development (PRD)

Property Owner (Name & Mailing Address)

Phyllis Roshan, 4420 Benefield Rd, Braselton GA 30517

Estate of Benny and Rebecca Mangum, 4336 Benefield Rd

Braselton, GA 301517

Phone 678-485-8000 (Roshan), 770-561-8738 (Mangum)

Email Address hanifroshan73@gmail.com, slhelton@bellsouth.net

Contact Person (Name & Mailing Address)

Michael Dye

4280 Dove Pt

Duluth, GA 30096

Phone 770-814-4500

Email Address mdye@EdgeCP.com

Tax Parcel Number 150028 000014, 15028 000070, 15028 000090

Acreage +/- 68.83 acres

Location Address 4336, 4370 and 4420 Benefield Road, Braselton GA 30517

Status of Applicant

Owner

Option to Purchase

Area Resident

Other

Requested Action

Existing Zoning: AR-IV, PCD

Rezone to: PRD

Fee: \$1,500.00

Receipt #: _____

Check #: _____

I hereby certify that the above information and all attached information are true and correct.

Sign *Michael Dye*

Date: 4-10-2024

Applicant must complete all information above. Failure to complete this section will result in the refusal of the application. The Planning Department has 15 days to review all applications and will set the dates for each application. If the application is found insufficient, an agenda date will not be set until the required information is submitted. Please note that the Planning Commission and County Commission dates are tentative.

Application Withdrawal: I hereby withdraw the application.

Sign _____ Date: _____

Staff Use Only

Application Date: _____ Taken by: _____

Tentative Planning Commission Date: _____ Tentative County Commission Date: _____

County Commission District: _____

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f: 770-531-3902



AUTHORIZATION OF PROPERTY OWNERS

Note: If the applicant is the property owner, please disregard this form.

Name of owner(s) Phyllis H. Roshan

Address 4420 Benefield Road
Braselton, GA 30517

Phone Number _____

Name of applicant(s) Edge City Properties, Inc.

Address 4280 Dove Pt
Duluth, GA 30096

Phone Number 770-814-4500

I swear that I am the owner of the property which is the subject matter of the attached applications as shown in the records of Hall County, Georgia.

I authorize the person named above to act as applicant in the pursuit of a rezoning, permissive use, or variance of this property.

Signature of Owner(s)
Phyllis H. Roshan

Personally appeared before me
Frances S Hamrick

who swears that the information contained in this authorization is true and correct to the best of his/her knowledge and belief

Frances S Hamrick
Notary Public

3-22-2024
Date





PLANNING AND DEVELOPMENT DEPARTMENT 2875
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f: 770-531-3902

AUTHORIZATION OF PROPERTY OWNERS

Note: If the applicant is the property owner, please disregard this form.

Name of owner(s) Estate of Benny and Rebecca M. Mangum

Address 4336 Benefield Road
Braselton, GA 30517

Phone Number _____

Name of applicant(s) Edge City Properties, Inc.

Address 4280 Dove Pt
Duluth, GA 30096

Phone Number 770-814-4500

I swear that I am the owner of the property which is the subject matter of the attached applications as shown in the records of Hall County, Georgia.

I authorize the person named above to act as applicant in the pursuit of a rezoning, permissive use, or variance of this property.

Signature of Owner(s)
Stacy Helton

Personally appeared before me
Stacy Helton

who swears that the information contained in this authorization is true and correct to the best of his/her knowledge and belief.

M. Shuruff

3.20.2024
Date



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f: 770-531-3902



CAMPAIGN CONTRIBUTIONS DISCLOSURE FORM

This form must be completed by the applicant and property owner, or person representing the property owner, for all zoning actions.

OCGA § 36-67A-3[C] Disclosure of campaign contributions:

(b) When any applicant for zoning action has made, within two years immediately preceding the filing of the applicant's application for the zoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

(3) The name and official position of the local government official to whom the campaign contribution was made; and

(4) The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution.

(b) The disclosures required by subsection (a) of this Code section shall be filed within ten days after the application for the zoning action is first filed. (Code 1981, Section OCGA § 36-67A-3[C], enacted by GA L. 1986, page 1269, Section 1, GA L. 1991, page 1365, Section 1).

I hereby certify that I have read the above and that:

I have** _____ I have not X

within the two years immediately preceding this date, made any contribution(s) aggregating \$250.00 or more to any local government official involved in the review or consideration of this application.

**If you have made such contributions, you must provide the data required below within ten (10) days of filing this application.

Name of Official(s): _____

Office: _____

Dollar Amount: _____

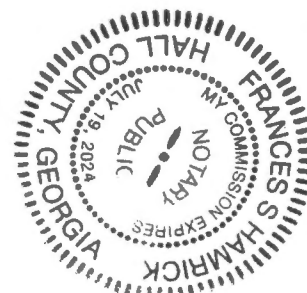
Date of Contribution: _____

Applicant's/Owner's Signature: Phyllis H. Roshan

Date: 3/22/24

Phyllis H. Roshan

Applicant's/Owner's Name(Printed): _____





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****If you have made such contributions, you must provide the data required below within ten (10) days of filing this application.**

Name of Official(s): _____

Office: _____

Dollar Amount: _____

Date of Contribution: _____

Applicant's/Owner's Signature: Stacy M Helton Title: Executor

Date: 3-20-24

Applicant's/Owner's Name (Printed): Estate of Benny and Rebecca Mangum
Stacy M Helton



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ADDRESS: PO BOX 1435, GAINESVILLE, GA 30503 t: 770-531-6809 l
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I hereby certify that I have read the above and that:

I have** _____ I have not X

within the two years immediately preceding this date, made any contribution(s) aggregating \$250.00 or more to any local government official involved in the review or consideration of this application.

****If you have made such contributions, you must provide the data required below within ten (10) days of filing this application.**

Name of Official(s): _____

Office: _____

Dollar Amount: _____

Date of Contribution: _____

Applicant's/Owner's Signature: _____

Date: 4-10-2024

Applicant's/Owner's Name(Printed): Michael Dye, President, Edge City Properties, Inc. as Applicant

PROJECT DESCRIPTION

The Subject Property contains three existing parcels with a total of +/- 68.83 acres of land on the north side of SR 53 (Winder Highway) in Hall County. The Property is located approximately four miles westbound from Interstate 85 and approximately five miles to the east from Interstate I-985. The only access to the development will be through two entrances on Benefield Road. Benefield Road has abundant access from SR 211 (Tanners Mill Road) to the north and SR 53 (Winder Highway) to the south.

The Applicant seeks to rezone the property to a Planned Residential Development (PRD) with quality residential homes with a full amenity package serving the residents.

The proposed homes will include a mixture of one and two-story detached and attached homes including two-car garages. The front façade of the proposed homes would be constructed of a mixture of brick, stone, and/or fiber-cement shake/siding (including board and batten). The homes proposed would contain a minimum of 1,800 square feet for the one-story homes and a minimum of 2,000 square feet for the two-story homes. The townhomes will have a minimum of 1,800 square feet.

Home prices (detached) will average from the high \$300,000's to mid \$400,000's and townhomes from the mid \$300,000's. Homes with basements and additional finishes will increase the average price.

A pool, cabana, hiking trails, open space areas and a dog park will serve the residents. All of the creeks and streams for the Property will be subject to the State and County buffer standards.

The community is designed to accommodate 302 homes consisting of 186 single family detached homes and 116 townhomes which are adjacent to the PCD zoned property known as Lanier Raceway. A more detailed description of the lot minimum requirements can be found on the site plan. A conceptual site plan is

submitted, but the Applicant reserves the right to amend the plan and develop in accordance with the final zoning conditions.

PROPOSED

PRD DEVELOPMENT STANDARDS:

| | |
|-------------------------------------|---|
| TOTAL HOMES: | 302 TOTAL 186 SINGLE-FAMILY DETACHED 116 TOWNHOMES ALL W/ENCLOSED TWO CAR GARAGES |
| TOTAL SITE DENSITY: | 4.39 LOTS/ACRE |
| MINIMUM LOT AREA: | 6,000 SQUARE FEET (DETACHED) |
| MINIMUM LOT WIDTH: | 50 FEET |
| MINIMUM HEATED FLOOR: | 1800 SQUARE FEET (TOWNHOMES) 1800 SQUARE FEET (DETACHED ONE STORY HOMES) 2000 SQUARE FEET (DETACHED TWO STORY HOMES) |
| MAXIMUM BUILDING HEIGHT: | 35 FEET |
| FRONT SETBACK: | 25 FEET |
| REAR YARD SETBACK: | 20 FEET |
| SIDE YARD: | 5 FEET |
| CORNER SIDE | 10 FEET |
| PERIMETER BUFFER (REPLANTED) | 50 FEET |

CURRENT USE AND FUTURE DEVELOPMENT

The Property is currently zoned AR-IV and PCD in Hall County. A majority of the property was rezoned in 2021 as a Planned Commercial Development (PCD) to consist of residential homes, car condos, RV parking and race day cottages. The existing home (Lot 10 of the PCD zoning) will remain a single-family home and will soon be replated out of the existing parcel number 15028 000090. It is excluded from this Application.

The property will be served by Hall County public sewer and City of Gainesville water. Capacity and service has already been reserved and a commitment letter accompanies this submittal.

The internal roads of the development will be developed and dedicated to Hall County standards and will not be private.

A mandatory Homeowners Association will be recorded with the final plat and govern the development for architectural standards and quality controls for the development as well as mandatory annual assessments for the maintenance of the common areas, signage and amenities.

The project is expected to take four (4) years to build out in three (3) phases of approximately 101 homes per phase.

A traffic impact study has been completed by the Applicant and accompanies this petition. The conclusion and recommendations for this report include the installation of decel lanes on Benefield Road for both entrances to the development and one left hand turn lane entering the Property from the northbound approach from HWY 53. In addition, the report recommends the installation of a right decel lane on HWY 53 (entering Benefield Road) and a right turn lane on the south Benefield Road approach to HWY 53.

The surrounding zonings consist PID, AR-IV, PCD, H-B and I-I.

The project will have monument signage that will not exceed the thirty-two (32) square feet which is permitted under the Hall County Signs Ordinance.

The Applicant is requesting the following variances to the PRD standards in the Development Standards Table listed in this Application. In addition, the Applicant request the following zoning conditions be considered:

1. The minimum lot size for detached homes shall be 6,000 square feet (from 8,000 square feet). (The reduction of lot size is being requested to accommodate the rising cost of housing due to material cost and mortgage interest rates. Homebuyers prefer smaller lots versus paying premiums for larger lots in today's environment).
2. Developer shall be allowed to only install sidewalks on one side of the street to lower the amount of impervious area and improve the aesthetic look of the neighborhood.
3. A variance to the maximum width of the garage wall for detached homes shall not exceed 55% of the width of the front façade of the dwelling. The garages can protrude up to 7.5 feet from the front heated square footage. Garage accents (i.e. eyebrow treatments, etc.) are excluded from this calculation.
4. Detached homes can also have garages set back a minimum of 4 feet from the heated square footage. Garage accents (i.e. eyebrow treatments, etc.) are excluded from this calculation.
5. A variance to the maximum width of the garage wall for townhomes shall not exceed 75% of the width of the front façade of the dwelling. The garages can protrude up to 7.5 feet from the front heated square footage. Garage accents (i.e. eyebrow treatments, etc.) are excluded from this calculation.
6. Developer shall be to allowed up to six model homes shall be permitted prior to the issuance of a final plat for the development.

HOUSING PRODUCT

Please see the enclosed photos of proposed housing product that accompany this application.

ACCOMPANYING MATERIALS

INTRODUCTION

A. COMPLETED APPLICATION WITH OWNER AFFADAVITS/CONTRIBUTIONS

B. PROJECT CONCEPT PLAN

C. PROPOSED HOME PRODUCT

D. WATER/SEWER CONFIRMATION LETTERS

E. LEGAL DESCRIPTION

F. TRAFFIC IMPACT STUDY

G. CONSTITUTIONAL OBJECTIONS

**JUSTIFICATION FOR REZONING APPLICATION OF
EDGE CITY PROPERTIES, INC.**

The portions of the Zoning Resolution of Hall County (the “ZR”) which classify or may classify the property (the "Property") which is the subject of the rezoning application submitted herewith (the “Application”) into any less intensive zoning classification other than as requested by the Applicant, or that prohibit the development of the Property as set forth in the Application, are or would be unconstitutional in that they would destroy the Applicant's property rights without first paying fair, adequate and just compensation for such rights, in violation of Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983, and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

The application of the ZR as applied to the subject Property, which restricts its use to the present zoning classification is unconstitutional, illegal, null and void, constituting a taking of the Applicant's and the Owner’s property in violation of the Just Compensation Clause of the Fifth Amendment and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States, Article I, Section I, Paragraph I, and Article I. Section I, Paragraph II of the Constitution of the State of Georgia of 1983, and the Equal Protection Clause of the Fourteenth Amendment to the Constitution of the United States denying the Applicant an economically viable use of its land while not substantially advancing legitimate state interests.

The Property is presently suitable for development under the PRD zoning classification as requested by the Applicant and is not economically suitable for development under the present AR-IV and PCD zoning classification of Hall County. A denial of the Application would constitute an arbitrary and capricious act by the Hall County Commissioner without any rational basis therefore, constituting an abuse of discretion in violation of Article I, Section I, Paragraph I and Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983, and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

A refusal by the Hall County Commissioner to rezone the Property to the PRD classification as set forth in the Application with such conditions as agreed to by the Applicant, so as to permit the only feasible economic use of the Property, would be unconstitutional and discriminate in an arbitrary, capricious and unreasonable manner between the Applicant and owners of similarly situated property in violation of Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983 and the Equal Protection Clause of the Fourteenth Amendment to the Constitution of the United States. Any rezoning of the subject Property to the PRD classification subject to conditions which are different from the conditions by which the Applicant may amend its application, to the extent such different conditions would have the effect of further restricting the Applicant’s and the Owner’s utilization of the subject Property, would also constitute an arbitrary, capricious and discriminatory act in zoning the Property to an unconstitutional classification and would likewise violate each of the provisions of the State and Federal Constitutions set forth hereinabove.

Likewise, a refusal by the Hall County Commissioner to permit the Applicant to withdraw the Application without prejudice would be an arbitrary and capricious act by Hall County Commissioner without any rational basis therefore, constituting an abuse of discretion in violation of Article I, Section 1, Paragraph I and Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983, and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

Accordingly, the Applicant respectfully requests that the rezoning application submitted by the Applicant relative to the Property be granted and that the Property be rezoned to the zoning classification as shown on the respective application.

This 12 day of April 2024

Respectfully submitted,

EDGE CITY PROPERTIES, INC., As Applicant



Michael K. Dye
President

Updated Staff plan review:

Following the release of the initial Staff Report, the Applicant met with Hall Planning Staff and was encouraged to incorporate several additional changes to the site plan prior to the Planning Commission meeting. The Staff asked for several changes to be considered. As a result, the Applicant submitted a new concept plan on July 23, 2024. These Staff suggestions along with the review of the Applicant's revised submittal plan are detailed below:

STAFF COMMENTS AND REVISIONS MADE BY APPLICANT WITH REVISED PLAN SUBMITTAL:

1. DISPLAY HOW THE VISUAL IMPACT FROM BENEFIELD ROAD WILL BE MINIMIZED BY THE CURRENT PLAN.

As a result, Applicant produced the typical lot "Benefield Road Cross Section exhibit" which details the graded change and landscaped buffer which will reduce the visual impact of the development from the view from Benefield Road.

2. INCREASE GREEN SPACE AREAS.

The amenity area was relocated to a more central area to the development and more accessible/visible to the residents. In addition, a larger additional "Central Park Area" was added to better serve the residents.

3. ENHANCE BUFFERS.

Additional planted trees within lots will be added on many of the interior lots (units 53-70 and 73-89, 90-109 and 110-128) to increase the visual buffer between homes.

4. CREATE A PRIMARY ENTRANCE AND INCREASE THE ATTRACTIVENESS.

A more central entrance was created with a landscaped island and separate roadways were added to present a more attractive entrance which will be heavily landscaped and provide an additional buffer from the view from Benefield Road. A more detailed entrance landscape plan will be provided by Applicant.

5. DECREASE THE LENGTH OF STRAIGHT ROADWAYS.

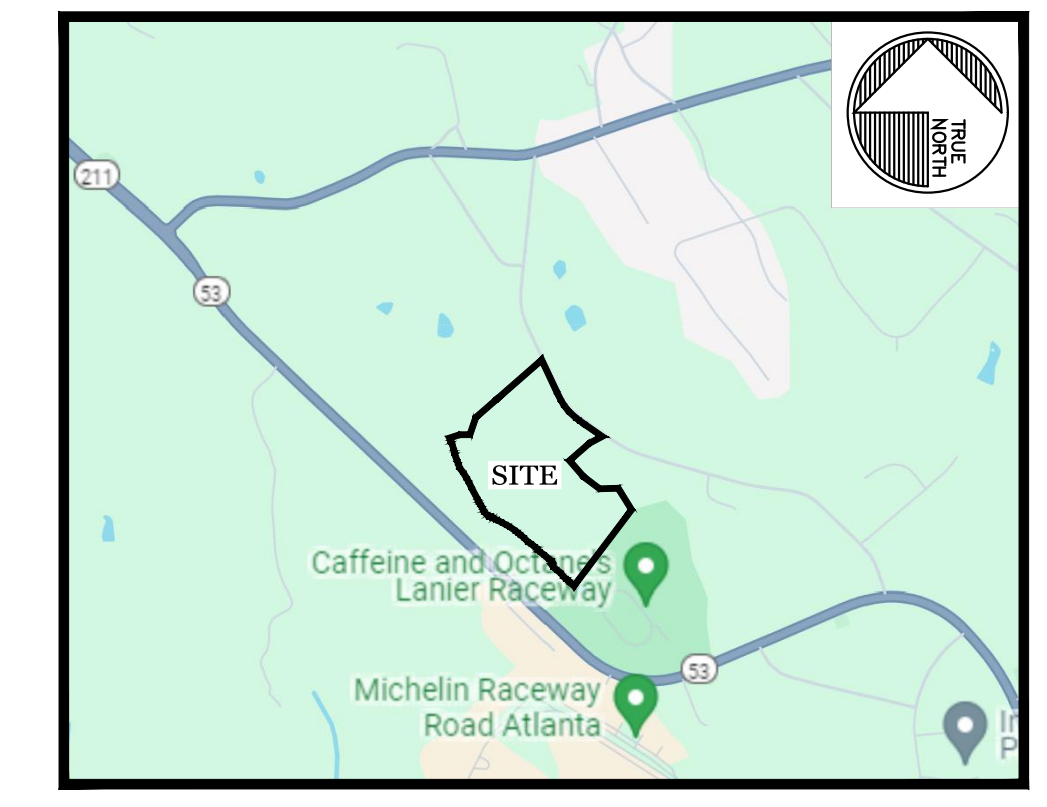
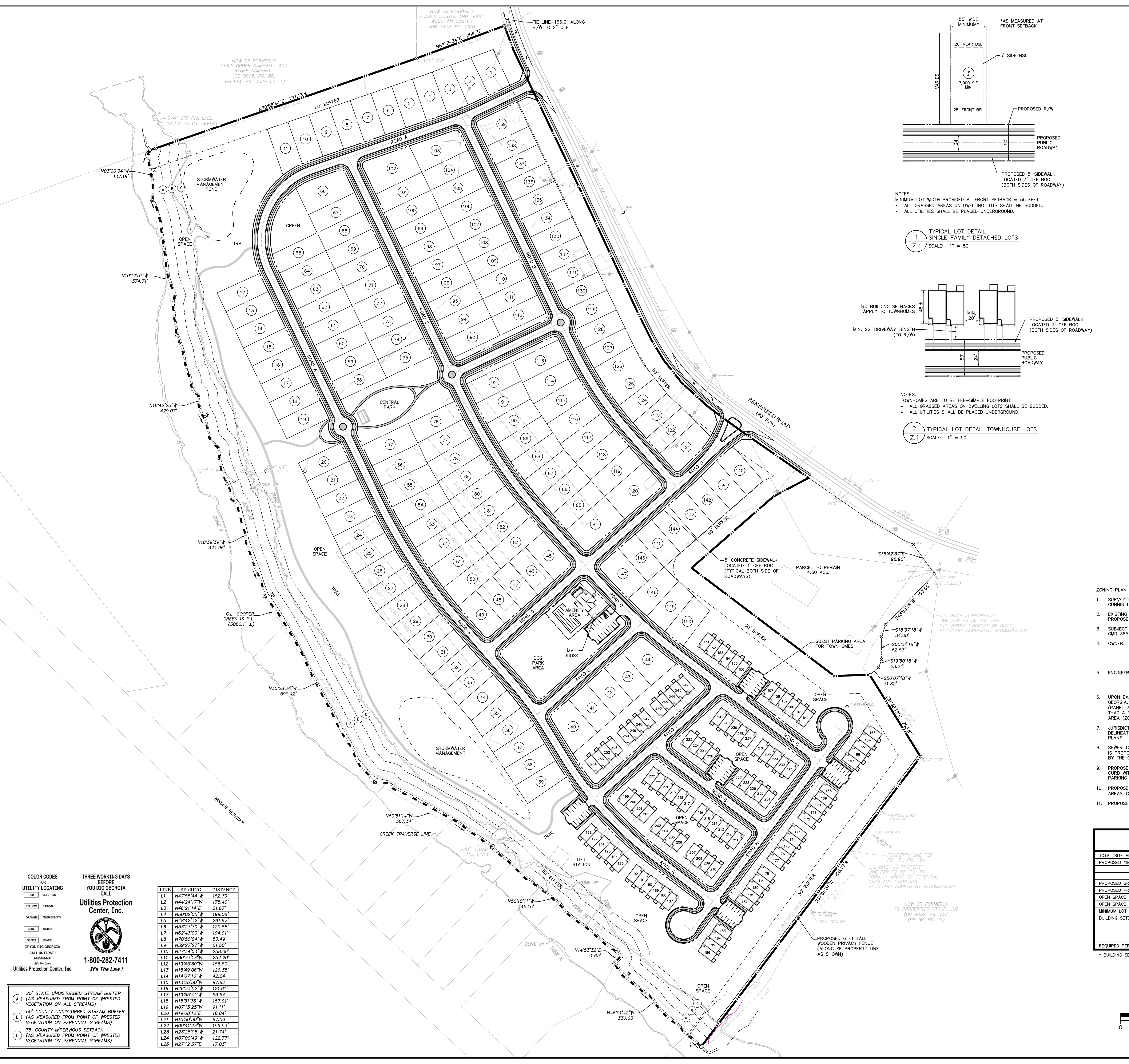
The new plan breaks up the longer roadways and installs roundabouts to slow traffic and creates a more pleasant design. While the streets follow the topography ridges the installation of these elements is more attractive. Also, additional lots were reduced to add a park area and additional connector street.

6. SIDEWALKS ON BOTH SIDES OF STREETS.

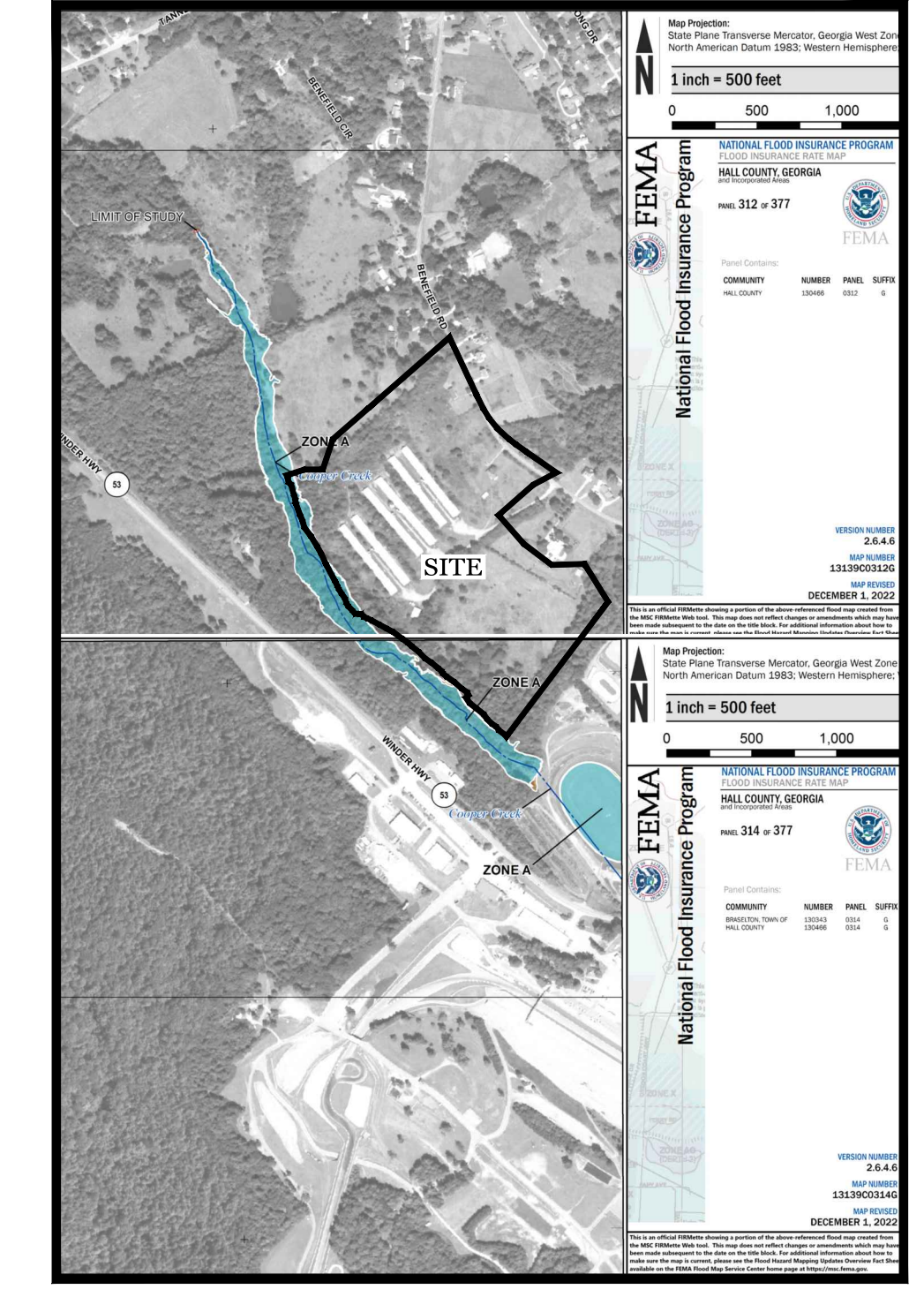
Sidewalks were added on both sides of the streets.

Conclusion and Summary:

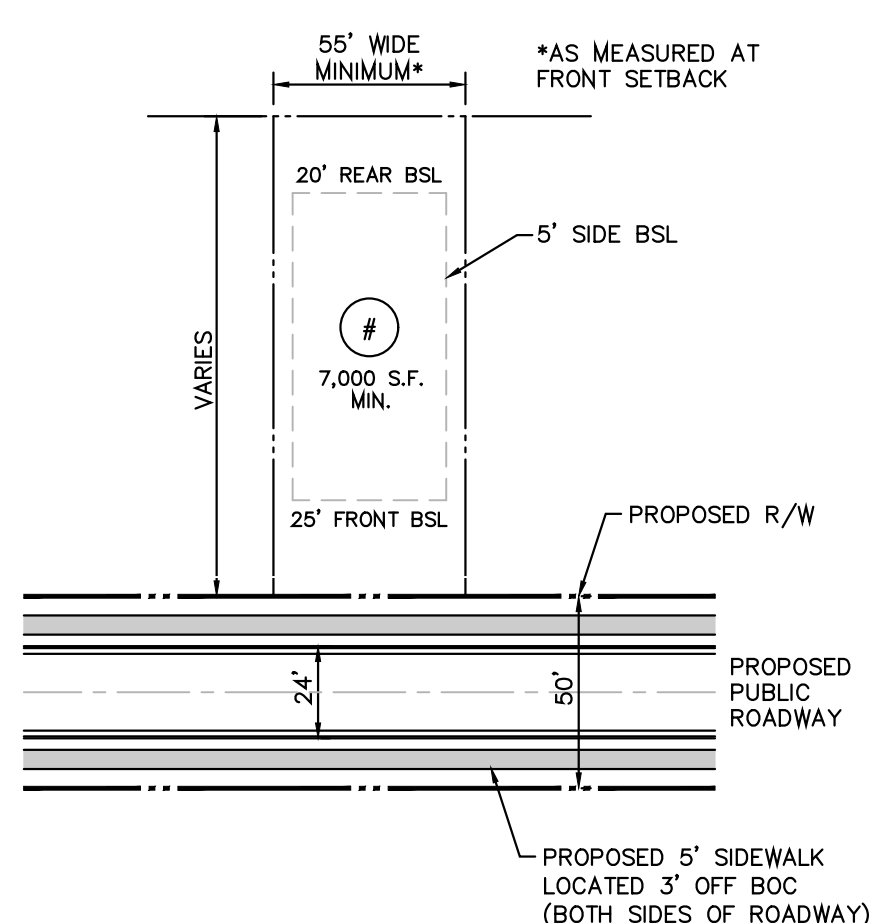
While no density reduction or minimum lot size reductions were requested by Staff, the revised submittal did reduce the unit count to 263, comprising of 159 detached homes and 104 townhomes or 3.82 units/acre (a reduction from 302 lots and 4.39 units/acre). The minimum lot size of 6,000 is still requested by the Applicant. After reviewing the revised submittal plan by Applicant, Staff does feel the Applicant has made a diligent effort to address the recommendations requested.



VICINITY MAP
SCALE 1" = 2,000'

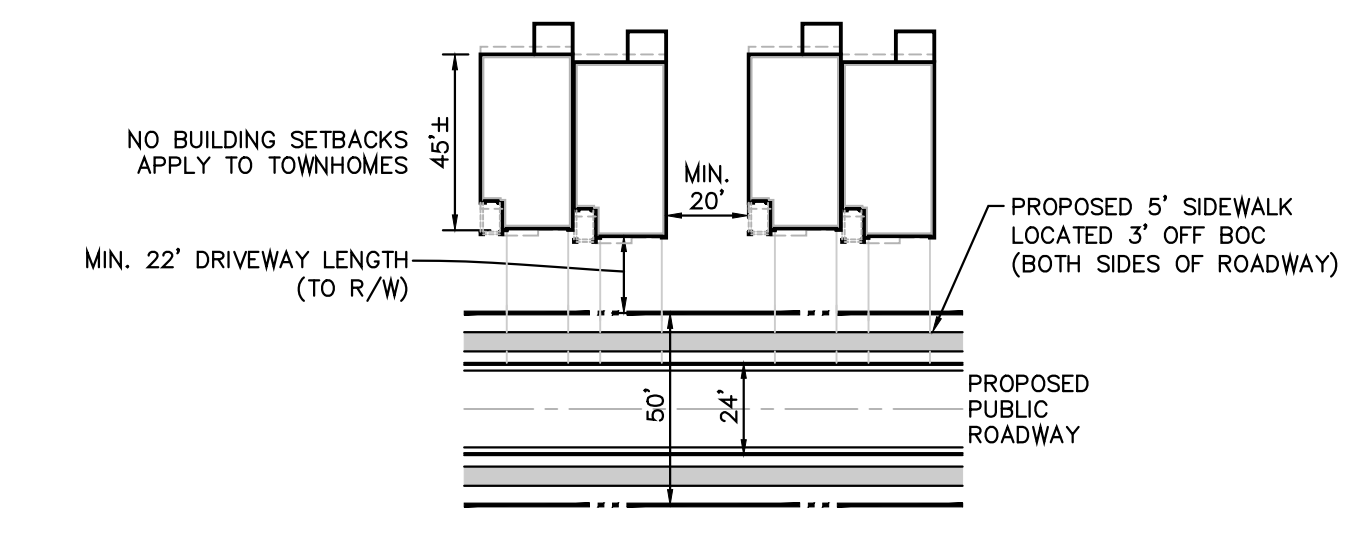


FEMA MAP
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SINGLE FAMILY DETACHED LOTS
SCALE: 1" = 50'



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TOWNHOUSE LOTS
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4280 DOVE POINT
DULUTH, GA 30096
CONTACT: MR. MIKE DYE 770.814.4500
mikedye@egpc.com
 - ENGINEER: CHRISTOPHER PLANNING & ENGINEERING, INC.
12460 CRABAPPLE ROAD, SUITE 202-612
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CONTACT: MR. SOTIR J. CHRISTOPHER 770.331.7303
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 - PROPOSED TRAIL TO BE A COMPACTED EARTHEN PATH.

| SITE ANALYSIS | |
|--------------------------------------|---------------------|
| TOTAL SITE AREA | 68.83 ACRES± |
| PROPOSED YIELD (A) 24' WIDE TOWNHOME | 104 LOTS |
| (B) 55' WIDE DETACHED LOTS | 150 LOTS |
| TOTAL | 254 LOTS |
| PROPOSED GROSS DENSITY | 3.69 UNITS/AC. |
| PROPOSED ZONING CRITERIA | |
| OPEN SPACE REQUIRED | 20.65 AC± (30%) |
| OPEN SPACE PROVIDED | 23.5 AC± (34.1%) |
| MINIMUM LOT SIZE | 7,000 S.F. |
| BUILDING SETBACKS* | FRONT 25 FEET |
| | SIDE 5 FEET |
| | CORNER SIDE 10 FEET |
| | REAR 20 FEET |
| REQUIRED PERIMETER BUFFER | 50 FEET |

* BUILDING SETBACKS DO NOT APPLY TO FEE-SIMPLE FOOTPRINT TOWNHOMES (SEE DETAIL)

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| L13 | N18°49'06"W | 126.38' |
| L14 | N14°07'10"W | 42.24' |
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| L20 | N19°08'10"E | 78.84' |
| L21 | N15°50'30"W | 87.56' |
| L22 | N09°41'23"W | 159.53' |
| L23 | N28°26'08"W | 21.74' |
| L24 | N07°00'49"W | 122.77' |
| L25 | N27°12'37"E | 17.03' |

- (A) 25' STATE UNDISTURBED STREAM BUFFER (AS MEASURED FROM POINT OF WRESTED VEGETATION ON ALL STREAMS)
- (B) 50' COUNTY UNDISTURBED STREAM BUFFER (AS MEASURED FROM POINT OF WRESTED VEGETATION ON PERENNIAL STREAMS)
- (C) 75' COUNTY IMPERVIOUS SETBACK (AS MEASURED FROM POINT OF WRESTED VEGETATION ON PERENNIAL STREAMS)

CP & E
CHRISTOPHER PLANNING & ENGINEERING

GEORGIA REGISTERED PROFESSIONAL ENGINEER
 No. 00086
 S. J. CHRISTOPHER
 9/3/2024

GSWCC LEVEL II CERTIFIED DESIGN PROFESSIONAL #05744 (EXP. 03.21.2027)

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 ALPHARETTA, GA 30004
 PHONE 770.331.7303
 schristopher@christopherplanning.com

ZONING PLAN FOR:
BENEFIELD ROAD TRACT

MORGAN DISTRICT
 GMD 385
 HALL COUNTY, GEORGIA

PARCEL IDS: 15028 000014,
 15028 000070, 15028 000090

PROPOSED ZONING: PRD

ZONING PLAN FOR:
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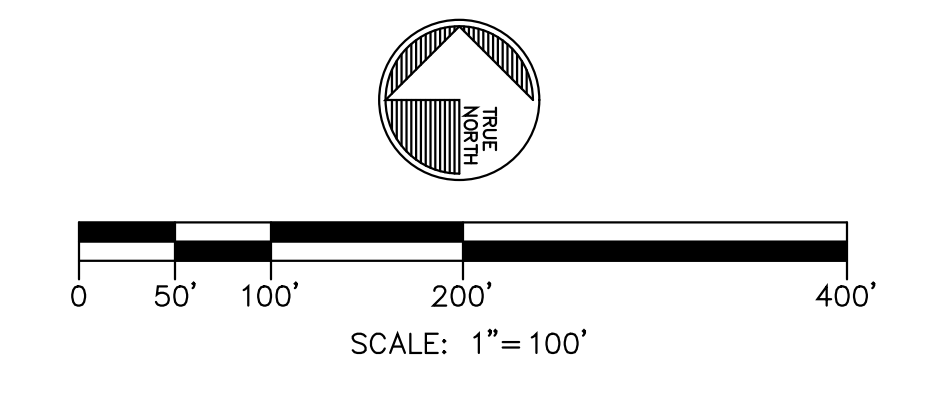
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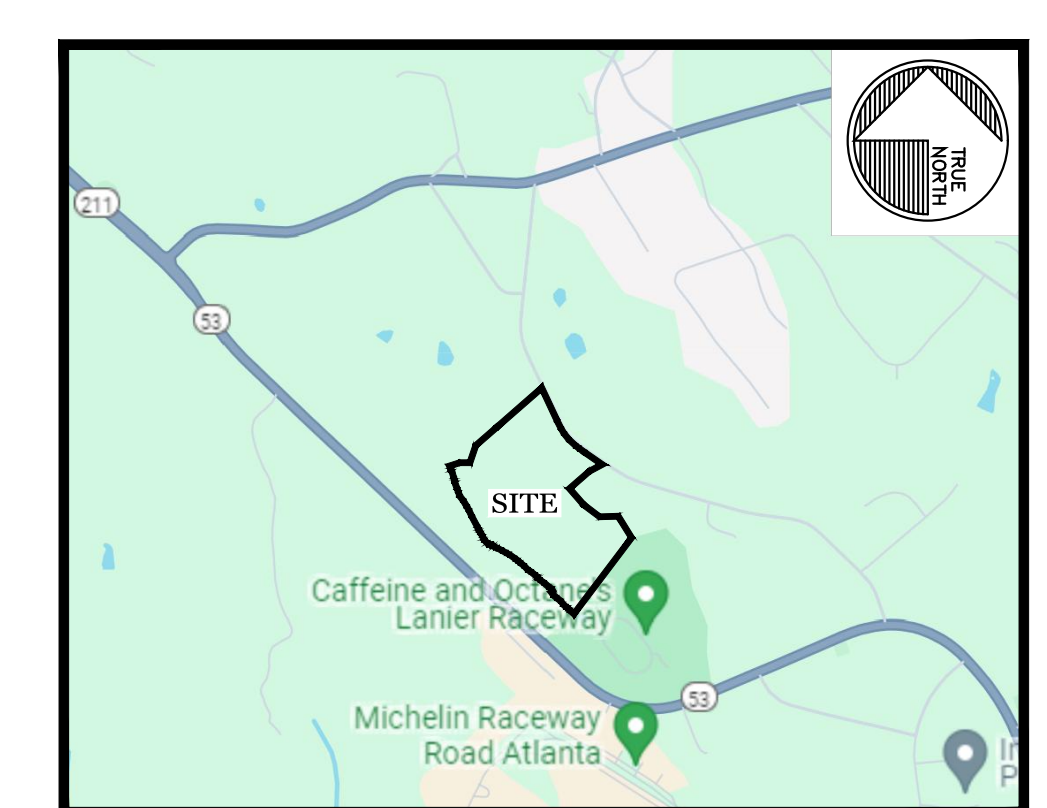
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| REVISIONS | |
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| 04.16.2024 | CLIENT COMMENTS |
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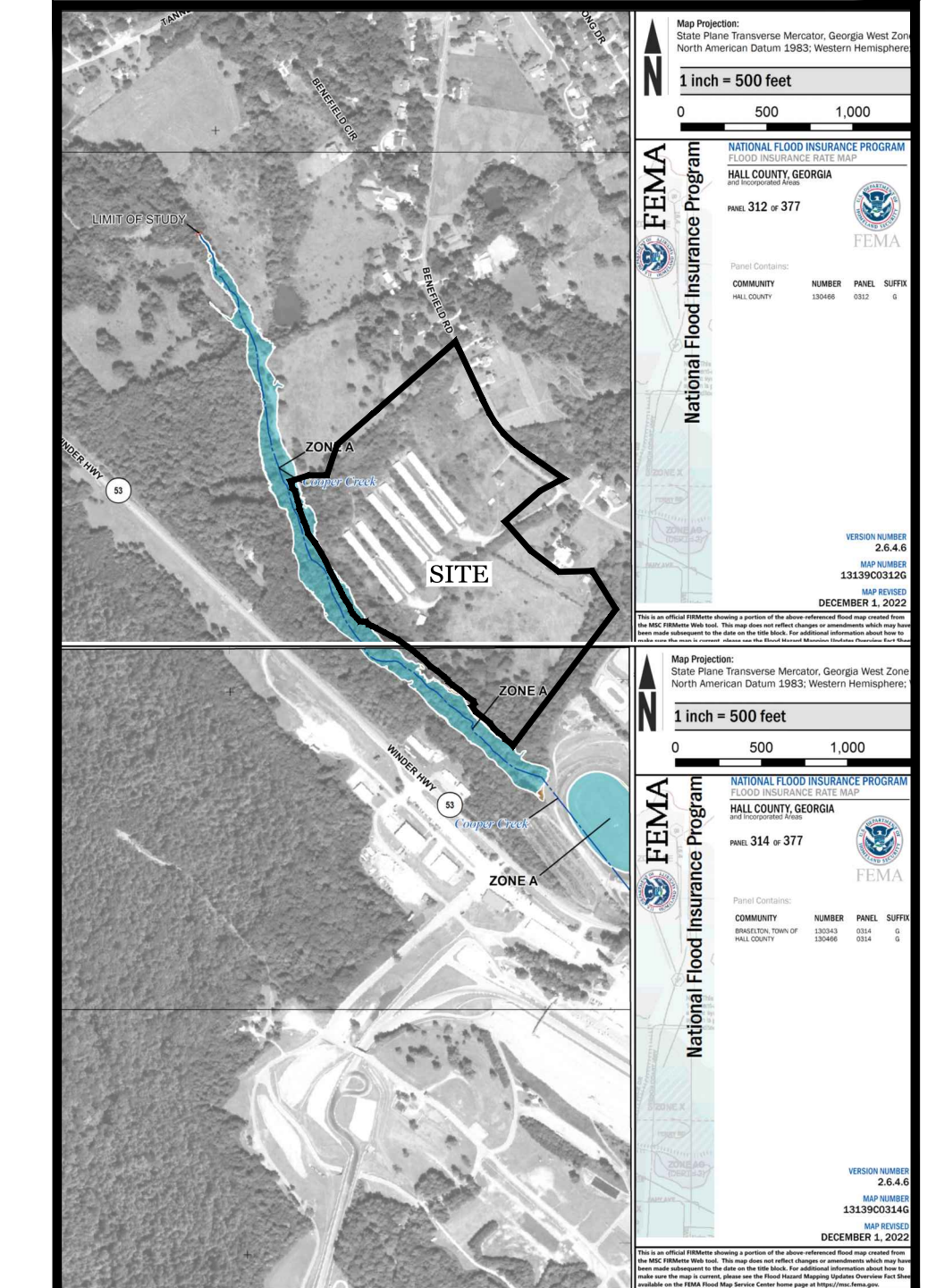
DATE: MARCH 14, 2024
 CP&E DRAWING NO: 2024103z1.dwg

ZONING SITE PLAN
 SHEET NO. **Z.1**

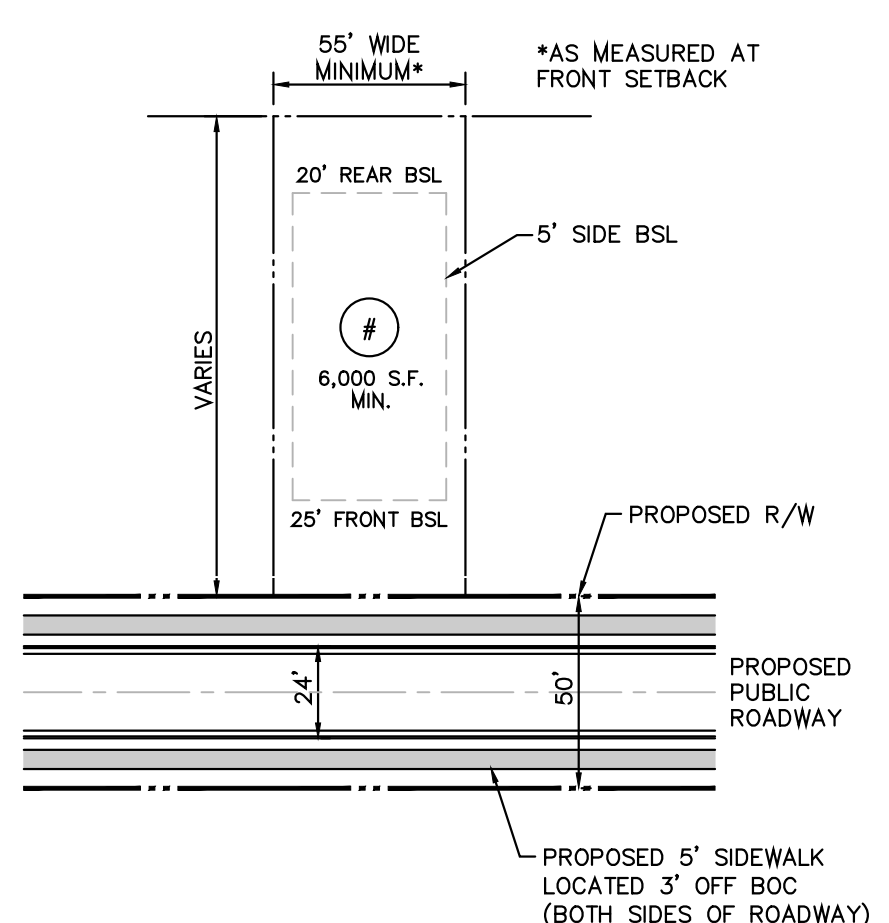




VICINITY MAP
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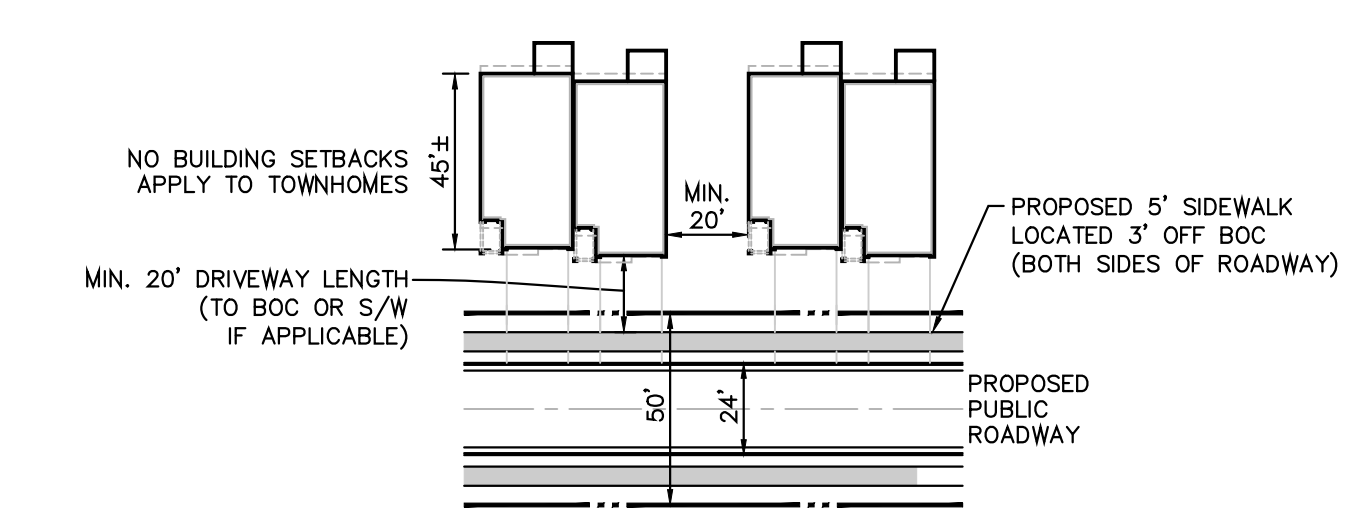


FEMA MAP
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NOTES:
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SINGLE FAMILY DETACHED LOTS
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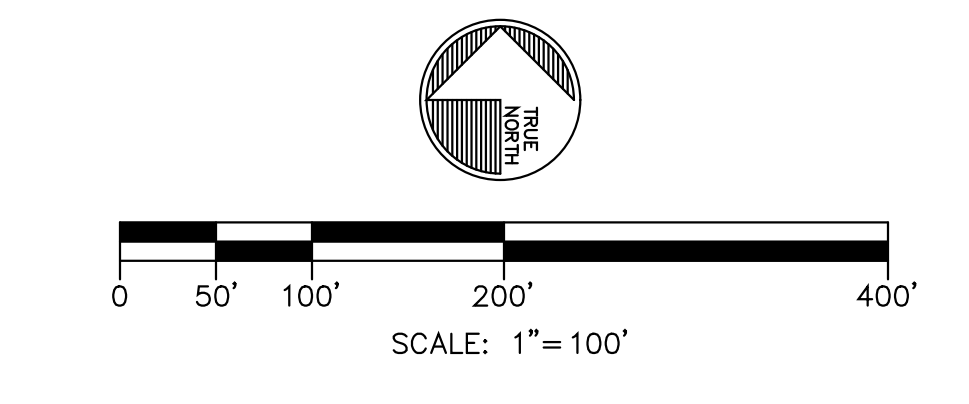
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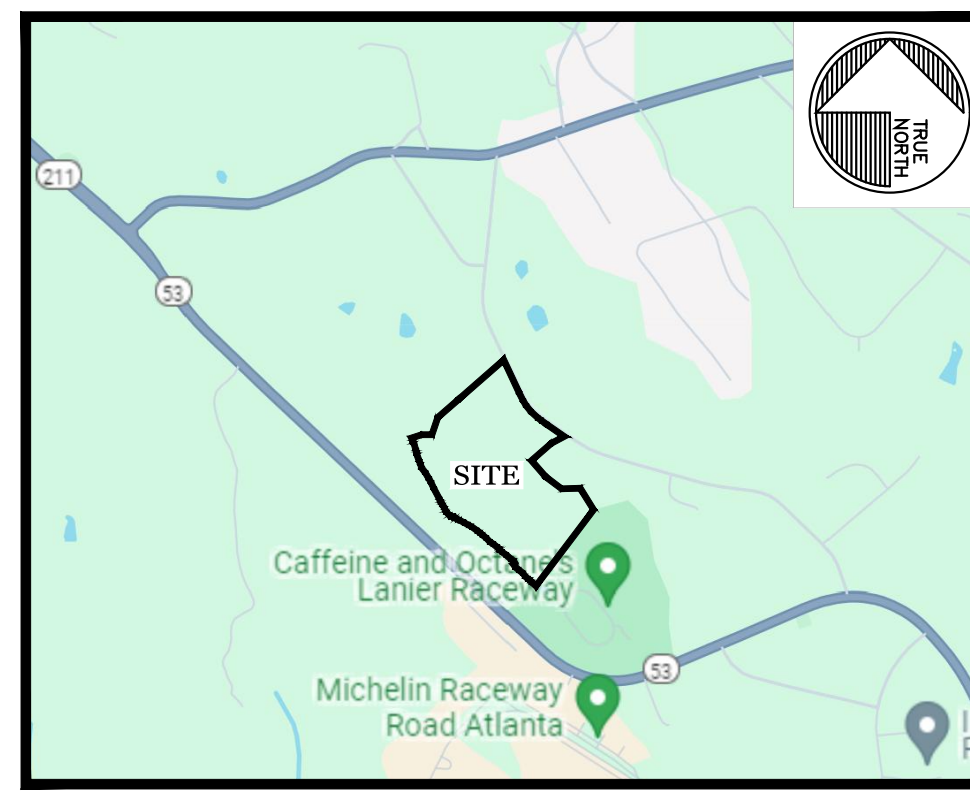
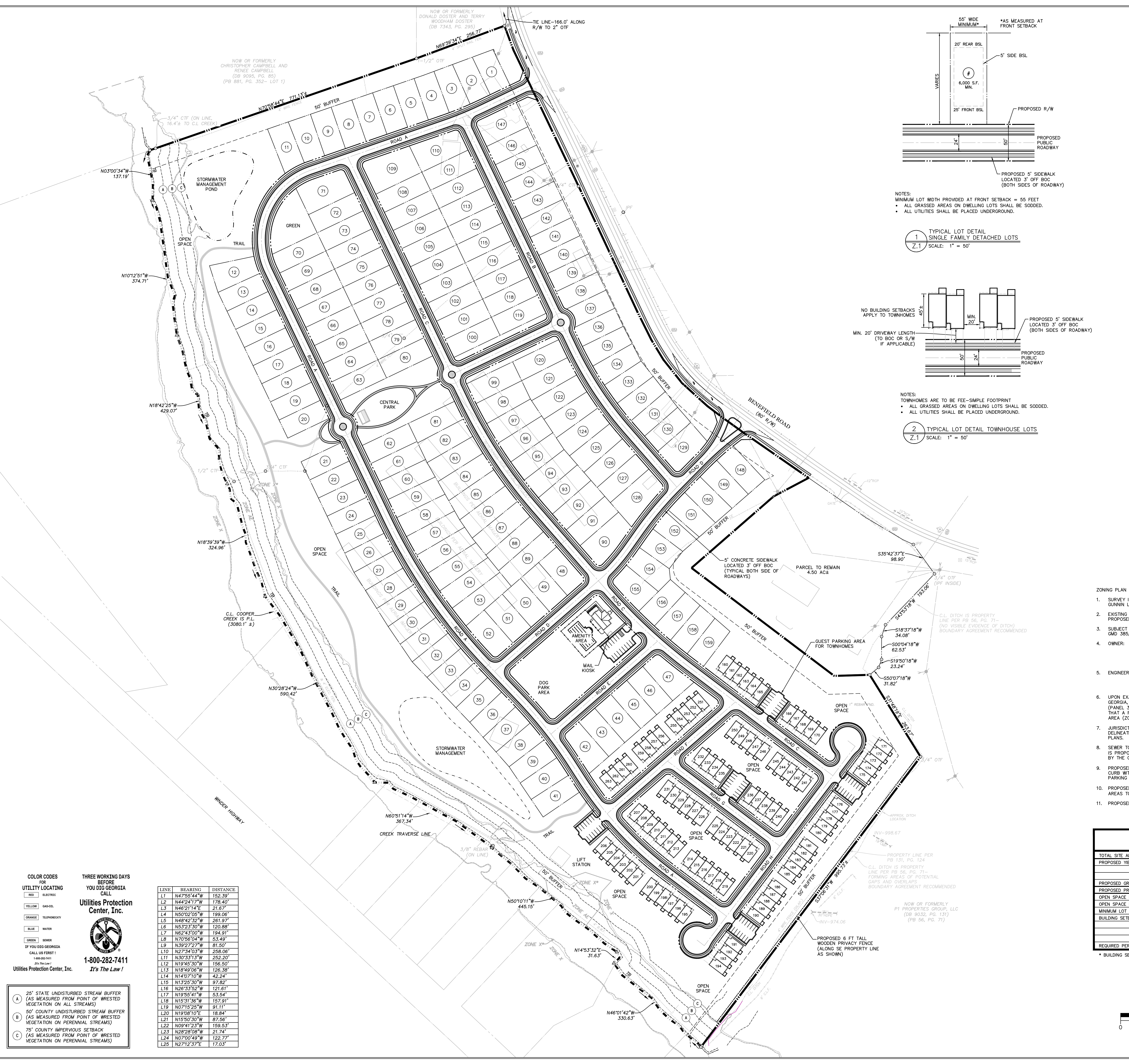
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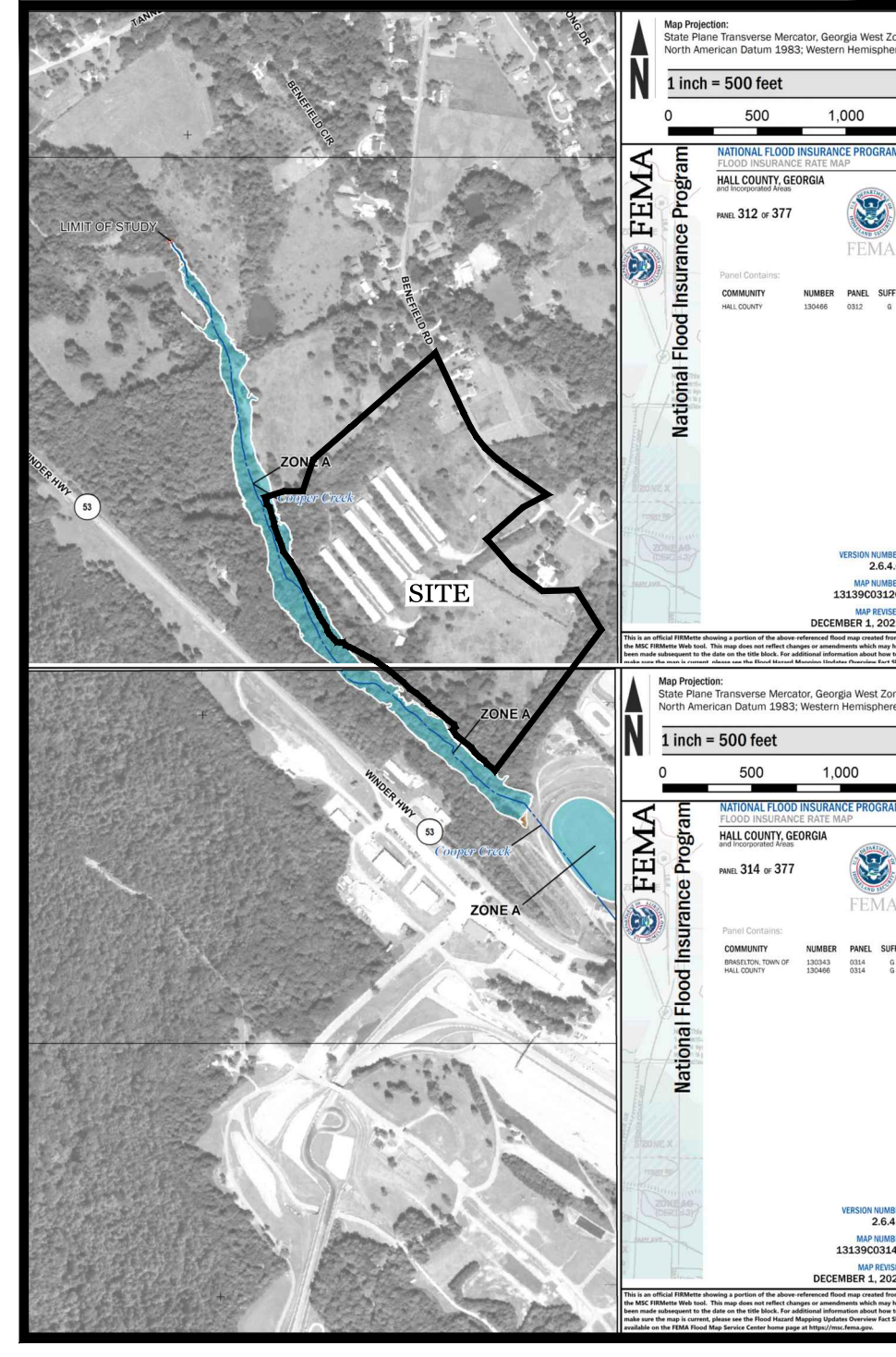
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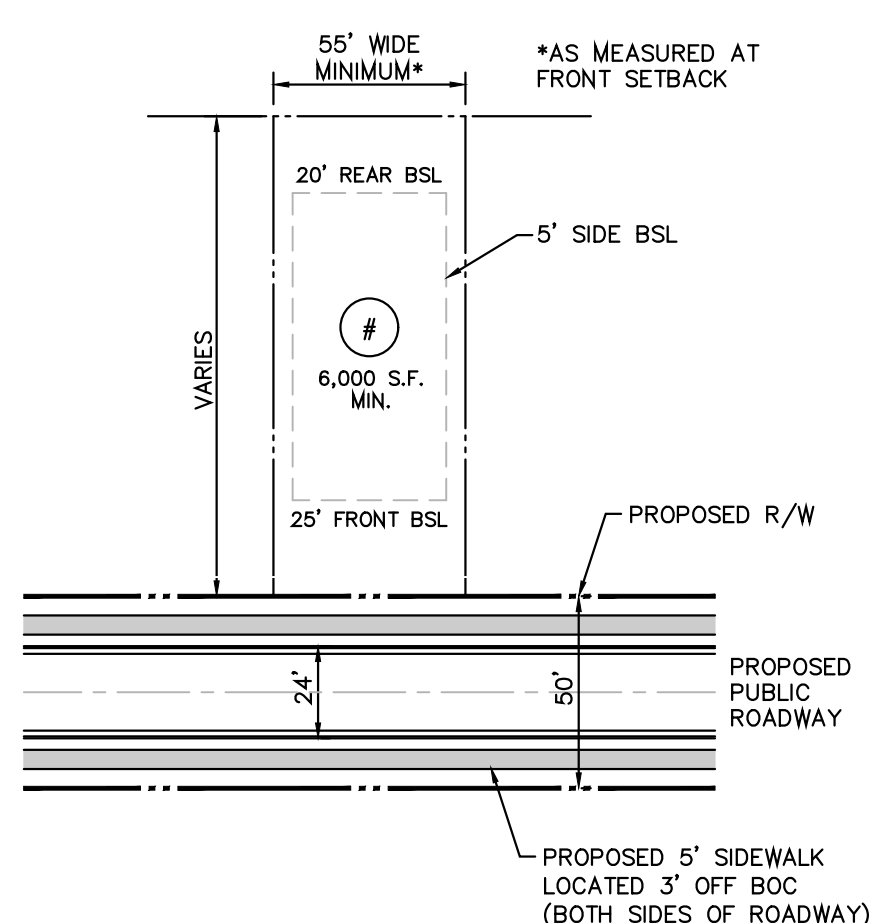
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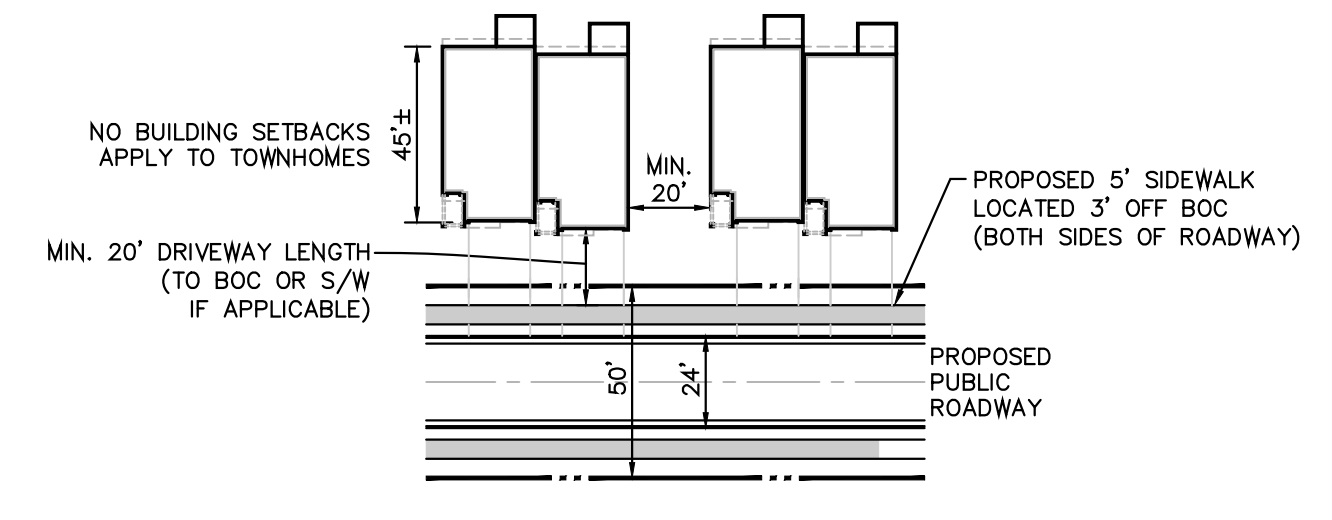


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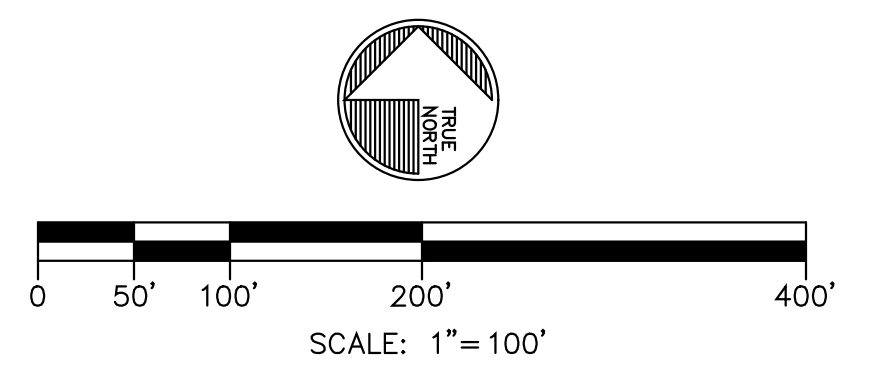
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| L10 | N27°34'03"W | 258.06' |
| L11 | N30°33'13"W | 252.20' |
| L12 | N19°45'50"W | 156.50' |
| L13 | N18°49'06"W | 126.38' |
| L14 | N14°07'10"W | 42.24' |
| L15 | N13°29'30"W | 97.82' |
| L16 | N26°33'52"W | 121.61' |
| L17 | N19°55'41"W | 63.54' |
| L18 | N15°31'36"W | 157.91' |
| L19 | N07°15'25"W | 91.11' |
| L20 | N19°08'10"E | 78.84' |
| L21 | N15°50'30"W | 87.56' |
| L22 | N09°41'23"W | 159.53' |
| L23 | N28°26'08"W | 21.74' |
| L24 | N07°00'49"W | 122.77' |
| L25 | N27°12'37"E | 17.03' |

- 25' STATE UNDISTURBED STREAM BUFFER (AS MEASURED FROM POINT OF WRESTED VEGETATION ON ALL STREAMS)
- 50' COUNTY UNDISTURBED STREAM BUFFER (AS MEASURED FROM POINT OF WRESTED VEGETATION ON PERENNIAL STREAMS)
- 75' COUNTY IMPERVIOUS SETBACK (AS MEASURED FROM POINT OF WRESTED VEGETATION ON PERENNIAL STREAMS)

CP & E
CHRISTOPHER PLANNING & ENGINEERING
 GEORGIA REGISTERED PROFESSIONAL ENGINEER
 SOTIR J. CHRISTOPHER
 7/23/2024
 GSWCC LEVEL II CERTIFIED DESIGN PROFESSIONAL #05744 (EXP. 03.21.2027)
 12460 CRABAPPLE ROAD, SUITE 202-612 ALPHARETTA, GA 30004
 PHONE 770.331.7303
 schristopher@christopherplanning.com

THESE PLANS ARE THE PROPERTY OF CHRISTOPHER PLANNING & ENGINEERING (CP&E). THESE DOCUMENTS MAY NOT BE COPIED, REPRODUCED, USED OR IMPLEMENTED IN ANY WAY, IN PART OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF CP&E. ALL COMMON LAW RIGHTS OF COPYRIGHT ARE HEREBY SPECIFICALLY RESERVED.

ZONING PLAN FOR:
BENEFIELD ROAD TRACT
 MORGAN DISTRICT GMD 385
 HALL COUNTY, GEORGIA
 PARCEL IDS: 15028 000014, 15028 000070, 15028 000090
 PROPOSED ZONING: PRD

FOR:
EDGE CITY PROPERTIES
 EDGE CITY PROPERTIES, INC.
 4280 DOVE POINT
 DULUTH, GA 30096
 CONTACT: MR. MIKE DYE 770.814.4500

| REVISIONS | |
|------------|------------------------|
| 04.16.2024 | CLIENT COMMENTS |
| 07.23.2024 | CLIENT/COUNTY COMMENTS |

DATE: MARCH 14, 2024 CP&E DRAWING NO: 2024103z1.dwg
ZONING SITE PLAN
 SHEET NO. **Z.1**

CLOSURE STATEMENT

THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS AN ANGULAR ERROR OF 1 SECOND PER ANGLE POINT AND A PRECISION RATIO OF 1 IN 27,221. IT HAS BEEN ADJUSTED USING THE COMPASS RULE METHOD.

THE DATA SHOWN ON THIS PLAT HAS A CLOSURE PRECISION RATIO OF 1 IN 4,477,952.

GENERAL NOTES

EQUIPMENT USED TO OBTAIN THESE MEASUREMENTS WAS A TRIMBLE S5 ROBOTIC TOTAL STATION. BEARINGS ARE CALCULATED FROM ANGLES TURNED FROM A SINGLE GRID BASELINE.

THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS AND BASED ON POSITIONAL VALUES FOR THE VIRTUAL REFERENCE STATION NETWORK DEVELOPED BY HIPS SOLUTIONS. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983 (NAD83) - STATE PLANE COORDINATE SYSTEM OF GEORGIA - WEST ZONE. THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988. ANY DIRECTIONS OR DIMENSIONS SHOWN ARE A RECTANGULAR, GROUND LEVEL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM.

DATE OF FIELD WORK: MARCH 26, 2024. ALL IRON PINS SET ARE 1/2" REBARS CAPPED WITH "GUNNIN LSF 1033" UNLESS OTHERWISE NOTED.

BY GRAPHIC PLOTTING ONLY, PORTIONS OF THIS SITE ARE SHOWN TO BE WITHIN THE LIMITS OF A 100 YR. FLOOD HAZARD AREA AS PER F.I.R.M. HALL COUNTY, GEORGIA AND INCORPORATED AREAS. COMMUNITY PANEL NUMBERS 13139C0312G AND 13139C0314G, DATED DECEMBER 1, 2022.

ABOVE GROUND UTILITY LOCATIONS WERE OBTAINED FROM FIELD OBSERVATIONS. THE UNDERGROUND UTILITIES ARE SHOWN HEREON BASED ON LOCATION OF MARKINGS PROVIDED BY:

RHD SERVICES, P.O. BOX 813399, SMYRNA, GEORGIA 30081, TEL: (404) 874-8585.

THE UNDERGROUND UTILITIES (EXCEPT THE LOCATION OF EXISTING DRAINAGE, SEWER AND IRRIGATION UTILITIES AS WELL AS UNDERGROUND STORAGE TANKS) WERE LOCATED BY RHD SERVICES UTILIZING RADIO FREQUENCY TECHNIQUE. THIS TECHNIQUE IS CAPABLE OF LOCATING METALLIC UTILITIES AND TRACER WIRES. ANY NON-METALLIC UTILITIES (WITHOUT TRACER WIRE) ARE NOT LOCATED. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. UNDERGROUND UTILITIES NOT OBSERVED OR LOCATED UTILIZING THIS TECHNIQUE MAY EXIST ON THIS SITE BUT NOT BE SHOWN, AND MAY BE FOUND UPON EXCAVATION. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. INFORMATION REGARDING MATERIAL AND SIZE OF UTILITIES IS BASED ON RECORDS ACQUIRED FROM THE UTILITY OWNERS.

ALL JURISDICTIONAL WATER DELINEATIONS WERE PROVIDED BY CORBLU ECOLOGY GROUP (PROJECT# 02-021224) AND FIELD LOCATED BY THIS FIRM. SITE ADDRESS IS LISTED AS: 4336, 4370 AND 4420 BENEFIELD ROAD, BRASELTON, GEORGIA 30517.

THE CURRENT PARCEL IDENTIFICATION NUMBERS ARE 15028 000014, 15028 000070 AND 15028 000090 (A PORTION OF).

DISCLOSURE AND NOTICE

THE SURVEY AND PLAT SHOWN HEREON IS NOT INTENDED FOR USE OR RELIANCE BY ANY PARTIES OR ENTITIES NOT SPECIFICALLY LISTED IN THE TITLE UNAUTHORIZED THIRD PARTIES SHALL INDEMNIFY AND HOLD GUNNIN LAND SURVEYING, LLC HARMLESS AGAINST ANY AND ALL LIABILITY FOR ANY LOSS ARISING OUT OF, OR RELATED TO, RELIANCE BY ANY THIRD PARTY ON ANY WORK PERFORMED THEREUNDER, OR THE CONTENTS OF THE SURVEY.

THIS DRAWING OR ANY FINDING(S) DOES NOT CONSTITUTE A TITLE OR LEGAL OPINION BY GUNNIN LAND SURVEYING, LLC. EASEMENTS OR OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN.

ANY PROVIDED CERTIFICATION IS A STATEMENT BASED ON FACTS AND KNOWLEDGE KNOWN TO THE REGISTRANT AND IS NOT A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED, AS A UNIQUE, GRAPHIC PROFESSIONAL WORK, THIS SURVEY IS SUBJECT TO THE COPYRIGHT LAWS OF THE UNITED STATES. THE LATEST DATE OF FIELD SURVEY WORK IS THE DATE APPLICABLE TO PROVISIONS OF STATUTES OF LIMITATION.

SYMBOL LEGEND

- IPF 1/2" REBAR FOUND
- IPF 1/2" REBAR SET
- IPF RIGHT-OF-WAY MONUMENT FOUND
- 42 ADJOINING LOT NUMBER
- 26 LOT NUMBER
- 100 LAND LOT NUMBER
- AIR CONDITIONING UNIT
- BENCHMARK
- BOLLARD
- HANDICAP PARKING SPOT
- SIOW
- MANHOLE - UNKNOWN TYPE
- HANDHOLE
- CABLE TV BOX
- CABLE TV MANHOLE
- CABLE TV PEDESTAL
- ELECTRIC BOX
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC PEDESTAL
- GUY WIRE AND ANCHOR
- GUY POLE
- CL.F. CHAIN LINK FENCE
- CONC. CONCRETE MONUMENT FOUND
- CONC. CONCRETE
- CONC. CROWDED TOP PIPE
- DB DEED BOOK
- DR. DRAINAGE EASEMENT
- E.E. EXISTING EASEMENT
- EV GAS VALVE
- EP GAS METER
- FEIN. FENCE
- L.L.L. LAND LOT LINE
- OTF OPEN TOP PIPE
- PB PLAT BOOK
- PG. PAGE
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- PROP. PROPOSED
- R/W RIGHT OF WAY
- SS SANITARY SEWER
- S.S.E. SANITARY SEWER EASEMENT
- P.L. PROPERTY LINE
- S.S.M. SANITARY SEWER MANHOLE
- U.E. UTILITY EASEMENT
- DI DROP INLET
- DWB DOUBLE WING CATCH BASIN
- FLARED END SECTION
- HW HEADWALL
- TES TESTED END SECTION
- FUNCTION BOX
- OCS OUTLET CONTROL STRUCTURE
- SWCB SINGLE WING CATCH BASIN
- PIW PRECAST/WEIR INLET
- YIP YARD INLET
- CMP CORRUGATED METAL PIPE
- DIP DUCTILE IRON PIPE
- HOPE HIGH DENSITY POLYETHYLENE PIPE
- PCV POLYVINYL CHLORIDE PIPE
- RCP REINFORCED CONCRETE PIPE
- VCP VITRIFIED CLAY PIPE

ABBREVIATIONS

- A.E. ACCESS EASEMENT
- BC BACK OF CURB
- BM BENCHMARK
- B.S.L. BUILDING SETBACK LINE
- CBG CURB AND GUTTER
- CL. CENTERLINE
- CL.F. CHAIN LINK FENCE
- CONC. CONCRETE MONUMENT FOUND
- CONC. CONCRETE
- CONC. CROWDED TOP PIPE
- DB DEED BOOK
- DR. DRAINAGE EASEMENT
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- FUNCTION BOX
- OCS OUTLET CONTROL STRUCTURE
- SWCB SINGLE WING CATCH BASIN
- PIW PRECAST/WEIR INLET
- YIP YARD INLET
- CMP CORRUGATED METAL PIPE
- DIP DUCTILE IRON PIPE
- HOPE HIGH DENSITY POLYETHYLENE PIPE
- PCV POLYVINYL CHLORIDE PIPE
- RCP REINFORCED CONCRETE PIPE
- VCP VITRIFIED CLAY PIPE

STREAM BUFFERS

- (A) 25' STATE UNDISTURBED BUFFER (AS MEASURED FROM TOP OF STREAM BANK)
- (B) 50' COUNTY UNDISTURBED VEGETATIVE BUFFER (AS MEASURED FROM TOP OF STREAM BANK)
- (C) 75' COUNTY NON-IMPERVIOUS SETBACK (AS MEASURED FROM TOP OF STREAM BANK)

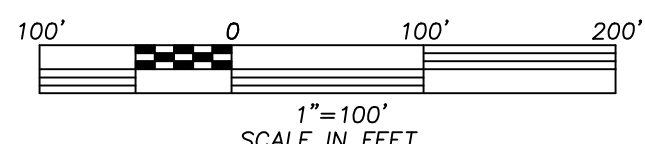
BUFFERS SHOWN ACCORDING TO JURISDICTIONAL WATERS REPORT PROVIDED BY CORBLU ECOLOGY GROUP (PROJECT# 02-021224). ADDITIONAL BUFFERS MAY BE REQUIRED BY LOCAL REQUIREMENTS.

LINE TYPE LEGEND

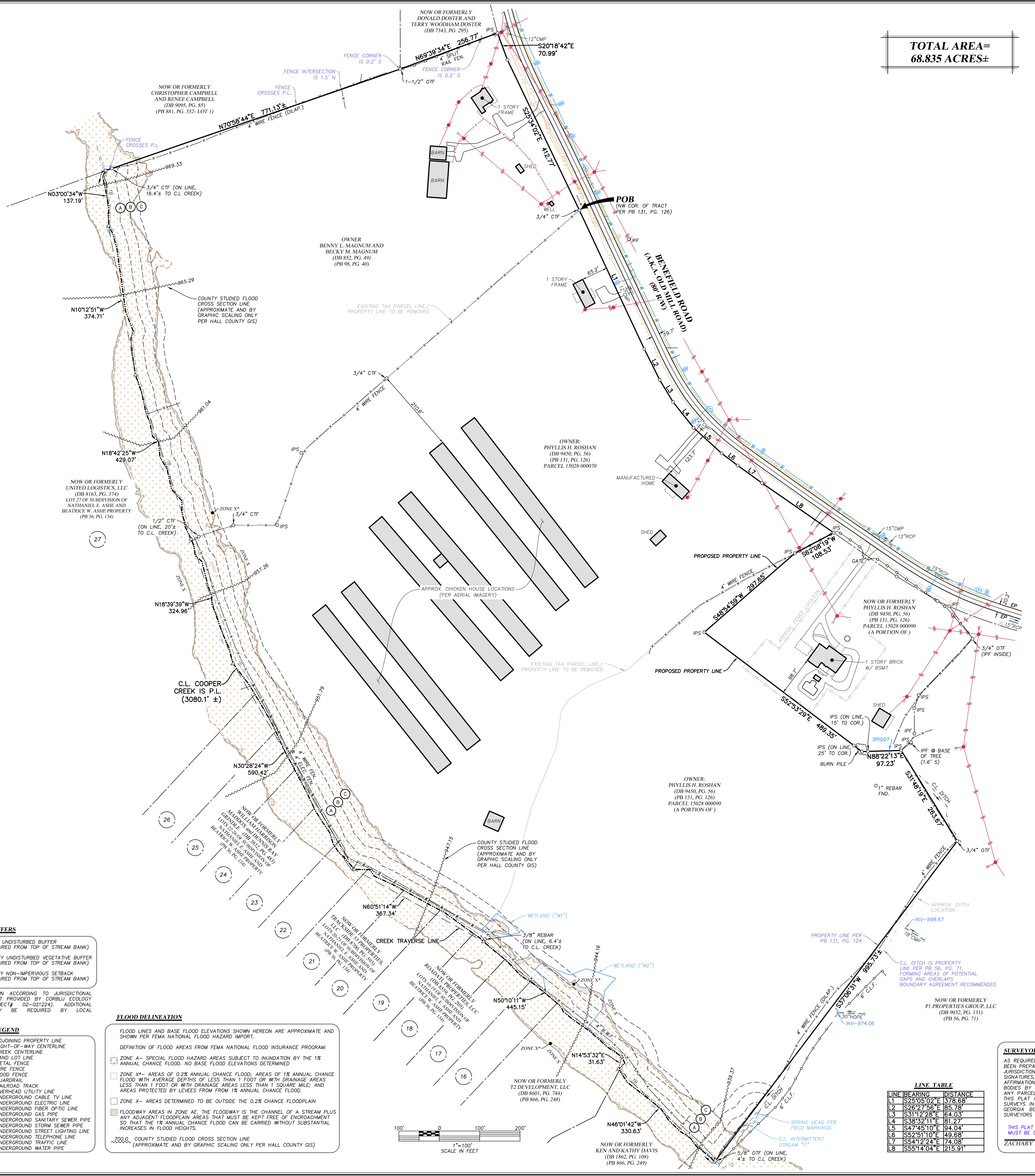
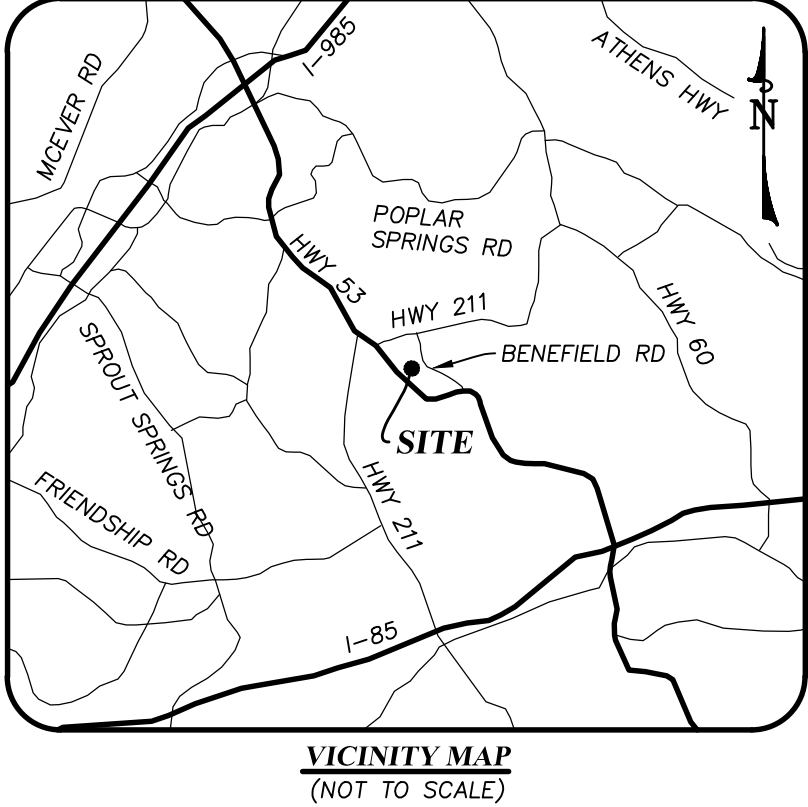
- ADJOINING PROPERTY LINE
- RIGHT-OF-WAY CENTERLINE
- CREEK CENTERLINE
- LAND LOT LINE
- METAL FENCE
- WIRE FENCE
- WOOD FENCE
- RAILROAD TRACK
- OVERHEAD UTILITY LINE
- UNDERGROUND CABLE TV LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND FIBER OPTIC LINE
- UNDERGROUND GAS PIPE
- UNDERGROUND SANITARY SEWER PIPE
- UNDERGROUND STORM SEWER PIPE
- UNDERGROUND STREET LIGHTING LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND TRAFFIC LINE
- UNDERGROUND WATER PIPE

FLOOD DELINEATION

FLOOD LINES AND BASE FLOOD ELEVATIONS SHOWN HEREON ARE APPROXIMATE AND SHOWN PER FEMA NATIONAL FLOOD HAZARD REPORT. DEFINITION OF FLOOD AREAS FROM FEMA NATIONAL FLOOD INSURANCE PROGRAM: ZONE A - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. NO BASE FLOOD ELEVATIONS DETERMINED. ZONE X* - AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVES FROM FROM 1% ANNUAL CHANCE FLOOD. ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE FLOODPLAIN. FLOODWAY AREAS IN ZONE AE. THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS. COUNTY STUDIED FLOOD CROSS SECTION LINE (APPROXIMATE AND BY GRAPHIC SCALING ONLY PER HALL COUNTY GIS)



TOTAL AREA= 68.835 ACRES±



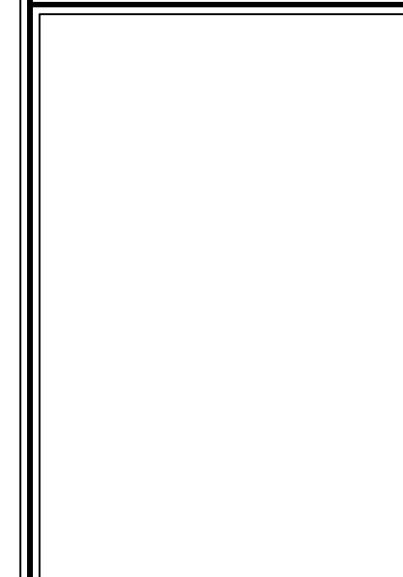
LINE TABLE

| LINE | BEARING | DISTANCE |
|------|-------------|----------|
| L1 | S84°05'02"E | 178.68 |
| L2 | S26°27'56"E | 85.78 |
| L3 | S31°12'28"E | 64.03 |
| L4 | S38°32'11"E | 81.27 |
| L5 | S47°45'10"E | 94.04 |
| L6 | S52°51'10"E | 49.68 |
| L7 | S54°12'24"E | 74.08 |
| L8 | S55°14'04"E | 125.91 |

SURVEYOR'S CERTIFICATE (STATE OF GEORGIA)

AS REQUIRED BY SUBSECTION (4) OF O.C.G.A. SECTION 15-6-67, THIS PLAT HAS BEEN PREPARED BY A LAND SURVEYOR AND APPROVED BY ALL APPLICABLE LOCAL JURISDICTIONS FOR RECORDING AS EVIDENCED BY APPROVAL CERTIFICATES, SIGNATURES, STAMPS, OR STATEMENTS HEREON. SUCH APPROVALS OR AFFIRMATIONS SHOULD BE CONFIRMED WITH THE APPROPRIATE GOVERNMENTAL BODIES BY ANY PURCHASER OR USER OF THIS PLAT AS TO INTENDED USE OF ANY PARCEL. FURTHERMORE, THE UNDERSIGNED LAND SURVEYOR CERTIFIES THAT THIS PLAT COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN THE RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67. THIS PLAT WAS RELEASED PRIOR TO APPROVALS BEING OBTAINED. APPROVALS MUST BE OBTAINED PRIOR TO THE RECORDING OF THIS DOCUMENT. ZACHARY R. WEISEL, GA RLS NO. 3473 DATE

REVISION and DATE table with columns for revision number and date.



BOUNDARY SURVEY FOR: **EDGE CITY PROPERTIES, INC.** LOCATED IN MORGAN DISTRICT (GMD 385) HALL COUNTY, GEORGIA APRIL 12, 2024

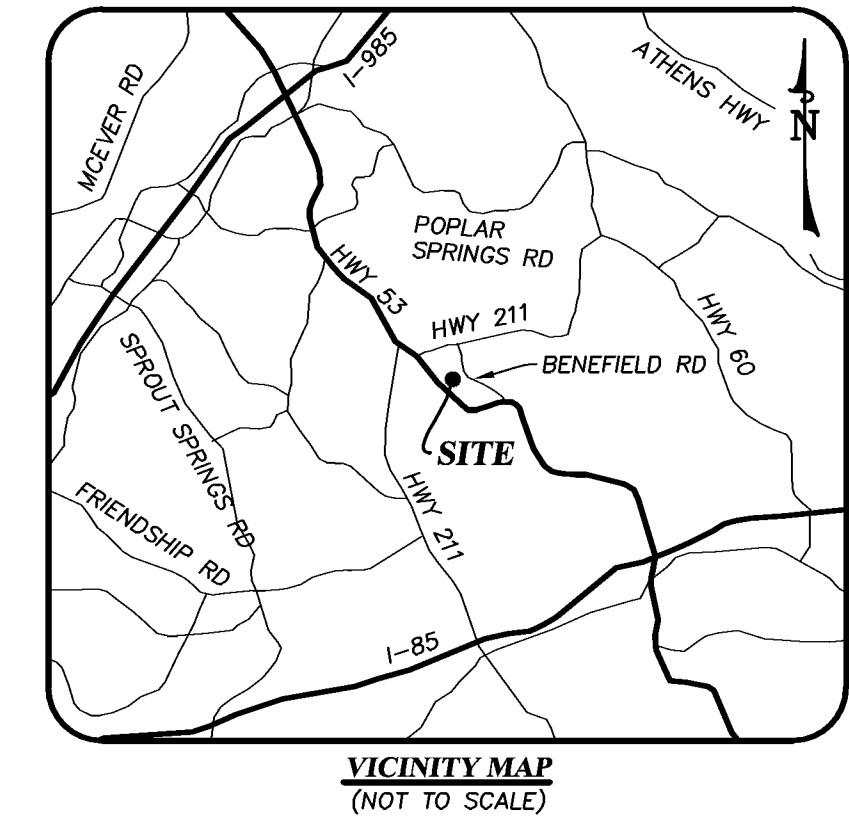
GUNNIN SURVEY logo and contact information for Gunnin Survey, LLC.

Professional Engineer and Land Surveyor seal for Zachary R. Weisel, State of Georgia, License No. 5475.

DRAWN BY: ZRW CHECKED BY: JRG PROJECT NO. 24001 SHEET 1 OF 1

eFiled and eRecorded
 DATE: 05/02/2024
 TIME: 3:46 PM
 PLAT BOOK: 885
 PAGE: 68 - 68
 FILING FEES: \$10.00
 PART ID: 4980386552
 RECORDED BY: JP
 Charles Baker, C.S.C
 Hall County, GA

TOTAL AREA=
 54.639 ACRES±



1: D-6495
 2: 07-555

Any abandoned well shall be properly closed as per Water Well Standards Act. Any abandoned septic tank shall be pumped by a State certified pumper/hauler and crushed/filled.

RESERVED FOR PLAT FILING

CLOSURE STATEMENT

THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS AN ANGULAR ERROR OF SECOND PER ANGLE POINT AND A PRECISION RATIO OF 1 IN 27,221. IT HAS BEEN ADJUSTED USING THE COMPASS RULE METHOD.

THE DATA SHOWN ON THIS PLAT HAS A CLOSURE PRECISION RATIO OF 1 IN 350,033 (TRACT 1) AND 585,925 (TRACT 2).

GENERAL NOTES

EQUIPMENT USED TO OBTAIN THESE MEASUREMENTS WAS A TRIMBLE S5 ROBOTIC TOTAL STATION.

BEARINGS ARE CALCULATED FROM ANGLES TURNED FROM A SINGLE GRID BASELINE.

THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS AND BASED ON POSITIONAL VALUES FOR THE VIRTUAL REFERENCE STATION NETWORK DEVELOPED BY HP'S SOLUTIONS. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983 (NAD83) - STATE PLANE COORDINATE SYSTEM OF GEORGIA - WEST ZONE. THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988. ANY DIRECTIONS OR DIMENSIONS SHOWN ARE A RECTANGULAR, GROUND LEVEL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM.

DATE OF FIELD WORK: FEBRUARY 20, 2024

ALL IRON PINS SET ARE 1/2" REBARS CAPPED WITH "GUNNIN LSP 1033" UNLESS OTHERWISE NOTED.

BY GRAPHIC PLOTTING ONLY, PORTIONS OF THIS SITE ARE SHOWN TO BE WITHIN THE LIMITS OF A 100 YR. FLOOD HAZARD AREA AS PER F.I.R.M. HALL COUNTY, GEORGIA AND INCORPORATING PANEL NUMBERS 13139C0312G AND 13139C0314G, DATED DECEMBER 1, 2022.

ABOVE GROUND UTILITY LOCATIONS WERE OBTAINED FROM FIELD OBSERVATIONS. UNDERGROUND UTILITIES WERE NOT LOCATED AS PART OF THIS SURVEY. THE INFORMATION SHOWN ON THIS DRAWING CONCERNING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE OWNER, ARCHITECT, CONTRACTOR AND THEIR AGENTS ARE RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE ACTUAL SIZE, TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

ALL JURISDICTIONAL WATER DELINEATIONS WERE PROVIDED BY CORBLU ECOLOGY GROUP (PROJECT# 02-02124) AND FIELD LOCATED BY THIS FIRM.

SITE ADDRESS IS LISTED AS: 4370 AND 4420 BENEFIELD ROAD, BRASELTON, GEORGIA 30517

THE CURRENT PARCEL IDENTIFICATION NUMBERS ARE 15028 000070, AND 15028 000090.

DISCLOSURE AND NOTICE

THE SURVEY AND PLAT SHOWN HEREON IS NOT INTENDED FOR USE OR RELIANCE BY ANY PARTIES OR ENTITIES NOT SPECIFICALLY LISTED IN THE TITLE UNAUTHORIZED THIRD PARTIES SHALL INDEMNIFY AND HOLD GUNNIN LAND SURVEYING, LLC HARMLESS AGAINST ANY AND ALL LIABILITY FOR ANY LOSS ARISING OUT OF OR RELATED TO, RELIANCE BY ANY THIRD PARTY ON ANY WORK PERFORMED THEREUNDER, OR THE CONTENTS OF THE SURVEY.

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HALL COUNTY ENGINEERING NOTES

ANY STREAM OR STATE WATER LOCATED ON THIS PROPERTY MAY BE SUBJECT TO A 50 FEET UNDISTURBED NATURAL VEGETATIVE BUFFER AND A 75 FEET IMPERVIOUS SURFACE SETBACK. (HALL COUNTY CODE § 8.170.070)

IF PROPERTY IS LOCATED IN THE NORTH OCOONEE WATERSHED DISTRICT, THEN ADDITIONAL STREAM BUFFERS AND IMPERVIOUS SETBACKS MAY BE REQUIRED FOR COMPLIANCE. (HALL COUNTY CODE § 17.225.040)

THIS PROPERTY OR A PORTION THEREOF IS LOCATED IN A FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAP #13139C0312G AND #13139C0314G, HALL COUNTY GEORGIA, DATED DECEMBER 1, 2022.

THIS PROPERTY OR A PORTION THEREOF IS LOCATED IN THE HALL COUNTY STUDIED FLOOD ZONE PER HALL COUNTY GIS.

IF RESIDENTIAL PROPERTY IS SUBDIVIDED INTO SEVEN LOTS OR MORE WITH ALL ACCESSING EXISTING HALL COUNTY GEORGIA ROADS, THEN STORMWATER MANAGEMENT IS REQUIRED FOR COMPLIANCE. (HALL COUNTY CODE § 8.180.160)

ALL DRIVEWAYS MUST MEET HALL COUNTY DRIVEWAY REGULATIONS PER CODE § 12.40. ALL LAND DISTURBANCES OVER ONE ACRE SHALL REQUIRE AN EROSION SEDIMENTATION POLLUTION CONTROL PLAN.

SYMBOL LEGEND

- 1/2" REBAR FOUND
- 1/2" REBAR SET
- RIGHT-OF-WAY MONUMENT FOUND
- ADDING LOT NUMBER
- LOT NUMBER
- LAND LOT NUMBER
- AIR CONDITIONING UNIT
- BENCHMARK
- BOLLARD
- HANDICAP PARKING SPOT
- SIGN
- MANHOLE - UNKNOWN TYPE
- HANDHOLE
- CABLE TV BOX
- CABLE TV MANHOLE
- CABLE TV PEDESTAL
- ELECTRIC BOX
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC PEDESTAL
- GUY WIRE AND ANCHOR
- GUY POLE
- LIGHT POLE (LP)
- POWER POLE (PP)
- SERVICE POLE
- HIGH VOLTAGE POWER POLE (HVPP)
- DRAINAGE EASEMENT
- GAS MANHOLE
- GAS VALVE
- GAS METER
- SANITARY SEWER CLEAN OUT
- SANITARY SEWER MANHOLE
- STORM SEWER CLEAN OUT
- DOUBLE WING CATCH BASIN
- SINGLE WING CATCH BASIN
- CURB INLET
- DROP INLET
- FLARED END SECTION
- HEADWALL
- JUNCTION BOX
- PEDESTAL/WEIR INLET
- YARD INLET
- TELEPHONE BOX
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- PEDESTRIAN SIGNAL POLE
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- FIRE DEPARTMENT CONNECTION
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- POST INDICATOR VALVE
- WATER MANHOLE
- WATER METER
- WATER VALVE
- WATER VAULT
- TREE

ABBREVIATIONS

- A.E. ACCESS EASEMENT
- BC BACK OF CURB
- BM BENCHMARK
- B.S.L. BUILDING SETBACK LINE
- CBM CURB AND BUTTER
- C.L. CENTERLINE
- C.L.F. CHAIN LINK FENCE
- CMF CONCRETE MONUMENT FOUND
- CONC. CONCRETE
- CRIMPED TOP PIPE
- DB DEED BOOK
- DRM DRAINAGE EASEMENT
- EX. EXISTING
- EP EDGE OF PAVEMENT
- FEN. FENCE
- L.L. LAND LOT LINE
- OTF OPEN TOP PIPE
- PB PLAT BOOK
- PG. PAGE
- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- PROJ. PROPOSED
- R/W RIGHT OF WAY
- SE SANITARY SEWER
- S.S.E. SANITARY SEWER EASEMENT
- P.L. PROPERTY LINE
- S.S.M. SANITARY SEWER MANHOLE
- U.E. UTILITY EASEMENT
- DI DROP INLET
- DWB DOUBLE WING CATCH BASIN
- HW HEADWALL
- J.B. JUNCTION BOX
- OCS OUTLET CONTROL STRUCTURE
- SWEB SINGLE WING CATCH BASIN
- P.Y.M. YARD INLET
- Y.I.P. YARD INLET
- DI DUCTILE IRON PIPE
- HDP HIGH DENSITY POLYETHYLENE PIPE
- P.V.C. POLYVINYL CHLORIDE PIPE
- RCP REINFORCED CONCRETE PIPE
- V.C.P. VITRIFIED CLAY PIPE

STREAM BUFFERS

- (A) 25' STATE UNDISTURBED BUFFER (AS MEASURED FROM TOP OF STREAM BANK)
- (B) 50' COUNTY UNDISTURBED VEGETATIVE BUFFER (AS MEASURED FROM TOP OF STREAM BANK)
- (C) 75' COUNTY NON-IMPERVIOUS SETBACK (AS MEASURED FROM TOP OF STREAM BANK)

BUFFERS SHOWN ACCORDING TO JURISDICTIONAL WATERS REPORT PROVIDED BY CORBLU ECOLOGY GROUP (PROJECT# 02-02124). ADDITIONAL BUFFERS MAY BE REQUIRED BY LOCAL REQUIREMENTS.

LINE TYPE LEGEND

- ADJOINING PROPERTY LINE
- RIGHT-OF-WAY CENTERLINE
- CREEK CENTERLINE
- LAND LOT LINE
- METAL FENCE
- WIRE FENCE
- WOOD FENCE
- GUARDRAIL
- RAILROAD TRACK
- OVERHEAD UTILITY LINE
- UNDERGROUND CABLE TV LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND FIBER OPTIC LINE
- UNDERGROUND GAS PIPE
- UNDERGROUND SANITARY SEWER PIPE
- UNDERGROUND STORM SEWER PIPE
- UNDERGROUND STREET LIGHTING LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND TRAFFIC LINE
- UNDERGROUND WATER PIPE
- VITRIFIED CLAY PIPE

FLOOD DELINEATION

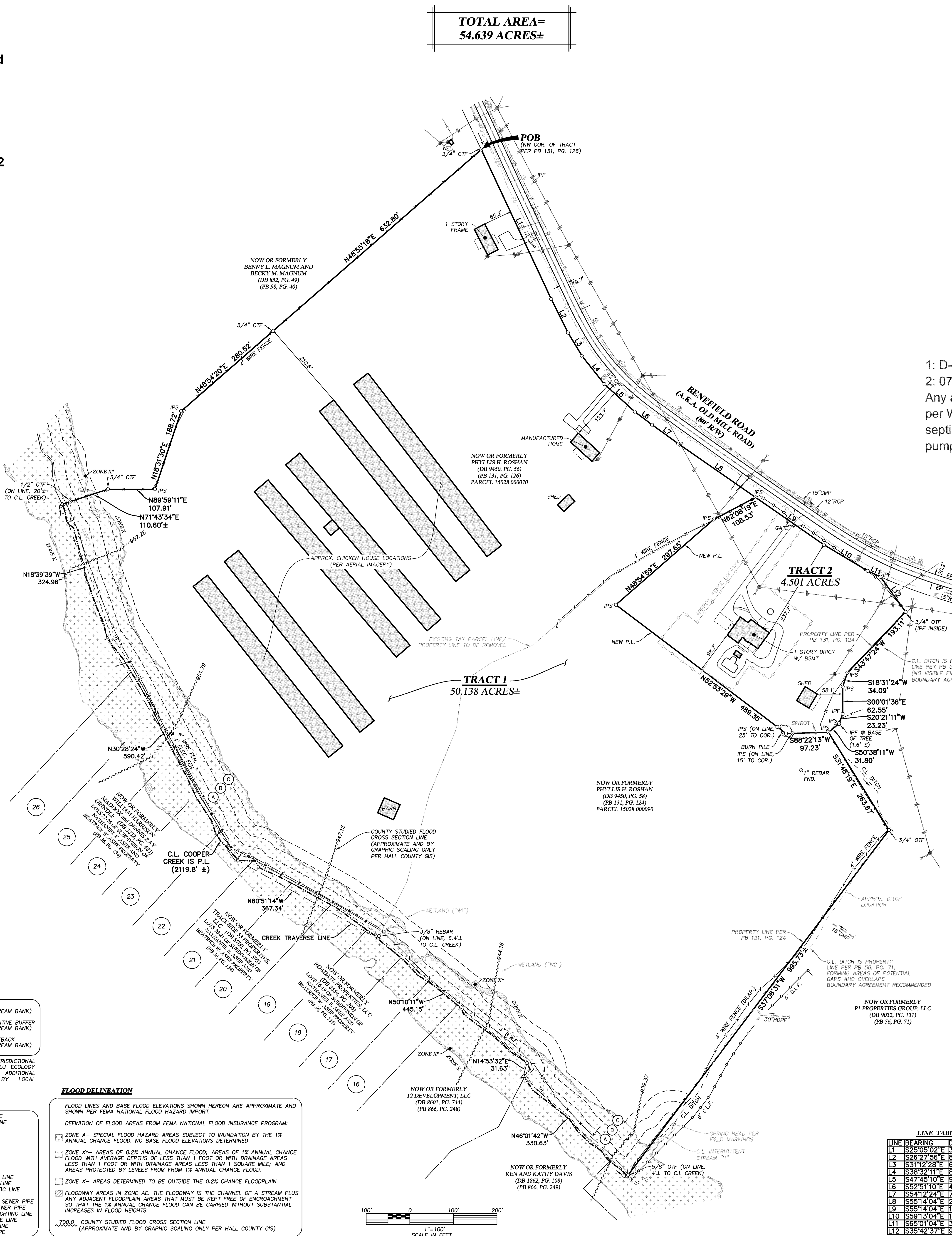
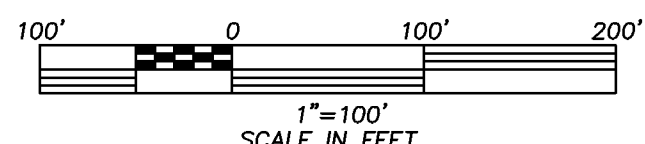
FLOOD LINES AND BASE FLOOD ELEVATIONS SHOWN HEREON ARE APPROXIMATE AND SHOWN PER FEMA NATIONAL FLOOD HAZARD REPORT.

DEFINITION OF FLOOD AREAS FROM FEMA NATIONAL FLOOD INSURANCE PROGRAM:

- ZONE A - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. NO BASE FLOOD ELEVATIONS DETERMINED.
- ZONE X - AREAS OF 0.2% ANNUAL CHANCE FLOOD. AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE. AND AREAS PROTECTED BY LEVES FROM FROM 1% ANNUAL CHANCE FLOOD.
- ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE FLOODPLAIN.

□ FLOODWAY AREAS IN ZONE AE. THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS.

○ COUNTY STUDIED FLOOD CROSS SECTION LINE (APPROXIMATE AND BY GRAPHIC SCALING ONLY PER HALL COUNTY GIS)



LINE TABLE

| LINE BEARING | DISTANCE |
|--------------|---------------------|
| 1 | S25°05'02"E 378.68' |
| 2 | S26°27'56"E 85.78' |
| 3 | S51°12'28"E 84.03' |
| 4 | S38°32'11"E 81.27' |
| 5 | S47°45'10"E 94.04' |
| 6 | S52°51'10"E 49.68' |
| 7 | S54°12'24"E 74.08' |
| 8 | S55°14'04"E 75.91' |
| 9 | S55°14'04"E 190.51' |
| 10 | S59°13'04"E 117.13' |
| 11 | S65°01'04"E 52.42' |
| 12 | S35°42'37"E 188.90' |

SURVEYOR'S CERTIFICATE (STATE OF GEORGIA)

AS REQUIRED BY SUBSECTION (g) OF O.C.G.A. SECTION 15-6-67, THIS PLAT HAS BEEN PREPARED BY A LAND SURVEYOR AND APPROVED BY ALL APPLICABLE LOCAL JURISDICTIONS FOR RECORDING AS EVIDENCED BY APPROVAL CERTIFICATES, SIGNATURES, STAMPS, OR STATEMENTS HEREON. SUCH APPROVALS OR APPROVALS SHOULD BE CONFIRMED WITH THE APPROPRIATE GOVERNMENTAL BODIES BY ANY PURCHASER OR USER OF THIS PLAT AS TO INTENDED USE OF ANY PARCEL. FURTHERMORE, THE UNDERSIGNED LAND SURVEYOR CERTIFIES THAT THIS PLAT COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN THE RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67.

Signature
 ZACHARY R. WEISSEL, GA RLS NO. 3473

APPROVED
 JAVAN SHARIFA
 42328024
 HALL COUNTY, GEORGIA

RECORDING PERMIT
 BY **Brittany Walker**
 HALL COUNTY PLANNING COMMISSION
 DATE: 4/23/2024

DATE: 04.16.24

REVISION

DATE

MINOR PLAT FOR:
EDGE CITY PROPERTIES, INC.
(BENEFIELD TRACTS)
 LOCATED IN MORGAN DISTRICT (GMD 385)
 HALL COUNTY, GEORGIA
 MARCH 21, 2024

G U N N I N E Y
 S U R V E Y

DRAWN BY: ZRW
 CHECKED BY: JRJ

PROJECT NO. 24001

SHEET OF
1 1

**TRAFFIC IMPACT STUDY
FOR
PROPOSED RESIDENTIAL DEVELOPMENT
AT 4370 BENEFIELD ROAD
HALL COUNTY, GEORGIA**



Prepared for:

**Mike Dye
EDGE CITY PROPERTIES, INC.
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Prepared By:



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March 22, 2024
A & R Project # 24-027

TABLE OF CONTENTS

| Item | Page |
|---|-------------|
| 1.0 Introduction | 1 |
| 2.0 Existing Facilities / Conditions | 3 |
| 2.1 Roadway Facilities | 3 |
| 2.1.1 SR 211/SR 53 (Winder Highway) | 3 |
| 2.1.2 SR 53 (Winder Highway)..... | 3 |
| 2.1.3 SR 211 (Tanners Mill Road)..... | 3 |
| 2.1.4 Benefield Road..... | 3 |
| 3.0 Study Methodology | 4 |
| 3.1 Unsignalized Intersections..... | 4 |
| 3.2 Signalized Intersections..... | 5 |
| 4.0 Existing 2024 Traffic Analysis..... | 6 |
| 4.1 Existing Traffic Volumes..... | 6 |
| 4.2 Existing Traffic Operations..... | 9 |
| 5.0 Proposed Development..... | 10 |
| 5.1 Trip Generation | 12 |
| 5.2 Trip Distribution..... | 12 |
| 6.0 Future 2026 Traffic Analysis | 14 |
| 6.1 Future “No-Build” Conditions..... | 14 |
| 6.1.1 Annual Traffic Growth | 14 |
| 6.2 Future “Build” Conditions..... | 14 |
| 6.3 Auxiliary Lane Analysis..... | 17 |
| 6.3.1 Left Turn Lane Analysis..... | 17 |
| 6.3.2 Deceleration Turn Lane Analysis | 17 |
| 6.4 Future Traffic Operations | 18 |
| 6.4.1 Site Mitigation Improvement (Intersection 3)..... | 19 |
| 7.0 Conclusions and Recommendations..... | 21 |
| 7.1 Recommendations for Site Access Configuration | 21 |
| 7.2 Recommended Site Mitigation Improvements | 22 |
| Appendix | |

LIST OF TABLES

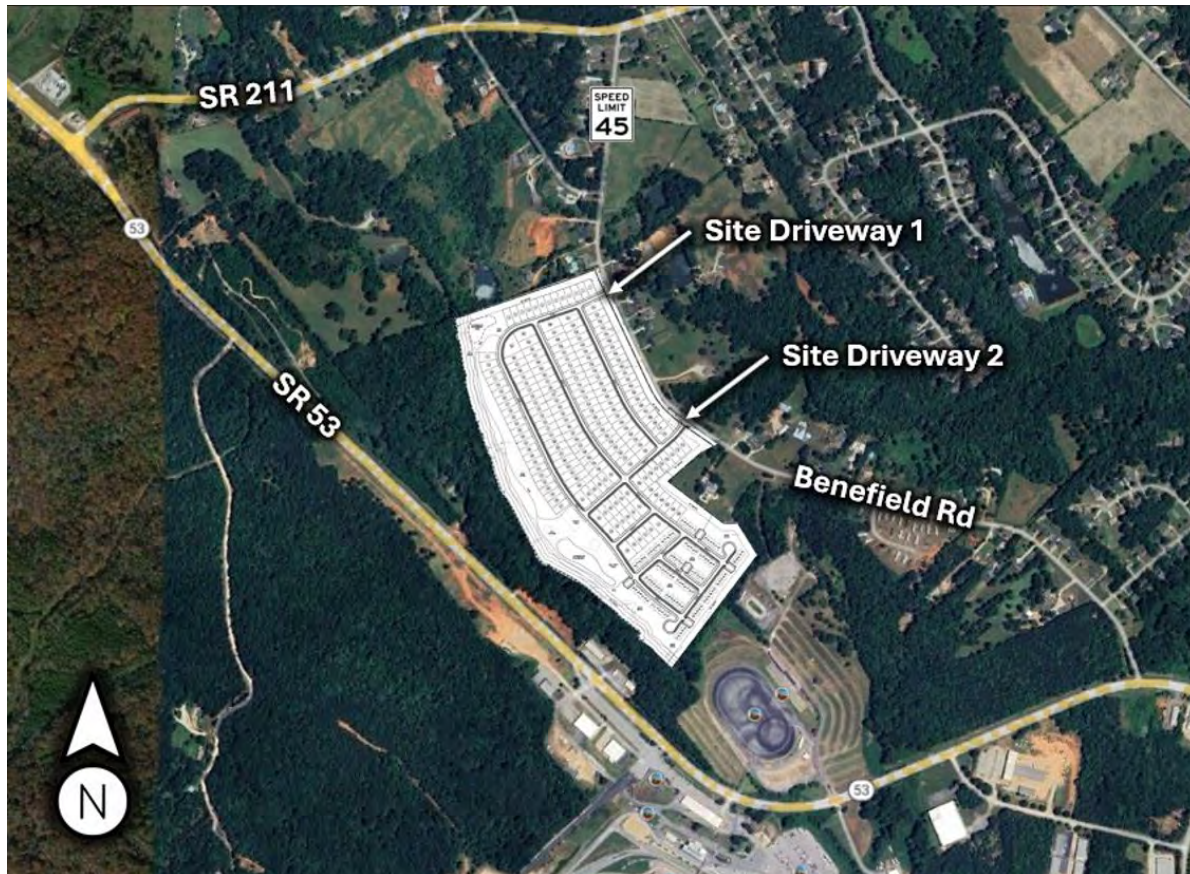
| Item | Page |
|---|-------------|
| Table 1 – Level-of-service Criteria for Unsignalized Intersections..... | 4 |
| Table 2 – Level-of-service Criteria for Signalized Intersections | 5 |
| Table 3 – Existing Intersection Operations | 9 |
| Table 4 – Trip Generation | 12 |
| Table 5 – GDOT Requirements for Left Turn Lanes | 17 |
| Table 6 – GDOT Requirements for Deceleration Lanes | 17 |
| Table 7 – Future Intersection Operations..... | 18 |
| Table 8 – Future Intersection Operations With & Without Improvement | 19 |

LIST OF FIGURES

| Item | Page |
|---|-------------|
| Figure 1 – Location Map..... | 2 |
| Figure 2 – Existing Weekday Peak Hour Volumes..... | 7 |
| Figure 3 – Existing Traffic Control and Lane Geometry | 8 |
| Figure 4 – Site Plan..... | 11 |
| Figure 5 – Trip Distribution and Site Generated Peak Hour Volumes | 13 |
| Figure 6 – Future (No-Build) Peak Hour Volumes..... | 15 |
| Figure 7 – Future (Build) Peak Hour Volumes..... | 16 |
| Figure 8 – Future Traffic Control and Lane Geometry | 20 |

1.0 INTRODUCTION

The purpose of this study is to determine the traffic impact from the proposed residential development that will be located at 4370 Benefield Road in Hall County, Georgia. The traffic analysis includes evaluation of the current operations and future conditions with the traffic generated by the development. The development will consist of 186 single-family houses and 116 townhomes.



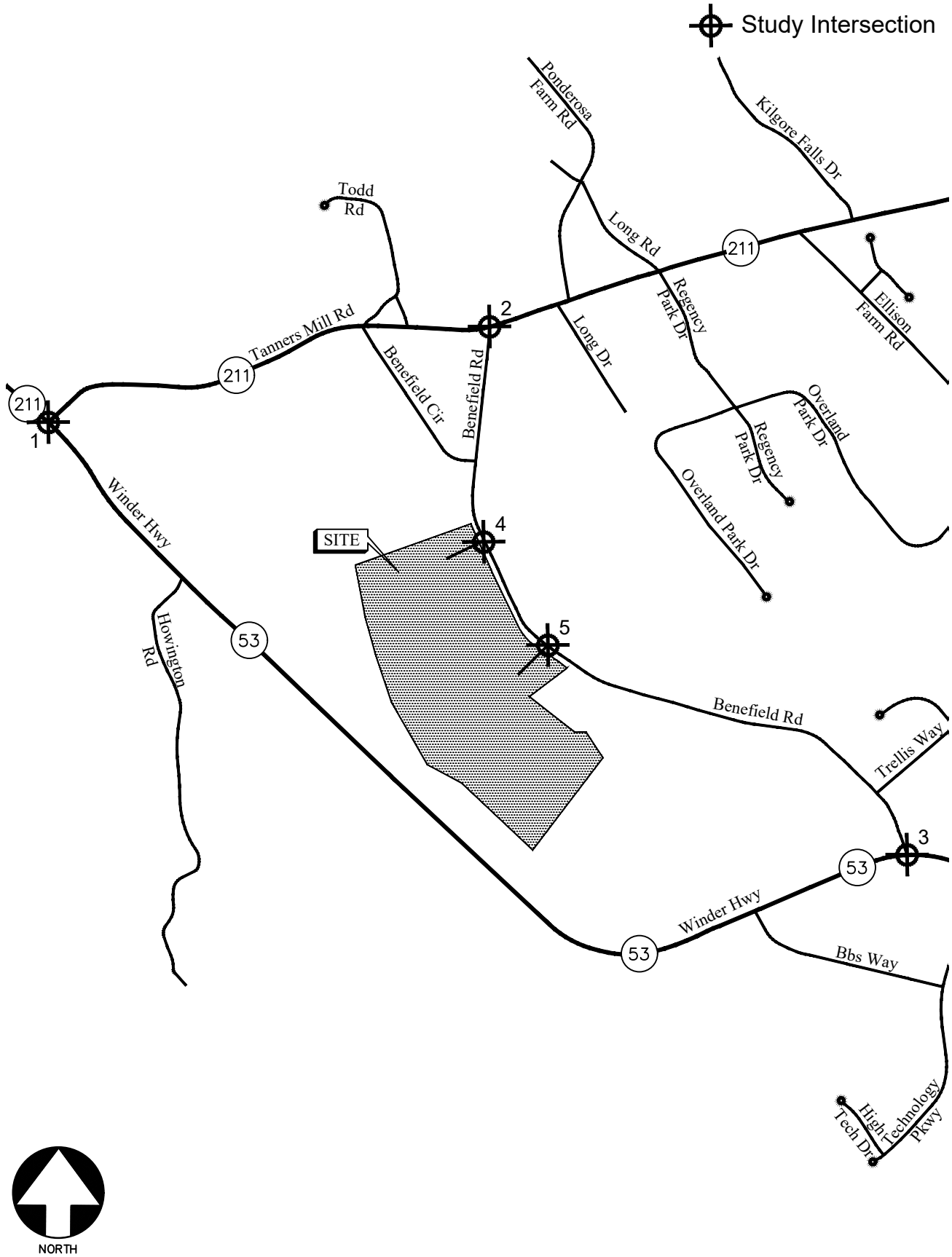
The development proposes access at the following locations:

- Site Driveway 1 (North): Full access driveway on Benefield Road
- Site Driveway 2 (South): Full access driveway on Benefield Road

The AM and PM peak hours have been analyzed in this study. In addition to the site access points, this study includes the evaluation of traffic operations at the intersections of:

- SR 211/SR 53 (Winder Highway) at SR 211 (Tanners Mill Road)
- SR 211 (Tanners Mill Road) at Benefield Road
- SR 53 (Winder Highway) at Benefield Road

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report. The location of the development and the surrounding roadway network are shown in Figure 1.



LOCATION MAP

FIGURE 1
A&R Engineering Inc.

2.0 EXISTING FACILITIES / CONDITIONS

2.1 Roadway Facilities

The following is a brief description of each of the roadway facilities located in proximity to the site:

2.1.1 SR 211/SR 53 (Winder Highway)

SR 211/SR 53 (Winder Highway) is a north-south, four-lane, median-divided roadway with a posted speed limit of 45 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 139-0292) indicate that the daily traffic volume on SR 211/SR 53 (Winder Highway) in 2022 was 14,700 vehicles per day north of SR 211 (Tanners Mill Road). GDOT classifies SR 211/SR 53 (Winder Highway) as a minor arterial roadway.

2.1.2 SR 53 (Winder Highway)

SR 53 (Winder Highway) is a two-lane, undivided roadway with a posted speed limit of 55 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 139-0294) indicate that the daily traffic volume on SR 53 (Winder Highway) in 2022 was 10,900 vehicles per day south of SR 211 (Tanners Mill Road). GDOT classifies SR 53 (Winder Highway) as a minor arterial roadway.

2.1.3 SR 211 (Tanners Mill Road)

SR 211 (Tanners Mill Road) is an east-west, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 139-0547) indicate that the daily traffic volume on SR 211 (Tanners Mill Road) in 2022 was 4,540 vehicles per day east of SR 53 (Winder Highway). GDOT classifies SR 211 (Tanners Mill Road) as a major collector roadway.

2.1.4 Benefield Road

Benefield Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site.

3.0 STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

3.1 Unsignalized Intersections

For unsignalized intersections controlled by a stop sign on minor streets, the level of service (LOS) for motor vehicles with controlled movements is determined by the computed control delay according to the thresholds stated in Table 1 below. LOS is determined for each minor street movement (or shared movement), as well as major street left turns. LOS is not defined for the intersection as a whole or for major street approaches. The LOS of any controlled movement which experiences a volume-to-capacity ratio greater than 1 is designated as "F" regardless of the control delay.

Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue.

Level of service is assigned a letter designation from "A" through "F". Level of service "A" indicates excellent operations with little delay to motorists, while level of service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross the main road without experiencing long total delays.

| TABLE 1 — LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS | | |
|--|----------------------------------|-----------|
| Control Delay (sec/vehicle) | LOS by Volume-to-Capacity Ratio* | |
| | v/c ≤ 1.0 | v/c > 1.0 |
| ≤ 10 | A | F |
| > 10 and ≤ 15 | B | F |
| > 15 and ≤ 25 | C | F |
| > 25 and ≤ 35 | D | F |
| > 35 and ≤ 50 | E | F |
| > 50 | F | F |

*The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection.

Source: Highway Capacity Manual, 6th edition, Exhibit 20-2 *LOS Criteria: Motorized Vehicle Mode*

3.2 Signalized Intersections

According to HCM procedures, LOS can be calculated for the entire intersection, each intersection approach, and each lane group. HCM uses control delay alone to characterize LOS for the entire intersection or an approach. Control delay per vehicle is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Both control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. A volume-to-capacity ratio of greater than 1.0 for a lane group indicates failure from capacity perspective. Therefore, such a lane group is assigned LOS F regardless of the amount of control delay.

Table 2 below summarizes the LOS criteria from HCM for motorized vehicles at signalized intersection.

| TABLE 2 — LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS | | |
|--|---|-----------|
| Control Delay (sec/vehicle) * | LOS for Lane Group by Volume-to-Capacity Ratio* | |
| | v/c ≤ 1.0 | v/c > 1.0 |
| ≤ 10 | A | F |
| > 10 and ≤ 20 | B | F |
| > 20 and ≤ 35 | C | F |
| > 35 and ≤ 55 | D | F |
| > 55 and ≤ 80 | E | F |
| > 80 | F | F |

*For approach-based and intersection wide assessments, LOS is defined solely by control delay

Source: Highway Capacity Manual, 6th edition, Exhibit 19-8 *LOS Criteria: Motorized Vehicle Mode*

LOS A is typically assigned when the volume-to-capacity (v/c) ratio is low and either progression is exceptionally favorable, or the cycle length is very short. LOS B is typically assigned when the v/c ratio is low and either progression is highly favorable, or the cycle length is short. However, more vehicles are stopped than with LOS A. LOS C is typically assigned when progression is favorable, or the cycle length is moderate. Individual *cycle failures* (one or more queued vehicles are not able to depart because of insufficient capacity during the cycle) may begin to appear at this level. Many vehicles still pass through the intersection without stopping, but the number of vehicles stopping is significant. LOS D is typically assigned when the v/c ratio is high and either progression is ineffective, or the cycle length is long. There are many vehicle-stops and individual cycle failures are noticeable. LOS E is typically assigned when the v/c ratio is high, progression is very poor, the cycle length is long, and individual cycle failures are frequent. LOS F is typically assigned when the v/c ratio is very high, progression is very poor, the cycle length is long, and most cycles fail to clear the queue.

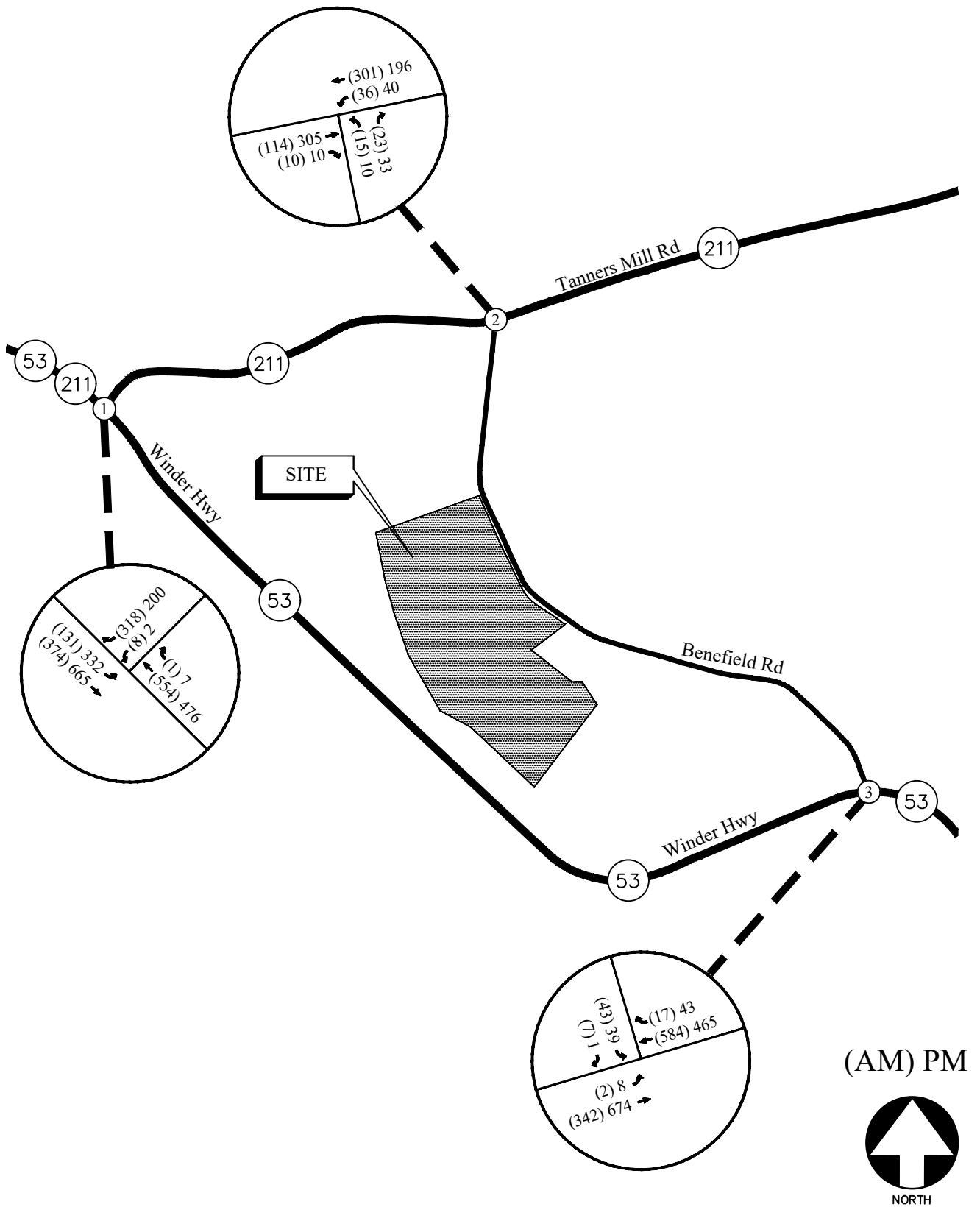
4.0 EXISTING 2024 TRAFFIC ANALYSIS

4.1 Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

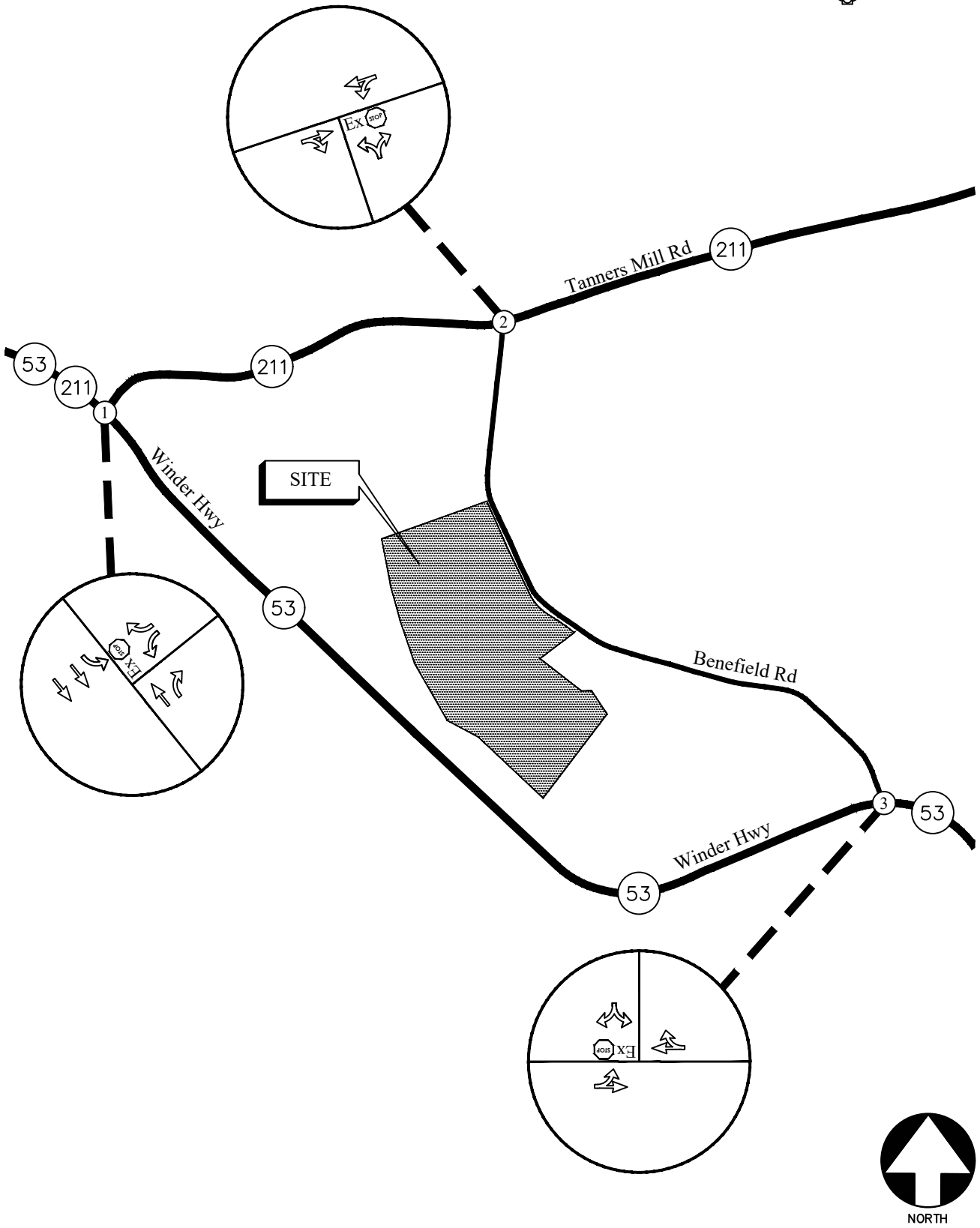
- SR 211/SR 53 (Winder Highway) at SR 211 (Tanners Mill Road)
- SR 211 (Tanners Mill Road) at Benefield Road
- SR 53 (Winder Highway) at Benefield Road

Turning movement counts were collected on Thursday, February 8, 2024. All turning movement counts were recorded during the AM and PM peak hours between 7:00 am to 9:00 am and 4:00 pm to 6:00 pm, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2. The existing traffic control and lane geometry for the intersections are shown in Figure 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 2
A&R Engineering Inc.



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 3

A&R Engineering Inc.

4.2 Existing Traffic Operations

Existing 2024 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analysis are shown in Table 3.

| TABLE 3 – EXISTING INTERSECTION OPERATIONS | | | | |
|--|---|--------------------------------|---------------------|----------------------|
| | Intersection | Traffic Control | LOS (Delay) | |
| | | | AM Peak Hour | PM Peak Hour |
| 1 | <u>SR 211/SR 53 (Winder Highway) @ SR 211 (Tanners Mill Road)</u> -Westbound Approach -Southbound Left | Stop Controlled on WB Approach | C (23.2) A (9.2) | C (15.9) B (10.2) |
| 2 | <u>SR 211 (Tanners Mill Road) @ Benefield Road</u> -Westbound Left -Northbound Approach | Stop Controlled on NB Approach | A (7.5) B (10.5) | A (8.0) B (11.3) |
| 3 | <u>SR 53 (Winder Highway) @ Benefield Road</u> -Eastbound Left -Southbound Approach | Stop Controlled on SB Approach | A (8.8) C (20.4) | A (8.5) D (29.5) |

The results of the existing traffic operations analysis indicate that the stop-controlled approaches at the unsignalized study intersections are operating at a level of service “D” or better with peak hour traffic.

5.0 PROPOSED DEVELOPMENT

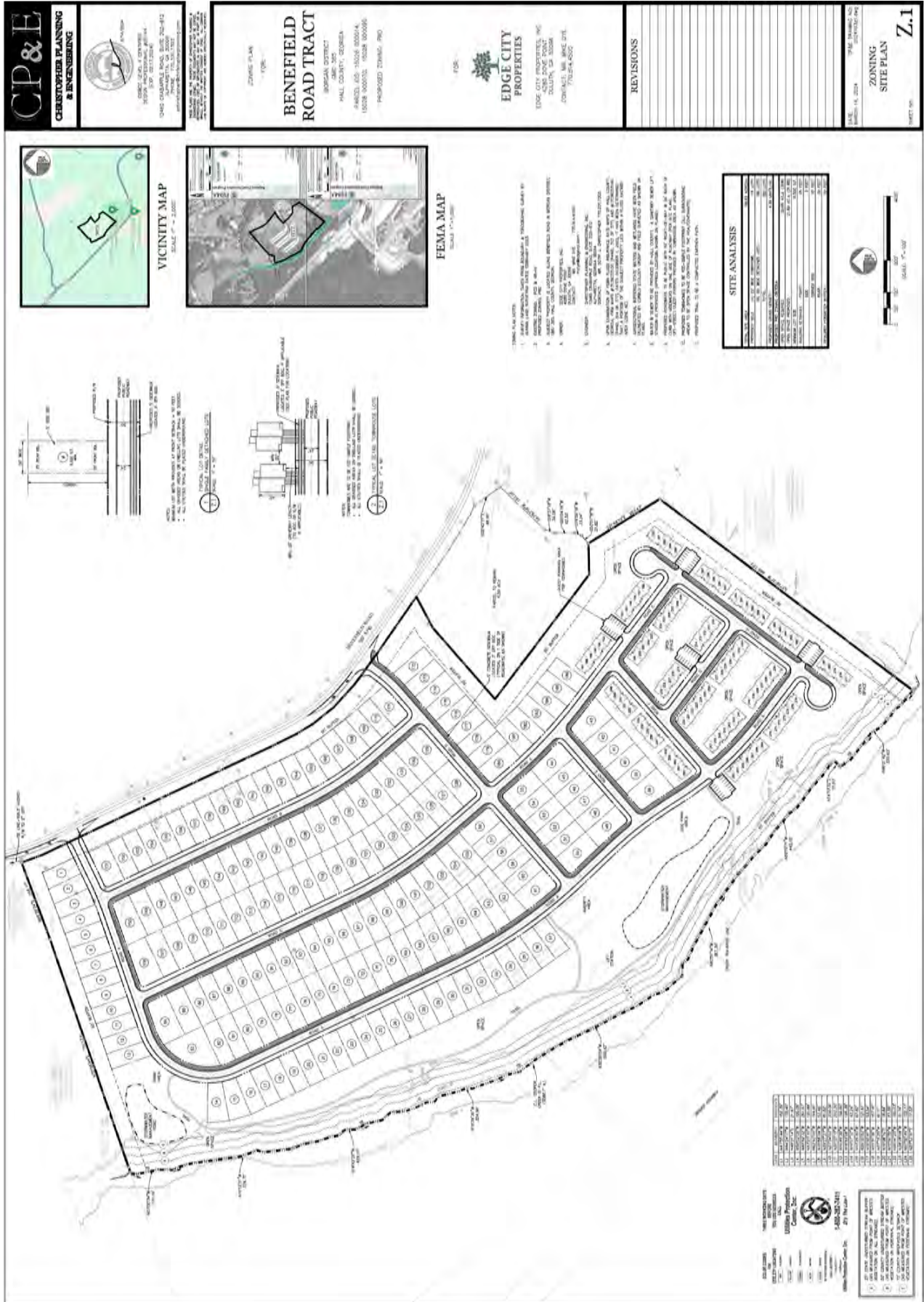
The proposed residential development will consist of 186 single-family houses and 116 townhomes.



The development proposes access at the following locations:

- Site Driveway 1 (North): Full access driveway on Benefield Road
- Site Driveway 2 (South): Full access driveway on Benefield Road

A site plan is shown in Figure 4.



A&R Engineering Inc.

Figure 4 – Site Plan

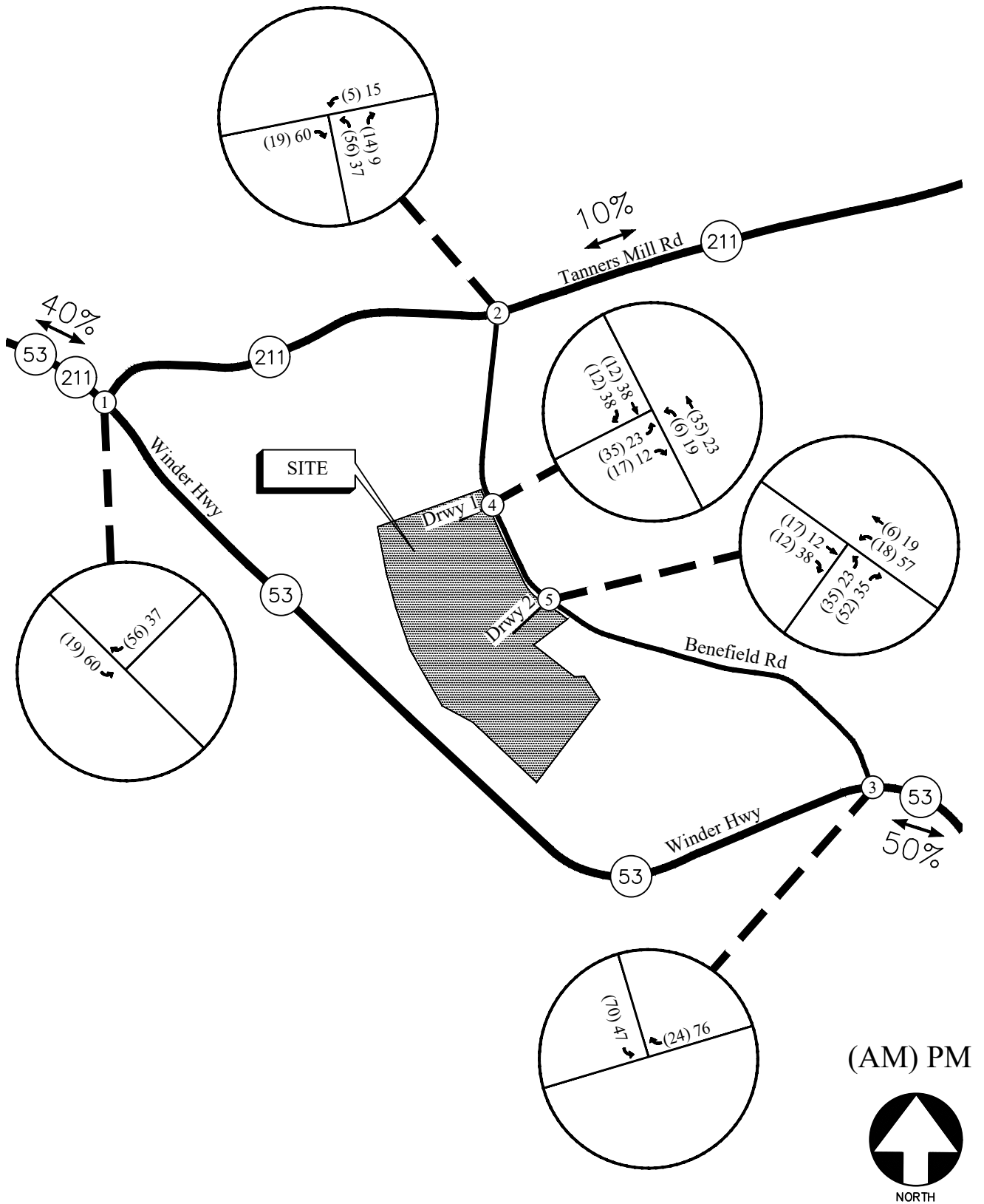
5.1 Trip Generation

Trip generation estimates for the project were based on the rates and equations published in the 11th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the ITE land use categories *210 - Single-Family Detached Housing* and *215 - Single-Family Attached Housing*. The calculated total trip generation for the proposed development is shown in Table 4.

| TABLE 4 – TRIP GENERATION | | | | | | | | |
|--|-----------|--------------|------------|------------|--------------|-----------|------------|--------------|
| Land Use | Size | AM Peak Hour | | | PM Peak Hour | | | 24 Hour |
| | | Enter | Exit | Total | Enter | Exit | Total | Two-Way |
| ITE 210 - Single-Family Detached Housing | 186 Units | 33 | 98 | 131 | 112 | 66 | 178 | 1,786 |
| ITE 215 - Single-Family Attached Housing | 116 Units | 14 | 41 | 55 | 39 | 27 | 66 | 833 |
| Total New Trips | | 47 | 139 | 186 | 151 | 93 | 244 | 2,619 |

5.2 Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on a review of the existing travel patterns in the area and the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 5.



TRIP DISTRIBUTION AND SITE-GENERATED
WEEKDAY PEAK HOUR VOLUMES

FIGURE 5
A&R Engineering Inc.

6.0 FUTURE 2026 TRAFFIC ANALYSIS

The future 2026 traffic operations are analyzed for the “Build” and “No-Build” conditions.

6.1 Future “No-Build” Conditions

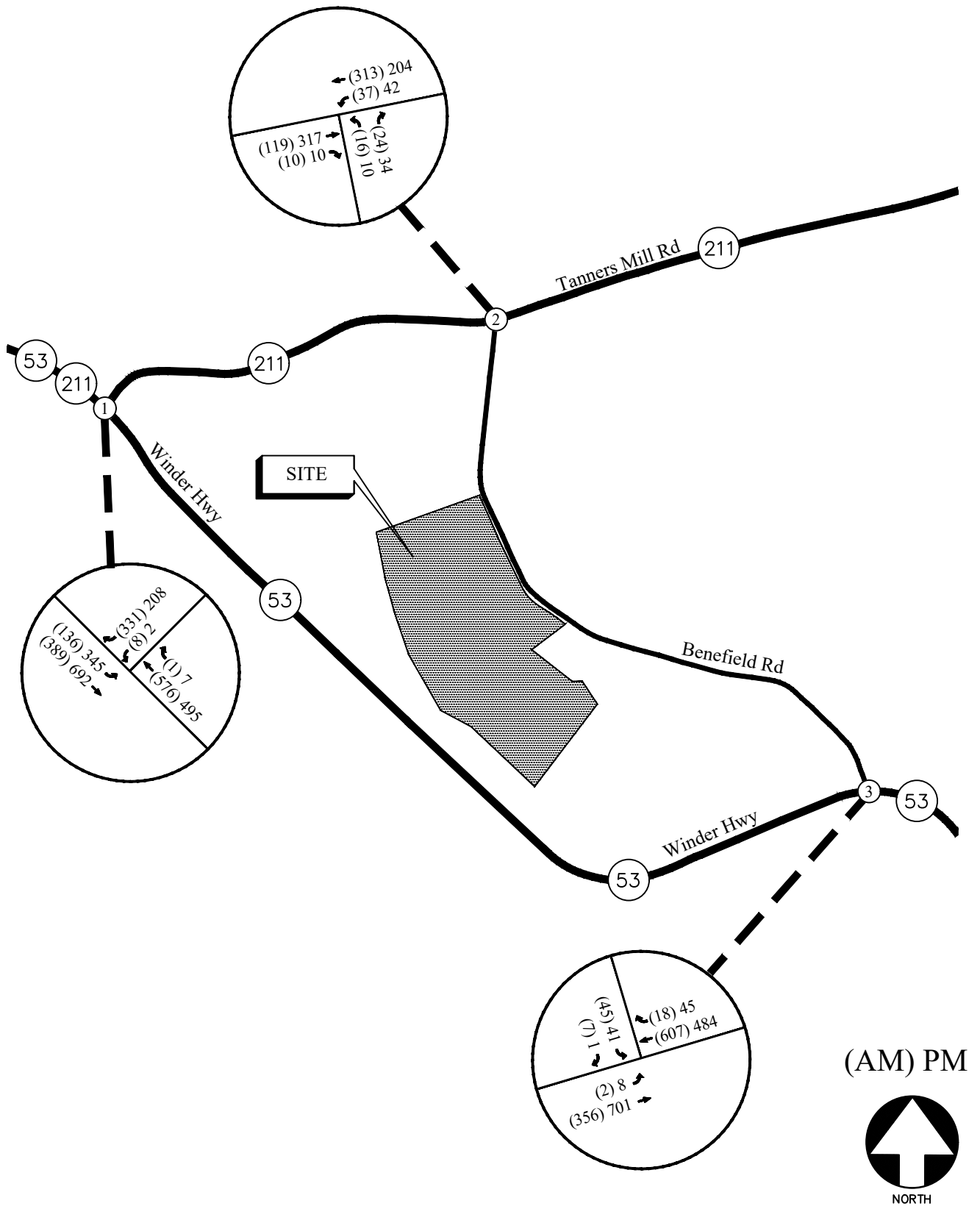
The “No-Build” (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The future “No-Build” volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of through traffic.

6.1.1 Annual Traffic Growth

To evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last five years (2017 - 2019 & 2021 - 2022) revealed a traffic volume increase of approximately 2% in the area. This growth factor was applied to the existing traffic volumes between collector and arterial roadways to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting future “No-Build” volumes on the roadway are shown in Figure 6.

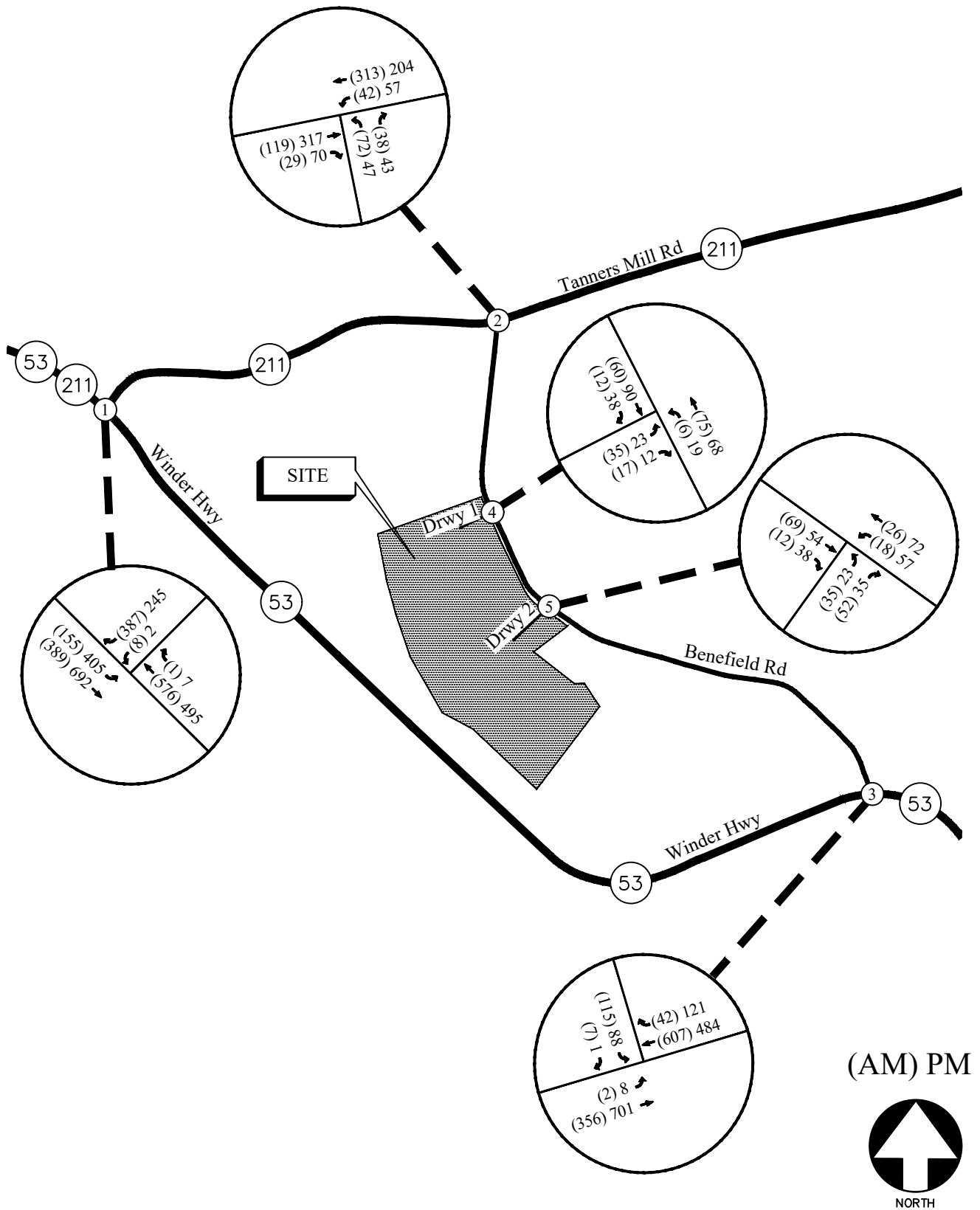
6.2 Future “Build” Conditions

The “Build” or development conditions include the estimated background traffic from the “No-Build” conditions plus the added traffic from the proposed development. To evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 5) were added to base traffic volumes (Figure 6) to calculate the future traffic volumes after the construction of the development. These total future “Build” traffic volumes are shown in Figure 7.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 6
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FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 7

A&R Engineering Inc.

6.3 Auxiliary Lane Analysis

Included below are analyses for left turn and right turn lanes for all site driveways per GDOT standards. The analyses below are based off the trip distribution values included in Section 5.2. According to the trip distribution, the 24-hour two-way volume for traffic entering and exiting the site is 2,619 vehicles. The ADT on Benefield Road was assumed to be less than 6,000 vehicles per day based on GDOT volumes on the surrounding roadway network.

6.3.1 Left Turn Lane Analysis

For a two-lane roadway with an AADT under 6,000 vehicles and a posted speed limit of 45 mph, the daily site-generated traffic left-turn movements threshold to warrant a turn lane is 250 left-turning vehicles a day. The projected left turn volumes per day at the site driveways are shown in Table 5 below.

| TABLE 5 – GDOT REQUIREMENTS FOR LEFT TURN LANES | | | | | |
|---|--------------------------------------|--|---------------------------------|-------------------------------|---------------|
| Intersection | Left Turn Traffic (% total entering) | Left Turn Volume (vehicles/day) | Roadway Speed / # Lanes / ADT | GDOT Threshold (vehicles/day) | Warrants Met? |
| Benefield Rd @ Site Driveway 1 | 12.5% (Northbound) | 164 (Total Trips) ÷ 2 × 0.125 = (2,619) ÷ 2 × 0.125 = 164 | 45 mph / 2-Lane / < 6,000 | 250 | No |
| Benefield Rd @ Site Driveway 2 | 37.5% (Northbound) | 491 (Total Trips) ÷ 2 × 0.375 = (2,619) ÷ 2 × 0.375 = 491 | 45 mph / 2-Lane / < 6,000 | 250 | Yes |

A left turn lane is warranted at site driveway 2 on Benefield Road as per GDOT standards.

6.3.2 Deceleration Turn Lane Analysis

For a two-lane roadway with an AADT under 6,000 vehicles and a posted speed limit of 45 mph, the daily site-generated traffic right turns movements threshold to warrant a deceleration lane is 150 right-turning vehicles a day. The projected daily right turn volumes at the site driveways are shown in Table 6.

| TABLE 6 – GDOT REQUIREMENTS FOR DECELERATION LANES | | | | | |
|--|---------------------------------------|--|---------------------------------|-------------------------------|---------------|
| Intersection | Right Turn Traffic (% total entering) | Right Turn Volume (vehicles/day) | Roadway Speed / # Lanes / ADT | GDOT Threshold (vehicles/day) | Warrants Met? |
| Benefield Rd @ Site Driveway 1 | 25% (Southbound) | 327 (Total Trips) ÷ 2 × 0.25 = (2,619) ÷ 2 × 0.25 = 327 | 45 mph / 2-Lane / < 6,000 | 150 | Yes |
| Benefield Rd @ Site Driveway 2 | 25% (Southbound) | 327 (Total Trips) ÷ 2 × 0.25 = (2,619) ÷ 2 × 0.25 = 327 | 45 mph / 2-Lane / < 6,000 | 150 | Yes |

A right turn lane is warranted at both site driveways as per GDOT standards.

6.4 Future Traffic Operations

The future “No-Build” and “Build” traffic operations were analysed using the volumes in Figures 6 and 7, respectively. The results of the future traffic operations analysis are shown below in Table 7. Recommendations on traffic control and lane geometry are shown in Figure 8.







| TABLE 7 – FUTURE INTERSECTION OPERATIONS | | | | | |
|--|--|-------------------------------|----------|-----------|----------|
| Intersection | | Future Condition: LOS (Delay) | | | |
| | | NO-BUILD | | BUILD-OUT | |
| | | AM Peak | PM Peak | AM Peak | PM Peak |
| 1 | <u>SR 211/SR 53 (Winder Highway) @ SR 211 (Tanners Mill Road)</u> | | | | |
| | -Westbound Approach | D (25.8) | C (16.8) | D (34.0) | C (18.5) |
| | -Southbound Left | A (9.3) | B (10.5) | A (9.5) | B (11.1) |
| 2 | <u>SR 211 (Tanners Mill Road) @ Benefield Road</u> | | | | |
| | -Westbound Left | A (7.6) | A (8.1) | A (7.6) | A (8.3) |
| | -Northbound Approach | B (10.7) | B (11.4) | B (13.1) | B (14.5) |
| 3 | <u>SR 53 (Winder Highway) @ Benefield Road</u> | | | | |
| | -Eastbound Left | A (8.9) | A (8.6) | A (9.0) | A (8.9) |
| | -Southbound Approach | C (21.7) | D (32.3) | D (32.5) | F (53.3) |
| 4 | <u>Benefield Road @ Site Driveway 1</u> | | | | |
| | -Eastbound Approach | - | - | A (9.4) | A (9.6) |
| | -Northbound Left | | | A (7.4) | A (7.5) |
| 5 | <u>Benefield Road @ Site Driveway 2</u> | | | | |
| | -Eastbound Approach | - | - | A (9.4) | A (9.5) |
| | -Northbound Left | | | A (7.4) | A (7.5) |

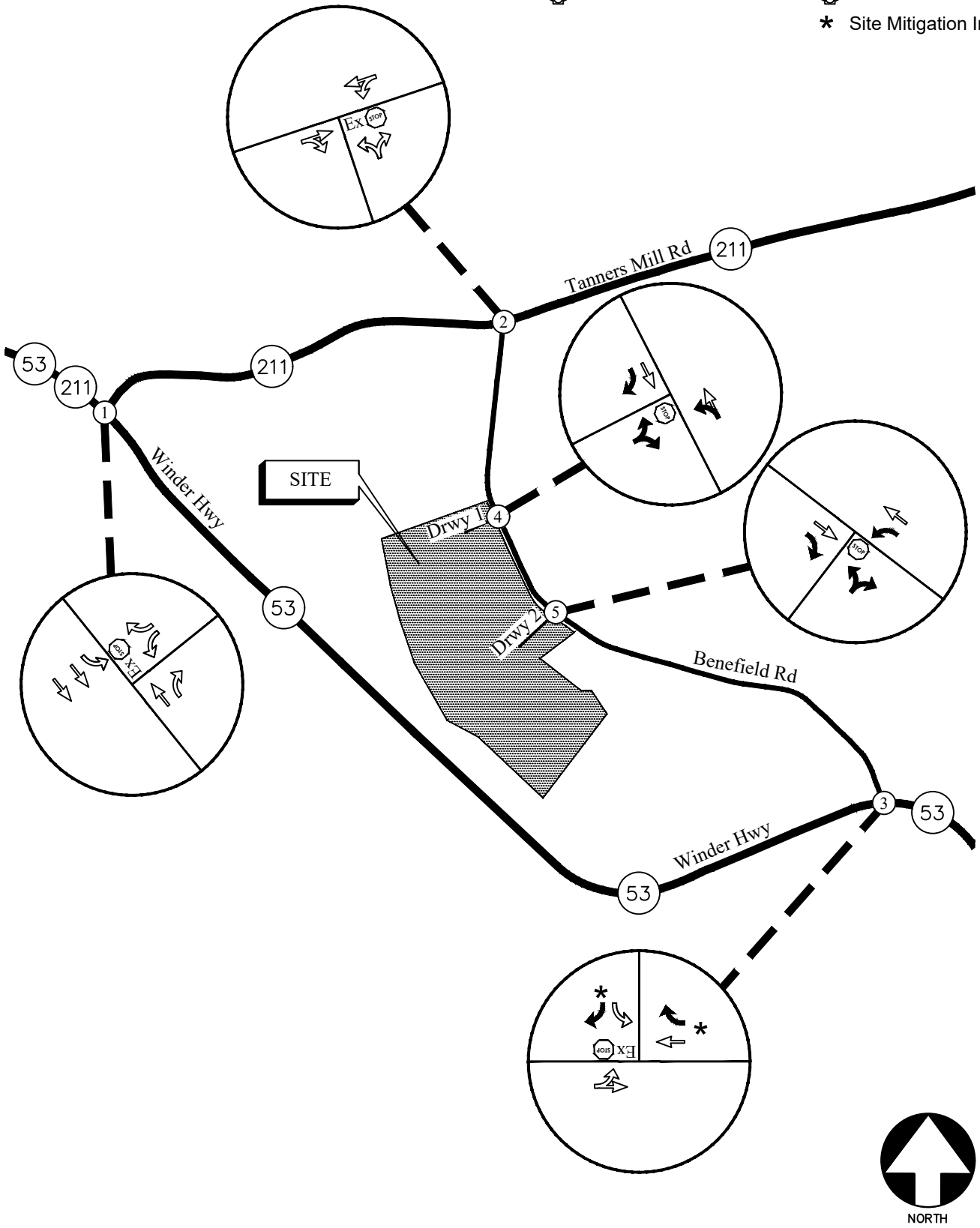
The results of the future “Build” conditions traffic analysis indicate that the stop-controlled approaches at the unsignalized study intersections will continue to operate at a level of service “D” or better with peak hour traffic, except for the southbound approach at the intersection of Benefield Road and SR 53, which will operate at a level of service “F” during the PM peak hour. It is not unusual for side streets that are stop sign controlled to experience higher delays due to the time gap required to make turning movements on busy arterial roadways. The projected increased delay at intersection 3 is addressed in the following section on page 19.

6.4.1 Site Mitigation Improvement (Intersection 3)

To address the projected increase in delays at the southbound approach of intersection 3 (SR 53 at Benfield Road), it is recommended that this approach be widened to have a separate right turn lane that will improve traffic flow. Additionally, it is also recommended that the westbound approach on SR 53 (Winder Highway) be given a separate turn lane for traffic entering Benfield Road. Table 8 below shows a comparison of traffic operations at intersection 3 with or without the recommended system improvements. As shown in Table 8, the projected delay at the southbound approach is lower in the PM peak hour with the turn lane additions, with it performing at a level of service “E” rather than “F”. Therefore, it is recommended that southbound and westbound right turn lanes be added to intersection 3 as site mitigation improvements.

| TABLE 8 – FUTURE INTERSECTION OPERATIONS WITH & WITHOUT IMPROVEMENT | | | | | |
|---|---|---|----------|-------------------|----------|
| Intersection | | Future Build-Out Condition: LOS (Delay) | | | |
| | | WITHOUT IMPROVEMENTS | | WITH IMPROVEMENTS | |
| | | AM Peak | PM Peak | AM Peak | PM Peak |
| 3 | SR 53 (Winder Highway) @ Benfield Road | | | | |
| | -Eastbound Left | A (9.0) | A (8.9) | A (9.0) | A (8.9) |
| | -Southbound Approach | D (32.5) | F (53.3) | D (29.9) | E (44.9) |

- LEGEND**
- Ex  Existing Signed Approach
 -  Existing Lane Geometry
 - Ex  Existing Traffic Signal
 -  Proposed Signed Approach
 -  Proposed Lane Geometry
 -  Proposed Traffic Signal
 - * Site Mitigation Improvement



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 8

A&R Engineering Inc.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed residential development that will be located at 4370 Benefield Road in Hall County, Georgia. The development will consist of 186 single-family houses and 116 townhomes, and proposes two full access driveways on Benefield Road.

Existing and future operations after completion of the project were analyzed at the intersections of:

- SR 211/SR 53 (Winder Highway) at SR 211 (Tanners Mill Road)
- SR 211 (Tanners Mill Road) at Benefield Road
- SR 53 (Winder Highway) at Benefield Road
- Benefield Road at Site Driveway 1 (North Access)
- Benefield Road at Site Driveway 2 (South Access)

The analysis included the evaluation of future operations for “No-Build” and “Build” conditions, with the differences between “No-Build” and “Build” accounting for the projected increase in traffic due to the proposed development. The results of the future “Build” conditions traffic analysis indicate that the stop-controlled approaches at the unsignalized study intersections will continue to operate at a level of service “D” or better with peak hour traffic, except for the southbound approach at the intersection of Benefield Road and SR 53, which will operate at a level of service “F” during the PM peak hour. It is not unusual for side streets that are stop sign controlled to experience higher delays due to the time gap required to make turning movements on busy arterial roadways. The projected increased delay at intersection 3 is addressed in section 6.4.1 on page 19.

7.1 Recommendations for Site Access Configuration

The following access configurations are recommended for the proposed site driveway intersections:

- Site Driveway 1 (North): Full access driveway on Benefield Road
 - One entering lane and one exiting lane
 - Stop-sign controlled on the driveway approach with Benefield Road remaining free flow
 - A right turn lane for entering traffic
 - Provide/confirm adequate sight distance per AASHTO standards
- Site Driveway 2 (South): Full access driveway on Benefield Road
 - One entering lane and one exiting lane
 - Stop-sign controlled on the driveway approach with Benefield Road remaining free flow
 - A right turn lane and a left turn lane for entering traffic
 - Provide/confirm adequate sight distance per AASHTO standards

7.2 Recommended Site Mitigation Improvements

To address the projected increase in delays at the southbound approach of intersection 3 (SR 53 at Benfield Road), it is recommended that this approach be widened to have a separate right turn lane that will improve traffic flow. Additionally, it is also recommended that the westbound approach on SR 53 (Winder Highway) be given a separate turn lane for traffic entering Benfield Road.

In summary, the following site mitigation improvements are recommended:

- Intersection 3: SR 53 (Winder Highway) at Benfield Road
 - A separate southbound right turn lane on Benfield Road
 - A separate westbound right turn lane on SR 53 (Winder Highway)

Appendix

Existing Intersection Traffic Counts
Linear Regression of Daily Traffic.....
Existing Intersection Analysis.....
Future “No-Build” Intersection Analysis
Future “Build” Intersection Analysis
Traffic Volume Worksheets

EXISTING INTERSECTION TRAFFIC COUNTS

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
 Marietta, GA 30067

TMC Data
 SR 53 @ SR 211
 7-9 am | 4-6 pm

File Name : 20240052
 Site Code : 20240052
 Start Date : 02-08-2024
 Page No : 1

Groups Printed- Cars & Buses - Trucks

| Start Time | SR 53 Northbound | | | | SR 211 / SR 53 Southbound | | | | Eastbound | | | | SR 211 Westbound | | | | Int. Total |
|----------------|------------------|------|-------|------------|---------------------------|------|-------|------------|-----------|------|-------|------------|------------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| 07:00 AM | 0 | 130 | 0 | 130 | 11 | 81 | 0 | 92 | 0 | 0 | 0 | 0 | 2 | 0 | 80 | 82 | 304 |
| 07:15 AM | 0 | 137 | 0 | 137 | 26 | 86 | 0 | 112 | 0 | 0 | 0 | 0 | 1 | 0 | 106 | 107 | 356 |
| 07:30 AM | 0 | 148 | 1 | 149 | 41 | 75 | 0 | 116 | 0 | 0 | 0 | 0 | 1 | 0 | 82 | 83 | 348 |
| 07:45 AM | 0 | 132 | 0 | 132 | 36 | 118 | 0 | 154 | 0 | 0 | 0 | 0 | 2 | 0 | 69 | 71 | 357 |
| Total | 0 | 547 | 1 | 548 | 114 | 360 | 0 | 474 | 0 | 0 | 0 | 0 | 6 | 0 | 337 | 343 | 1365 |
| 08:00 AM | 0 | 137 | 0 | 137 | 28 | 95 | 0 | 123 | 0 | 0 | 0 | 0 | 4 | 0 | 61 | 65 | 325 |
| 08:15 AM | 0 | 141 | 0 | 141 | 29 | 92 | 0 | 121 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 49 | 311 |
| 08:30 AM | 0 | 132 | 1 | 133 | 22 | 86 | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 39 | 280 |
| 08:45 AM | 0 | 127 | 1 | 128 | 27 | 76 | 0 | 103 | 0 | 0 | 0 | 0 | 2 | 0 | 48 | 50 | 281 |
| Total | 0 | 537 | 2 | 539 | 106 | 349 | 0 | 455 | 0 | 0 | 0 | 0 | 6 | 0 | 197 | 203 | 1197 |
| *** BREAK *** | | | | | | | | | | | | | | | | | |
| 04:00 PM | 0 | 109 | 1 | 110 | 70 | 147 | 0 | 217 | 0 | 0 | 0 | 0 | 1 | 0 | 42 | 43 | 370 |
| 04:15 PM | 0 | 106 | 3 | 109 | 82 | 148 | 0 | 230 | 0 | 0 | 0 | 0 | 2 | 0 | 47 | 49 | 388 |
| 04:30 PM | 0 | 99 | 2 | 101 | 68 | 162 | 0 | 230 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 49 | 380 |
| 04:45 PM | 0 | 94 | 2 | 96 | 67 | 191 | 0 | 258 | 0 | 0 | 0 | 0 | 0 | 0 | 54 | 54 | 408 |
| Total | 0 | 408 | 8 | 416 | 287 | 648 | 0 | 935 | 0 | 0 | 0 | 0 | 3 | 0 | 192 | 195 | 1546 |
| 05:00 PM | 0 | 119 | 1 | 120 | 85 | 154 | 0 | 239 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 409 |
| 05:15 PM | 0 | 150 | 1 | 151 | 90 | 164 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 53 | 458 |
| 05:30 PM | 0 | 113 | 3 | 116 | 90 | 156 | 0 | 246 | 0 | 0 | 0 | 0 | 2 | 0 | 43 | 45 | 407 |
| 05:45 PM | 0 | 96 | 4 | 100 | 71 | 142 | 0 | 213 | 0 | 0 | 0 | 0 | 3 | 0 | 50 | 53 | 366 |
| Total | 0 | 478 | 9 | 487 | 336 | 616 | 0 | 952 | 0 | 0 | 0 | 0 | 5 | 0 | 196 | 201 | 1640 |
| Grand Total | 0 | 1970 | 20 | 1990 | 843 | 1973 | 0 | 2816 | 0 | 0 | 0 | 0 | 20 | 0 | 922 | 942 | 5748 |
| Apprch % | 0 | 99 | 1 | | 29.9 | 70.1 | 0 | | 0 | 0 | 0 | 0 | 2.1 | 0 | 97.9 | | |
| Total % | 0 | 34.3 | 0.3 | 34.6 | 14.7 | 34.3 | 0 | 49 | 0 | 0 | 0 | 0 | 0.3 | 0 | 16 | 16.4 | |
| Cars & Buses | 0 | 1856 | 18 | 1874 | 820 | 1854 | 0 | 2674 | 0 | 0 | 0 | 0 | 17 | 0 | 905 | 922 | 5470 |
| % Cars & Buses | 0 | 94.2 | 90 | 94.2 | 97.3 | 94 | 0 | 95 | 0 | 0 | 0 | 0 | 85 | 0 | 98.2 | 97.9 | 95.2 |
| Trucks | 0 | 114 | 2 | 116 | 23 | 119 | 0 | 142 | 0 | 0 | 0 | 0 | 3 | 0 | 17 | 20 | 278 |
| % Trucks | 0 | 5.8 | 10 | 5.8 | 2.7 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 15 | 0 | 1.8 | 2.1 | 4.8 |

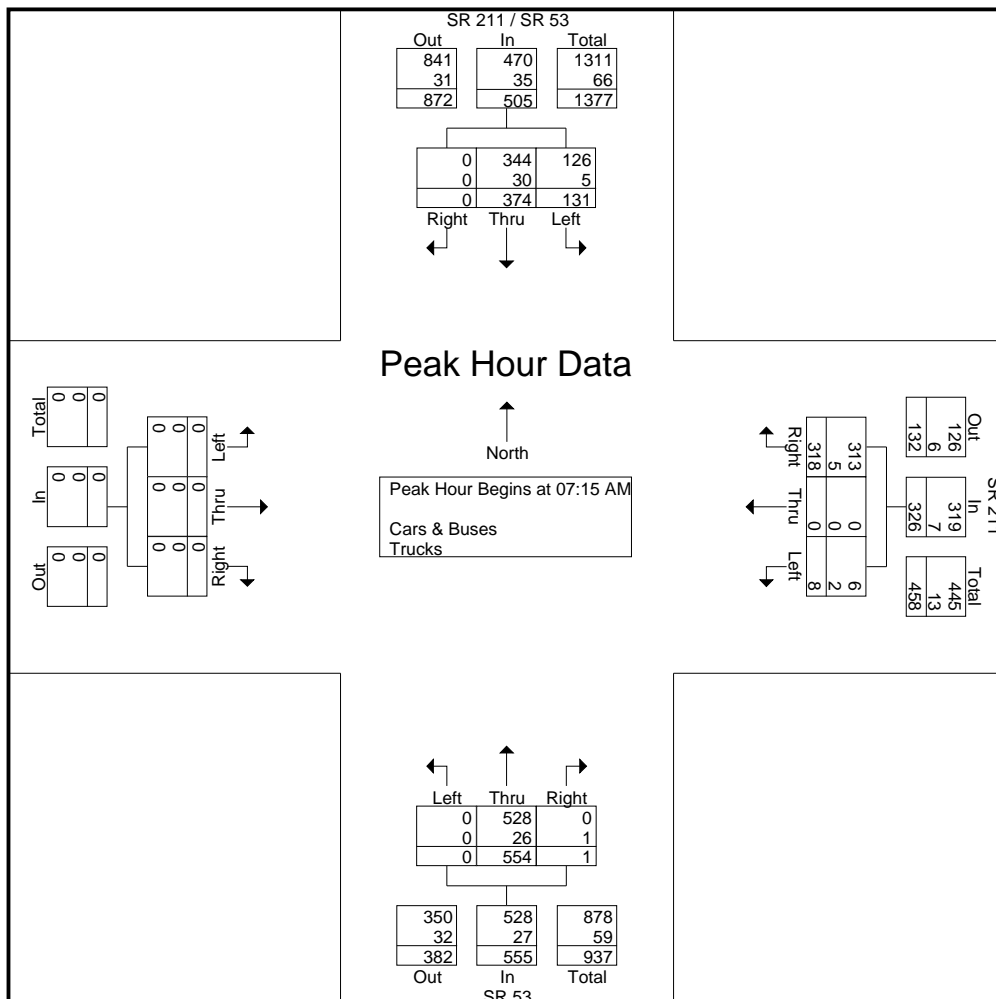
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 53 @ SR 211
7-9 am | 4-6 pm

File Name : 20240052
Site Code : 20240052
Start Date : 02-08-2024
Page No : 2

| Start Time | SR 53 Northbound | | | | SR 211 / SR 53 Southbound | | | | Eastbound | | | | SR 211 Westbound | | | | Int. Total |
|--|------------------|------|-------|------------|---------------------------|------|-------|------------|-----------|------|-------|------------|------------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | |
| 07:15 AM | 0 | 137 | 0 | 137 | 26 | 86 | 0 | 112 | 0 | 0 | 0 | 0 | 1 | 0 | 106 | 107 | 356 |
| 07:30 AM | 0 | 148 | 1 | 149 | 41 | 75 | 0 | 116 | 0 | 0 | 0 | 0 | 1 | 0 | 82 | 83 | 348 |
| 07:45 AM | 0 | 132 | 0 | 132 | 36 | 118 | 0 | 154 | 0 | 0 | 0 | 0 | 2 | 0 | 69 | 71 | 357 |
| 08:00 AM | 0 | 137 | 0 | 137 | 28 | 95 | 0 | 123 | 0 | 0 | 0 | 0 | 4 | 0 | 61 | 65 | 325 |
| Total Volume | 0 | 554 | 1 | 555 | 131 | 374 | 0 | 505 | 0 | 0 | 0 | 0 | 8 | 0 | 318 | 326 | 1386 |
| % App. Total | 0 | 99.8 | 0.2 | 99.9 | 25.9 | 74.1 | 0 | 99.9 | 0 | 0 | 0 | 0 | 2.5 | 0 | 97.5 | 99.9 | 99.9 |
| PHF | .000 | .936 | .250 | .931 | .799 | .792 | .000 | .820 | .000 | .000 | .000 | .000 | .500 | .000 | .750 | .762 | .971 |
| Cars & Buses | 0 | 528 | 0 | 528 | 126 | 344 | 0 | 470 | 0 | 0 | 0 | 0 | 6 | 0 | 313 | 319 | 1317 |
| % Cars & Buses | 0 | 95.3 | 0 | 95.1 | 96.2 | 92.0 | 0 | 93.1 | 0 | 0 | 0 | 0 | 75.0 | 0 | 98.4 | 97.9 | 95.0 |
| Trucks | 0 | 26 | 1 | 27 | 5 | 30 | 0 | 35 | 0 | 0 | 0 | 0 | 2 | 0 | 5 | 7 | 69 |
| % Trucks | 0 | 4.7 | 100 | 4.9 | 3.8 | 8.0 | 0 | 6.9 | 0 | 0 | 0 | 0 | 25.0 | 0 | 1.6 | 2.1 | 5.0 |



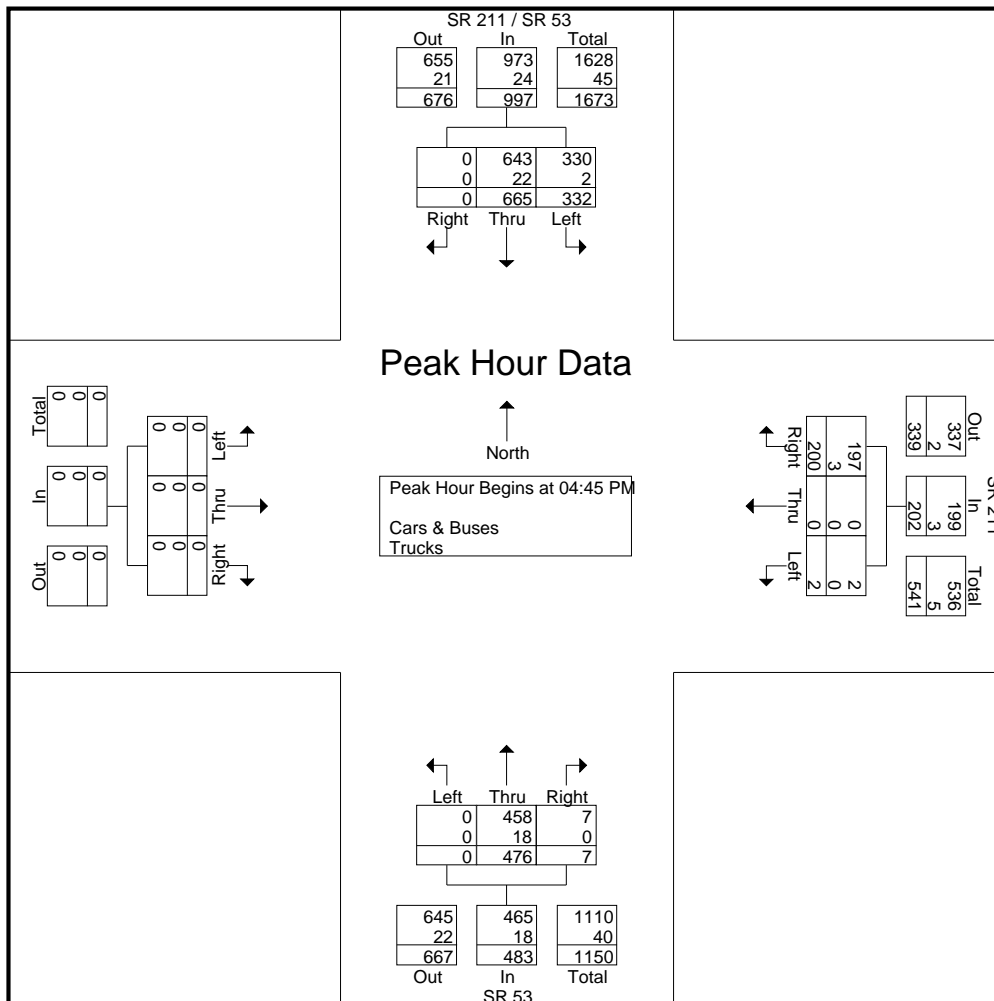
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 53 @ SR 211
7-9 am | 4-6 pm

File Name : 20240052
Site Code : 20240052
Start Date : 02-08-2024
Page No : 3

| Start Time | SR 53 Northbound | | | | SR 211 / SR 53 Southbound | | | | Eastbound | | | | SR 211 Westbound | | | | Int. Total |
|--|------------------|------------|----------|------------|---------------------------|------------|-------|------------|-----------|------|-------|------------|------------------|------|-----------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | |
| 04:45 PM | 0 | 94 | 2 | 96 | 67 | 191 | 0 | 258 | 0 | 0 | 0 | 0 | 0 | 0 | 54 | 54 | 408 |
| 05:00 PM | 0 | 119 | 1 | 120 | 85 | 154 | 0 | 239 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 409 |
| 05:15 PM | 0 | 150 | 1 | 151 | 90 | 164 | 0 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 53 | 458 |
| 05:30 PM | 0 | 113 | 3 | 116 | 90 | 156 | 0 | 246 | 0 | 0 | 0 | 0 | 2 | 0 | 43 | 45 | 407 |
| Total Volume | 0 | 476 | 7 | 483 | 332 | 665 | 0 | 997 | 0 | 0 | 0 | 0 | 2 | 0 | 200 | 202 | 1682 |
| % App. Total | 0 | 98.6 | 1.4 | | 33.3 | 66.7 | 0 | | 0 | 0 | 0 | | 1 | 0 | 99 | | |
| PHF | .000 | .793 | .583 | .800 | .922 | .870 | .000 | .966 | .000 | .000 | .000 | .000 | .250 | .000 | .926 | .935 | .918 |
| Cars & Buses | 0 | 458 | 7 | 465 | 330 | 643 | 0 | 973 | 0 | 0 | 0 | 0 | 2 | 0 | 197 | 199 | 1637 |
| % Cars & Buses | 0 | 96.2 | 100 | 96.3 | 99.4 | 96.7 | 0 | 97.6 | 0 | 0 | 0 | 0 | 100 | 0 | 98.5 | 98.5 | 97.3 |
| Trucks | 0 | 18 | 0 | 18 | 2 | 22 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 45 |
| % Trucks | 0 | 3.8 | 0 | 3.7 | 0.6 | 3.3 | 0 | 2.4 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 2.7 |



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 211 @ Benefield Road
7-9 am | 4-6 pm

File Name : 20240051
Site Code : 20240051
Start Date : 02-08-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

| Start Time | Benefield Road Northbound | | | | Southbound | | | | SR 211 Eastbound | | | | SR 211 Westbound | | | | Int. Total |
|---------------|---------------------------|------|-------|------------|------------|------|-------|------------|------------------|------|-------|------------|------------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| 07:00 AM | 4 | 0 | 5 | 9 | 0 | 0 | 0 | 0 | 0 | 16 | 3 | 19 | 9 | 96 | 0 | 105 | 133 |
| 07:15 AM | 2 | 0 | 6 | 8 | 0 | 0 | 0 | 0 | 0 | 34 | 4 | 38 | 6 | 81 | 0 | 87 | 133 |
| 07:30 AM | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 39 | 7 | 60 | 0 | 67 | 111 |
| 07:45 AM | 9 | 0 | 7 | 16 | 0 | 0 | 0 | 0 | 0 | 25 | 3 | 28 | 14 | 64 | 0 | 78 | 122 |
| Total | 15 | 0 | 23 | 38 | 0 | 0 | 0 | 0 | 0 | 114 | 10 | 124 | 36 | 301 | 0 | 337 | 499 |
| 08:00 AM | 6 | 0 | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 31 | 1 | 32 | 8 | 50 | 0 | 58 | 97 |
| 08:15 AM | 3 | 0 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 21 | 3 | 24 | 5 | 35 | 0 | 40 | 72 |
| 08:30 AM | 1 | 0 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 18 | 7 | 41 | 0 | 48 | 72 |
| 08:45 AM | 5 | 0 | 4 | 9 | 0 | 0 | 0 | 0 | 0 | 23 | 2 | 25 | 5 | 42 | 0 | 47 | 81 |
| Total | 15 | 0 | 15 | 30 | 0 | 0 | 0 | 0 | 0 | 93 | 6 | 99 | 25 | 168 | 0 | 193 | 322 |
| *** BREAK *** | | | | | | | | | | | | | | | | | |
| 04:00 PM | 5 | 0 | 10 | 15 | 0 | 0 | 0 | 0 | 0 | 71 | 1 | 72 | 4 | 42 | 0 | 46 | 133 |
| 04:15 PM | 2 | 0 | 7 | 9 | 0 | 0 | 0 | 0 | 0 | 72 | 1 | 73 | 4 | 48 | 0 | 52 | 134 |
| 04:30 PM | 3 | 0 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 64 | 2 | 66 | 15 | 50 | 0 | 65 | 139 |
| 04:45 PM | 1 | 0 | 10 | 11 | 0 | 0 | 0 | 0 | 0 | 72 | 3 | 75 | 6 | 52 | 0 | 58 | 144 |
| Total | 11 | 0 | 32 | 43 | 0 | 0 | 0 | 0 | 0 | 279 | 7 | 286 | 29 | 192 | 0 | 221 | 550 |
| 05:00 PM | 3 | 0 | 11 | 14 | 0 | 0 | 0 | 0 | 0 | 87 | 2 | 89 | 6 | 49 | 0 | 55 | 158 |
| 05:15 PM | 3 | 0 | 7 | 10 | 0 | 0 | 0 | 0 | 0 | 82 | 3 | 85 | 13 | 45 | 0 | 58 | 153 |
| 05:30 PM | 5 | 0 | 6 | 11 | 0 | 0 | 0 | 0 | 0 | 64 | 3 | 67 | 9 | 45 | 0 | 54 | 132 |
| 05:45 PM | 3 | 0 | 10 | 13 | 0 | 0 | 0 | 0 | 0 | 72 | 3 | 75 | 8 | 42 | 0 | 50 | 138 |
| Total | 14 | 0 | 34 | 48 | 0 | 0 | 0 | 0 | 0 | 305 | 11 | 316 | 36 | 181 | 0 | 217 | 581 |
| Grand Total | 55 | 0 | 104 | 159 | 0 | 0 | 0 | 0 | 0 | 791 | 34 | 825 | 126 | 842 | 0 | 968 | 1952 |
| Apprch % | 34.6 | 0 | 65.4 | | 0 | 0 | 0 | | 0 | 95.9 | 4.1 | | 13 | 87 | 0 | | |
| Total % | 2.8 | 0 | 5.3 | 8.1 | 0 | 0 | 0 | 0 | 0 | 40.5 | 1.7 | 42.3 | 6.5 | 43.1 | 0 | 49.6 | |

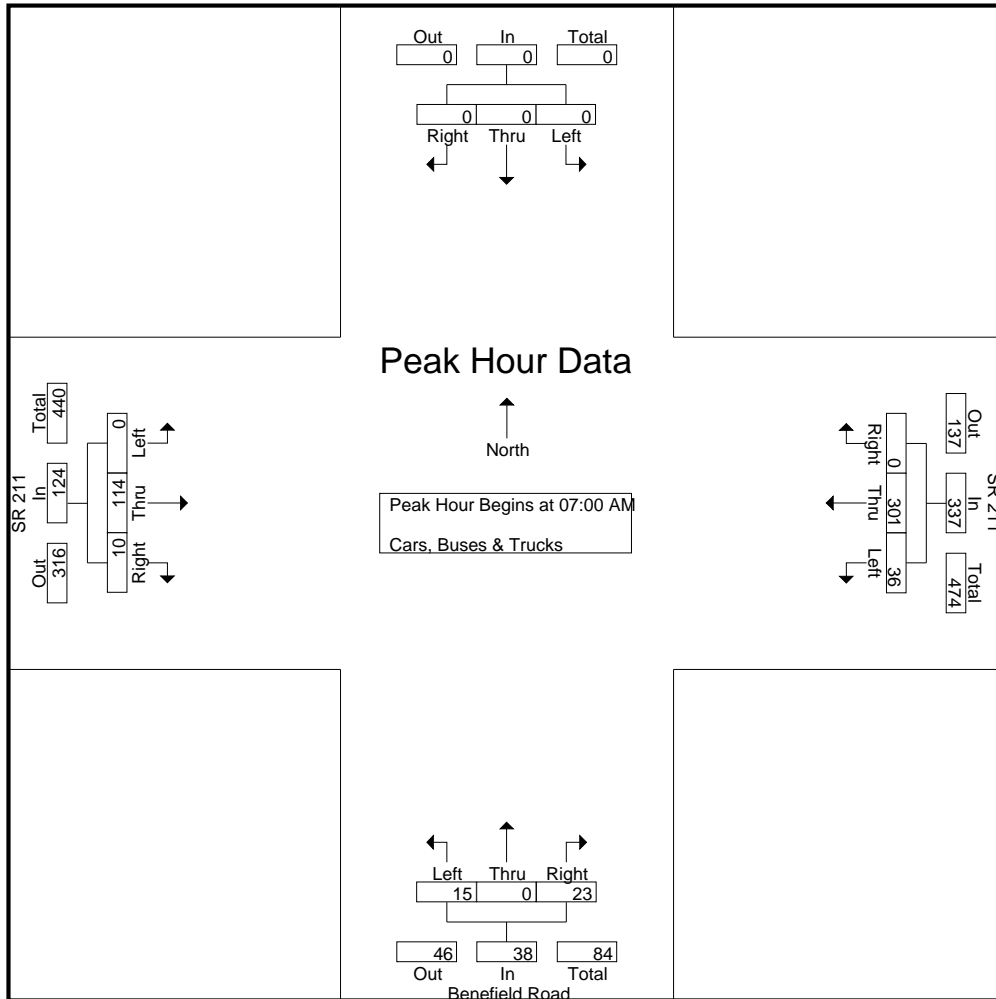
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 211 @ Benefield Road
7-9 am | 4-6 pm

File Name : 20240051
Site Code : 20240051
Start Date : 02-08-2024
Page No : 2

| Start Time | Benefield Road Northbound | | | | Southbound | | | | SR 211 Eastbound | | | | SR 211 Westbound | | | | Int. Total |
|--|---------------------------|------|-------|------------|------------|------|-------|------------|------------------|------|-------|------------|------------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | |
| 07:00 AM | 4 | 0 | 5 | 9 | 0 | 0 | 0 | 0 | 0 | 16 | 3 | 19 | 9 | 96 | 0 | 105 | 133 |
| 07:15 AM | 2 | 0 | 6 | 8 | 0 | 0 | 0 | 0 | 0 | 34 | 4 | 38 | 6 | 81 | 0 | 87 | 133 |
| 07:30 AM | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 39 | 7 | 60 | 0 | 67 | 111 |
| 07:45 AM | 9 | 0 | 7 | 16 | 0 | 0 | 0 | 0 | 0 | 25 | 3 | 28 | 14 | 64 | 0 | 78 | 122 |
| Total Volume | 15 | 0 | 23 | 38 | 0 | 0 | 0 | 0 | 0 | 114 | 10 | 124 | 36 | 301 | 0 | 337 | 499 |
| % App. Total | 39.5 | 0 | 60.5 | | 0 | 0 | 0 | | 0 | 91.9 | 8.1 | | 10.7 | 89.3 | 0 | | |
| PHF | .417 | .000 | .821 | .594 | .000 | .000 | .000 | .000 | .000 | .731 | .625 | .795 | .643 | .784 | .000 | .802 | .938 |



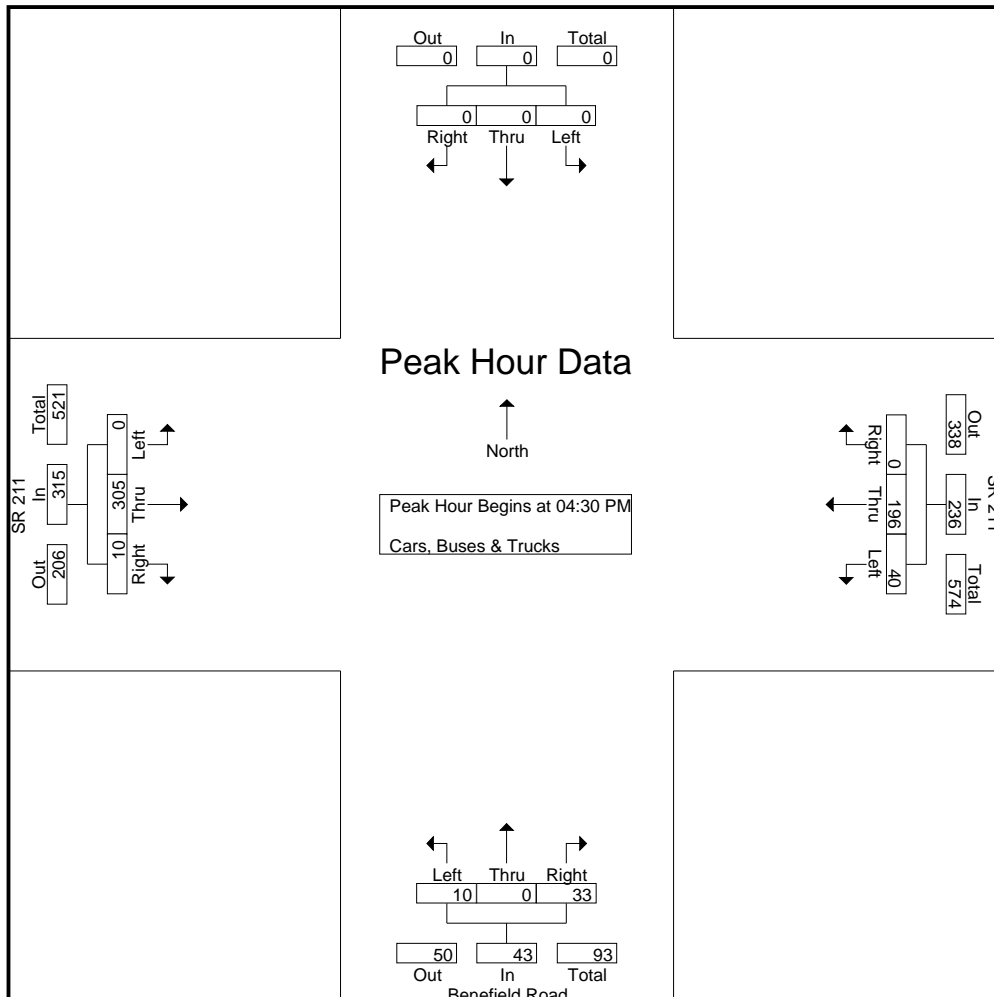
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 211 @ Benefield Road
7-9 am | 4-6 pm

File Name : 20240051
Site Code : 20240051
Start Date : 02-08-2024
Page No : 3

| Start Time | Benefield Road Northbound | | | | Southbound | | | | SR 211 Eastbound | | | | SR 211 Westbound | | | | Int. Total |
|--|---------------------------|------|-------|------------|------------|------|-------|------------|------------------|------|-------|------------|------------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | 3 | 0 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 64 | 2 | 66 | 15 | 50 | 0 | 65 | 139 |
| 04:45 PM | 1 | 0 | 10 | 11 | 0 | 0 | 0 | 0 | 0 | 72 | 3 | 75 | 6 | 52 | 0 | 58 | 144 |
| 05:00 PM | 3 | 0 | 11 | 14 | 0 | 0 | 0 | 0 | 0 | 87 | 2 | 89 | 6 | 49 | 0 | 55 | 158 |
| 05:15 PM | 3 | 0 | 7 | 10 | 0 | 0 | 0 | 0 | 0 | 82 | 3 | 85 | 13 | 45 | 0 | 58 | 153 |
| Total Volume | 10 | 0 | 33 | 43 | 0 | 0 | 0 | 0 | 0 | 305 | 10 | 315 | 40 | 196 | 0 | 236 | 594 |
| % App. Total | 23.3 | 0 | 76.7 | | 0 | 0 | 0 | | 0 | 96.8 | 3.2 | | 16.9 | 83.1 | 0 | | |
| PHF | .833 | .000 | .750 | .768 | .000 | .000 | .000 | .000 | .000 | .876 | .833 | .885 | .667 | .942 | .000 | .908 | .940 |



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 53 @ Benefield Road
7-9 am | 4-6 pm

File Name : 20240050
Site Code : 20240050
Start Date : 02-08-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

| Start Time | Northbound | | | | Benefield Road Southbound | | | | SR 53 Eastbound | | | | SR 53 Westbound | | | | Int. Total |
|----------------|------------|------|-------|------------|---------------------------|------|-------|------------|-----------------|------|-------|------------|-----------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| 07:00 AM | 0 | 0 | 0 | 0 | 10 | 0 | 5 | 15 | 0 | 79 | 0 | 79 | 0 | 146 | 6 | 152 | 246 |
| 07:15 AM | 0 | 0 | 0 | 0 | 10 | 0 | 1 | 11 | 0 | 82 | 0 | 82 | 0 | 142 | 2 | 144 | 237 |
| 07:30 AM | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 11 | 0 | 78 | 0 | 78 | 0 | 154 | 4 | 158 | 247 |
| 07:45 AM | 0 | 0 | 0 | 0 | 12 | 0 | 1 | 13 | 2 | 103 | 0 | 105 | 0 | 142 | 5 | 147 | 265 |
| Total | 0 | 0 | 0 | 0 | 43 | 0 | 7 | 50 | 2 | 342 | 0 | 344 | 0 | 584 | 17 | 601 | 995 |
| 08:00 AM | 0 | 0 | 0 | 0 | 14 | 0 | 1 | 15 | 0 | 94 | 0 | 94 | 0 | 128 | 3 | 131 | 240 |
| 08:15 AM | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 5 | 0 | 82 | 0 | 82 | 0 | 134 | 7 | 141 | 228 |
| 08:30 AM | 0 | 0 | 0 | 0 | 8 | 0 | 3 | 11 | 2 | 76 | 0 | 78 | 0 | 142 | 3 | 145 | 234 |
| 08:45 AM | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 6 | 0 | 76 | 0 | 76 | 0 | 125 | 4 | 129 | 211 |
| Total | 0 | 0 | 0 | 0 | 30 | 0 | 7 | 37 | 2 | 328 | 0 | 330 | 0 | 529 | 17 | 546 | 913 |
| *** BREAK *** | | | | | | | | | | | | | | | | | |
| 04:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 158 | 0 | 160 | 0 | 100 | 8 | 108 | 269 |
| 04:15 PM | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 5 | 2 | 151 | 0 | 153 | 0 | 94 | 9 | 103 | 261 |
| 04:30 PM | 0 | 0 | 0 | 0 | 9 | 0 | 2 | 11 | 3 | 177 | 0 | 180 | 0 | 83 | 9 | 92 | 283 |
| 04:45 PM | 0 | 0 | 0 | 0 | 12 | 0 | 1 | 13 | 1 | 175 | 0 | 176 | 0 | 95 | 10 | 105 | 294 |
| Total | 0 | 0 | 0 | 0 | 26 | 0 | 4 | 30 | 8 | 661 | 0 | 669 | 0 | 372 | 36 | 408 | 1107 |
| 05:00 PM | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 2 | 156 | 0 | 158 | 0 | 148 | 15 | 163 | 327 |
| 05:15 PM | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 179 | 0 | 183 | 0 | 110 | 10 | 120 | 306 |
| 05:30 PM | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 18 | 1 | 164 | 0 | 165 | 0 | 112 | 8 | 120 | 303 |
| 05:45 PM | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 0 | 145 | 0 | 145 | 0 | 87 | 16 | 103 | 258 |
| Total | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 37 | 7 | 644 | 0 | 651 | 0 | 457 | 49 | 506 | 1194 |
| Grand Total | 0 | 0 | 0 | 0 | 136 | 0 | 18 | 154 | 19 | 1975 | 0 | 1994 | 0 | 1942 | 119 | 2061 | 4209 |
| Apprch % | 0 | 0 | 0 | 0 | 88.3 | 0 | 11.7 | | 1 | 99 | 0 | | 0 | 94.2 | 5.8 | | |
| Total % | 0 | 0 | 0 | 0 | 3.2 | 0 | 0.4 | 3.7 | 0.5 | 46.9 | 0 | 47.4 | 0 | 46.1 | 2.8 | 49 | |
| Cars & Buses | 0 | 0 | 0 | 0 | 133 | 0 | 18 | 151 | 18 | 1866 | 0 | 1884 | 0 | 1836 | 118 | 1954 | 3989 |
| % Cars & Buses | 0 | 0 | 0 | 0 | 97.8 | 0 | 100 | 98.1 | 94.7 | 94.5 | 0 | 94.5 | 0 | 94.5 | 99.2 | 94.8 | 94.8 |
| Trucks | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 1 | 109 | 0 | 110 | 0 | 106 | 1 | 107 | 220 |
| % Trucks | 0 | 0 | 0 | 0 | 2.2 | 0 | 0 | 1.9 | 5.3 | 5.5 | 0 | 5.5 | 0 | 5.5 | 0.8 | 5.2 | 5.2 |

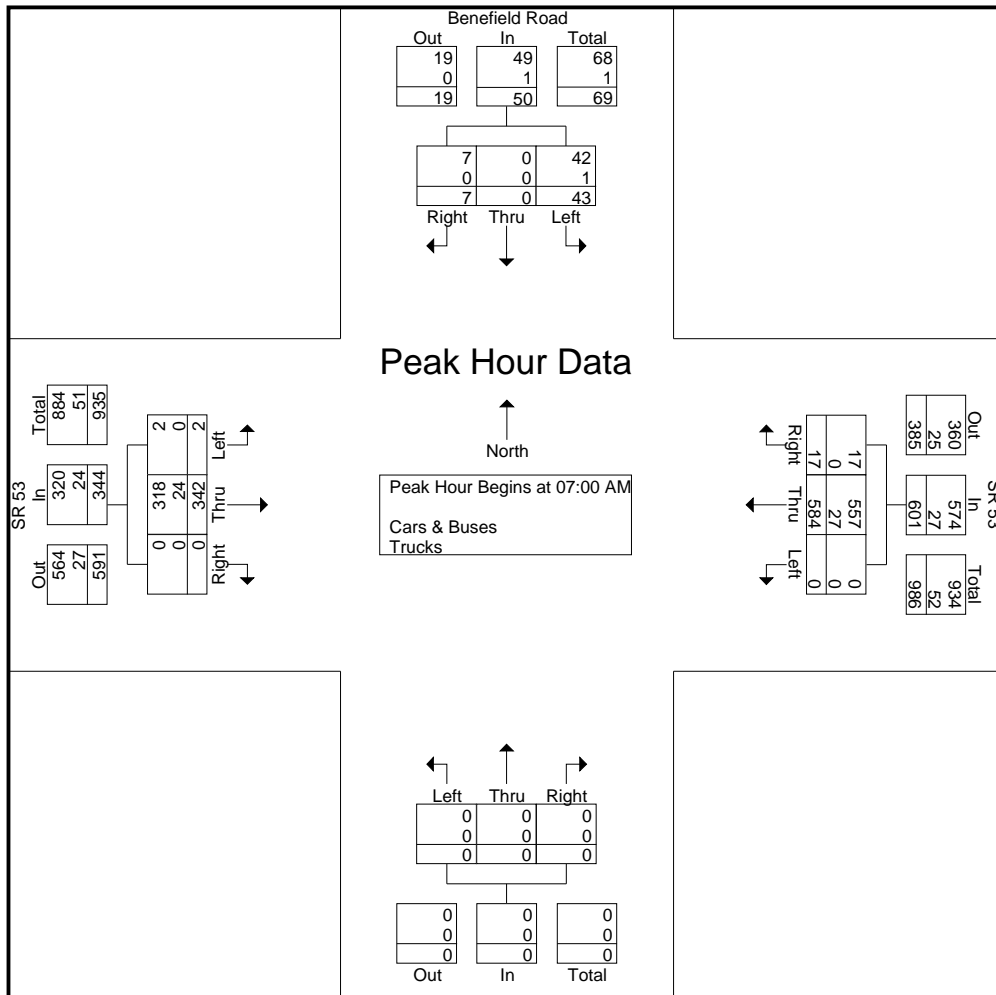
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 53 @ Benefield Road
7-9 am | 4-6 pm

File Name : 20240050
Site Code : 20240050
Start Date : 02-08-2024
Page No : 2

| Start Time | Northbound | | | | Benefield Road Southbound | | | | SR 53 Eastbound | | | | SR 53 Westbound | | | | Int. Total |
|--|------------|------|-------|------------|---------------------------|------|-------|------------|-----------------|------|-------|------------|-----------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 0 | 0 | 10 | 0 | 5 | 15 | 0 | 79 | 0 | 79 | 0 | 146 | 6 | 152 | 246 |
| 07:15 AM | 0 | 0 | 0 | 0 | 10 | 0 | 1 | 11 | 0 | 82 | 0 | 82 | 0 | 142 | 2 | 144 | 237 |
| 07:30 AM | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 11 | 0 | 78 | 0 | 78 | 0 | 154 | 4 | 158 | 247 |
| 07:45 AM | 0 | 0 | 0 | 0 | 12 | 0 | 1 | 13 | 2 | 103 | 0 | 105 | 0 | 142 | 5 | 147 | 265 |
| Total Volume | 0 | 0 | 0 | 0 | 43 | 0 | 7 | 50 | 2 | 342 | 0 | 344 | 0 | 584 | 17 | 601 | 995 |
| % App. Total | 0 | 0 | 0 | 0 | 86 | 0 | 14 | 98.0 | 0.6 | 99.4 | 0 | 93.0 | 0 | 97.2 | 2.8 | 95.5 | 94.8 |
| PHF | .000 | .000 | .000 | .000 | .896 | .000 | .350 | .833 | .250 | .830 | .000 | .819 | .000 | .948 | .708 | .951 | .939 |
| Cars & Buses | 0 | 0 | 0 | 0 | 42 | 0 | 7 | 49 | 2 | 318 | 0 | 320 | 0 | 557 | 17 | 574 | 943 |
| % Cars & Buses | 0 | 0 | 0 | 0 | 97.7 | 0 | 100 | 98.0 | 100 | 93.0 | 0 | 93.0 | 0 | 95.4 | 100 | 95.5 | 94.8 |
| Trucks | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 24 | 0 | 24 | 0 | 27 | 0 | 27 | 52 |
| % Trucks | 0 | 0 | 0 | 0 | 2.3 | 0 | 0 | 2.0 | 0 | 7.0 | 0 | 7.0 | 0 | 4.6 | 0 | 4.5 | 5.2 |



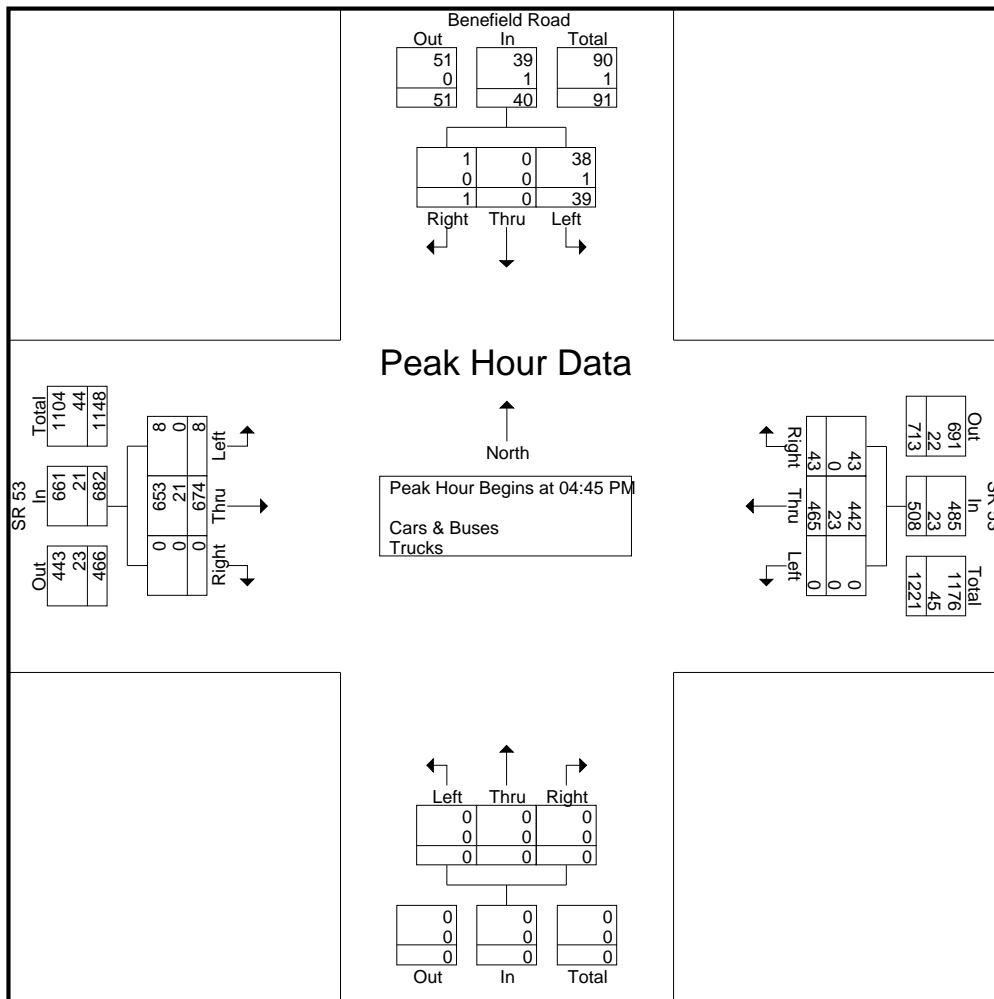
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 53 @ Benefield Road
7-9 am | 4-6 pm

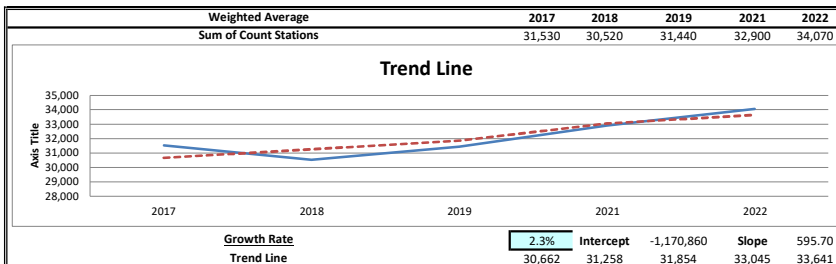
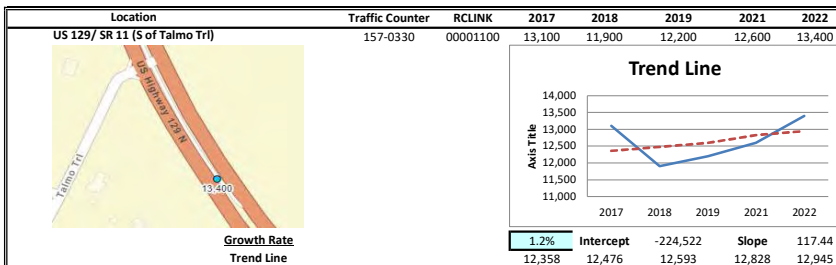
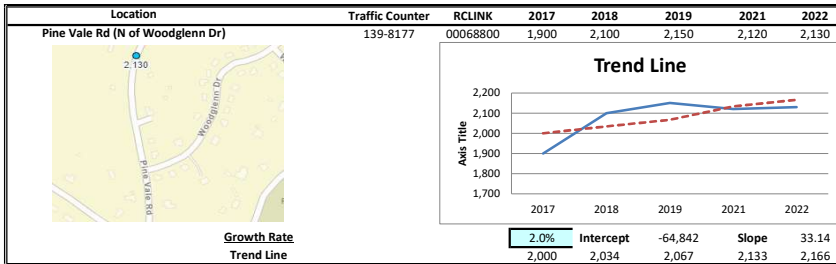
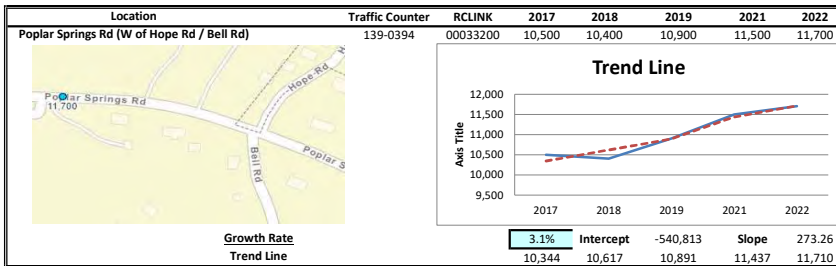
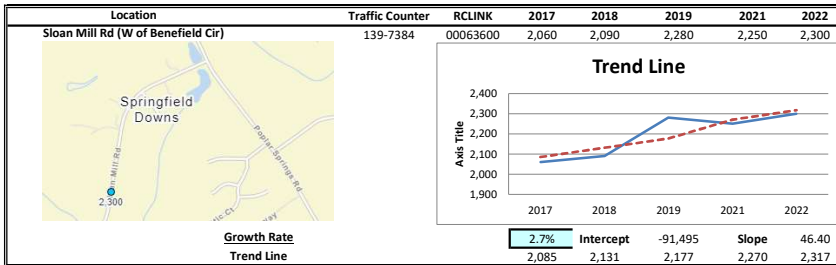
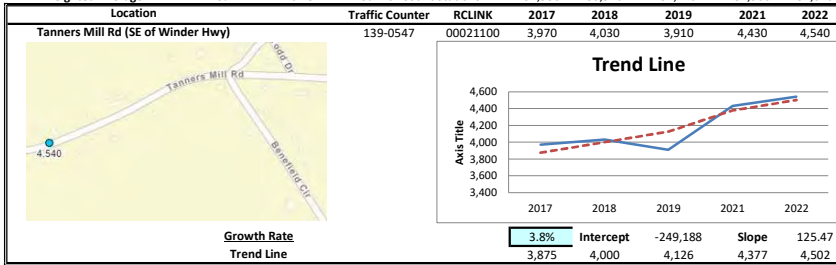
File Name : 20240050
Site Code : 20240050
Start Date : 02-08-2024
Page No : 3

| Start Time | Northbound | | | | Benefield Road Southbound | | | | SR 53 Eastbound | | | | SR 53 Westbound | | | | Int. Total |
|--|------------|------|-------|------------|---------------------------|------|-------|------------|-----------------|------|-------|------------|-----------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | |
| 04:45 PM | 0 | 0 | 0 | 0 | 12 | 0 | 1 | 13 | 1 | 175 | 0 | 176 | 0 | 95 | 10 | 105 | 294 |
| 05:00 PM | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 2 | 156 | 0 | 158 | 0 | 148 | 15 | 163 | 327 |
| 05:15 PM | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 179 | 0 | 183 | 0 | 110 | 10 | 120 | 306 |
| 05:30 PM | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 18 | 1 | 164 | 0 | 165 | 0 | 112 | 8 | 120 | 303 |
| Total Volume | 0 | 0 | 0 | 0 | 39 | 0 | 1 | 40 | 8 | 674 | 0 | 682 | 0 | 465 | 43 | 508 | 1230 |
| % App. Total | 0 | 0 | 0 | 0 | 97.5 | 0 | 2.5 | | 1.2 | 98.8 | 0 | | 0 | 91.5 | 8.5 | | |
| PHF | .000 | .000 | .000 | .000 | .542 | .000 | .250 | .556 | .500 | .941 | .000 | .932 | .000 | .785 | .717 | .779 | .940 |
| Cars & Buses | 0 | 0 | 0 | 0 | 38 | 0 | 1 | 39 | 8 | 653 | 0 | 661 | 0 | 442 | 43 | 485 | 1185 |
| % Cars & Buses | 0 | 0 | 0 | 0 | 97.4 | 0 | 100 | 97.5 | 100 | 96.9 | 0 | 96.9 | 0 | 95.1 | 100 | 95.5 | 96.3 |
| Trucks | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 21 | 0 | 21 | 0 | 23 | 0 | 23 | 45 |
| % Trucks | 0 | 0 | 0 | 0 | 2.6 | 0 | 0 | 2.5 | 0 | 3.1 | 0 | 3.1 | 0 | 4.9 | 0 | 4.5 | 3.7 |



LINEAR REGRESSION OF DAILY TRAFFIC

| Location | Growth Rate | R Squared | Station ID | Route | 2017 | 2018 | 2019 | 2021 | 2022 |
|----------------------------------|-------------|-------------|--------------------------------|----------|---------------|---------------|---------------|---------------|---------------|
| Tanners Mill Rd (SE of Winder H | 3.8% | 0.82 | 139-0547 | 00021100 | 3,970 | 4,030 | 3,910 | 4,430 | 4,540 |
| Sloan Mill Rd (W of Benefield Ci | 2.7% | 0.73 | 139-7384 | 00063600 | 2,060 | 2,090 | 2,280 | 2,250 | 2,300 |
| Poplar Springs Rd (W of Hope R | 3.1% | 0.94 | 139-0394 | 00033200 | 10,500 | 10,400 | 10,900 | 11,500 | 11,700 |
| Pine Vale Rd (N of Woodglenn C | 2.0% | 0.46 | 139-8177 | 00068800 | 1,900 | 2,100 | 2,150 | 2,120 | 2,130 |
| US 129/ SR 11 (S of Talmo Trl) | 1.2% | 0.15 | 157-0330 | 00001100 | 13,100 | 11,900 | 12,200 | 12,600 | 13,400 |
| Weighted Average | 2.3% | 0.78 | Sum of Count Stations = | | 31,530 | 30,520 | 31,440 | 32,900 | 34,070 |



EXISTING INTERSECTION ANALYSIS

HCM 6th TWSC

1a. Existing 2024 AM

1: SR 53 (Winder Hwy)/SR 53/ SR 211 (Winder Hwy) & SR 211 (Tanners Mill Rd)

03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|----------|--------|-------|-------|------|
| Int Delay, s/veh | 6.3 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | ↗ | ↑ | ↗ | ↘ | ↑↑ |
| Traffic Vol, veh/h | 8 | 318 | 554 | 1 | 131 | 374 |
| Future Vol, veh/h | 8 | 318 | 554 | 1 | 131 | 374 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | Yield | - | Yield | - | None |
| Storage Length | 0 | 80 | - | 225 | 395 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 25 | 2 | 5 | 10 | 4 | 8 |
| Mvmt Flow | 8 | 328 | 571 | 1 | 135 | 386 |
| Major/Minor | Minor1 | Major1 | Major2 | | | |
| Conflicting Flow All | 1034 | 571 | 0 | 0 | 571 | 0 |
| Stage 1 | 571 | - | - | - | - | - |
| Stage 2 | 463 | - | - | - | - | - |
| Critical Hdwy | 6.975 | 6.23 | - | - | 4.16 | - |
| Critical Hdwy Stg 1 | 5.775 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.175 | - | - | - | - | - |
| Follow-up Hdwy | 3.7375 | 3.319 | - | - | 2.238 | - |
| Pot Cap-1 Maneuver | 212 | 519 | - | - | 988 | - |
| Stage 1 | 511 | - | - | - | - | - |
| Stage 2 | 548 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | |
| Mov Cap-1 Maneuver | 183 | 519 | - | - | 988 | - |
| Mov Cap-2 Maneuver | 183 | - | - | - | - | - |
| Stage 1 | 511 | - | - | - | - | - |
| Stage 2 | 473 | - | - | - | - | - |
| Approach | WB | NB | SB | | | |
| HCM Control Delay, s | 23.2 | 0 | 2.4 | | | |
| HCM LOS | C | | | | | |
| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL | SBT | |
| Capacity (veh/h) | - | - | 183 | 519 | 988 | - |
| HCM Lane V/C Ratio | - | - | 0.045 | 0.632 | 0.137 | - |
| HCM Control Delay (s) | - | - | 25.6 | 23.1 | 9.2 | - |
| HCM Lane LOS | - | - | D | C | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 4.4 | 0.5 | - |

HCM 6th TWSC
2: Benefield Rd & SR 211 (Tanners Mill Rd)

1a. Existing 2024 AM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|-------|-------|-------|
| Int Delay, s/veh | 1.3 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 114 | 10 | 36 | 301 | 15 | 23 |
| Future Vol, veh/h | 114 | 10 | 36 | 301 | 15 | 23 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 121 | 11 | 38 | 320 | 16 | 24 |
| Major/Minor | Major1 | Major2 | Minor1 | | | |
| Conflicting Flow All | 0 | 0 | 132 | 0 | 523 | 127 |
| Stage 1 | - | - | - | - | 127 | - |
| Stage 2 | - | - | - | - | 396 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1453 | - | 514 | 923 |
| Stage 1 | - | - | - | - | 899 | - |
| Stage 2 | - | - | - | - | 680 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1453 | - | 498 | 923 |
| Mov Cap-2 Maneuver | - | - | - | - | 498 | - |
| Stage 1 | - | - | - | - | 899 | - |
| Stage 2 | - | - | - | - | 658 | - |
| Approach | EB | WB | NB | | | |
| HCM Control Delay, s | 0 | 0.8 | 10.5 | | | |
| HCM LOS | | | B | | | |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT | |
| Capacity (veh/h) | 690 | - | - | 1453 | - | |
| HCM Lane V/C Ratio | 0.059 | - | - | 0.026 | - | |
| HCM Control Delay (s) | 10.5 | - | - | 7.5 | 0 | |
| HCM Lane LOS | B | - | - | A | A | |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.1 | - | |

HCM 6th TWSC

3: SR 53 (Winder Hwy) & Benefield Rd

1a. Existing 2024 AM
03/15/2024

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.1 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↕ | ↕ | | ↕ | |
| Traffic Vol, veh/h | 2 | 342 | 584 | 17 | 43 | 7 |
| Future Vol, veh/h | 2 | 342 | 584 | 17 | 43 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 7 | 5 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 364 | 621 | 18 | 46 | 7 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 639 | 0 | - | 0 | 998 |
| Stage 1 | - | - | - | - | 630 |
| Stage 2 | - | - | - | - | 368 |
| Critical Hdwy | 4.12 | - | - | - | 6.42 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 |
| Pot Cap-1 Maneuver | 945 | - | - | - | 270 |
| Stage 1 | - | - | - | - | 531 |
| Stage 2 | - | - | - | - | 700 |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 945 | - | - | - | 269 |
| Mov Cap-2 Maneuver | - | - | - | - | 269 |
| Stage 1 | - | - | - | - | 529 |
| Stage 2 | - | - | - | - | 700 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.1 | 0 | 20.4 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 945 | - | - | - | 287 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.185 |
| HCM Control Delay (s) | 8.8 | 0 | - | - | 20.4 |
| HCM Lane LOS | A | A | - | - | C |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.7 |

HCM 6th TWSC

1b. Exisitng 2024 PM

1: SR 53 (Winder Hwy)/SR 53/ SR 211 (Winder Hwy) & SR 211 (Tanners Mill Rd)

03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|----------|--------|-------|-------|------|
| Int Delay, s/veh | 3.9 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | ↗ | ↑ | ↗ | ↘ | ↑↑ |
| Traffic Vol, veh/h | 2 | 200 | 476 | 7 | 332 | 665 |
| Future Vol, veh/h | 2 | 200 | 476 | 7 | 332 | 665 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | Yield | - | Yield | - | None |
| Storage Length | 0 | 80 | - | 225 | 395 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 4 | 2 | 2 | 3 |
| Mvmt Flow | 2 | 217 | 517 | 8 | 361 | 723 |
| Major/Minor | Minor1 | Major1 | Major2 | | | |
| Conflicting Flow All | 1601 | 517 | 0 | 0 | 517 | 0 |
| Stage 1 | 517 | - | - | - | - | - |
| Stage 2 | 1084 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.23 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.83 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 106 | 557 | - | - | 1047 | - |
| Stage 1 | 598 | - | - | - | - | - |
| Stage 2 | 287 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 69 | 557 | - | - | 1047 | - |
| Mov Cap-2 Maneuver | 69 | - | - | - | - | - |
| Stage 1 | 598 | - | - | - | - | - |
| Stage 2 | 188 | - | - | - | - | - |
| Approach | WB | NB | SB | | | |
| HCM Control Delay, s | 15.9 | 0 | 3.4 | | | |
| HCM LOS | C | | | | | |
| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL | SBT | |
| Capacity (veh/h) | - | - | 69 | 557 | 1047 | - |
| HCM Lane V/C Ratio | - | - | 0.032 | 0.39 | 0.345 | - |
| HCM Control Delay (s) | - | - | 58.9 | 15.5 | 10.2 | - |
| HCM Lane LOS | - | - | F | C | B | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 1.8 | 1.6 | - |

HCM 6th TWSC
2: Benefield Rd & SR 211 (Tanners Mill Rd)

1b. Exisitng 2024 PM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|-------|-------|-------|
| Int Delay, s/veh | 1.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 305 | 10 | 40 | 196 | 10 | 33 |
| Future Vol, veh/h | 305 | 10 | 40 | 196 | 10 | 33 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 324 | 11 | 43 | 209 | 11 | 35 |
| Major/Minor | Major1 | Major2 | Minor1 | | | |
| Conflicting Flow All | 0 | 0 | 335 | 0 | 625 | 330 |
| Stage 1 | - | - | - | - | 330 | - |
| Stage 2 | - | - | - | - | 295 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1224 | - | 449 | 712 |
| Stage 1 | - | - | - | - | 728 | - |
| Stage 2 | - | - | - | - | 755 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1224 | - | 431 | 712 |
| Mov Cap-2 Maneuver | - | - | - | - | 431 | - |
| Stage 1 | - | - | - | - | 728 | - |
| Stage 2 | - | - | - | - | 725 | - |
| Approach | EB | WB | NB | | | |
| HCM Control Delay, s | 0 | 1.4 | 11.3 | | | |
| HCM LOS | | | B | | | |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT | |
| Capacity (veh/h) | 618 | - | - | 1224 | - | |
| HCM Lane V/C Ratio | 0.074 | - | - | 0.035 | - | |
| HCM Control Delay (s) | 11.3 | - | - | 8 | 0 | |
| HCM Lane LOS | B | - | - | A | A | |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.1 | - | |

HCM 6th TWSC

3: SR 53 (Winder Hwy) & Benefield Rd

1b. Existing 2024 PM
03/15/2024

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | ↷ |
| Traffic Vol, veh/h | 8 | 674 | 465 | 43 | 39 | 1 |
| Future Vol, veh/h | 8 | 674 | 465 | 43 | 39 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 3 | 5 | 2 | 3 | 2 |
| Mvmt Flow | 9 | 717 | 495 | 46 | 41 | 1 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 541 | 0 | - | 0 | 1253 518 |
| Stage 1 | - | - | - | - | 518 - |
| Stage 2 | - | - | - | - | 735 - |
| Critical Hdwy | 4.12 | - | - | - | 6.43 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.43 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.527 3.318 |
| Pot Cap-1 Maneuver | 1028 | - | - | - | 189 558 |
| Stage 1 | - | - | - | - | 596 - |
| Stage 2 | - | - | - | - | 473 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1028 | - | - | - | 186 558 |
| Mov Cap-2 Maneuver | - | - | - | - | 186 - |
| Stage 1 | - | - | - | - | 587 - |
| Stage 2 | - | - | - | - | 473 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.1 | 0 | 29.5 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1028 | - | - | - | 189 |
| HCM Lane V/C Ratio | 0.008 | - | - | - | 0.225 |
| HCM Control Delay (s) | 8.5 | 0 | - | - | 29.5 |
| HCM Lane LOS | A | A | - | - | D |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.8 |

**FUTURE "NO-BUILD" INTERSECTION
ANALYSIS**

HCM 6th TWSC

2a. No Build 2026 AM

1: SR 53 (Winder Hwy)/SR 53/ SR 211 (Winder Hwy) & SR 211 (Tanners Mill Rd)

03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|----------|--------|-------|-------|------|
| Int Delay, s/veh | 6.9 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | ↗ | ↑ | ↗ | ↘ | ↑↑ |
| Traffic Vol, veh/h | 8 | 331 | 576 | 1 | 136 | 389 |
| Future Vol, veh/h | 8 | 331 | 576 | 1 | 136 | 389 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | Yield | - | Yield | - | None |
| Storage Length | 0 | 80 | - | 225 | 395 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 25 | 2 | 5 | 10 | 4 | 8 |
| Mvmt Flow | 8 | 341 | 594 | 1 | 140 | 401 |
| Major/Minor | Minor1 | Major1 | Major2 | | | |
| Conflicting Flow All | 1075 | 594 | 0 | 0 | 594 | 0 |
| Stage 1 | 594 | - | - | - | - | - |
| Stage 2 | 481 | - | - | - | - | - |
| Critical Hdwy | 6.975 | 6.23 | - | - | 4.16 | - |
| Critical Hdwy Stg 1 | 5.775 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.175 | - | - | - | - | - |
| Follow-up Hdwy | 3.7375 | 3.319 | - | - | 2.238 | - |
| Pot Cap-1 Maneuver | 199 | 504 | - | - | 968 | - |
| Stage 1 | 498 | - | - | - | - | - |
| Stage 2 | 536 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 170 | 504 | - | - | 968 | - |
| Mov Cap-2 Maneuver | 170 | - | - | - | - | - |
| Stage 1 | 498 | - | - | - | - | - |
| Stage 2 | 458 | - | - | - | - | - |
| Approach | WB | NB | SB | | | |
| HCM Control Delay, s | 25.8 | 0 | 2.4 | | | |
| HCM LOS | D | | | | | |
| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL | SBT | |
| Capacity (veh/h) | - | - | 170 | 504 | 968 | - |
| HCM Lane V/C Ratio | - | - | 0.049 | 0.677 | 0.145 | - |
| HCM Control Delay (s) | - | - | 27.3 | 25.8 | 9.3 | - |
| HCM Lane LOS | - | - | D | D | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 5 | 0.5 | - |

HCM 6th TWSC
2: Benefield Rd & SR 211 (Tanners Mill Rd)

2a. No Build 2026 AM
03/15/2024

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 119 | 10 | 37 | 313 | 16 | 24 |
| Future Vol, veh/h | 119 | 10 | 37 | 313 | 16 | 24 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 127 | 11 | 39 | 333 | 17 | 26 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|-------|-------|
| Conflicting Flow All | 0 | 0 | 138 | 0 | 544 | 133 |
| Stage 1 | - | - | - | - | 133 | - |
| Stage 2 | - | - | - | - | 411 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1446 | - | 500 | 916 |
| Stage 1 | - | - | - | - | 893 | - |
| Stage 2 | - | - | - | - | 669 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1446 | - | 484 | 916 |
| Mov Cap-2 Maneuver | - | - | - | - | 484 | - |
| Stage 1 | - | - | - | - | 893 | - |
| Stage 2 | - | - | - | - | 647 | - |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.8 | 10.7 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 675 | - | - | 1446 | - |
| HCM Lane V/C Ratio | 0.063 | - | - | 0.027 | - |
| HCM Control Delay (s) | 10.7 | - | - | 7.6 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.1 | - |

HCM 6th TWSC
3: SR 53 (Winder Hwy) & Benefield Rd

2a. No Build 2026 AM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|------|-------|-------|
| Int Delay, s/veh | 1.1 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↕ | ↕ | | ↕ | |
| Traffic Vol, veh/h | 2 | 356 | 607 | 18 | 45 | 7 |
| Future Vol, veh/h | 2 | 356 | 607 | 18 | 45 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 7 | 5 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 379 | 646 | 19 | 48 | 7 |
| Major/Minor | Major1 | Major2 | Minor2 | | | |
| Conflicting Flow All | 665 | 0 | - | 0 | 1039 | 656 |
| Stage 1 | - | - | - | - | 656 | - |
| Stage 2 | - | - | - | - | 383 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 924 | - | - | - | 255 | 465 |
| Stage 1 | - | - | - | - | 516 | - |
| Stage 2 | - | - | - | - | 689 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 924 | - | - | - | 254 | 465 |
| Mov Cap-2 Maneuver | - | - | - | - | 254 | - |
| Stage 1 | - | - | - | - | 514 | - |
| Stage 2 | - | - | - | - | 689 | - |
| Approach | EB | WB | | SB | | |
| HCM Control Delay, s | 0 | 0 | | 21.7 | | |
| HCM LOS | | | | C | | |
| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | |
| Capacity (veh/h) | 924 | - | - | - | 271 | |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.204 | |
| HCM Control Delay (s) | 8.9 | 0 | - | - | 21.7 | |
| HCM Lane LOS | A | A | - | - | C | |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.7 | |

HCM 6th TWSC

2b. No Build 2026 PM

1: SR 53 (Winder Hwy)/SR 53/ SR 211 (Winder Hwy) & SR 211 (Tanners Mill Rd)

03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|----------|--------|-------|-------|------|
| Int Delay, s/veh | 4.1 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | ↗ | ↑ | ↗ | ↘ | ↑↑ |
| Traffic Vol, veh/h | 2 | 208 | 495 | 7 | 345 | 692 |
| Future Vol, veh/h | 2 | 208 | 495 | 7 | 345 | 692 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | Yield | - | Yield | - | None |
| Storage Length | 0 | 80 | - | 225 | 395 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 4 | 2 | 2 | 3 |
| Mvmt Flow | 2 | 226 | 538 | 8 | 375 | 752 |
| Major/Minor | Minor1 | Major1 | Major2 | | | |
| Conflicting Flow All | 1664 | 538 | 0 | 0 | 538 | 0 |
| Stage 1 | 538 | - | - | - | - | - |
| Stage 2 | 1126 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.23 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.83 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 97 | 542 | - | - | 1028 | - |
| Stage 1 | 584 | - | - | - | - | - |
| Stage 2 | 272 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 62 | 542 | - | - | 1028 | - |
| Mov Cap-2 Maneuver | 62 | - | - | - | - | - |
| Stage 1 | 584 | - | - | - | - | - |
| Stage 2 | 173 | - | - | - | - | - |
| Approach | WB | NB | SB | | | |
| HCM Control Delay, s | 16.8 | 0 | 3.5 | | | |
| HCM LOS | C | | | | | |
| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL | SBT | |
| Capacity (veh/h) | - | - | 62 | 542 | 1028 | - |
| HCM Lane V/C Ratio | - | - | 0.035 | 0.417 | 0.365 | - |
| HCM Control Delay (s) | - | - | 65.2 | 16.3 | 10.5 | - |
| HCM Lane LOS | - | - | F | C | B | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 2 | 1.7 | - |

HCM 6th TWSC
2: Benefield Rd & SR 211 (Tanners Mill Rd)

2b. No Build 2026 PM
03/15/2024

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 317 | 10 | 42 | 204 | 10 | 34 |
| Future Vol, veh/h | 317 | 10 | 42 | 204 | 10 | 34 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 337 | 11 | 45 | 217 | 11 | 36 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 0 | 0 | 348 | 0 | 650 |
| Stage 1 | - | - | - | - | 343 |
| Stage 2 | - | - | - | - | 307 |
| Critical Hdwy | - | - | 4.12 | - | 6.42 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 |
| Pot Cap-1 Maneuver | - | - | 1211 | - | 434 |
| Stage 1 | - | - | - | - | 719 |
| Stage 2 | - | - | - | - | 746 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1211 | - | 416 |
| Mov Cap-2 Maneuver | - | - | - | - | 416 |
| Stage 1 | - | - | - | - | 719 |
| Stage 2 | - | - | - | - | 715 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 1.4 | 11.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 606 | - | - | 1211 | - |
| HCM Lane V/C Ratio | 0.077 | - | - | 0.037 | - |
| HCM Control Delay (s) | 11.4 | - | - | 8.1 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.1 | - |

HCM 6th TWSC
3: SR 53 (Winder Hwy) & Benefield Rd

2b. No Build 2026 PM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|------|-------|-------|
| Int Delay, s/veh | 1.1 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↖ | ↗ | | ↖ | ↗ |
| Traffic Vol, veh/h | 8 | 701 | 484 | 45 | 41 | 1 |
| Future Vol, veh/h | 8 | 701 | 484 | 45 | 41 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 3 | 5 | 2 | 3 | 2 |
| Mvmt Flow | 9 | 746 | 515 | 48 | 44 | 1 |
| Major/Minor | Major1 | Major2 | Minor2 | | | |
| Conflicting Flow All | 563 | 0 | - | 0 | 1303 | 539 |
| Stage 1 | - | - | - | - | 539 | - |
| Stage 2 | - | - | - | - | 764 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.43 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.43 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.527 | 3.318 |
| Pot Cap-1 Maneuver | 1008 | - | - | - | 176 | 542 |
| Stage 1 | - | - | - | - | 583 | - |
| Stage 2 | - | - | - | - | 458 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1008 | - | - | - | 173 | 542 |
| Mov Cap-2 Maneuver | - | - | - | - | 173 | - |
| Stage 1 | - | - | - | - | 574 | - |
| Stage 2 | - | - | - | - | 458 | - |
| Approach | EB | WB | SB | | | |
| HCM Control Delay, s | 0.1 | 0 | 32.3 | | | |
| HCM LOS | | | D | | | |
| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | |
| Capacity (veh/h) | 1008 | - | - | - | 176 | |
| HCM Lane V/C Ratio | 0.008 | - | - | - | 0.254 | |
| HCM Control Delay (s) | 8.6 | 0 | - | - | 32.3 | |
| HCM Lane LOS | A | A | - | - | D | |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 1 | |

FUTURE "BUILD" INTERSECTION ANALYSIS

HCM 6th TWSC

3a. Future Build 2026 AM

1: SR 53 (Winder Hwy)/SR 53/ SR 211 (Winder Hwy) & SR 211 (Tanners Mill Rd)

03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|----------|--------|-------|-------|------|
| Int Delay, s/veh | 9.8 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | ↗ | ↑ | ↗ | ↘ | ↑↑ |
| Traffic Vol, veh/h | 8 | 387 | 576 | 1 | 155 | 389 |
| Future Vol, veh/h | 8 | 387 | 576 | 1 | 155 | 389 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | Yield | - | Yield | - | None |
| Storage Length | 0 | 80 | - | 225 | 395 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 25 | 2 | 5 | 10 | 4 | 8 |
| Mvmt Flow | 8 | 399 | 594 | 1 | 160 | 401 |
| Major/Minor | Minor1 | Major1 | Major2 | | | |
| Conflicting Flow All | 1115 | 594 | 0 | 0 | 594 | 0 |
| Stage 1 | 594 | - | - | - | - | - |
| Stage 2 | 521 | - | - | - | - | - |
| Critical Hdwy | 6.975 | 6.23 | - | - | 4.16 | - |
| Critical Hdwy Stg 1 | 5.775 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.175 | - | - | - | - | - |
| Follow-up Hdwy | 3.7375 | 3.319 | - | - | 2.238 | - |
| Pot Cap-1 Maneuver | 187 | 504 | - | - | 968 | - |
| Stage 1 | 498 | - | - | - | - | - |
| Stage 2 | 510 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | |
| Mov Cap-1 Maneuver | 156 | 504 | - | - | 968 | - |
| Mov Cap-2 Maneuver | 156 | - | - | - | - | - |
| Stage 1 | 498 | - | - | - | - | - |
| Stage 2 | 426 | - | - | - | - | - |
| Approach | WB | NB | SB | | | |
| HCM Control Delay, s | 34 | 0 | 2.7 | | | |
| HCM LOS | D | | | | | |
| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL | SBT | |
| Capacity (veh/h) | - | - | 156 | 504 | 968 | - |
| HCM Lane V/C Ratio | - | - | 0.053 | 0.792 | 0.165 | - |
| HCM Control Delay (s) | - | - | 29.4 | 34.1 | 9.5 | - |
| HCM Lane LOS | - | - | D | D | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 7.3 | 0.6 | - |

HCM 6th TWSC
2: Benefield Rd & SR 211 (Tanners Mill Rd)

3a. Future Build 2026 AM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|-------|-------|-------|
| Int Delay, s/veh | 2.9 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 119 | 29 | 42 | 313 | 72 | 38 |
| Future Vol, veh/h | 119 | 29 | 42 | 313 | 72 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 127 | 31 | 45 | 333 | 77 | 40 |
| Major/Minor | Major1 | Major2 | Minor1 | | | |
| Conflicting Flow All | 0 | 0 | 158 | 0 | 566 | 143 |
| Stage 1 | - | - | - | - | 143 | - |
| Stage 2 | - | - | - | - | 423 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1422 | - | 486 | 905 |
| Stage 1 | - | - | - | - | 884 | - |
| Stage 2 | - | - | - | - | 661 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1422 | - | 467 | 905 |
| Mov Cap-2 Maneuver | - | - | - | - | 467 | - |
| Stage 1 | - | - | - | - | 884 | - |
| Stage 2 | - | - | - | - | 635 | - |
| Approach | EB | WB | NB | | | |
| HCM Control Delay, s | 0 | 0.9 | 13.1 | | | |
| HCM LOS | | | | | | B |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT | |
| Capacity (veh/h) | 561 | - | - | 1422 | - | |
| HCM Lane V/C Ratio | 0.209 | - | - | 0.031 | - | |
| HCM Control Delay (s) | 13.1 | - | - | 7.6 | 0 | |
| HCM Lane LOS | B | - | - | A | A | |
| HCM 95th %tile Q(veh) | 0.8 | - | - | 0.1 | - | |

HCM 6th TWSC
3: SR 53 (Winder Hwy) & Benefield Rd

3a. Future Build 2026 AM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|------|-------|-------|
| Int Delay, s/veh | 3.5 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↕ | ↕ | | ↕ | |
| Traffic Vol, veh/h | 2 | 356 | 607 | 42 | 115 | 7 |
| Future Vol, veh/h | 2 | 356 | 607 | 42 | 115 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 7 | 5 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 379 | 646 | 45 | 122 | 7 |
| Major/Minor | Major1 | Major2 | Minor2 | | | |
| Conflicting Flow All | 691 | 0 | - | 0 | 1052 | 669 |
| Stage 1 | - | - | - | - | 669 | - |
| Stage 2 | - | - | - | - | 383 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 904 | - | - | - | 251 | 458 |
| Stage 1 | - | - | - | - | 509 | - |
| Stage 2 | - | - | - | - | 689 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 904 | - | - | - | 250 | 458 |
| Mov Cap-2 Maneuver | - | - | - | - | 250 | - |
| Stage 1 | - | - | - | - | 507 | - |
| Stage 2 | - | - | - | - | 689 | - |
| Approach | EB | WB | SB | | | |
| HCM Control Delay, s | 0.1 | 0 | 32.5 | | | |
| HCM LOS | | | D | | | |
| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | |
| Capacity (veh/h) | 904 | - | - | - | 257 | |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.505 | |
| HCM Control Delay (s) | 9 | 0 | - | - | 32.5 | |
| HCM Lane LOS | A | A | - | - | D | |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 2.6 | |

HCM 6th TWSC

4: Benefield Rd & Site Drwy 1

3a. Future Build 2026 AM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh | 2.6 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 35 | 17 | 6 | 75 | 60 | 12 |
| Future Vol, veh/h | 35 | 17 | 6 | 75 | 60 | 12 |
| 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 | - | - | - | - | 175 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 38 | 18 | 7 | 82 | 65 | 13 |
| Major/Minor | Minor2 | Major1 | | Major2 | | |
| Conflicting Flow All | 161 | 65 | 78 | 0 | 0 | |
| Stage 1 | 65 | - | - | - | - | |
| Stage 2 | 96 | - | - | - | - | |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 830 | 999 | 1520 | - | - | |
| Stage 1 | 958 | - | - | - | - | |
| Stage 2 | 928 | - | - | - | - | |
| Platoon blocked, % | | | | - | - | |
| Mov Cap-1 Maneuver | 826 | 999 | 1520 | - | - | |
| Mov Cap-2 Maneuver | 826 | - | - | - | - | |
| Stage 1 | 953 | - | - | - | - | |
| Stage 2 | 928 | - | - | - | - | |
| Approach | EB | NB | | SB | | |
| HCM Control Delay, s | 9.4 | 0.5 | | 0 | | |
| HCM LOS | A | | | | | |
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR | |
| Capacity (veh/h) | 1520 | - | 876 | - | - | |
| HCM Lane V/C Ratio | 0.004 | - | 0.065 | - | - | |
| HCM Control Delay (s) | 7.4 | 0 | 9.4 | - | - | |
| HCM Lane LOS | A | A | A | - | - | |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - | |

HCM 6th TWSC

5: Benefield Rd & Site Drwy 2

3a. Future Build 2026 AM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh | 4.5 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 35 | 52 | 18 | 26 | 69 | 12 |
| Future Vol, veh/h | 35 | 52 | 18 | 26 | 69 | 12 |
| 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 | - | 235 | - | - | 175 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 38 | 57 | 20 | 28 | 75 | 13 |
| Major/Minor | Minor2 | Major1 | | Major2 | | |
| Conflicting Flow All | 143 | 75 | 88 | 0 | 0 | |
| Stage 1 | 75 | - | - | - | - | |
| Stage 2 | 68 | - | - | - | - | |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 850 | 986 | 1508 | - | - | |
| Stage 1 | 948 | - | - | - | - | |
| Stage 2 | 955 | - | - | - | - | |
| Platoon blocked, % | | | | - | - | |
| Mov Cap-1 Maneuver | 839 | 986 | 1508 | - | - | |
| Mov Cap-2 Maneuver | 839 | - | - | - | - | |
| Stage 1 | 936 | - | - | - | - | |
| Stage 2 | 955 | - | - | - | - | |
| Approach | EB | NB | | SB | | |
| HCM Control Delay, s | 9.4 | 3 | | 0 | | |
| HCM LOS | A | | | | | |
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR | |
| Capacity (veh/h) | 1508 | - | 921 | - | - | |
| HCM Lane V/C Ratio | 0.013 | - | 0.103 | - | - | |
| HCM Control Delay (s) | 7.4 | - | 9.4 | - | - | |
| HCM Lane LOS | A | - | A | - | - | |
| HCM 95th %tile Q(veh) | 0 | - | 0.3 | - | - | |

HCM 6th TWSC

3b. Future Build 2026 PM

1: SR 53 (Winder Hwy)/SR 53/ SR 211 (Winder Hwy) & SR 211 (Tanners Mill Rd)

03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|----------|--------|-------|-------|------|
| Int Delay, s/veh | 4.9 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | ↗ | ↑ | ↗ | ↘ | ↗↗ |
| Traffic Vol, veh/h | 2 | 245 | 495 | 7 | 405 | 692 |
| Future Vol, veh/h | 2 | 245 | 495 | 7 | 405 | 692 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | Yield | - | Yield | - | None |
| Storage Length | 0 | 80 | - | 225 | 395 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 4 | 2 | 2 | 3 |
| Mvmt Flow | 2 | 266 | 538 | 8 | 440 | 752 |
| Major/Minor | Minor1 | Major1 | Major2 | | | |
| Conflicting Flow All | 1794 | 538 | 0 | 0 | 538 | 0 |
| Stage 1 | 538 | - | - | - | - | - |
| Stage 2 | 1256 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.23 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.83 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 80 | 542 | - | - | 1028 | - |
| Stage 1 | 584 | - | - | - | - | - |
| Stage 2 | 232 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 46 | 542 | - | - | 1028 | - |
| Mov Cap-2 Maneuver | 46 | - | - | - | - | - |
| Stage 1 | 584 | - | - | - | - | - |
| Stage 2 | 133 | - | - | - | - | - |
| Approach | WB | NB | SB | | | |
| HCM Control Delay, s | 18.5 | 0 | 4.1 | | | |
| HCM LOS | C | | | | | |
| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL | SBT | |
| Capacity (veh/h) | - | - | 46 | 542 | 1028 | - |
| HCM Lane V/C Ratio | - | - | 0.047 | 0.491 | 0.428 | - |
| HCM Control Delay (s) | - | - | 87.1 | 17.9 | 11.1 | - |
| HCM Lane LOS | - | - | F | C | B | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 2.7 | 2.2 | - |

HCM 6th TWSC
2: Benefield Rd & SR 211 (Tanners Mill Rd)

3b. Future Build 2026 PM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|-------|-------|-------|
| Int Delay, s/veh | 2.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 317 | 70 | 57 | 204 | 47 | 43 |
| Future Vol, veh/h | 317 | 70 | 57 | 204 | 47 | 43 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 337 | 74 | 61 | 217 | 50 | 46 |
| Major/Minor | Major1 | Major2 | Minor1 | | | |
| Conflicting Flow All | 0 | 0 | 411 | 0 | 713 | 374 |
| Stage 1 | - | - | - | - | 374 | - |
| Stage 2 | - | - | - | - | 339 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1148 | - | 398 | 672 |
| Stage 1 | - | - | - | - | 696 | - |
| Stage 2 | - | - | - | - | 722 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1148 | - | 374 | 672 |
| Mov Cap-2 Maneuver | - | - | - | - | 374 | - |
| Stage 1 | - | - | - | - | 696 | - |
| Stage 2 | - | - | - | - | 679 | - |
| Approach | EB | WB | NB | | | |
| HCM Control Delay, s | 0 | 1.8 | 14.5 | | | |
| HCM LOS | | | B | | | |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT | |
| Capacity (veh/h) | 475 | - | - | 1148 | - | |
| HCM Lane V/C Ratio | 0.202 | - | - | 0.053 | - | |
| HCM Control Delay (s) | 14.5 | - | - | 8.3 | 0 | |
| HCM Lane LOS | B | - | - | A | A | |
| HCM 95th %tile Q(veh) | 0.7 | - | - | 0.2 | - | |

HCM 6th TWSC
3: SR 53 (Winder Hwy) & Benefield Rd

3b. Future Build 2026 PM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|------|-------|-------|
| Int Delay, s/veh | 3.4 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | |
| Traffic Vol, veh/h | 8 | 701 | 484 | 121 | 88 | 1 |
| Future Vol, veh/h | 8 | 701 | 484 | 121 | 88 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 3 | 5 | 2 | 3 | 2 |
| Mvmt Flow | 9 | 746 | 515 | 129 | 94 | 1 |
| Major/Minor | Major1 | Major2 | Minor2 | | | |
| Conflicting Flow All | 644 | 0 | - | 0 | 1344 | 580 |
| Stage 1 | - | - | - | - | 580 | - |
| Stage 2 | - | - | - | - | 764 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.43 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.43 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.527 | 3.318 |
| Pot Cap-1 Maneuver | 941 | - | - | - | 166 | 514 |
| Stage 1 | - | - | - | - | 558 | - |
| Stage 2 | - | - | - | - | 458 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 941 | - | - | - | 163 | 514 |
| Mov Cap-2 Maneuver | - | - | - | - | 163 | - |
| Stage 1 | - | - | - | - | 549 | - |
| Stage 2 | - | - | - | - | 458 | - |
| Approach | EB | WB | SB | | | |
| HCM Control Delay, s | 0.1 | 0 | 53.3 | | | |
| HCM LOS | | | F | | | |
| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | |
| Capacity (veh/h) | 941 | - | - | - | 164 | |
| HCM Lane V/C Ratio | 0.009 | - | - | - | 0.577 | |
| HCM Control Delay (s) | 8.9 | 0 | - | - | 53.3 | |
| HCM Lane LOS | A | A | - | - | F | |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 3 | |

HCM 6th TWSC

4: Benefield Rd & Site Drwy 1

3b. Future Build 2026 PM
03/15/2024

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.9 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 23 | 12 | 19 | 68 | 90 | 38 |
| Future Vol, veh/h | 23 | 12 | 19 | 68 | 90 | 38 |
| 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 | - | - | - | - | 175 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 25 | 13 | 21 | 74 | 98 | 41 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 214 | 98 | 139 | 0 | - | 0 |
| Stage 1 | 98 | - | - | - | - | - |
| Stage 2 | 116 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 774 | 958 | 1445 | - | - | - |
| Stage 1 | 926 | - | - | - | - | - |
| Stage 2 | 909 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 762 | 958 | 1445 | - | - | - |
| Mov Cap-2 Maneuver | 762 | - | - | - | - | - |
| Stage 1 | 912 | - | - | - | - | - |
| Stage 2 | 909 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|-----|----|
| HCM Control Delay, s | 9.6 | 1.6 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1445 | - | 819 | - | - |
| HCM Lane V/C Ratio | 0.014 | - | 0.046 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.6 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

HCM 6th TWSC

5: Benefield Rd & Site Drwy 2

3b. Future Build 2026 PM
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh | 3.5 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 23 | 35 | 57 | 72 | 54 | 38 |
| Future Vol, veh/h | 23 | 35 | 57 | 72 | 54 | 38 |
| 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 | - | 235 | - | - | 175 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 25 | 38 | 62 | 78 | 59 | 41 |
| Major/Minor | Minor2 | Major1 | | Major2 | | |
| Conflicting Flow All | 261 | 59 | 100 | 0 | 0 | |
| Stage 1 | 59 | - | - | - | - | |
| Stage 2 | 202 | - | - | - | - | |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 728 | 1007 | 1493 | - | - | |
| Stage 1 | 964 | - | - | - | - | |
| Stage 2 | 832 | - | - | - | - | |
| Platoon blocked, % | | | | - | - | |
| Mov Cap-1 Maneuver | 697 | 1007 | 1493 | - | - | |
| Mov Cap-2 Maneuver | 697 | - | - | - | - | |
| Stage 1 | 924 | - | - | - | - | |
| Stage 2 | 832 | - | - | - | - | |
| Approach | EB | NB | | SB | | |
| HCM Control Delay, s | 9.5 | 3.3 | | 0 | | |
| HCM LOS | A | | | | | |
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR | |
| Capacity (veh/h) | 1493 | - | 856 | - | - | |
| HCM Lane V/C Ratio | 0.041 | - | 0.074 | - | - | |
| HCM Control Delay (s) | 7.5 | - | 9.5 | - | - | |
| HCM Lane LOS | A | - | A | - | - | |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.2 | - | - | |

HCM 6th TWSC
3: SR 53 (Winder Hwy) & Benefield Rd

4a. Future Build 2026 AM (Improved)
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|------|-------|-------|
| Int Delay, s/veh | 3.3 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↔ | ↕ | ↕ | ↕ | ↕ |
| Traffic Vol, veh/h | 2 | 356 | 607 | 42 | 115 | 7 |
| Future Vol, veh/h | 2 | 356 | 607 | 42 | 115 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 250 | 0 | 175 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 7 | 5 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 379 | 646 | 45 | 122 | 7 |
| Major/Minor | Major1 | Major2 | Minor2 | | | |
| Conflicting Flow All | 691 | 0 | - | 0 | 1029 | 646 |
| Stage 1 | - | - | - | - | 646 | - |
| Stage 2 | - | - | - | - | 383 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 904 | - | - | - | 259 | 472 |
| Stage 1 | - | - | - | - | 522 | - |
| Stage 2 | - | - | - | - | 689 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 904 | - | - | - | 258 | 472 |
| Mov Cap-2 Maneuver | - | - | - | - | 258 | - |
| Stage 1 | - | - | - | - | 520 | - |
| Stage 2 | - | - | - | - | 689 | - |
| Approach | EB | WB | SB | | | |
| HCM Control Delay, s | 0.1 | 0 | 29.9 | | | |
| HCM LOS | | | D | | | |
| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
| Capacity (veh/h) | 904 | - | - | - | 258 | 472 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.474 | 0.016 |
| HCM Control Delay (s) | 9 | 0 | - | - | 30.9 | 12.7 |
| HCM Lane LOS | A | A | - | - | D | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 2.4 | 0 |

HCM 6th TWSC
3: SR 53 (Winder Hwy) & Benefield Rd

4b. Future Build 2026 PM (Improved)
03/15/2024

| Intersection | | | | | | |
|--------------------------|--------|--------|--------|------|-------|-------|
| Int Delay, s/veh | 2.9 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↕ | ↕ | ↕ | ↕ | ↕ |
| Traffic Vol, veh/h | 8 | 701 | 484 | 121 | 88 | 1 |
| Future Vol, veh/h | 8 | 701 | 484 | 121 | 88 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | 250 | 0 | 175 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 3 | 5 | 2 | 3 | 2 |
| Mvmt Flow | 9 | 746 | 515 | 129 | 94 | 1 |
| Major/Minor | Major1 | Major2 | Minor2 | | | |
| Conflicting Flow All | 644 | 0 | - | 0 | 1279 | 515 |
| Stage 1 | - | - | - | - | 515 | - |
| Stage 2 | - | - | - | - | 764 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.43 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.43 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.43 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.527 | 3.318 |
| Pot Cap-1 Maneuver | 941 | - | - | - | 182 | 560 |
| Stage 1 | - | - | - | - | 598 | - |
| Stage 2 | - | - | - | - | 458 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 941 | - | - | - | 179 | 560 |
| Mov Cap-2 Maneuver | - | - | - | - | 179 | - |
| Stage 1 | - | - | - | - | 588 | - |
| Stage 2 | - | - | - | - | 458 | - |
| Approach | EB | WB | SB | | | |
| HCM Control Delay, s | 0.1 | 0 | 44.9 | | | |
| HCM LOS | | | E | | | |
| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
| Capacity (veh/h) | 941 | - | - | - | 179 | 560 |
| HCM Lane V/C Ratio | 0.009 | - | - | - | 0.523 | 0.002 |
| HCM Control Delay (s) | 8.9 | 0 | - | - | 45.3 | 11.4 |
| HCM Lane LOS | A | A | - | - | E | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 2.6 | 0 |

TRAFFIC VOLUME WORKSHEETS

24-027 4370 Benefield Road Residential Development - Hall County, GA - TIS
Traffic Volumes

A&R Engineering
 March 2024

1. SR 53 @ SR 211
A.M. Peak Hour

| Condition | SR 53 (Winder Highway) | | | SR 53/ SR 211 (Winder Highway) | | | - | | | SR 211 (Tanners Mill Road) | | | | | | |
|-------------------------------|------------------------|-----|---|--------------------------------|-----|-----|-----------|-----|---|----------------------------|---|-----|---|---|-----|-----|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | L | T | R | Tot | L | T | R | Tot | L | T | R | Tot | | | | |
| Existing 2024 Traffic Counts: | 0 | 554 | 1 | 555 | 131 | 374 | 0 | 505 | 0 | 0 | 0 | 0 | 8 | 0 | 318 | 326 |
| Growth Factor (%): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No-Build 2026 Volumes: | 0 | 576 | 1 | 577 | 136 | 389 | 0 | 525 | 0 | 0 | 0 | 0 | 8 | 0 | 331 | 339 |
| Total New Trips: | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 |
| Future 2026 Traffic Volumes: | 0 | 576 | 1 | 577 | 155 | 389 | 0 | 544 | 0 | 0 | 0 | 0 | 8 | 0 | 387 | 395 |

P.M. Peak Hour

| Condition | SR 53 (Winder Highway) | | | SR 53/ SR 211 (Winder Highway) | | | - | | | SR 211 (Tanners Mill Road) | | | | | | |
|-------------------------------|------------------------|-----|---|--------------------------------|-----|-----|-----------|------|---|----------------------------|---|-----|---|---|-----|-----|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | L | T | R | Tot | L | T | R | Tot | L | T | R | Tot | | | | |
| Existing 2024 Traffic Counts: | 0 | 476 | 7 | 483 | 332 | 665 | 0 | 997 | 0 | 0 | 0 | 0 | 2 | 0 | 200 | 202 |
| Growth Factor (%): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No-Build 2026 Volumes: | 0 | 495 | 7 | 502 | 345 | 692 | 0 | 1037 | 0 | 0 | 0 | 0 | 2 | 0 | 208 | 210 |
| Total New Trips: | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 37 |
| Future 2026 Traffic Volumes: | 0 | 495 | 7 | 502 | 405 | 692 | 0 | 1097 | 0 | 0 | 0 | 0 | 2 | 0 | 245 | 247 |

24-027 4370 Benefield Road Residential Development - Hall County, GA - TIS
Traffic Volumes

A&R Engineering
 March 2024

2. SR 211 @ Benefield Rd
A.M. Peak Hour

| Condition | Benefield Road Northbound | | | - | | | Southbound | | | SR 211 (Tanners Mill Road) Eastbound | | | SR 211 (Tanners Mill Road) Westbound | | | |
|------------------------------|-------------------------------|----|----|-----|----|---|------------|-----|---|--------------------------------------|-----|-----|--------------------------------------|-----|-----|-----|
| | L | T | R | Tot | L | T | R | Tot | L | T | R | Tot | L | T | R | Tot |
| | Existing 2024 Traffic Counts: | 15 | 0 | 23 | 38 | 0 | 0 | 0 | 0 | 0 | 114 | 10 | 124 | 36 | 301 | 0 |
| Growth Factor (%): | 2 | 2 | 2 | 40 | 2 | 2 | 2 | 0 | 0 | 2 | 2 | 129 | 2 | 2 | 2 | 350 |
| No-Build 2026 Volumes: | 16 | 0 | 24 | 40 | 0 | 0 | 0 | 0 | 0 | 119 | 10 | 129 | 37 | 313 | 0 | 350 |
| Total New Trips: | 56 | 0 | 14 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 19 | 5 | 0 | 0 | 5 |
| Future 2026 Traffic Volumes: | 72 | 0 | 38 | 110 | 0 | 0 | 0 | 0 | 0 | 119 | 29 | 148 | 42 | 313 | 0 | 355 |

P.M. Peak Hour

| Condition | Benefield Road Northbound | | | - | | | Southbound | | | SR 211 (Tanners Mill Road) Eastbound | | | SR 211 (Tanners Mill Road) Westbound | | | |
|------------------------------|-------------------------------|----|----|-----|----|---|------------|-----|---|--------------------------------------|-----|-----|--------------------------------------|-----|-----|-----|
| | L | T | R | Tot | L | T | R | Tot | L | T | R | Tot | L | T | R | Tot |
| | Existing 2024 Traffic Counts: | 10 | 0 | 33 | 43 | 0 | 0 | 0 | 0 | 0 | 305 | 10 | 315 | 40 | 196 | 0 |
| Growth Factor (%): | 2 | 2 | 2 | 44 | 2 | 2 | 2 | 0 | 0 | 2 | 2 | 327 | 2 | 2 | 2 | 246 |
| No-Build 2026 Volumes: | 10 | 0 | 34 | 44 | 0 | 0 | 0 | 0 | 0 | 317 | 10 | 327 | 42 | 204 | 0 | 246 |
| Total New Trips: | 37 | 0 | 9 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 60 | 15 | 0 | 0 | 15 |
| Future 2026 Traffic Volumes: | 47 | 0 | 43 | 90 | 0 | 0 | 0 | 0 | 0 | 317 | 70 | 387 | 57 | 204 | 0 | 261 |

24-027 4370 Benefield Road Residential Development - Hall County, GA - TIS
Traffic Volumes

A&R Engineering
 March 2024

3. SR 53 @ Benefield Rd
A.M. Peak Hour

| Condition | - | | | Benefield Road | | | SR 53 (Winder Highway) | | | SR 53 (Winder Highway) | | | | | |
|-------------------------------|------------|---|---|----------------|---|---|------------------------|---|-----|------------------------|-----|---|-----|----|-----|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | |
| | L | T | R | L | T | R | L | T | R | L | T | R | Tot | | |
| Existing 2024 Traffic Counts: | 0 | 0 | 0 | 43 | 0 | 7 | 50 | 2 | 342 | 0 | 344 | 0 | 584 | 17 | 601 |
| Growth Factor (%): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No-Build 2026 Volumes: | 0 | 0 | 0 | 45 | 0 | 7 | 52 | 2 | 356 | 0 | 358 | 0 | 607 | 18 | 625 |
| Total New Trips: | 0 | 0 | 0 | 70 | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| Future 2026 Traffic Volumes: | 0 | 0 | 0 | 115 | 0 | 7 | 122 | 2 | 356 | 0 | 358 | 0 | 607 | 42 | 649 |

P.M. Peak Hour

| Condition | - | | | Benefield Road | | | SR 53 (Winder Highway) | | | SR 53 (Winder Highway) | | | | | |
|-------------------------------|------------|---|---|----------------|---|---|------------------------|---|-----|------------------------|-----|---|-----|-----|-----|
| | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | |
| | L | T | R | L | T | R | L | T | R | L | T | R | Tot | | |
| Existing 2024 Traffic Counts: | 0 | 0 | 0 | 39 | 0 | 1 | 40 | 8 | 674 | 0 | 682 | 0 | 465 | 43 | 508 |
| Growth Factor (%): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No-Build 2026 Volumes: | 0 | 0 | 0 | 41 | 0 | 1 | 42 | 8 | 701 | 0 | 709 | 0 | 484 | 45 | 529 |
| Total New Trips: | 0 | 0 | 0 | 47 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| Future 2026 Traffic Volumes: | 0 | 0 | 0 | 88 | 0 | 1 | 89 | 8 | 701 | 0 | 709 | 0 | 484 | 121 | 605 |

24-027 4370 Benefield Road Residential Development - Hall County, GA - TIS
Traffic Volumes

A&R Engineering
 March 2024

4. Benefield Rd @ Site Drwy 1

A.M. Peak Hour

| Condition | Benefield Road Northbound | | | Benefield Road Southbound | | | Site Driveway 1 Eastbound | | | Westbound | | |
|-------------------------------|---------------------------|----|---|---------------------------|----|----|---------------------------|----|---|-----------|----|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| | Tot | | | Tot | | | Tot | | | Tot | | |
| Existing 2024 Traffic Counts: | 0 | 38 | 0 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Factor (%): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No-Build 2026 Volumes: | 0 | 40 | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total New Trips: | 6 | 35 | 0 | 0 | 12 | 12 | 24 | 35 | 0 | 17 | 52 | 0 |
| Future 2026 Traffic Volumes: | 6 | 75 | 0 | 0 | 60 | 12 | 72 | 35 | 0 | 17 | 52 | 0 |

P.M. Peak Hour

| Condition | Benefield Road Northbound | | | Benefield Road Southbound | | | Site Driveway 1 Eastbound | | | Westbound | | |
|-------------------------------|---------------------------|----|---|---------------------------|----|----|---------------------------|----|---|-----------|----|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| | Tot | | | Tot | | | Tot | | | Tot | | |
| Existing 2024 Traffic Counts: | 0 | 43 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Factor (%): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No-Build 2026 Volumes: | 0 | 45 | 0 | 0 | 52 | 0 | 52 | 0 | 0 | 0 | 0 | 0 |
| Total New Trips: | 19 | 23 | 0 | 0 | 38 | 38 | 76 | 23 | 0 | 12 | 35 | 0 |
| Future 2026 Traffic Volumes: | 19 | 68 | 0 | 0 | 90 | 38 | 128 | 23 | 0 | 12 | 35 | 0 |

24-027 4370 Benefield Road Residential Development - Hall County, GA - TIS
Traffic Volumes

A&R Engineering
 March 2024

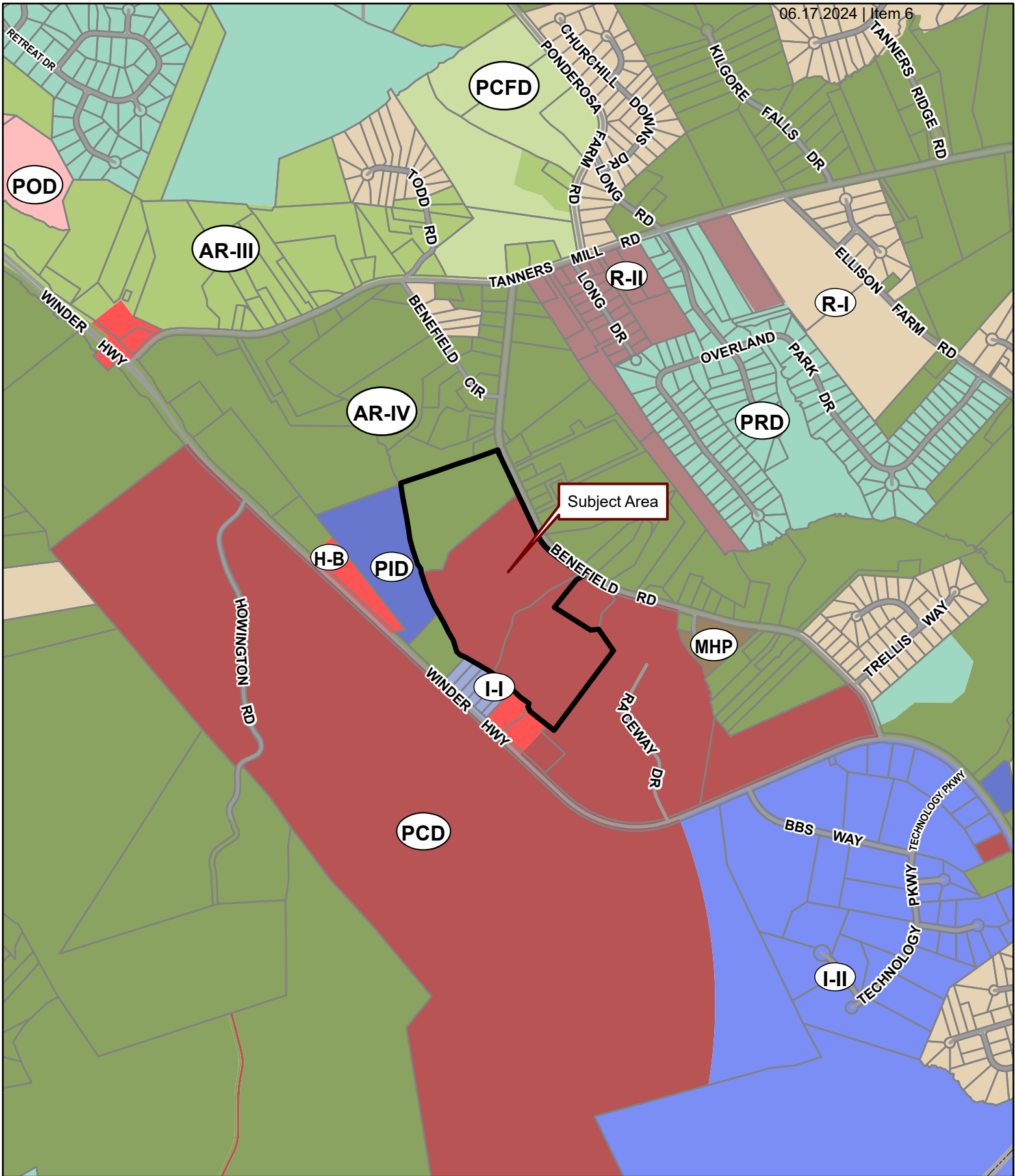
5. Benefield Rd @ Site Drwy 2

A.M. Peak Hour

| Condition | Benefield Road Northbound | | | Benefield Road Southbound | | | Site Driveway 2 Eastbound | | | Westbound | | | |
|-------------------------------|---------------------------|----|---|---------------------------|---|----|---------------------------|----|----|-----------|----|----|---|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| | Tot | | | Tot | | | Tot | | | Tot | | | |
| Existing 2024 Traffic Counts: | 0 | 19 | 0 | 19 | 0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 |
| Growth Factor (%): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No-Build 2026 Volumes: | 0 | 20 | 0 | 20 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | 0 | 0 |
| Total New Trips: | 18 | 6 | 0 | 24 | 0 | 17 | 12 | 29 | 35 | 0 | 52 | 87 | 0 |
| Future 2026 Traffic Volumes: | 18 | 26 | 0 | 44 | 0 | 69 | 12 | 81 | 35 | 0 | 52 | 87 | 0 |

P.M. Peak Hour

| Condition | Benefield Road Northbound | | | Benefield Road Southbound | | | Site Driveway 2 Eastbound | | | Westbound | | | |
|-------------------------------|---------------------------|----|---|---------------------------|---|----|---------------------------|----|----|-----------|----|----|---|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| | Tot | | | Tot | | | Tot | | | Tot | | | |
| Existing 2024 Traffic Counts: | 0 | 51 | 0 | 51 | 0 | 40 | 0 | 40 | 0 | 0 | 0 | 0 | 0 |
| Growth Factor (%): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No-Build 2026 Volumes: | 0 | 53 | 0 | 53 | 0 | 42 | 0 | 42 | 0 | 0 | 0 | 0 | 0 |
| Total New Trips: | 57 | 19 | 0 | 76 | 0 | 12 | 38 | 50 | 23 | 0 | 35 | 58 | 0 |
| Future 2026 Traffic Volumes: | 57 | 72 | 0 | 129 | 0 | 54 | 38 | 92 | 23 | 0 | 35 | 58 | 0 |



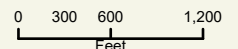
Applicant: EDGE CITY PROPERTIES, INC.

Tax Parcel #: 15028 000014, 000070, & 000090 (PT.)

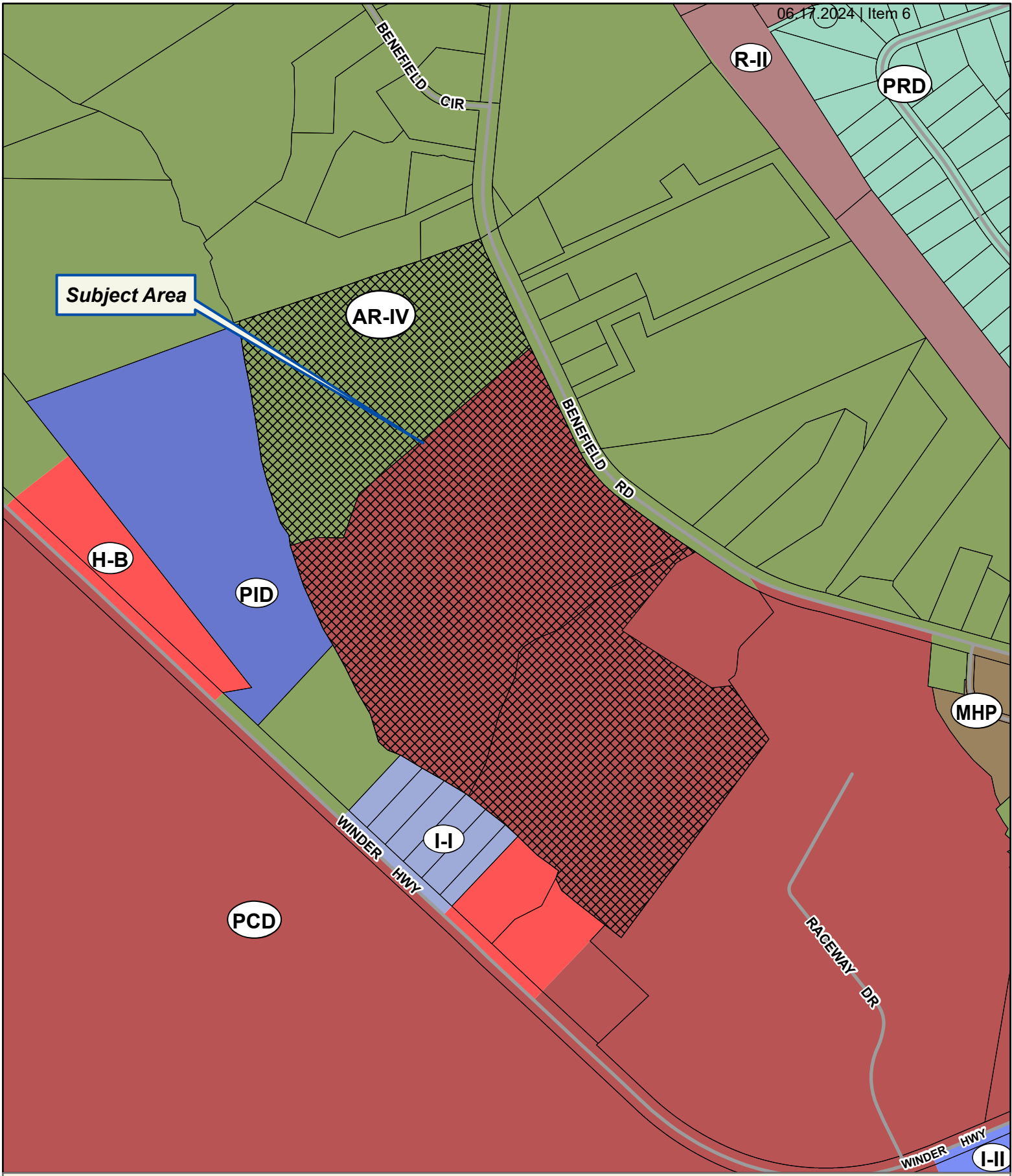
Location: 4336, 4370, & 4420 BENEFIELD ROAD, BRASELTON, GA 30517

Commission District 1

PC Mtg. Date: 06/17/2024



- Zoning Boundary
 - ▭ City Limits
 - ▭ Subject Area
 - ▭ Structure
- N
↑



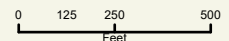
Applicant: EDGE CITY PROPERTIES, INC.

Tax Parcel #: 15028 000014, 000070, & 000090 (PT.)

Location: 4336, 4370, & 4420 BENEFIELD ROAD, BRASELTON, GA 30517

Commission District 1

PC Mtg. Date: 06/17/2024

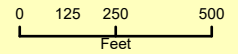


- Zoning Boundary
- ▭ City Limits
- ▨ Subject Area
- ▭ Structure





Applicant: EDGE CITY PROPERTIES, INC.
Tax Parcel #: 15028 000014, 000070, & 000090 (PT.)
Location: 4336, 4370, & 4420 BENEFIELD ROAD, BRASELTON, GA 30517
Commission District 1 **PC Mtg. Date: 06/17/2024**



- Zoning Boundary
- City Limits
- Subject Area

N





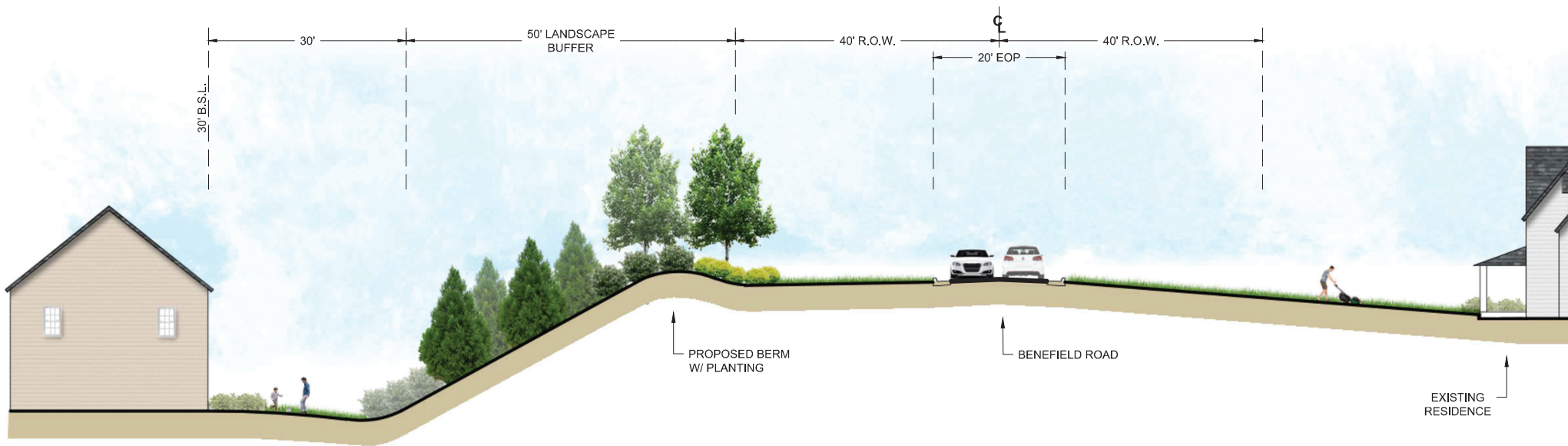
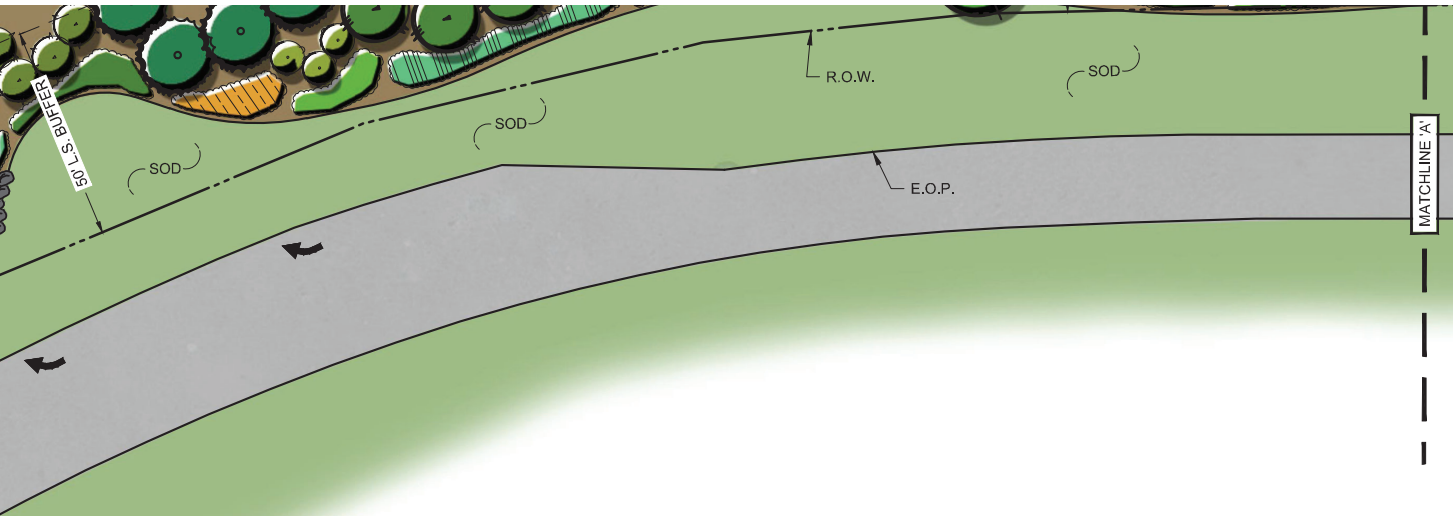




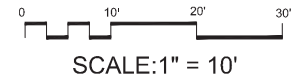








2
1 BENEFIELD ROAD CROSS SECTION
SCALE: 1" = 10'



FILED & RECORDED 03/22/2024 1:42 PM
 DEED BOOK 9450 PAGES 56 - 57
 FILING FEES: \$25.00
 PT61: 069-2024-001848 TRANSFER TAX: \$0.00
 RECORDED BY: MB
 CLERK: Charles Baker, C.S.C. Hall County, GA

After recording, return to:

Phyllis Roshan
 3400 Kates Way
 Duluth, Ga 30097



QUITCLAIM DEED

STATE OF GEORGIA

COUNTY OF HALL

THIS INDENTURE, made the 22nd day of *march*, 2024, by and between **DANISH AND DANİYAL, LLC**, a Georgia limited liability company, as party of the first part, herein called Grantor, and **PHYLLIS H. ROSHAN**, a Georgia resident, as party of the second part, herein called Grantee.

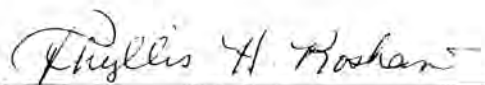
WITNESSETH: That Grantor, for and in consideration of the sum of ONE AND NO/100 dollar (\$1.00) cash in hand paid, and other valuable consideration, the receipt of which is hereby acknowledged, has bargained, sold, and does by these presents bargain, sell, remise, release, and forever quitclaim to Grantee all the right, title, interest, claim, or demand which the Grantor has, or may have had, in and to the following described real property, to wit:

All that certain tract or parcel of land lying and being in Morgan District G.M. number 385, Hall County, Georgia, containing 29.839 acres as shown on a plat survey for the Estate of John Wolford by Farley-Collins Associates, Registered Land Surveyor, dated July, 20, 1988, recorded in Plat Book 131, Page 126, Hall County Plat Records, which plat is hereby referred to, incorporated herein, and made a part of.

TO HAVE AND TO HOLD the said described premises unto the Grantee so that neither the said Grantor, nor any other person or persons claiming under Grantor, shall at any time claim or demand any right, title, or interest to the aforesaid described premises or its appurtenances.

IN WITNESS WHEREOF, the Grantor has signed and sealed this Quitclaim Deed the day and year above written.

GRANTOR: DANISH AND DANİYAL, LLC

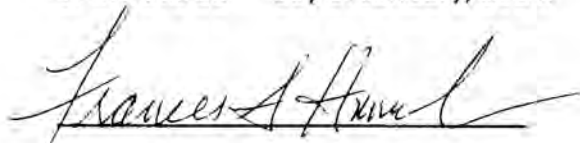


PHYLLIS H. ROSHAN (Member)



Unofficial Witness

Signed, sealed, and delivered in the presence of me this 22nd day of ^{March} ~~January~~, 2024.



Notary Public

My commission expires:



FILED & RECORDED 03/22/2024 1:42 PM
 DEED BOOK 9450 PAGES 58 - 59
 FILING FEES: \$25.00
 PT61: 069-2024-001849 TRANSFER TAX: \$0.00
 RECORDED BY: MB
 CLERK: Charles Baker, C.S.C Hall County, GA

After recording, return to: Phyllis Roshan
 → 3400 Kates Way
 Duluth, Ga 30097

QUITCLAIM DEED

STATE OF GEORGIA

COUNTY OF HALL

THIS INDENTURE, made the 22nd day of ^{March} ~~January~~, 2024, by and between **DANISH AND DANİYAL,LLC**, a Georgia limited liability company, as party of the first part, herein called Grantor, and **PHYLLIS H. ROSHAN**, a Georgia resident, as party of the second part, herein called Grantee.

WITNESSETH: That Grantor, for and in consideration of the sum of ONE AND NO/100 dollar (\$1.00) cash in hand paid, and other valuable consideration, the receipt of which is hereby acknowledged, has bargained, sold, and does by these presents bargain, sell, remise, release, and forever quitclaim to Grantee all the right, title, interest, claim, or demand which the Grantor has, or may have had, in and to the following described real property, to wit:

All that certain tract or parcel of land lying and being in Morgan District G.M.D. 385, Hall County, Georgia, containing 24.677 acres on the southwest side of Old Mill Road a/k/a Benefield Road, being more particularly shown and delineated according to a plat prepared by William H. Collins, GRLS, recorded in Plat Book 131, Page 124, Hall County, Georgia Records, which plat is hereby incorporated for a more complete description.

TO HAVE AND TO HOLD the said described premises unto the Grantee so that neither the said Grantor, nor any other person or persons claiming under Grantor, shall at any time claim or demand any right, title, or interest to the aforesaid described premises or its appurtenances.

IN WITNESS WHEREOF, the Grantor has signed and sealed this Quitclaim Deed the day and year above written.

GRANTOR: DANISH AND DANIYAL, LLC

Phyllis H. Roshan

PHYLLIS H. ROSHAN (Member)

[Signature]

Unofficial Witness

Signed, sealed, and delivered in the presence of me this 22nd day of ~~January~~ ^{March}, 2024.

Frances A. Hamrick

Notary Public

My commission expires: 7-19-2024



Written Description: 24011 Benefield Road (Overall for Zoning)

All that tract or parcel of land lying and being in the Morgan District (Georgia Militia District 385), Hall County, Georgia, and being more particularly described as follows:

TO FIND THE TRUE POINT OF BEGINNING, COMMENCE at a 3/4" crimped top pipe found at the intersection of the southerly right of way of Benefield Road (a.k.a. Old Mill Road) (80' right of way) and the northwest corner of the property now or formerly of Danish and Daniyal, LLC (Deed Book 9040, Page 269), as shown on Plat Book 131, Page 126, Hall County, Georgia records, said point being the **TRUE POINT OF BEGINNING**.

FROM THE TRUE POINT OF BEGINNING AS THUS ESTABLISHED;

thence in an easterly direction along said southerly right of way the following courses and distances:

S25°05'02"E for a distance of 378.68 feet to a point;

S26°27'56"E for a distance of 85.78 feet to a point;

S31°12'28"E for a distance of 64.03 feet to a point;

S38°32'11"E for a distance of 81.27 feet to a point;

S47°45'10"E for a distance of 94.04 feet to a point;

S52°51'10"E for a distance of 49.68 feet to a point;

S54°12'24"E for a distance of 74.08 feet to a point;

S55°14'04"E for a distance of 215.91 feet to a 1/2" rebar set;

thence leaving said southerly right of way S62°08'19"W for a distance of 108.53 feet to a 1/2" rebar

set; thence S48°54'59"W for a distance of 297.65 feet to a 1/2" rebar set; thence S52°53'29"E for a

distance of 489.35 feet to a point; thence N88°22'13"E for a distance of 97.23 feet to a 1/2" rebar set;

thence S31°48'19"E for a distance of 263.67 feet to a 3/4" open top pipe found; thence S37°06'31"W

for a distance of 995.73 feet, more or less, to a point at the centerline of Cooper Creek; thence in a

westerly direction along the centerline of said creek, following the meanderings thereof, for a distance

of 3080.1 feet, more or less, to a point, said creek following a traverse line as follows:

N46°01'42"W for a distance of 330.63 feet to a point;

N14°53'32"E for a distance of 31.63 feet to a point;

N50°10'11"W for a distance of 445.15 feet to a point;

N60°51'14"W for a distance of 367.34 feet to a point;

N30°28'24"W for a distance of 590.42 feet to a point;

N18°39'39"W for a distance of 324.96 feet to a point;

N18°42'25"W for a distance of 429.07 feet to a point;

N10°12'51"W for a distance of 374.71 feet to a point;

N03°00'34"W for a distance of 137.19 feet to a point;

thence leaving the centerline of said creek N70°58'44"E for a distance of 771.13 feet, more or less, to a

1-1/2" open top pipe found; thence N69°39'34"E for a distance of 256.77 feet to a 1/2" rebar set at the

southerly right of way of Benefield Road (a.k.a. Old Mill Road) (80' right of way); thence in a

southeasterly direction along said southerly right of way S20°18'42"E for a distance of 70.99 feet to a

point; thence continuing along said southerly right of way S25°34'02"E for a distance of 412.77 feet to

a 3/4" crimped top pipe found, said point being the **TRUE POINT OF BEGINNING**.

Said tract or parcel of land contains 68.835 acres, more or less.



Hall County Government

BOARD OF COMMISSIONERS

August 17, 2021

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

MP Partners Development, LLC
Attn: Trip Campbell
5289 Winder Highway
Braselton, GA 30517

t: 770.535.8288 | f: 770.531.3972

RE: **Application to Rezone**

CHAIRMAN
Richard P. Higgins

Dear Trip Campbell:

Kathy L. Cooper, District 1
Billy Powell, District 2
Shelly Echols, District 3
Jeff Stowe, District 4

Please be advised that in its Voting Meeting on August 12, 2021, the Hall County Board of Commissioners voted to approve the following application with the listed conditions.

COUNTY ADMINISTRATOR
Jock A. Connell

Application of MP Partners Development, LLC to amend conditions of a Planned Commercial Development on a 1.95± acre tract located on the north side of Winder Highway approximately 1390 feet from its intersection with Raceway Drive; a.k.a. 5295 Winder Highway (pt.); Zoned PCD; Tax Parcel 15028B000001E (pt.). Proposed Use: mixed use commercial development. Commission District 1.

ASSISTANT
COUNTY ADMINISTRATOR
Marty Nix

Conditions:

ASSISTANT
COUNTY ADMINISTRATOR
Zachary T. Propes

1. The development shall generally occur as depicted on the site plan and described in the project narrative, modified for compliance with zoning conditions and Hall County regulations at time of development.
2. The residential portion of the development shall conform to §17.180.060 Planned Residential Development (PRD) standards as it relates to the architectural standards found within §17.180.060.B.9.a.
3. The non-residential components of the development shall be subject to all standards set forth in §17.420.050, Gateway Corridors Overlay District and the architectural standards for non-residential structures shall be approved by the Planning Director prior to the issuance of any permits. All existing elements on site at the time of Rezoning shall be grandfathered. Exceptions to these standards shall be allowed if approved by the Planning Director.
4. The County Traffic Engineer and/or the Georgia Department of Transportation (GDOT) shall approve the location, type and design of all driveways to and from the site.
5. A sewer study shall be conducted prior to the submittal of plans for a land disturbance permit.
6. The following language shall be placed upon the final plat and/or development plans for the property: "Owners and users of this property are informed of motor raceway venues nearby and should expect noise, crowds, and other effects associated with such venues."
7. Any future changes or expansion of the development shall require Board of Commissioners approval.

COUNTY CLERK
Lisa A. Ritchie

8. The following statement regarding the potential impacts of agricultural operations in the area shall be made a part of any plat recorded on the property: "Owners, occupants, and users of property shown on this plat are hereby informed of the impacts associated with normal farming practices which may take place on adjacent and nearby property including, but not limited to, noise, odors, dust, the operation of machinery of any kind, the storage and disposal of manure, and the application of fertilizers, herbicides, and pesticides. Therefore, owners, occupants, and users of the property shown on this plat should be prepared to expect the effects of such practices."
9. A 50 foot, rear of lot, vegetated buffer shall be established around the entirety of the development unless such natural buffer currently exists, with the exception of the road frontage along Winder Highway, Benefield Road and along the western portion of the property which borders existing commercially zoned parcels. Where the existing vegetation does not provide sufficient screening additional plantings may be required. The buffer shall be increases to 100 feet along the northern property line adjacent to the "Race Day Cottages". The buffer of 1 shall remain 50 feet.
10. A wooden fence shall be constructed along the shared boundary between tax parcel 15028B000016 (N/F the property of Rodney Cole) and the proposed development.
11. A fence shall be placed along the rear of the residential lots that front Benefield Road, internal to the development, behind lots 1 through 17 and extending all the way to the creek buffer on the eastern boundary with the exception of where internal roads connect to Benefield Road.
12. All residential lots fronting Benefield Road shall be a minimum of one (1) acre in size and, with the exception of lot 10, shall be accessed through a system of shared driveways or streets with no direct access to Benefield Road permitted. All lots shall be allowed to access Benefield Road from these shared driveways or streets.
13. All property owners shall be the only users approved to access the development from the northern most access point on Benefield Road. This will be managed by gated entry and exit. The remainder of users of the property shall enter from Winder Highway.
14. Rally cross events shall be permitted in daytime hours only.
15. The proposed hotel building if constructed on Tax Parcel 15028B 000015 shall not be any more than four stories in height and shall not be constructed within 550 feet of Benefield Road. A hotel can be constructed on Tax Parcel 15028 B000001 or 15028 B000001E and shall be limited to 70 feet on this parcel only.
16. All car maintenance and repair shall be conducted during the hours between 7:00am and 9:00pm, with the exception of organized races.
17. Right turn only shall be allowed for commercial use exiting the property from Benefield Road.
18. No motor home traffic, commercial/trailer traffic shall be allowed on Benefield Road.
19. The existing emergency exit shall be closed and all emergency access shall be through the residential entrance on Benefield Road.

Please contact me if you have questions or if you require any additional information concerning this action of the Board.

Sincerely,

Lisa A. Ritchie
Hall County Commission Clerk

cc: Sarah McQuade, Director of Planning & Development

Ken & Kathy Davis
304 Cleveland Ferry Road
Fair Play, SC 29643

Project Narrative for Motorplex Atlanta

LOCATION – 5295 Winder Hwy., Braselton, GA 30517

ACREAGE – 137.17 acres +/-

APPLICANT – MP Partners Development, LLC

Summary

The accompanying application seeks zoning district change from PCD & AR-IV to PCD for 137.17 acres of partially developed property located on Winder Highway (SR 53) in south Hall County near the Michelin Raceway Road Atlanta complex. The intent is to develop a mixed use, racing oriented complex that will serve race patrons, car enthusiast and the general public. This narrative will propose a unified set of standards for project. The location and proposed use is consistent with the Hall County Comprehensive Plan's designation as a "Mixed Use Corridor" and appropriate for Hall County's Planned Commercial Development (PCD) District. Completion of development is anticipated by 2026.

Site Description

The combined parcels have approximately 3,700 lf of frontage along Winder Highway (SR 53) and falls within the Hall Gateway district. The site is partially developed with a mix of residential, agricultural and other uses associated with the former Lanier Speedway. The topography is rolling with a mix of hardwood and pines. Domestic water is provided by the City of Gainesville and is located in the Winder Highway right-of-way. Hall County will serve the site with sanitary sewer through a proposed pump station and force main that will connect to an existing force main located in Winder Highway. All other dry utilities are located within a reasonable distance for service extensions. There are no known impediments to its successful development for the purposes stated.

Adjacencies (exhibit B)

The property is surrounded by residential zonings (AR – IV & MHP) and commercial zonings (H-B). The area south of the property and across Winder Highway includes the Road Atlanta complex zoned PCD and an industrial park zoned light industrial (I-II)

Access

Access to the property is proposed from three driveways on Winder Highway (SR 53) and two driveways on Benefield Road.

Proximity to Other Uses

- Nearest distance to undeveloped commercial property – parcel zoned H-B, adjacent to the site.
- Nearest distance to developed commercial property – parcel zoned H-B, adjacent to the site on Winder Highway (golf cart sales).

- Nearest distance to a residential property – parcel zoned AR-IV, adjacent to the site on Benefield Road
- Nearest distance to a subdivision – Ivy Ridge S/D is located adjacent to the property on Benefield Road

Comprehensive Plan Consistency

The project is consistent with the “Mixed Use Corridor” of the Future Land Use Map and numerous Goals, Policies and Objectives of the Comprehensive Plan and is not known or believed to be in conflict with any of the above.

Aerial View



Traffic Impact Study

Based on the number of residential units (not to exceed 100), a traffic study is not required.

Gateway Corridor

A portion of the property falls with the Hall County Gateway Corridor Overlay District. The district specifies standards for all land parcels with 300 feet of the centerline of Winder Highway (SR 53).

Proposed Uses

The developer is planning to create a village concept centered around motorsports and car enthusiasts and with options for recreation, lodging, commercial and residential uses. The complex will be supported internally property owners and externally by patrons of the various use opportunities. The complex will retain the existing, asphalt oval track and paved infield which will be the central focal point of the development. In addition to all the existing permitted uses, the following components are planned:

- Car Condos – fee simple attached buildings featuring garage areas for car collections in a quiet enjoyment environment as well as optional loft living areas. These may also contain commercial functions related car customizing, repair or sales.
- Race Day Cottages – fee simple or rental detached or attached cottages, primarily for use during race weeks.
- Luxury Recreational Vehicle Lots – leased spaces for Recreational Vehicle or motor coach accommodations with water, sewer and power hookups. They may also have outdoor rooms such as pavilions, fire pits, pools or other gathering spaces.
- Single Family Residential – fee simple detached homes located along Benefield Road.
- Event Center – rentable space for private functions and a public access restaurant.
- Retail Village – leased spaces for small retail users or restaurants centered around outdoor gathering areas.
- Commercial Center – fee simple sites for general commercial uses including hotel, retail, professional office and service business users.
- Main Track – existing asphalt oval with paved infield track and midget cart track, proposed rally cross track and proposed cart garage with viewing stands, retail uses such as restaurants, shops, etc. and office uses and suites for viewing events and public gatherings.
- For more detail, see attached Rezoning and Amendment Comparison.

Prior Zoning Actions

Three of the five parcels have been previously rezoned to PCD under separate actions:

- Parcel #15028B 000001 – November 11, 1998
- Parcel #15028B 000015 – October 28, 1999
- Parcel #15028B 000001E – November 11, 1998 (formerly a portion of #15028B 000001)

The fourth & fifth parcels (#15028 000070 & #15028 000090) has an original zoning of AR-IV.

Development Strategy

MP Partners Development, LLC is planning a mixed use development with an emphasis on motorsports related uses and clientele. The development will align well with the existing Michelin Raceway Road Atlanta complex across Winder Highway and the existing oval track on the property. Although racing fans and car enthusiast will be the primary focus, the general public will have access to an event venue and restaurant, hotels and other retail offerings.

In addition to the approvals received under the two prior zoning actions, the applicant is requesting the following amendments and proffered conditions:

- Total square footage of development shall not exceed 400,000 sf on Parcels 15028 000070 & 15028 000090.
- Total square footage of development shall not exceed 400,000 sf on Parcels 15028B 000001E & 15028B 000001E.
- Total number of residential units shall not exceed 100 units on Parcels 15028 000070 & 15028 000090.
- Total number of residential units shall not exceed 100 units on Parcels 15028B 000001E & 15028B 000001E.
- Hotel/Motel use to be allowed on Parcel #15028B 000015
- Overnight accommodations in the motor coach use not to exceed 50 spaces
- Elimination of any maximum square footage related to a single use as long as the overall cap is not exceeded.
- A maximum permanent seating capacity not to exceed 20,000 SF
- Driveways serving the Single Family Residences, Cottages, Luxury RV Areas and Car Condos will be allowed to connect to Benefield Road. No Event traffic will be allowed to use these driveways except for emergency purposes.
- Total residential driveways allowed on Benefield Road not to exceed 18 driveways.
- Parcel #15028B 000015 may access Benefield Road provided that the location does not exceed 600 LF from its intersection with Winder Highway (SR 53)

Project Dimensional Standards

The following dimensional standards will apply to the proposed uses of the development.

| | |
|--|---------------------------------------|
| Development Standards | |
| Planned Commercial Development | |
| Minimum Lot Area (Interior) | 1500 sf |
| Minimum Lot Area (Exterior) | 20,000 sf |
| Front Setback (Interior) | 10 ft |
| Front Setback (Exterior) | 25 ft |
| Side Setback (Interior) | 0 ft |
| Side Setback (Exterior) | 10 ft |
| Rear Setback (Interior) | 10 ft |
| Rear Setback (Exterior) | 10 ft |
| Buffer along West Property Line of Parcel 15028 000070 | 25 ft |
| Buffer along North Property Line of Parcel 15028 B000015 | 50 ft |
| Maximum Building Height | 70 ft |
| Total Acreage | 137.22 Acres |
| Open Space Acreage | 6.00 Acres |
| Maximum Floor Area | See Rezoning and Amendment Comparison |

Conceptual Master Plan

The development of the Motorplex Atlanta shall be controlled by the Conceptual Master Plan (the "Plan") attached as exhibit "A". The plan is considered conceptual in nature, and as such may require modifications during the engineering and development process. Modifications to the locations and arrangement of buildings, roads, and other improvements that do not conflict with specific standards and requirements of these conditions may be made by the Developer or End User, so long as such modifications do not change the land use, increase the overall density of the project or reduce any established exterior buffers or setbacks.



| NO. | DATE | DESCRIPTION | REVISIONS |
|-----|------|-------------|-----------|
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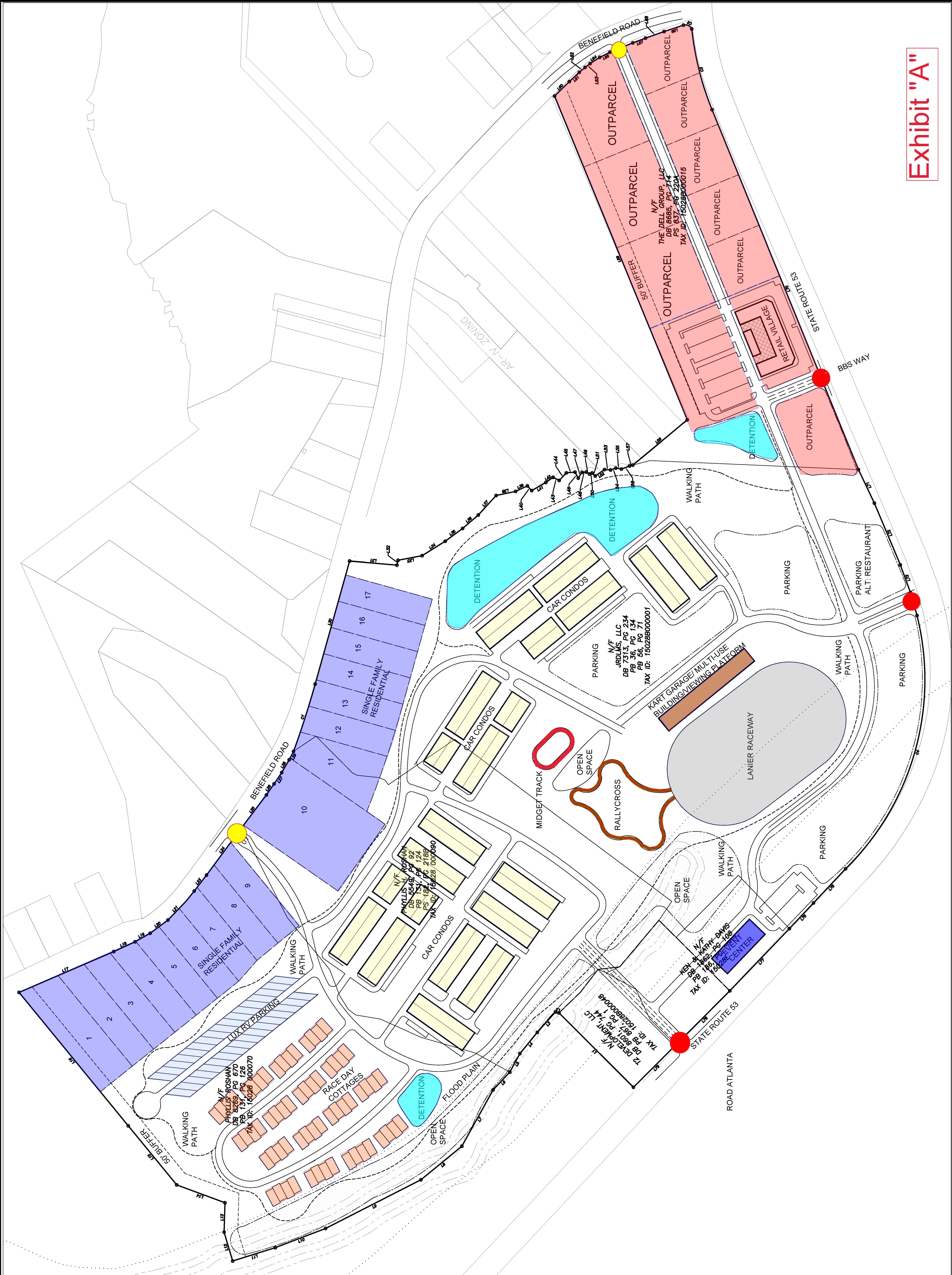
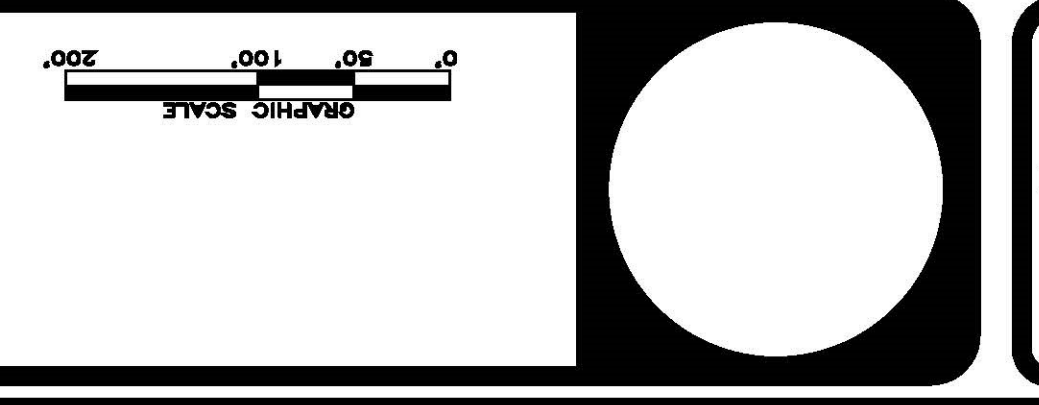
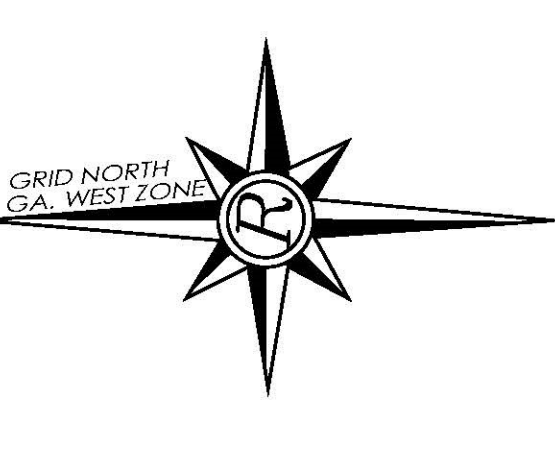


Exhibit "A"



APPLICANT:
 MP DEVELOPMENT PARTNERS, LLC
 5289 WINDER HIGHWAY
 BRASELTON, GEORGIA 30517

EXISTING ZONING: PCD
 PROPOSED ZONING: PCD
 TAX PARCEL NUMBERS:
 150288 000001 5301 WINDER HWY, BRASELTON, GA 30517
 150288 000015 5385 WINDER HWY, BRASELTON, GA 30517

CONCEPT IS DRAWN FROM GIS DATA, PARCEL AREAS, PARCEL BOUNDARIES, FLOOD PLAIN, STREAM LINES AND STREAM BUFFERS AND ARE SUBJECT TO CHANGE

THIS SITE PLACE IS FOR ILLUSTRATIVE PURPOSES ONLY. THE ZONING SHALL NOT BE SITE PLAN SPECIFIC



Hall County Government

PUBLIC WORKS AND UTILITIES

March 27, 2024

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6800 | f: 770.531.3945

Edge City Properties, Inc.
4280 Dove Pt
Duluth, Georgia 30096

Subject: Sanitary Sewer Letter of Availability
4370, 4420, &4336 Benefield Road
Parcel Id No.: **15028 000070, 15028 000090, 15028 000014**
Braselton, GA 30517

BILL NASH, P.E.

Director

Jorge Gomez
Assistant Director

Dear Sir or Madam,

In response to your request, this letter will serve as confirmation that Hall County has sufficient volume to serve 4370, 4420, &4336 Benefield Road Braselton, Ga 30517 for a proposed 302 lot/unit (estimated average daily flow of 60,400 GPD for single-family residence) at this time. The nearest sanitary sewer main to this address is located on Howington Road.

The nearest existing sewer line is located along Howington Road. The proposed homes will gravity flow into a proposed pump station to be constructed on the property and pumped via force main to HWY 53 and then connect via current 12-inch gravity line on Howington Road at developers expense.

Sanitary sewer capacity allocation is available on a first come, first serve basis by purchasing the sewer taps. As such, this "availability" letter does not guarantee capacity. Additionally, this letter is non-transferable. If the project design changes, this letter is void and a new "availability" letter must be obtained.

If you have any questions or need more information, please call the Hall County Public Works and Utilities Department at 770-531-6800.

Sincerely,

Bill Nash

Application for Sewer Availability Letter

Date: 3-18-2024
 Name of Applicant: Edge City Properties, Inc. Contact Number: 770-814-4500
 Address of Applicant: 4280 Dove Pt
 City: Duluth State: GA Zip: 30096 E-mail: mdye@EdgeCP.com
 Name of Agent: Edge City Properties, Inc. Contact Number: Same
 Address of Agent: Same
 City: _____ State: _____ Zip: _____ E-mail: _____

THE APPLICANT NAMED ABOVE AFFIRMS THAT THEY ARE THE OWNER OR AGENT FOR THE OWNER OF THE PROPERTY DESCRIBED BELOW AND REQUESTS: (Please check the purpose of letter request and fill in all applicable information legibly and completely.)

AVAILABILITY: General Availability Rezoning Conditional Use Permit

Availability letters will require a minimum of one week from the date of application submittal.

Request from PCD and AR-IV to PRD
 (Present Zoning) (Requested Zoning)

For the Purpose of Residential development
 (Type of Development)

Address of Property: 4370, 4420 and 4336 Benefield Road, Braselton GA 30517

Nearest Intersection to Property: Benefield/HWY 53

Size of Tract: +/- 68.83 acre(s), Lane Lot Number(s): GMD 385, Morgan, District(s): 1

Development Estimate Average Daily Sewer Flow (GPD): 302 lots x 300 GPD= 90,600

Property Tax Parcel Number: 15028 000014, 15028 000070, 15028 000090 Proposed number of Lots: 302

(Below: For properties within protected watershed districts only)

Gross Density: _____ units per acre Net Density: _____ units per acre

Estimated amount of impervious surface: _____ Minimum Lot Size: _____

[Signature]
 Notary

[Signature]
 Signature of Owner(s)/Agent(s)

Michael Dye
 Printed Name of Owner(s)/Agent(s)

President
 Title of Agent





3/19/2024

Re: LETTER OF INTENT FOR HALL COUNTY SEWER AVAILABILITY

Dear Director Nash:

Edge City Properties, Inc. (the "Applicant") submits this Letter of Intent for the purpose of rezoning to the PRD zoning classification the +/- 68.83 acres of land (the "Property") situated on three parcels of land with addresses of 4336, 4370 and 4420 Benefield Road, Braselton Georgia 30517.

The Applicant proposes to develop the Property to contain a single-family residential master planned community including a total of 302 detached/attached single-family homes.

The proposed homes will gravity flow into a proposed pump station to be constructed on the Property and pumped via force main to HWY 53 and then connect via the current 12-inch gravity line on Howington Road. The project is expected to take four (4) years to complete from LDP permit to final home sale.

The Applicant and its representatives welcome the opportunity to meet with the Hall staff to answer any questions or to address any concerns relating to the matters set forth in this letter.

The Applicant respectfully request your consideration for this Sewer Availability Letter.

Sincerely,

Michael K. Dye
President
Edge City Properties, Inc. as Applicant

Availability Letter Checklist/Summary

Please complete this form when requesting sewer availability letters. Attach the checklist to the application and sign.

ALL DOCUMENTS ARE REQUIRED IN ORDER TO CONSIDER AVAILABILITY;
INCOMPLETE APPLICATION WILL NOT BE ACCEPTED

| REQUIRED ITEMS | COPIES | PROCEDURE | (INITIAL) |
|---|--------|--|------------|
| Application Form (Originals only-No photocopies) | 01 | 1. Signed by owner and notarized . Or 2. Signed by owner's agent and notarized . | <i>MWJ</i> |
| Letter of Intent | 01 | The letter must clearly state the proposed use, development intent, and estimated timeframe for construction. | <i>MWJ</i> |
| Preliminary Site Plan/Layout (24x36 max.) | 01 | Preliminary Site Plan drawn to scale that clearly presents the following minimum details. <ul style="list-style-type: none"> • Location of Proposed Development (Identify all adjacent roads used to access development) • Overall size of proposed development • Land Lot(s) and District(s) of the proposed development • Current and proposed zoning classification • Proposed improvement for the development, for subdivision, show proposed lot layout, identifying total # of lots. • Topography – Clearly label contour information. • Existing sewer line sizes and locations. If an extension of the sewer system is required, site plan must be accompanied with a preliminary routing of the off-site extension. (Preliminary profiles of the proposed sewer routing may be required.) • Estimate sanitary sewer flow along with the method of calculation. • Building, road frontage, north arrow. • The plan/layout must be dated and correspond with the submittal to the County. • All plans/layouts must include a statement of whether or not the property is within a protected watershed district. | <i>MWJ</i> |
| Additional site plan/layout requirements | 01 | If property is within a protected watershed, include proposed minimum lot sizes, estimate of impervious surface, and required stream buffers. | <i>MWJ</i> |

The reviewer may require additional information different from the above depending upon the type of development and/or system requirements. The terms and conditions of an availability letter are subject to all rules and regulations of Hall County Department of Public Works and Utilities. This application is valid only for the real property referenced on this application. This application is not transferable or assignable to any party. Hall County reserves the right to discontinue processing applications at any time without prior notice for any reason, including limited, diminished, or lack of supply and/or demand considerations.

March 26, 2024

Edge City Properties, Inc
Attn: Michael Dye
4280 Dove Pt
Duluth, GA 30096

Re: Water Availability
Proposed 302-Lot Residential Development
4336, 4370, & 4420 Benefield Road
PINs: 15028 000014, 070, & 090

Dear Mr. Dye,

The purpose of this letter is to confirm the availability of water service to the above referenced properties.

The City of Gainesville owns and operates an existing 8-inch DIP water main in the right-of-way of Benefield Road adjacent to the subject property.

Currently, the City has adequate domestic water capacity to serve your proposed 302-lot residential development.

This confirmation of water availability is good for one year from the date of this letter at which time, it will become null and void unless engineered plans have been submitted for issuance of a development permit.

Please call me at (770) 538-2475 should you have any questions.

Sincerely,

Daniel Costantini

Daniel Costantini
Civil Engineer II

cc: Nick Swafford, Permitting Services and GIS Manager
Tracy Robar, P.E., Engineering and Construction Division Manager

Anael Dominguez (CDI: Planning)

From: Emily McGahee (Environmental Health)
Sent: Wednesday, July 17, 2024 11:36 AM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning); Katie L. Greenway (CDI: Planning)
Cc: Kelly Hairston (Environmental Health); Chad Harper (Environmental Health)
Subject: HCPC Tentative Agenda 8.19.24

Please find Environmental Health comments below:

Item 1, 4745 Cagle Mill Road/4673/3691 Noah Martin, Boling: No comment. Public sewer.

Item 2, 4745 Cagle Mill Road, Boling: No comment. Public sewer.

Item 3, 4336/4370/4420 Benefield Road, Edge City Properties: No comment. Public sewer.

Item 4, 3475 Cook Road, Decature Presbyterian Church: All proposed lots must meet Hall County Board of Health Lot Size Resolution requirements. Please note that Zoning approval does not imply approval from other county departments. Further determination will be made during the plat review process. All proposed plats must be submitted to the Hall County Plat Review Team for review and approval prior to submittal to Clerk of Courts for recordation.

Item 5, Short Term Rental Amendment: No comment.

Emily McGahee

Hall County Environmental Health

Hall County Government Center

2875 Browns Bridge Road

Mailing: PO Box 5901

Gainesville, GA 30504

(770) 531-3973 (phone)

emcgahee@hallcounty.org

<http://dph.georgia.gov/environmental-health> (State Website)

<http://www.phdistrict2.org/HallCounty.htm> (District Website)

<https://www.hallcounty.org/192/Environmental-Health> (County Website & Forms)

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Anael Dominguez (CDI: Planning)

From: Chavers, Veronica E <VChavers@dot.ga.gov>
Sent: Thursday, July 18, 2024 1:43 PM
To: Anael Dominguez (CDI: Planning); Beth Garmon (CDI: Planning)
Subject: Re: Tentative Planning Agenda for August 19, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

See responses in red, below.

1. 4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Residential Development (PRD) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 (pt.), 15019 000043 & 15019 000114 | Proposed Use: 349-unit residential development | ** Commission District 3 | Josh Boling, applicant **No GDOT coordination required**
2. 4745 Cagle Mill Road | Rezone | from Agricultural Residential III (AR-III) & Agricultural Residential IV (AR-IV) to Planned Industrial Development (PID) & Gateway Corridors Overlay District (GCOD) | on a 10.59± acre tract located on the east side of Cornelia Highway (GA-365), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax Parcel 15007 00254 (pt.) | Proposed Use: Industrial development | ** Commission District 3 | Josh Boling, applicant **No GDOT coordination required**
3. 4336, 4370, & 4420 Benefield Road | Rezone | from Agricultural Residential IV (AR-IV) and Planned Commercial Development (PCD) to Planned Residential Development (PRD) | on a combined 68.83± acre tract located on the south side of Benefield Road, approximately 900 feet from its intersection with Village South Drive | Zoned AR-IV and PCD; Tax Parcels 15028 000014, 000070, & 000090 (pt.) | Proposed Use: 302-unit residential development | ** Commission District 1 | Edge City Properties, Inc., applicant **No GDOT coordination required**
4. 3475 Cook Road | Use Subject to County Commission Approval | on a 13.91± acre tract located on the east side of Cook Road approximately 1,503 feet from its intersection with Davis Bridge Road | Zoned AR-III & VC; Tax Parcel 10068 000005C | Proposed Use: 6-lot subdivision | ** Commission District 2 | Decatur Presbyterian Church, applicant **No GDOT coordination required**
5. Public Hearing to Amend Section 17.216, Short Term Rental; to modify the standards by which the County regulates Short Term Rentals; and for other purposes. ** | Hall County Planning Staff, applicant. **No GDOT coordination required**

From: Anael Dominguez (CDI: Planning) <adominguez@hallcounty.org>
Sent: Thursday, July 11, 2024 10:04 AM
Subject: Tentative Planning Agenda for August 19, 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Hall County Government
COMMUNITY DEVELOPMENT AND INFRASTRUCTURE
PUBLIC WORKS AND UTILITIES

MEMORANDUM

To: Beth Garmon, Director of Planning and Zoning
From: Bill Nash, Director of Public Works and Utilities
Date: July 18, 2024
Subject: August 19, 2024 - Hall County Planning Commission Agenda

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6800 | f: 770.531.3945

PUBLIC WORKS AND
UTILITIES DIRECTOR

Bill Nash, P.E.

Please be advised that our office has reviewed the Hall County Planning Commission agenda for the August 19, 2024 meeting. Upon review, we provide the following comments.

OLD BUSINESS

1. [4745 Cagle Mill Road, 4673 & 4691 Noah Martin Drive | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Residential Development \(PRD\) | on a combined 130.84± acre tract located on the west side of Cagle Mill Road, at its intersection with Noah Martin Drive | Zoned AR-III & AR-IV; Tax Parcels 15007 000254 \(pt.\), 15019 000043 & 15019 000114 | Proposed Use: 349-unit residential development | ** Commission District 3 | Josh Boling, applicant](#)
 - a. **Engineering:** Property is in major flood area
Show FEMA and Hall County studied Flood plains that are present on site
Property is in north Oconee WPD
Show N. Oconee WPD buffers
No rise study required for construction in flood zone
Roads should be private
 - b. **Traffic:** Roadways are shown as private, however, this should be required.
Access from Cornelia Hwy (SR 365) is shown as private, however, Label indicates “end of county maintained right-of-way” internally. Clarify.
Additional comments may be necessary after clarification.
Fire only access on White Hall Road must be gated and no ability for internal traffic to turn around is provided
Recommend the gravel section of Cagle Mill Road be improved to county paved standards to White Hall Road in order to facilitate site traffic to and from Old Cornelia Hwy.
Site plan indicates a fire only access on Cagle Mill Road labeled as “Gated fire only entrance with Knox Box” However no access is shown. Clarify.
GDOT permit required for Cornelia Hwy (SR 365) access.
 - c. **Utilities:** Hall County lift station on GA 365

2. [4745 Cagle Mill Road | Rezone | from Agricultural Residential III \(AR-III\) & Agricultural Residential IV \(AR-IV\) to Planned Industrial Development \(PID\) & Gateway Corridors Overlay District \(GCOD\) | on a 10.59± acre tract located on the east side of Cornelia Highway \(GA-365\), approximately 4,970 feet from Cagle Road | Zoned AR-III & AR-IV; Tax](#)

Parcel 15007 00254 (pt.) | Proposed Use: Industrial development | **
Commission District 3 | Josh Boling, applicant

- a. **Engineering:** See #6 comments
 - b. **Traffic:** GDOT permit required for Cornelia Hwy (SR365) access.
Very short section of entrance is proposed to be county maintained but should be a private driveway.
 - c. **Utilities:** Hall county lift station on GA 365
3. **4336, 4370, & 4420 Benefield Road | Rezone | from Agricultural Residential IV (AR-IV) and Planned Commercial Development (PCD) to Planned Residential Development (PRD) | on a combined 68.83± acre tract located on the south side of Benefield Road, approximately 900 feet from its intersection with Village South Drive | Zoned AR-IV and PCD; Tax Parcels 15028 000014, 000070, & 000090 (pt.) | Proposed Use: 302-unit residential development | ** Commission District 1 | Edge City Properties, Inc., applicant**
- a. **Engineering:** This site may require a stormwater management report should the site plan indicate the proposed development meets stormwater thresholds for impervious surfaces and/or disturbed acreage.
Show stream buffer and impervious setback from wrested vegetation not centerline of stream.
As this subdivision is greater than 6 lots on an existing road a stormwater management report prepared by a professional engineer will be required.
 - b. **Traffic:** Recommend improvements identified in the traffic impact study be required. Some will require GDOT coordination.
Per County Code, a left turn lane and decel (right) turn lane will be required for both proposed Benefield Road access points. Recommend this be a condition.
Any design elements that do not meet County Code 16.60 will need a variance this includes proposed off-site guest parking areas, distance between intersections, curve radii, minimum length of a cul-da-sac, etc.
 - c. **Utilities:** Nearest sanitary sewer is west access Winder Hwy on howington Rd. – Hall County sewer.

NEW BUSINESS

4. **3475 Cook Road | Use Subject to County Commission Approval | on a 13.91± acre tract located on the east side of Cook Road approximately 1,503 feet from its intersection with Davis Bridge Road | Zoned AR-III & VC; Tax Parcel 10068 000005C | Proposed Use: 6-lot subdivision | ** Commission District 2 | Decatur Presbyterian Church, applicant**
- a. **Engineering:** Show FEMA and Hall County studied Flood plains that are present on site
As this subdivision is greater than 6 lots on an existing road a stormwater management report prepared by a professional engineer will be required.
Cook Drive beyond the cul-de-sac is not Hall County maintained.
Hall County should not accept partial right of way on a road that it does not maintain or have an interest in.
If they want to bring the road up to county specifications, then, as long as the other property owners agree, we would possibly accept the road.

- b. **Traffic:** Non-County maintained, “Privately maintained” roadway – see engineering comments, no additional comments.
- c. **Utilities:** No sanitary sewer near the development

5. [Public Hearing to Amend Section 17.216, Short Term Rental; to modify the standards by which the County regulates Short Term Rentals; and for other purposes. ** | Hall County Planning Staff, applicant.](#)

- a. **Engineering:** No comments
- b. **Traffic:** No comments
- c. **Utilities:** No comments

Anael Dominguez (CDI: Planning)

From: John Hornick (Fire Services)
Sent: Thursday, May 23, 2024 3:59 PM
To: Anael Dominguez (CDI: Planning)
Cc: Beth Garmon (CDI: Planning)
Subject: Fire Comments

Monday, June 17, 2024 Hall County Planning Commission Meeting.

1. [4336, 4370, & 4420 Benefield Road | Rezone | from Agricultural Residential IV \(AR-IV\) and Planned Commercial Development \(PCD\) to Planned Residential Development \(PRD\) | on a combined 68.83± acre tract located on the south side of Benefield Road, approximately 900 feet from its intersection with Village South Drive | Zoned AR-IV and PCD; Tax Parcels 15028 000014, 000070, & 000090 \(pt.\) | Proposed Use: 302-unit residential development | ** Commission District 1 | Edge City Properties, Inc., applicant](#)

The Hall County Fire Marshal's Office considers the plan conceptual in nature, and if approved may require modifications during the development review process.

Regards,

John Hornick, NPQ Fire Service Plans Examiner 1
Lieutenant, Hall County Fire Rescue
Hall County Government
Main: 770-531-6838 | Cell: 404-597-0083
Website: www.Hallcounty.org



ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT: EDGE CITY PROPERTIES, INC

REQUEST: REZONE FROM AR-IV & PCD TO PRD FOR A 302-UNIT RESIDENTIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date AUG 19, 2024

Time: 5:10 P.M.

COUNTY COMMISSION

Date Sept. 24 2024

Time: 6:00 P.M.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT: EDGE CITY PROPERTIES, INC

REQUEST: REZONE FROM AR-IV & PCD TO PRD FOR A 302-UNIT RESIDENTIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

COUNTY COMMISSION

Date: AUG 19, 2024

Date: Sept 24, 2024

Time: 5:15 P.M.

Time: 6:00 P.M.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

ZONING NOTICE

AN APPLICATION HAS BEEN FILED WITH HALL COUNTY IN REGARD TO THE ZONING REGULATIONS AS THEY APPLY TO THIS PROPERTY

APPLICANT: EDGE CITY PROPERTIES, INC

REQUEST: REZONE FROM AR-IV & PCD TO PRD FOR A 302-UNIT RESIDENTIAL DEVELOPMENT

PUBLIC HEARINGS WILL BE HELD ON:

PLANNING COMMISSION

Date: AUG 19, 2024

Time: 5:15 P.M.

COUNTY COMMISSION

Date: Sept. 24, 2024

Time: 6:00 P.M.

HALL COUNTY GOVERNMENT CENTER, 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GA

FOR MORE INFORMATION CALL: (770) 531-6809

Print

Planning Commission Comments - June 17, 2024 - Submission #98321

Date Submitted: 6/13/2024

Comments completed in the form below will be submitted into the record for the April 1, 2024 meeting of the Hall County Planning Commission.

First Name*

Leslie

Last Name*

Kennedy

Address1*

4355 Benefield Rd.

Address2

City*

Braselton

State*

GA

Zip*

30517

Zoning Item for Comment*

4336, 4370, & 4420 Benefield Road

Select from the list below which zoning item you would like to register a comment on. Items are listed in the order in which they appear on the agenda.

Your Comments*

I have many concerns for the Edge City Properties building homes and townhouses across my home. The number of homes and townhouse are way too high for this space in this area on Benefield Rd. They are cramming too many homes and townhouses in this area not acceptable at all .

The traffic is going to be over kill on this street Benefield Rd. if they build the number of homes and townhouses.Please think of the school buses on this street.The traffic would be out of control and many accidents, I see many problems with the 2000 cars up and down this street. This street is not equipped for this, nor is it practical for Benefield Rd.

Another concern of mine is having the houses and townhouses as rentals , this will bring the in crime in and lower the property value of my home .

People already use this Benefield Rd. as a short cut to 53 Hwy or Tanner Mill Rd.speeding through here all hours of the day and night. I ask you to preserver this road and farm setting that it is.

A small sub-division with high quality production with beautiful landscaping is something I would consider save many of the trees for privacy to the road.

I ask you to please consider saving our Benefield Rd.of 2000 cars from becoming a race track street and a death trap for people trying to get in and out of their own driveways.

Ask yourself this ,would you accept this for you and your family. Safety needs to be first here!

Please write your comments in the box above.

File Upload

No file chosen

If you have files, such as photos, videos or text documents to include with your comments, upload them in the box above.

Would you like follow-up communication?

Please leave an email address and/or phone number if you would like a Hall County staff member to follow-up with you.

Print

Planning Commission Comments - June 17, 2024 - Submission #98320

Date Submitted: 6/13/2024

Comments completed in the form below will be submitted into the record for the April 1, 2024 meeting of the Hall County Planning Commission.

First Name*

Martha

Last Name*

Walker

Address1*

4417 Benefield RD

Address2

City*

Braselton

State*

GA

Zip*

30517

Zoning Item for Comment*

4336, 4370, & 4420 Benefield Road

Select from the list below which zoning item you would like to register a comment on. Items are listed in the order in which they appear on the agenda.

Your Comments*

I have lived here all my life from when Benefield RD was dirt, gravel and then paved. It is not equipped to have an additional 2,619 cars daily. There are 15-18 families who lived here longstanding and who have invested here with purpose to live and make their home in this community. We cannot pick up our homes and move and start over as this is where we have lived and plan to pass. The proposed development does not align with the farm equipment, kids, animals, and farm community this road hosts. Your consideration in denying this proposal is appreciated.

Please write your comments in the box above.

File Upload

Choose File No file chosen

If you have files, such as photos, videos or text documents to include with your comments, upload them in the box above.

Print

Planning Commission Comments - June 17, 2024 - Submission #98357

Date Submitted: 6/16/2024

Comments completed in the form below will be submitted into the record for the April 1, 2024 meeting of the Hall County Planning Commission.

First Name*

Brandon

Last Name*

Walker

Address1*

4409 Benefield Road

Address2

City*

Braselton

State*

Ga

Zip*

30517

Zoning Item for Comment*

4336, 4370, & 4420 Benefield Road

Select from the list below which zoning item you would like to register a comment on. Items are listed in the order in which they appear on the agenda.

Your Comments*

The road we live on is a curve small cut thru road from Hwy 53 to Tanners Mill Road. Putting this development on our road with two entrances and exits only on Benefield Road only is going to create chaos for all the family's that have built their homes here, this is going to make our road dangerous and so busy with traffic that people will not even want to leave because of all the traffic congestion. I'm not against some houses being built but 302 units is way too much. Your talking about at least two cars per house which will be at least 604 cars not counting kids and other family members that are going to pile up in these homes also. If these family's have just two kids driving your talking about at least 1200 plus cars a day. The only way to make this possible to be safe for all people involved is to make a Main Entrance off of the Winder Hwy. 53 that will be a four lane road eventually and can have a traffic light installed. The second thing is the units need to be cut down to about half the number. I just ask that you do the right thing for all the family's that have made this place their home for years and think about what it would be like if this development was going across the road from your home knowing what the traffic situation was going to be like.

Please write your comments in the box above.

Print

Planning Commission Comments - June 17, 2024 - Submission #98346

Date Submitted: 6/15/2024

Comments completed in the form below will be submitted into the record for the April 1, 2024 meeting of the Hall County Planning Commission.

First Name*

JAVIER

Last Name*

ANCIETA

Address1*

4361 BENEFIELD RD

Address2

City*

BRASELTON

State*

GA

Zip*

30517

Zoning Item for Comment*

4336, 4370, & 4420 Benefield Road

Select from the list below which zoning item you would like to register a comment on. Items are listed in the order in which they appear on the agenda.

Your Comments*

I Oppose, I will be attending the meeting on June 17th at 5:15 pm

Please write your comments in the box above.

File Upload

IMG.jpeg

If you have files, such as photos, videos or text documents to include with your comments, upload them in the box above.

Would you like follow-up communication?

jancieta1@yahoo.com

Please leave an email address and/or phone number if you would like a Hall County staff member to follow-up with you.



**P1 Properties Group LLC
5301 Winder Highway
Braselton, GA 30517**

September 5, 2024

Mike Dye
President
Edge City Properties, Inc. as Applicant
4280 Dove Pt
Duluth, GA 30096

Re: Letter of Support for Benefield Road PRD zoning HZON24-0014

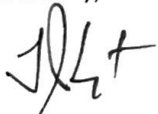
Dear Mike:

Thank you for your time and effort in working with me these past few months on the above-referenced zoning application. This letter is to confirm our conversation and outline the general terms for our support of the above referenced application and site plan dated July 23, 2024, as submitted to Hall County. This agreement is:

1. **SUPPORT FOR DEVELOPMENT.** As the owner/operator of the racetrack, Caffeine and Octane's Lanier Raceway, we support your development. After further consideration, we hereby withdraw the request made at the Public Hearing on August 19, 2024, in which we requested the possibility of a sound barrier being installed on your property. We understand that this is not financially practical for the minimum benefit to the residents of your development. We do request that you make every effort that is financially feasible to reduce the impact of noise that will reach the homes in your development.
2. **COORDINATION OF SEWER LIFT STATION.** We understand that the installation of your sewer lift station to serve your development will provide enhanced value to our Property. As per our discussions, Hall County Public Works has supported that the lift station be installed on our Property to provide us (and upstream adjacent properties) access. In general, we agree to provide the proper and timely easements dedication (at no costs to you) to facilitate this. Such easements will include the lift station area, access, gravity lines to your development and the force main easement to pump to the right-of-way of S.R. 53. All of these easements shall be prepared and created at the sole cost and expense of you as the developer and subject to comment and direction of Hall County. We do understand that time is of the essence in responding to these requests and this agreement is contingent upon such timeliness in executing upon receipt and reasonable review.

We look forward to working with you after a successful rezoning. Please feel free to contact me with any questions you have at 404-862-0862.

Sincerely,



TJ Vogt
P1 Properties Group LLC

HZON24-0014 BOC Meeting Applicant Requested Changes:

6. Both detached single-family homes as well as the townhomes shall include enclosed two-car garages. Front-entry garage orientation may be semi-flush with the garage face positioned a maximum of 8 feet past the front heated square footage plane of the residence. In addition, garages of the detached homes may be recessed from 3' to 20' behind the front heated square footage. Plans shall be similar in architecture as depicted on the renderings submitted April 19, 2024. Garage door width shall not exceed 55% of the width of the front façade of the single-family residences and a maximum garage door width of 75% of the front façade of the townhomes.

23. The residences (townhomes and detached dwellings) shall be composed of a majority of brick or masonry, on the front facade. The sides shall have a two-foot brick water table.

Or Alternate Condition 23:

The residences (townhomes and detached dwellings) shall be composed of all brick/masonry on the front. The sides shall have a two-foot brick water table.

**P1 Properties Group LLC
5301 Winder Highway
Braselton, GA 30517**

September 5, 2024

Mike Dye
President
Edge City Properties, Inc. as Applicant
4280 Dove Pt
Duluth, GA 30096

Re: Letter of Support for Benefield Road PRD zoning HZON24-0014

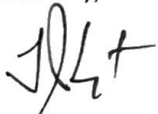
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2. **COORDINATION OF SEWER LIFT STATION.** We understand that the installation of your sewer lift station to serve your development will provide enhanced value to our Property. As per our discussions, Hall County Public Works has supported that the lift station be installed on our Property to provide us (and upstream adjacent properties) access. In general, we agree to provide the proper and timely easements dedication (at no costs to you) to facilitate this. Such easements will include the lift station area, access, gravity lines to your development and the force main easement to pump to the right-of-way of S.R. 53. All of these easements shall be prepared and created at the sole cost and expense of you as the developer and subject to comment and direction of Hall County. We do understand that time is of the essence in responding to these requests and this agreement is contingent upon such timeliness in executing upon receipt and reasonable review.

We look forward to working with you after a successful rezoning. Please feel free to contact me with any questions you have at 404-862-0862.

Sincerely,



TJ Vogt
P1 Properties Group LLC

Jennifer Rivera (Administration)

From: Beth Garmon (CDI: Planning)
Sent: Monday, September 16, 2024 11:34 AM
To: Jennifer Rivera (Administration)
Subject: FW: Applicant items for Benefield Road PRD Zoning
Attachments: Edge City Benefield Plan 7.29 small.jpg; BOC Applicant Requested Changes v2 9.11.24.docx; P1 Properties Support Letter for Edge City 9.9.2024.pdf; Post PC Zoning Plan 9.3.24.pdf

Jennifer,

Please find attached an updated site plan as well as the applicant-requested changes and comments in Mr. Dye's email below. If you would add these items to the Benefield Road zoning file, I would appreciate it.

Thank you,
Beth

Beth Garmon

Director of Planning and Zoning
Hall County Community Development and Infrastructure
(office) 770-531-6809
(direct) 770-297-2626
bgarmon@hallcounty.org

All **ZONING, PLAT**, and **BUILDING PERMIT** submittals may be submitted online through [Accela](#). Plat inquiries may be submitted to plats@hallcounty.org. Zoning and general inquiries may be submitted to planning@hallcounty.org.



From: Mike Dye <mdye@edgecp.com>
Sent: Monday, September 16, 2024 8:39 AM
To: Beth Garmon (CDI: Planning) <bgarmon@hallcounty.org>
Cc: Kathy Cooper (County Commissioner) <kcooper@hallcounty.org>
Subject: Applicant items for Benefield Road PRD Zoning

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Beth:

Good morning. Thank you for your time to discuss my zoning case last week. Per our conversation, please see attached documents and the following items for consideration:

1. **LOT REDUCTION AND INCREASED LOT MINIMUM.** While the attached colored aerial plan was not revised, the "Post PC Zoning Plan 9.3.24" was revised to reflect the PC changes with the nine (9) reduced lots and minimum lot size of 7,000 square feet. Also, a non-disturbed buffer was added along the racetrack property and those townhome units were pulled further away from the property line (approximately 110 feet to the rear building setback).
2. **SOUND BARRIER ISSUE.** The attached support letter from the Caffeine and Octane racetrack owner withdraws their request made at the Planning Commission hearing for a sound barrier. After consideration they have decided my intent to bring sewer to their property and the adjacent Dell property on the corner is providing a substantial benefit to them for future development of their property (already zoned for car condos and a hotel on the Dell property). I still had Road Atlanta make the request.
3. **SOUND BARRIER CONSIDERATION.** While Caffeine and Octane was the first to make the request (now withdrawn), Road Atlanta requested a sound barrier, and I have solicited the input from five (5) well know firms that specialize in noise study/mitigation. Only three were able to provide timely feedback and two submitted written proposals. These were Kimley Horn and Newcomb Boyd. The costs ranged from \$17,000 to \$26,000. Both firms struggled with meeting a BOC deadline of 9/24/24. For the five firms that looked at the site conditions the general consensus was the most effective sound barrier would need to be installed directly by the racetrack (at the ground level with the track) to capture the sound. Generally, the further a home is away from the sound barrier the less effective it is. Even with a sound barrier directly behind the townhomes the benefit is limited the further you move away from the sound barrier. For that reason, I will be prepared to discuss this at the hearing, but I am hoping the withdrawal request for the barrier by my neighbor will allow this issue to be resolved without further action. While I struggle to understand Road Atlanta's standing to make this request, I am happy to conduct further research if instructed by Commissioner Cooper. If that is required, then I would ask a deferral be considered before a vote to remedy this request.
4. **REQUESTED ZONING CONDITION CHANGES BY APPLICANT.** Attached are two Applicant requested changes I would ask to be considered. The first one allows the detached home elevation to be redesigned a little closer to the Hall County requirements that allow the garages to be recessed 3 feet (compared to the Hall County code of 5 feet). Also, I would also ask for the PC condition requiring three sides brick be reconsidered. While the three-side brick increases the cost of the home by \$20,000 I feel like the consumer would like to see more variation in materials as a more "craftsman style" elements are very popular and sell better. Allowing this revision will also improve affordability. Regardless, I will accept the decision by Commissioner Cooper or the entire Commission on this matter.

To conclude, I do feel strongly that the approval of this Application will provide a benefit to community and the surrounding parcels. My commitment to install the \$1.83 million in sewer improvements (on the racetrack property in accordance with Hall County Public Works request) will allow for the potential development of these parcels. In addition, it is an economic reality that the value of the racetrack is eroding, and that site has so much better potential to be redeveloped with a use which is less of a nuisance. For that reason, the owners of the racetrack provided the written support for this Application.

As I am in the final days of preparing for the BOC meeting next week, please let me know if you (or Commissioner Cooper) have any comments or concerns I can be addressing. Again, thank you for your time and efforts in working with me on this request.

Mike Dye
EDGE CITY PROPERTIES, INC.

770-814-4500 Mobile



AGENDA ITEM

Planning & Zoning

REPORT TO: Work Session (09/23/24)

REPORT TO: Voting Meeting (09/24/24)

ITEM NO: 506/2024

SUBJECT: Public Hearing to amend Chapter 17.216 entitled "Short Term Rental" of the Official Code of Ordinances of Hall County, Georgia by deleting the current Chapter 17.216 of the Code of Ordinances in its entirety and inserting the word "Reserved" in place thereof; to amend Section 17.20.540 by deleting the current Section 17.20.540 and inserting a new Section 17.20.540 in lieu thereof; by inserting a new Chapter 5.100 entitled "Short Term Rentals" in Title 5 of the Code of Ordinances of Hall County, Georgia; and to provide for an effective date for said resolution; to repeal conflicting ordinances and resolutions; and for other purposes.

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: BG
Recommendation: Approval

Purpose of Request: Public Hearing to amend Chapter 17.216 entitled "Short Term Rental" of the Official Code of Ordinances of Hall County, Georgia by deleting the current Chapter 17.216 of the Code of Ordinances in its entirety and inserting the word "Reserved" in place thereof; to amend Section 17.20.540 by deleting the current Section 17.20.540 and inserting a new Section 17.20.540 in lieu thereof; by inserting a new Chapter 5.100 entitled "Short Term Rentals" in Title 5 of the Code of Ordinances of Hall County, Georgia; and to provide for an effective date for said resolution; to repeal conflicting ordinances and resolutions; and for other purposes.

History:

Facts and Issues:

Options:

Funding Requested \$ 0.00
Are funds within current budget? No

Source of Funds

Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? Yes

Has it been reviewed by the County Attorney? Yes

Is there a deadline for this item?

Approvals:

| Submit | Approve | Attorney | Administration |
|---------------|----------------|-----------------|-----------------------|
| KE | BG | WLI | CR |
| Clerk | | | |
| JR | | | |

Attachments:

- Board Memo
- Amendment Redlines
- Resolution



Hall County Government

COMMUNITY DEVELOPMENT & INFRASTRUCTURE
PLANNING AND ZONING

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6809 | f: 770.531.3902

PLANNING AND ZONING
DIRECTOR
Beth Garmon

To: Richard Higgins, Chairman
Kathy Cooper, District 1 Commissioner
Billy Powell, District 2 Commissioner
Gregg Poole, District 3 Commissioner
Jeff Stowe, District 4 Commissioner

From: Beth Garmon, Director of Planning & Zoning

Date: September 9, 2024

Subject: Amendment of Section 17.216, Short Term Rental

The request before you is the request of staff to amend Section 17.216, Short Term Rental. This amendment applies to all zoning districts.

At their August 19, 2024 meeting, the Hall County Planning Commission voted to recommend approval **(5-0)**.

There were **no comments submitted** in advance of the Planning Commission meeting and **no one spoke during the public hearing**.



Hall County Government

COMMUNITY DEVELOPMENT & INFRASTRUCTURE
PLANNING AND ZONING

POST OFFICE DRAWER 1435
GAINESVILLE, GA 30503

t: 770.531.6809 | f: 770.531.3902

PLANNING AND ZONING
DIRECTOR
Beth Garmon

To: Richard Higgins, Chairman
Kathy Cooper, District 1 Commissioner
Billy Powell, District 2 Commissioner
Gregg Poole, District 3 Commissioner
Jeff Stowe, District 4 Commissioner

From: Beth Garmon, Director of Planning & Zoning

Date: September 9, 2024

Subject: Amendment of Section 17.216, Short Term Rental

Staff is proposing an amendment to Section 17.216 Short Term Rental as well as Section 17.20 Definitions. Please see the summary below of the recommended changes and the explanation for these modifications:

1. Definition of Guest House – Currently the definition of a guest house is limited in use to a non-paying guest or relative of the occupants of the premises (17.20.540.B), as well as not to be rented (17.20.540.C). Staff recommends that this restriction be removed, allowing guest houses to be used for short term rental. All other language would remain.
2. Section 17.216 Short Term Rental – Currently the section of code which establishes the standards for short term rentals is included in Title 17 of the Official Code of Hall County. Staff recommends that the short term rental regulations be moved to Title 5 – Business Licenses and Regulations as that office now serves as the department which reviews the applications and issues business licenses for short term rentals. Doing so will also provide more clarity for both Business Licenses and code enforcement should short term rental violations occur.
3. Short term rental business license revocations – language has been amended to state that if a short term rental applicant has had their business license revoked within 24 months, no new locations or renewals of an existing location shall be permitted.
4. Life safety – language has been amended to clarify the occupancy limits to 2 guest per bedroom plus 3 guests per short term rental. Staff recommends that the number of bedrooms provided on the short term rental application shall match the number of bedrooms listed on the Hall County property tax card. If the property includes more than 6 bedrooms, the maximum occupancy shall be limited to 15 guests, or the property must meet all life safety code per the Fire Marshal and International Building Code. This may include sprinkler system, fire alarm, and annual inspections.

5. Events and multiple groups – language has been added to restrict the rental of a short term rental to one group at a time, and reservations may only be for less than the entire property if the property is owner-occupied. The short term rental is also restricted from being used as an event venue, and shall not be used to host weddings, parties, or corporate events.

17.20.540. Guest house.

"Guest house" means accessory living quarters situated within a detached or semi-detached site-built structure located on the same premises with the principal residence. Guest houses shall be limited to one such structure per lot and will not include mobile or modular structures. The size of the guest house shall be limited in that the total area of all structures (existing and proposed) shall not be more than 20 percent of the total lot area, if those structures include a guest house. The guest house shall:

- A. Be located a minimum of 20 feet from the principal residence;
- B. ~~Be used by a bona fide non-paying guest or relative of the occupants of the premises; and~~
- C. Not be ~~rented or otherwise~~ occupied as a principal residence.

(Res. of 8-28-78, § 3; Res. of 4-26-91; Code 1991, § 17.20.350; Res. of 2-27-03(1), § 1)

CHAPTER 5.100. SHORT TERM RENTAL

| | |
|------------|--|
| 5.100.010. | Purpose. |
| 5.100.020. | Zoning districts. |
| 5.100.030. | Applicability. |
| 5.100.040. | Definitions. |
| 5.100.050. | Property owners, local contact person, and responsible person. |
| 5.100.060. | Business license and tax, and transferability. |
| 5.100.070. | Standard operational requirements and conditions. |
| 5.100.080. | Violation and penalties. |

5.100.010. Purpose.

- A. The purpose of this chapter is to establish standards for short term rentals of privately owned residential structures used as vacation homes and rented to transient occupants, minimize adverse effects of short term rental uses on surrounding residential neighborhoods, and preserve the character of neighborhoods in which vacation home use occurs.
- B. This chapter is not intended to regulate hotels, motels, inns, or non-vacation type rental arrangements including, but not limited to, boardinghouses, lodging houses, or rooming houses.

5.100.020. Zoning districts.

Short term rentals are permitted in all residential zoning districts.

5.100.030. Applicability.

- A. It shall be unlawful for any owner of any property within the unincorporated areas of the county to rent or operate a short term rental of residential property contrary to the procedures and regulations established in this chapter, other provisions of this Code, or any applicable state law.
- B. The restrictions and obligations contained in this chapter shall apply to short term rentals at all times during which such vacation homes are marketed and used as short term rentals.
- C. The allowance of short term rentals pursuant to this section shall not prevent enforcement of additional restrictions that may be contained in restrictive covenants or other private contractual agreements or arrangements.

5.100.040. Definitions.

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

Managing agency or agent. A person, firm or agency representing an owner or owners of a short term rental.

Noise regulations. Those regulations contained in the Official Code of Hall County, Georgia, chapter 8.80, noise control.

Officer of the county. The officer or officers who are authorized by O.C.G.A. §§ 41-2-7 through 41-2-17 and by this chapter of the Official Code of Hall County to exercise the powers prescribed by such ordinances or any agent of such officer or officers.

Owner. A person that holds legal and/or equitable title to private property.

Private. Intended for or restricted to the occupants and/or guests of his or her short term rental; not for public use.

Property. A residential legal lot of record on which a short term rental is located.

Rental term. The period of time a responsible person rents or leases a short term rental.

Short term rental. The transient occupancy of a vacation home, rented for the purpose of overnight lodging for a period of not less than two nights and not more than 30 consecutive nights.

5.100.050. Property owners, local contact person, and responsible person.

A. *Property owners.*

1. The owner and/or local contact person shall use reasonably prudent business practices to ensure the short term rental is used in a manner that complies with all applicable laws, rules, and regulations pertaining to the use and occupancy of the subject vacation home, and shall further use reasonably prudent business practices to ensure the occupants and/or guests of the vacation home do not create noise in violation of the noise regulations of this Code or disturbances, engage in disorderly conduct, or violate any applicable law, rule or regulation pertaining to the use and occupancy of the subject vacation home.

B. *Local contact person.*

1. Each owner of a short term rental shall designate a local contact person who has access and authority to assume management of the short term rental and take remedial measures while the short term rental is being rented to an occupant and/or guest. An owner of a short term rental may designate himself or herself as the local contact person.
2. The local contact person shall be at least 21 years of age.
3. There shall only be one designated local contact person for a short term rental at any given time.
4. The local contact person shall be required to respond to the location of the short term rental 24 hours a day, seven days a week, and within one hour after being notified by the county of the existence of a violation of this chapter or any other provision of this Code, or any disturbance or complaint requiring immediate remedy or abatement regarding the condition, operation, or conduct of occupants of the short term rental.
5. An owner may retain a managing agent, managing agency, operator, or representative to serve as the local contact person to comply with the requirements of this section, including, without limitation, the licensing of the short term rental, the management of the short term rental, and the compliance with the conditions of the license. The owner of the short term rental is responsible for compliance with the provisions of this section and the failure of an agent, representative, or local contact person to comply with this section shall be deemed noncompliance by the owner.
6. The owner must immediately notify the county business license department in writing upon a change of local contact person or the local contact person's telephone number. This notification will be on forms prescribed by the business license department. The new, revised business license, which will not extend the expiration date of the business license, will be issued for a fee of \$25.00; must be posted in the vacation home within ten days of any change of local contact person information and before occupants can rent the short term rental; and updated notices mailed out to all residential neighbors per section 5.100.060 of this Code.

C. *Responsible person.*

1. Each rental party of the short term rental shall have an occupant designated to be the responsible person.

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2. The responsible person must be at least 25 years of age.
 3. The responsible person is legally responsible for ensuring that all occupants and/or guests of the short term rental comply with all applicable laws, rules and regulations pertaining to the use and occupancy of the subject short term rental.

5.100.060. Business license and tax, and transferability.

A. Business license and tax.

1. The owner shall pay all required excise tax per section 3.40.020 of this Code;
2. No owner or local contact person of a short term rental shall rent that vacation home without first applying for and registering the business per section 3.40.060 of this Code;
3. The owner shall comply with all other applicable provisions of chapter 3.40 of this Code;
4. The owner shall obtain a business license for said short term rental and comply with all applicable provisions of title 5 of this Code for business licenses and regulations;
5. A separate business license shall be required for each vacation home used for short term rental;
6. A business license application **for a new location, or renewal of an existing location**, may be denied if the applicant has had ~~a prior short term rental for the same home or location~~ any Hall County short term rental license revoked within ~~12~~ **24** months of the application;
7. A business license application will be denied if the property for which the business license is sought is subject to one or more covenants proscribing or restricting the use of the property as a short term rental.
8. The following additional information shall be required to be submitted with each application for a business license for a short term rental:
 - (a) The name, address, telephone number, and e-mail address of the local contact person for the short term rental;
 - (b) The number of bedrooms and approximate square footage in the short term rental, and the maximum number of overnight and daytime occupants;
 - (c) Acknowledgement that the owner and local contact person have read all regulations pertaining to the operation of a short term rental;
 - (d) True and correct copies of any and all covenants to which the property sought to be used as a short term rental is subjected, together with a sworn statement on a form prescribed by the county on which the owner and applicant swear under oath that the property is subject to no covenants other than those which have been provided to the county by the owner and applicant.

B. All business licenses issued pursuant to this chapter are subject to the following standard conditions:

1. The owner or local contact person shall, by written agreement with the responsible person, limit overnight occupancy of the short term rental to the specific number of overnight occupants designated in the business license application;
 2. Prior to permitting occupancy of a short term rental by a transient occupant, the owner or the local contact person shall:
 - (a) Obtain the name, address, and a copy of a valid government identification of the responsible person;
 - (b) Provide information about the short term rental regulations to the responsible person; and
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- (c) Provide and require that such responsible person execute a formal acknowledgement that he or she is legally responsible for compliance by all occupants and/or guests of the vacation home with all applicable laws, rules and regulations pertaining to the use and occupancy of the short term rental.
- 3. Parked vehicles:
 - (a) Shall not be parked on the county right-of-way or along any roadways at any time; and
 - (b) Shall be parked outdoors on the property only on designated hard surfaced areas with gravel, concrete or asphalt surfacing; and shall not be permitted outside such hard surfaced areas (i.e., no parking in yards or neighbor's properties).
 - 4. The owner and/or local contact person shall use best efforts to ensure that the occupants and/or guests of the short term rental do not violate the noise regulations set forth in title 8 of this Code by notifying the occupants of the rules regarding short term rentals and responding when notified that occupants are violating laws regarding their occupancy. It is not intended that the owner and/or local contact person act as a peace officer or place himself or herself in harm's way;
 - 5. The owner and/or local contact person shall use best efforts to ensure that the occupants and/or guests of the short term rental do not violate the domestic animal regulations set forth in title 4 of this Code by notifying the occupants of the rules regarding short term rentals and responding when notified that occupants are violating laws regarding their occupancy. It is not intended that the owner and/or local contact person act as a peace officer or place himself or herself in harm's way;
 - 6. The owner and/or local contact person of the short term rental shall post a copy of the business license and a copy of the conditions set forth in this chapter in a conspicuous place within the short term rental;
 - 7. All business licenses issued under this chapter shall be valid for no more than one year, beginning on the date of issuance and expiring on December 31st of that year; and
 - 8. Upon the issuance of a new short term rental business license, or an updated local contact person, or a change in business license name, the county shall mail a notice to all residences within 500 feet of the property line of the short term rental notifying the neighbors that a short term rental business license has been issued and providing information regarding how to lodge complaints regarding the short term rental, if any.
- C. *Transferability.*
 - 1. No business license issued under this section shall be transferred or assigned or used by any person other than the owner or local contact person to whom it is issued, or at any location other than the one for which it is issued.

5.100.070. Standard operational requirements and conditions.

- A. *Parked vehicles.* All parked vehicles at the short term rental shall comply with all applicable provisions of section 5.100.060 of this Code.
- B. *Life safety and sanitation.*
 - 1. The occupancy shall be limited to two **adults guests** per bedroom plus three **adults additional guests** per each short term rental property. The bedroom(s) shall be inspected by Hall County prior to the issuance of a certificate of occupancy (CO). **If a whole house is being used as a STR, the bedroom count must also match the Hall County property tax records. If the property has more than 6 bedrooms, the maximum occupancy shall be limited to fifteen guests total, or the applicant must meet all life safety codes including installation of a sprinkler system, fire alarm, and annual fire inspection.**

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2. Short term rentals shall meet **all** applicable International Building Code, ~~and~~ International Fire Code, **and Life Safety Code as adopted by the State**. For properties that are served by septic, short term rentals shall meet **all** applicable Environmental Health regulations.
 3. Short term rentals shall meet applicable state department of natural resources and the county public safety regulations.
 4. The owner and/or local contact person shall maintain a house number that is visible from the street at all times.
 5. **A short-term rental license is limited to one reservation at any time. Short-rentals may not be less than whole house unless the property is owner-occupied; in such cases, rentals shall also be limited to one reservation at any time.**
 6. **A short-term rental may not be advertised as an event venue and may not be used by the guests to accommodate weddings, parties, corporate events, or similar functions.**

5.100.080. Violation and penalties.

A. Violation.

1. The following conduct shall constitute a violation for which the penalties specified in paragraph D. of this section 5.100.080 may be imposed, or the business license suspended or revoked:
 - (a) The owner or local contact person has violated any of the provisions of this chapter; or
 - (b) The owner or local contact person has violated any zoning, building, health or life safety provision; or
 - (c) The owner or local contact person has failed to comply with all applicable provisions of chapter 3.40 of this Code.
2. Any violation of the provisions of this section by occupants and/or guests of the short term rental shall be enforced pursuant to this section, and any other applicable Code sections. Enforcement actions may be brought against occupants and/or guests of a short term rental for violations of this section and any other provision of this Code notwithstanding that this section may also make the owner or local contact person of the short term rental responsible for the conduct constituting the violation.
3. Any advertising of the short term rental shall conform to information included in the short term rental business license and requirements of this section, and shall include notification of the maximum occupancy, and provisions regulating noise.

B. Abandonment. The abandonment or failure to use a residence as a short term rental for a period of 12 consecutive months for any period shall be deemed an abandonment of the rental use and the owner shall be required to obtain a new business license for the property.

C. Complaints.

1. The complaining party shall first attempt to communicate with the owner or local contact person designated and describe the situation that is out of compliance with this Code;
2. If the complaint is not resolved with the owner or local contact person, then the complaining party may next provide a written complaint to the county marshal which shall include a description of the complaint, the attempts to resolve the complaint, and the complaining party's contact information.

D. Penalties.

1. The penalties for violations specified in section 5.100.080 of this Code shall be as follows:

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- (a) For the first violation within any 12-month period, the penalty shall be a written notice of violation and a fine not to exceed \$500.00;
 - (b) For a second violation within any 12-month period, the penalty shall be a written notice of violation and a fine not to exceed \$1,000.00;
 - (c) For a third violation within any 12-month period, the penalty shall be a written notice of violation, a fine not to exceed \$2,000.00, the business license shall be revoked for a period of 24 months, and the owner or local contact person shall not be eligible to reapply for a business license on the property in violation for a period of 24 months from the date of revocation.
2. A short term rental that is determined to be operating without the necessary business license required under this section shall subject the owner to a penalty of \$500.00. Each day the short term rental is marketed or rented for overnight accommodation shall constitute a separate violation.
 3. Failure of the owner or local contact person to respond to calls or complaints regarding the condition, operation, or conduct of occupants and/or guests of the short term rental in a timely and appropriate manner shall be grounds for imposition of penalties as set forth in this chapter. It is not intended that an owner or local contact person act as a peace officer or place himself or herself in an at-risk situation.
 4. In addition to the penalties described above, any person violating the provisions of this chapter by operating a short term rental without a valid business license may be prosecuted according to the general penalties described in section 1.50.020 of this Code.

E. *Enforcement.*

1. Penalties, including a notice of violation, shall be imposed, and business licenses shall be revoked, in the manner provided in this chapter.
 - (a) Complaints shall result in a notice of the complaint being directed to the local contact person designated in the business license. The local contact person shall be responsible for contacting the responsible person to correct the problem within one hour. This local contact person is required to visit the property to confirm compliance with this chapter, unless compliance can reasonably be confirmed without visiting the property.
 - (b) If non-compliance with provisions of this section occurs, the business license department or officer of the county shall conduct an investigation whenever there is reason to believe that an owner and/or local contact person has failed to comply with the provisions of this chapter. The investigation may include an inspection of the premises, review of law enforcement/security reports, online searches, citations, or neighbor documentation consisting of photos, sound recordings and video all of which may constitute evidence of a violation. Should the investigation support a finding that a violation occurred, the business license department or designee shall issue written notice of the violation and intention to impose a penalty and/or revoke the business license. The written notice may be served either by first class mail, by commercial overnight delivery, by personal service on the owner and/or local contact person, or by any other reasonable means of delivery, including email, and shall specify the facts which, in the opinion of the business license department, constitute grounds for imposition of the penalties and/or revocation, and specify that the penalties will be imposed and/or that the business license will be revoked 15 calendar days from the date of the notice unless the owner and/or local contact person files with the business license department a request for an appeal hearing before the board of commissioners. In considering such appeal, the board of commissioners shall determine whether the business license department has erred in his/her interpretation and/or enforcement of this chapter.
 - (c) The business license department or officer of the county is hereby authorized and directed to establish such procedures, as specified in title 5 of this Code, which may from time to time be required to carry out the purpose and intent of this chapter. The county marshal and/or the county sheriff or his or her designee shall also have authority to enforce this chapter.

STATE OF GEORGIA
COUNTY OF HALL

A RESOLUTION TO AMEND THE CODE OF ORDINANCES OF HALL COUNTY
WITH REGARD TO THE SHORT TERM RENTALS AND GUEST HOUSES

WHEREAS, Hall County has enacted ordinances entitled “Short Term Rental” that include provisions relating to Short Term Rentals found in Chapter 17.216 of The Official Code of Hall County, Georgia; the definition of “Guest House” found in Section 17.20.540 of The Official Code of Hall County, Georgia, and Title 5 of The Official Code of Hall County, Georgia, and

WHEREAS, the County has conducted a review and analysis of said Chapter 17.216, Section 17.20.540, and Title 5 of its Official Code and determined that revisions to said Chapter, and Section and Title are warranted; and

WHEREAS, the warranted changes include changes to the standards by which the County regulates Short Term Rentals; and

WHEREAS, the changes to said Chapter 17.216, Section 17.20.540, and Title 5 of the Official Code of Hall County are attached hereto as Exhibit A, Exhibit B, and Exhibit C; and

WHEREAS, the Board of Commissioners has determined that the revisions to Chapter 17.216, Section 17.20.540, and Title 5 of The Official Code of Hall County, Georgia attached hereto as Exhibit A, Exhibit B, and Exhibit C are in the best interest of the residents of Hall County, and will promote the health, safety, and general welfare of the residents and businesses in Hall County.

NOW, THEREFORE, the Board of Commissioners does hereby amend The Official Code of Hall County, Georgia as follows:

1.

Chapter 17.216 and Section 17.20.540 of The Official Code of Hall County are hereby amended by deleting Chapter 17.216 in its entirety and by inserting in lieu, thereof, the word “RESERVED” and deleting Section 17.20.540 in its entirety and replacing it exactly as described in Exhibit B attached hereto, and inserting a new Chapter 5.100 entitled “Short Term Rentals” in Title 5 exactly as described in Exhibit C attached hereto.

2.

The remaining provisions of The Official Code of Hall County shall remain as they were, unchanged by this amendment.

SO RESOLVED, this the _____ day of _____, 2024.

HALL COUNTY BOARD OF COMMISSIONERS

By: _____
Richard Higgins, Chairman

ATTEST:

Jennifer Rivera, County Clerk

APPROVED AS TO FORM:

William J. Linkous III, County Attorney

CHAPTER 17.216. RESERVED

17.20.540. Guest house.

"Guest house" means accessory living quarters situated within a detached or semi-detached site-built structure located on the same premises with the principal residence. Guest houses shall be limited to one such structure per lot and will not include mobile or modular structures. The size of the guest house shall be limited in that the total area of all structures (existing and proposed) shall not be more than 20 percent of the total lot area, if those structures include a guest house. The guest house shall:

- A. Be located a minimum of 20 feet from the principal residence;
- B. Not be occupied as a principal residence.

CHAPTER 5.100. SHORT TERM RENTAL

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| 5.100.010. | Purpose. |
| 5.100.020. | Zoning districts. |
| 5.100.030. | Applicability. |
| 5.100.040. | Definitions. |
| 5.100.050. | Property owners, local contact person, and responsible person. |
| 5.100.060. | Business license and tax, and transferability. |
| 5.100.070. | Standard operational requirements and conditions. |
| 5.100.080. | Violation and penalties. |

5.100.010. Purpose.

- A. The purpose of this chapter is to establish standards for short term rentals of privately owned residential structures used as vacation homes and rented to transient occupants, minimize adverse effects of short term rental uses on surrounding residential neighborhoods, and preserve the character of neighborhoods in which vacation home use occurs.
- B. This chapter is not intended to regulate hotels, motels, inns, or non-vacation type rental arrangements including, but not limited to, boardinghouses, lodging houses, or rooming houses.

5.100.020. Zoning districts.

Short term rentals are permitted in all residential zoning districts.

5.100.030. Applicability.

- A. It shall be unlawful for any owner of any property within the unincorporated areas of the county to rent or operate a short term rental of residential property contrary to the procedures and regulations established in this chapter, other provisions of this Code, or any applicable state law.
- B. The restrictions and obligations contained in this chapter shall apply to short term rentals at all times during which such vacation homes are marketed and used as short term rentals.
- C. The allowance of short term rentals pursuant to this section shall not prevent enforcement of additional restrictions that may be contained in restrictive covenants or other private contractual agreements or arrangements.

5.100.040. Definitions.

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

Managing agency or agent. A person, firm or agency representing an owner or owners of a short term rental.

Noise regulations. Those regulations contained in the Official Code of Hall County, Georgia, chapter 8.80, noise control.

Officer of the county. The officer or officers who are authorized by O.C.G.A. §§ 41-2-7 through 41-2-17 and by this chapter of the Official Code of Hall County to exercise the powers prescribed by such ordinances or any agent of such officer or officers.

Owner. A person that holds legal and/or equitable title to private property.

Private. Intended for or restricted to the occupants and/or guests of his or her short term rental; not for public use.

Property. A residential legal lot of record on which a short term rental is located.

Rental term. The period of time a responsible person rents or leases a short term rental.

Short term rental. The transient occupancy of a vacation home, rented for the purpose of overnight lodging for a period of not less than two nights and not more than 30 consecutive nights.

5.100.050. Property owners, local contact person, and responsible person.

A. *Property owners.*

1. The owner and/or local contact person shall use reasonably prudent business practices to ensure the short term rental is used in a manner that complies with all applicable laws, rules, and regulations pertaining to the use and occupancy of the subject vacation home, and shall further use reasonably prudent business practices to ensure the occupants and/or guests of the vacation home do not create noise in violation of the noise regulations of this Code or disturbances, engage in disorderly conduct, or violate any applicable law, rule or regulation pertaining to the use and occupancy of the subject vacation home.

B. *Local contact person.*

1. Each owner of a short term rental shall designate a local contact person who has access and authority to assume management of the short term rental and take remedial measures while the short term rental is being rented to an occupant and/or guest. An owner of a short term rental may designate himself or herself as the local contact person.
2. The local contact person shall be at least 21 years of age.
3. There shall only be one designated local contact person for a short term rental at any given time.
4. The local contact person shall be required to respond to the location of the short term rental 24 hours a day, seven days a week, and within one hour after being notified by the county of the existence of a violation of this chapter or any other provision of this Code, or any disturbance or complaint requiring immediate remedy or abatement regarding the condition, operation, or conduct of occupants of the short term rental.
5. An owner may retain a managing agent, managing agency, operator, or representative to serve as the local contact person to comply with the requirements of this section, including, without limitation, the licensing of the short term rental, the management of the short term rental, and the compliance with the conditions of the license. The owner of the short term rental is responsible for compliance with the provisions of this section and the failure of an agent, representative, or local contact person to comply with this section shall be deemed noncompliance by the owner.
6. The owner must immediately notify the county business license department in writing upon a change of local contact person or the local contact person's telephone number. This notification will be on forms prescribed by the business license department. The new, revised business license, which will not extend the expiration date of the business license, will be issued for a fee of \$25.00; must be posted in the vacation home within ten days of any change of local contact person information and before occupants can rent the short term rental; and updated notices mailed out to all residential neighbors per section 5.100.060 of this Code.

C. *Responsible person.*

1. Each rental party of the short term rental shall have an occupant designated to be the responsible person.

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2. The responsible person must be at least 25 years of age.
 3. The responsible person is legally responsible for ensuring that all occupants and/or guests of the short term rental comply with all applicable laws, rules and regulations pertaining to the use and occupancy of the subject short term rental.

5.100.060. Business license and tax, and transferability.

A. *Business license and tax.*

1. The owner shall pay all required excise tax per section 3.40.020 of this Code;
2. No owner or local contact person of a short term rental shall rent that vacation home without first applying for and registering the business per section 3.40.060 of this Code;
3. The owner shall comply with all other applicable provisions of chapter 3.40 of this Code;
4. The owner shall obtain a business license for said short term rental and comply with all applicable provisions of title 5 of this Code for business licenses and regulations;
5. A separate business license shall be required for each vacation home used for short term rental;
6. A business license application for a new location, or renewal of an existing location, may be denied if the applicant has had any Hall County short term rental license revoked within 24 months of the application;
7. A business license application will be denied if the property for which the business license is sought is subject to one or more covenants proscribing or restricting the use of the property as a short term rental.
8. The following additional information shall be required to be submitted with each application for a business license for a short term rental:
 - (a) The name, address, telephone number, and e-mail address of the local contact person for the short term rental;
 - (b) The number of bedrooms and approximate square footage in the short term rental, and the maximum number of overnight and daytime occupants;
 - (c) Acknowledgement that the owner and local contact person have read all regulations pertaining to the operation of a short term rental;
 - (d) True and correct copies of any and all covenants to which the property sought to be used as a short term rental is subjected, together with a sworn statement on a form prescribed by the county on which the owner and applicant swear under oath that the property is subject to no covenants other than those which have been provided to the county by the owner and applicant.

B. All business licenses issued pursuant to this chapter are subject to the following standard conditions:

1. The owner or local contact person shall, by written agreement with the responsible person, limit overnight occupancy of the short term rental to the specific number of overnight occupants designated in the business license application;
2. Prior to permitting occupancy of a short term rental by a transient occupant, the owner or the local contact person shall:
 - (a) Obtain the name, address, and a copy of a valid government identification of the responsible person;
 - (b) Provide information about the short term rental regulations to the responsible person; and

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- (c) Provide and require that such responsible person execute a formal acknowledgement that he or she is legally responsible for compliance by all occupants and/or guests of the vacation home with all applicable laws, rules and regulations pertaining to the use and occupancy of the short term rental.
- 3. Parked vehicles:
 - (a) Shall not be parked on the county right-of-way or along any roadways at any time; and
 - (b) Shall be parked outdoors on the property only on designated hard surfaced areas with gravel, concrete or asphalt surfacing; and shall not be permitted outside such hard surfaced areas (i.e., no parking in yards or neighbor's properties).
 - 4. The owner and/or local contact person shall use best efforts to ensure that the occupants and/or guests of the short term rental do not violate the noise regulations set forth in title 8 of this Code by notifying the occupants of the rules regarding short term rentals and responding when notified that occupants are violating laws regarding their occupancy. It is not intended that the owner and/or local contact person act as a peace officer or place himself or herself in harm's way;
 - 5. The owner and/or local contact person shall use best efforts to ensure that the occupants and/or guests of the short term rental do not violate the domestic animal regulations set forth in title 4 of this Code by notifying the occupants of the rules regarding short term rentals and responding when notified that occupants are violating laws regarding their occupancy. It is not intended that the owner and/or local contact person act as a peace officer or place himself or herself in harm's way;
 - 6. The owner and/or local contact person of the short term rental shall post a copy of the business license and a copy of the conditions set forth in this chapter in a conspicuous place within the short term rental;
 - 7. All business licenses issued under this chapter shall be valid for no more than one year, beginning on the date of issuance and expiring on December 31st of that year; and
 - 8. Upon the issuance of a new short term rental business license, or an updated local contact person, or a change in business license name, the county shall mail a notice to all residences within 500 feet of the property line of the short term rental notifying the neighbors that a short term rental business license has been issued and providing information regarding how to lodge complaints regarding the short term rental, if any.
- C. *Transferability.*
 - 1. No business license issued under this section shall be transferred or assigned or used by any person other than the owner or local contact person to whom it is issued, or at any location other than the one for which it is issued.

5.100.070. Standard operational requirements and conditions.

- A. *Parked vehicles.* All parked vehicles at the short term rental shall comply with all applicable provisions of section 5.100.060 of this Code.
 - B. *Life safety and sanitation.*
 - 1. The occupancy shall be limited to two guests per bedroom plus three additional guests per each short term rental property. The bedroom(s) shall be inspected by Hall County prior to the issuance of a certificate of occupancy (CO). If a whole house is being used as a STR, the bedroom count must also match the Hall County property tax records. If the property has more than 6 bedrooms, the maximum occupancy shall be limited to fifteen guests total, or the applicant must meet all life safety codes including installation of a sprinkler system, fire alarm, and annual fire inspection.
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2. Short term rentals shall meet all applicable International Building Code, International Fire Code, and Life Safety Code as adopted by the State. For properties that are served by septic, short term rentals shall meet all applicable Environmental Health regulations.
 3. Short term rentals shall meet applicable state department of natural resources and the county public safety regulations.
 4. The owner and/or local contact person shall maintain a house number that is visible from the street at all times.
 5. A short-term rental license is limited to one reservation at any time. Short-rentals may not be less than whole house unless the property is owner-occupied; in such cases, rentals shall also be limited to one reservation at any time.
 6. A short-term rental may not be advertised as an event venue and may not be used by the guests to accommodate weddings, parties, corporate events, or similar functions.

5.100.080. Violation and penalties.

A. *Violation.*

1. The following conduct shall constitute a violation for which the penalties specified in paragraph D. of this section 5.100.080 may be imposed, or the business license suspended or revoked:
 - (a) The owner or local contact person has violated any of the provisions of this chapter; or
 - (b) The owner or local contact person has violated any zoning, building, health or life safety provision; or
 - (c) The owner or local contact person has failed to comply with all applicable provisions of chapter 3.40 of this Code.
2. Any violation of the provisions of this section by occupants and/or guests of the short term rental shall be enforced pursuant to this section, and any other applicable Code sections. Enforcement actions may be brought against occupants and/or guests of a short term rental for violations of this section and any other provision of this Code notwithstanding that this section may also make the owner or local contact person of the short term rental responsible for the conduct constituting the violation.
3. Any advertising of the short term rental shall conform to information included in the short term rental business license and requirements of this section, and shall include notification of the maximum occupancy, and provisions regulating noise.

B. *Abandonment.* The abandonment or failure to use a residence as a short term rental for a period of 12 consecutive months for any period shall be deemed an abandonment of the rental use and the owner shall be required to obtain a new business license for the property.

C. *Complaints.*

1. The complaining party shall first attempt to communicate with the owner or local contact person designated and describe the situation that is out of compliance with this Code;
2. If the complaint is not resolved with the owner or local contact person, then the complaining party may next provide a written complaint to the county marshal which shall include a description of the complaint, the attempts to resolve the complaint, and the complaining party's contact information.

D. *Penalties.*

1. The penalties for violations specified in section 5.100.080 of this Code shall be as follows:

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- (a) For the first violation within any 12-month period, the penalty shall be a written notice of violation and a fine not to exceed \$500.00;
 - (b) For a second violation within any 12-month period, the penalty shall be a written notice of violation and a fine not to exceed \$1,000.00;
 - (c) For a third violation within any 12-month period, the penalty shall be a written notice of violation, a fine not to exceed \$2,000.00, the business license shall be revoked for a period of 24 months, and the owner or local contact person shall not be eligible to reapply for a business license on the property in violation for a period of 24 months from the date of revocation.
2. A short term rental that is determined to be operating without the necessary business license required under this section shall subject the owner to a penalty of \$500.00. Each day the short term rental is marketed or rented for overnight accommodation shall constitute a separate violation.
 3. Failure of the owner or local contact person to respond to calls or complaints regarding the condition, operation, or conduct of occupants and/or guests of the short term rental in a timely and appropriate manner shall be grounds for imposition of penalties as set forth in this chapter. It is not intended that an owner or local contact person act as a peace officer or place himself or herself in an at-risk situation.
 4. In addition to the penalties described above, any person violating the provisions of this chapter by operating a short term rental without a valid business license may be prosecuted according to the general penalties described in section 1.50.020 of this Code.

E. *Enforcement.*

1. Penalties, including a notice of violation, shall be imposed, and business licenses shall be revoked, in the manner provided in this chapter.
 - (a) Complaints shall result in a notice of the complaint being directed to the local contact person designated in the business license. The local contact person shall be responsible for contacting the responsible person to correct the problem within one hour. This local contact person is required to visit the property to confirm compliance with this chapter, unless compliance can reasonably be confirmed without visiting the property.
 - (b) If non-compliance with provisions of this section occurs, the business license department or officer of the county shall conduct an investigation whenever there is reason to believe that an owner and/or local contact person has failed to comply with the provisions of this chapter. The investigation may include an inspection of the premises, review of law enforcement/security reports, online searches, citations, or neighbor documentation consisting of photos, sound recordings and video all of which may constitute evidence of a violation. Should the investigation support a finding that a violation occurred, the business license department or designee shall issue written notice of the violation and intention to impose a penalty and/or revoke the business license. The written notice may be served either by first class mail, by commercial overnight delivery, by personal service on the owner and/or local contact person, or by any other reasonable means of delivery, including email, and shall specify the facts which, in the opinion of the business license department, constitute grounds for imposition of the penalties and/or revocation, and specify that the penalties will be imposed and/or that the business license will be revoked 15 calendar days from the date of the notice unless the owner and/or local contact person files with the business license department a request for an appeal hearing before the board of commissioners. In considering such appeal, the board of commissioners shall determine whether the business license department has erred in his/her interpretation and/or enforcement of this chapter.
 - (c) The business license department or officer of the county is hereby authorized and directed to establish such procedures, as specified in title 5 of this Code, which may from time to time be required to carry out the purpose and intent of this chapter. The county marshal and/or the county sheriff or his or her designee shall also have authority to enforce this chapter.



AGENDA ITEM

Public Works and Utilities

REPORT TO: Work Session (09/23/24)

REPORT TO: Voting Meeting (09/24/24)

ITEM NO: 513/2024

SUBJECT: Approval and authorization for the Chairman to execute a renewal application for the WaterFirst Program; authorization for the Chairman to execute any and all documents necessary to effectuate the program's renewal, subject to review and approval by the County Attorney.

Meetings:

Work Session Date: 09/23/24

Voting Meeting Date: 09/24/24

Executive Summary:

Presenter: BN

Recommendation:
Approve

Purpose of Request:

Approval and authorization for the Chairman to execute a renewal application for the WaterFirst Program; authorization for the Chairman to execute any and all documents necessary to effectuate the program's renewal, subject to review and approval by the County Attorney.

History:

Hall County was designated a WaterFirst county in 2019 and requires renewal every 5 years.

Facts and Issues:

Options:

The WaterFirst Program is a voluntary partnership between local governments, state agencies, and other organizations working together to increase the quality of life in communities through the wise management and protection of our valuable water resources. This proactive approach to water resources requires local governments to make the connection between land use and water quality, and it requires thinking beyond political boundaries to recognize the inextricable links created by shared water resources.

WaterFirst Renewal - Benefits include Statewide recognition for environmental stewardship, 1 (one) percent interest rate reduction on GEFA loans, Annual eligibility for water-related project applications to the Community Development Block Grant Program through the Georgia Department of Community Affairs, and priority status for the 319(h) Grant Program administered by the Georgia Environmental Protection Division.

Funding Requested \$ 0.00
Are funds within current budget? No
Source of Funds
Does the action involve a Resolution, Ordinance, Contract, Agreement, etc.? No
Has it been reviewed by the County Attorney? No
Is there a deadline for this item? 2024-10-31

Approvals:

| | | | |
|-----------------|-----------------------|---------------|----------------|
| Submit | Approve | Budget | Finance |
| BN | WK | DA | TS |
| Attorney | Administration | Clerk | |
| WLI | CR | JR | |

Attachments:

WaterFirst Renewal Application
WaterFirst Renewal Supporting Document

WaterFirst

CARING FOR OUR WATER RESOURCES

Georgia Environmental Finance Authority WaterFirst Program Renewal Application

The WaterFirst Program is a voluntary partnership between local governments, state agencies, and other organizations working together to increase the quality of life in communities through the wise management and protection of our valuable water resources. This proactive approach to water resources requires local governments to make the connection between land use and water quality, and it requires thinking beyond political boundaries to recognize the inextricable links created by shared water resources. The intended result of WaterFirst is achieving excellence beyond the current water regulations in nine major categories:

- Watershed assessment,
- Stormwater master planning,
- Wastewater treatment and management,
- Water supply planning,
- Water supply protection,
- Water conservation,
- Water reclamation and reuse,
- Educational outreach; and
- Regional water planning.

To continue qualifying for WaterFirst incentives, communities must be recertified every five years. It has been five years since your designation or renewal. GEFA needs to evaluate your programs to ensure that your community is still achieving environmental excellence. If you have questions regarding this renewal application, please contact waterresources@gefa.ga.gov.

Renewal Application Deadline

The deadline for submitting the renewal application is the last business day of October.

Please submit one digital copy of the application to waterresources@gefa.ga.gov.

I. Applicant Information

Please check one: Individual City or County or Multi-Jurisdictional Partnership

City/County of: Hall County

Address: PO Drawer 1435

City: Gainesville Zip Code: 30503

Phone: (770) 535-8288 Fax: _____

Email: bnash@hallcounty.org

Name of Person Completing Application: William King

Title: Assistant Public Works Director

Address: PO Drawer 1435

City: Gainesville Zip Code: 30503

Phone: (770) 531-6800 Cell (770) 329-0863 Fax: _____

Email: wking@hallcounty.org

II. Community Profile

(If applying as a partnership, please answer the following questions for each partner, separate pages may be added.)

Are you currently a Qualified Local Government? Yes

In what water basin(s) are you located?

| | | |
|---------|---------------------|--------------|
| 3070101 | UPPER OCONEE | Altamaha |
| 3130001 | UPPER CHATTAHOOCHEE | Apalachicola |
| 3060104 | BROAD | Savannah |

Have your water services that were provided at designation changed? If so, how? We are no longer in the Water Service Business. We transferred our water infrastructure to the various local municipalities as appropriate. We retained our sanitary sewer infrastructure and utilize the local municipalities for billing through the water service.

Has your service area changed? If so, how? The latest Service Delivery Strategy we sold our water service to the various localities as appropriate. We are still in the sanitary sewer business in the unincorporated areas.

How many residents does each service support? **Water:** 0 - We have agreements with local municipalities to provide water service.

Sanitary Sewer: Approximately 5,000 billed through the various municipal water systems.

| HALL COUNTY, GEORGIA SEWER CONNECTION REVISED Through END of JUNE 2024 | Capacity (GPD) | Equivalent Residential Units (ERU) | Prepurchased | |
|--|-------------------|--|--------------------|--------------------|
| | | | Units Purchased | Remaining Units |
| Spout Springs WRF | 750,000 | 3750 | | |
| Reunion (pre-purchased taps) | 180,000 | 900 | 900 | 0 |
| Reunion (beyond pre-purchased taps) | 7,000 | 35 | 35 | 0 |
| Sterling on The Lake | 399,400 | 1997 | 1997 | 0 |
| Hall County Schools | 89,200 | 446 | 446 | 0 |
| NNP Looper Lake | 500 | 2.5 | 2.5 | 0 |
| Frank Duncan @ 7114 Williams Road | 1,000 | 5 | 5 | 0 |
| Frank Duncan @ 7108 Williams Road | 1,000 | 5 | 5 | 0 |
| Cambridge | 11,000 | 55 | 53 | 2 |
| Prince of Peace | 1,600 | 8 | 1 | 7 |
| Lancaster | 36,200 | 181 | 6 | 175 |
| Clark Farms | 73,000 | 365 | 31 | 334 |
| Cherokee Bluff Middle School | 5,000 | 25 | 25 | 0 |
| Chateau Elan | 17,200 | 86 | 86 | 0 |
| NEGA Medical Center | 20,000 | 100 | 60 | 40 |
| Sub-Total | -92,100 | 4,211 | 3,653 | 98 |

HALL COUNTY CAPITAL ASSET

| Total Capacity purchased by Gainesville | 1,000,000 | | | |
|---|----------------|---------------|--------------|--------------|
| Mulberry Sewer System | | 1,250 | 0 | 1,250 |
| Village of Deaton Creek | 240,000 | 1200 | 1200 | 0 |
| World Language Academy | 1,600 | 8 | 8 | 0 |
| Road Atlanta | 1,600 | 8 | 8 | 0 |
| 4740 Younblood Road - Private Resident | 200 | 1 | 1 | 0 |
| Union Grove | 30,000 | 150 | 150 | 0 |
| Union Heights Amenity | 200 | 1 | 1 | 0 |
| Union Heights | 25,000 | 125 | 30 | 95 |
| Flowery Branch Peace of Mind | 200 | 1 | 1 | 0 |
| Sub-Total | | 1,494 | 1,399 | -149 |
| North Hall/SR365 Sewer System | | 3,750 | | |
| Auto Metal Direct | 1,600 | 8 | 8 | 0 |
| Georgia Poultry Lab | 1,600 | 8 | 8 | 0 |
| Kubota | 1,000 | 5 | 5 | 0 |
| Lanier Cold Storage | 500 | 2.5 | 2.5 | 0 |
| Tatsumi Intermodal | 1,600 | 8 | 8 | 0 |
| QuikTrip | 1,000 | 5 | 5 | 0 |
| Grey Hill LLC | 200 | 1 | 1 | 0 |
| Sub-Total | 693,700 | 37.5 | 37.5 | 3,713 |
| Flowery Branch | 200,000 | 1,000 | | 1,000 |
| Ingles | 12,000 | 60 | 60 | 0 |
| Ponderosa Farms | 46,000 | 230 | 25 | 205 |
| Stone Bridge Village | 32,400 | 162 | 162 | 0 |
| Sub-Total | 155,600 | 452 | 247 | 753 |
| Lula | 100,000 | 500 | | 500 |
| Sub-Total | 100,000 | 500 | | 500 |
| Total Remaining Capacity | 857,200 | 10,250 | 5,336 | 4,914 |

Has the percent of residents using private wells, septic systems changed? If so, how? In 2018 we reported about 20-25% of our residents were served by private wells. In the period from 2019 through 2023 the Hall County Department of Environmental Health reports: 2,254 new septic systems were installed. 32 were on community wells, 334 on private wells, and 1,888 were on public water.

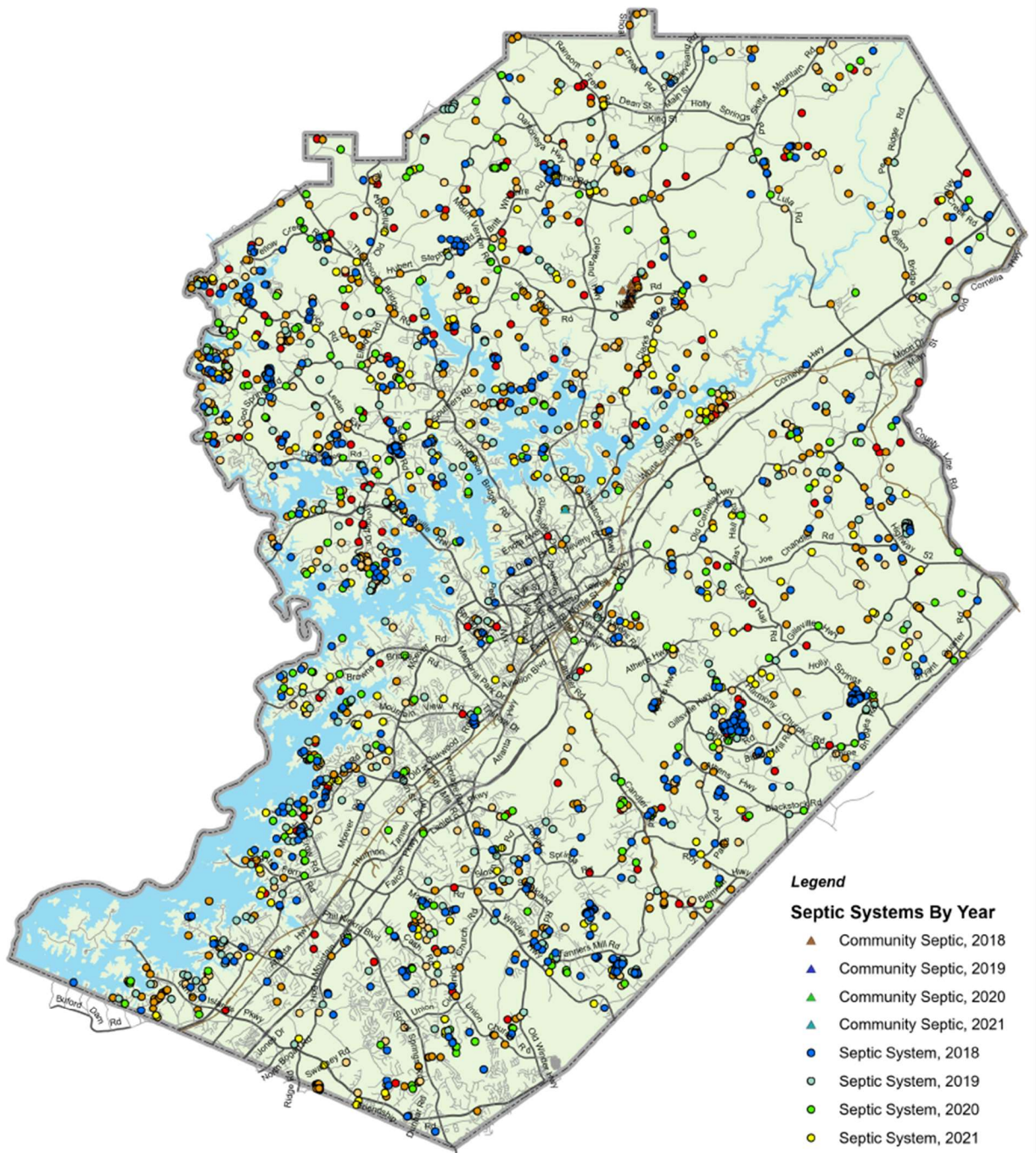
The Hall County building permit records reports:

Permitting Activity for Hall County, Gainesville & Oakwood, 1018 - May 2024

| Sewer/Septic | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | Grand Total |
|----------------------|--------------|------------|------------|--------------|--------------|--------------|------------|--------------|
| Braselton Sewer | | | | 1 | 17 | 1 | 1 | 20 |
| Buford Sewer | 5 | 5 | | 10 | 7 | 1 | 1 | 29 |
| Community Septic | 18 | 20 | 14 | 41 | | | | 93 |
| County Sewer | 62 | 69 | 94 | 139 | 225 | 34 | 84 | 707 |
| Flowery Branch Sewer | 16 | 34 | 3 | 1 | | 2 | | 56 |
| Gainesville Sewer | 410 | 288 | 198 | 566 | 332 | 439 | 254 | 2,487 |
| Gwinnett County | | 48 | 112 | 54 | | | | 214 |
| Lula Sewer | | | 17 | 43 | 69 | 17 | | 146 |
| Oakwood Sewer | | | | | | 2 | 1 | 3 |
| Piedmont | | | | 1 | 4 | | | 5 |
| Private | 4 | 8 | 10 | 29 | 29 | 95 | 41 | 216 |
| Septic System | 547 | 427 | 392 | 522 | 439 | 503 | 202 | 3,032 |
| Grand Total | 1,062 | 899 | 840 | 1,407 | 1,122 | 1,094 | 584 | 7,008 |

See plot of Septic Systems by Year on next page.

Septic System Permits 2018 - May 2024



Legend

Septic Systems By Year

- ▲ Community Septic, 2018
- ▲ Community Septic, 2019
- ▲ Community Septic, 2020
- ▲ Community Septic, 2021
- Septic System, 2018
- Septic System, 2019
- Septic System, 2020
- Septic System, 2021
- Septic System, 2022
- Septic System, 2023
- Septic System, 2024



Date: 6/21/2024

0 0.5 1 2 3 4 5 6 7 8 9 10 Miles

Has your primary water source for your community changed (surface/groundwater)? [Surface Water from Lake Lanier.](#)

In comparison to five years ago, what are your water conservation savings? [We have water service agreements with Five municipalities. Gainesville, Braselton, Lula, Flowery Branch and Oakwood.](#)

In the past five years, have you received a GEFA loan, 319 grant, and/or CDBG funding? If so, what financial savings/amounts have you received?

[2021 Community Development Block Grant: Joseph F. Walters Club Multipurpose Gymnasium Project in the amount of \\$750,000.](#)

[2021 Community Development Block Grant: Georgia Mountain Food Bank in the amount of \\$2,213,697.](#)

Please list your community's current water-related EPD permits.

[Spout Springs WRF NPDES Permit #GA0050214 discharges into Lollis Creek.](#)

Please list any EPD water-related permit violations that have occurred in the past five years. Please give details of how the violations were addressed. [None.](#)

Have any 303(D) listed streams been delisted in the past five years? If so, what stream(s)? [No.](#)

In the past five years, have you received any awards for outstanding water services? [We have agreements with local municipalities to provide water service.](#)

In the past five years, have there been any permits or regulatory minimum standard changes? If so, how were they addressed? [No.](#)

Is your community on EPA's Significant Non-Compliance list? If so, please explain. [No.](#)

Are there any other benefits you have received since designation? [No.](#)

Report on your MOU goals from the past five years:

- [Partner, support and enhance education in the areas of Water Conservation, Water Quality, Stormwater Management and Watershed Protection.](#)
- [Establish buffer requirements for the Chattahoochee River not under the jurisdiction of the US Army COE.](#)
- [Implement items in the Metro, North Georgia Water Planning District's Water Resource Management Plan.](#)
- [Identify projects for federal Sec 319\(h\) Nonpoint Source implementation to address pollutants.](#)

What are your WaterFirst goals for the next five years? [Expand the sanitary sewer collection system to serve more of the unincorporated County.](#)

Attached is your checklist at the time of your original application. Please update the checklist and explain any significant changes in the past five years.

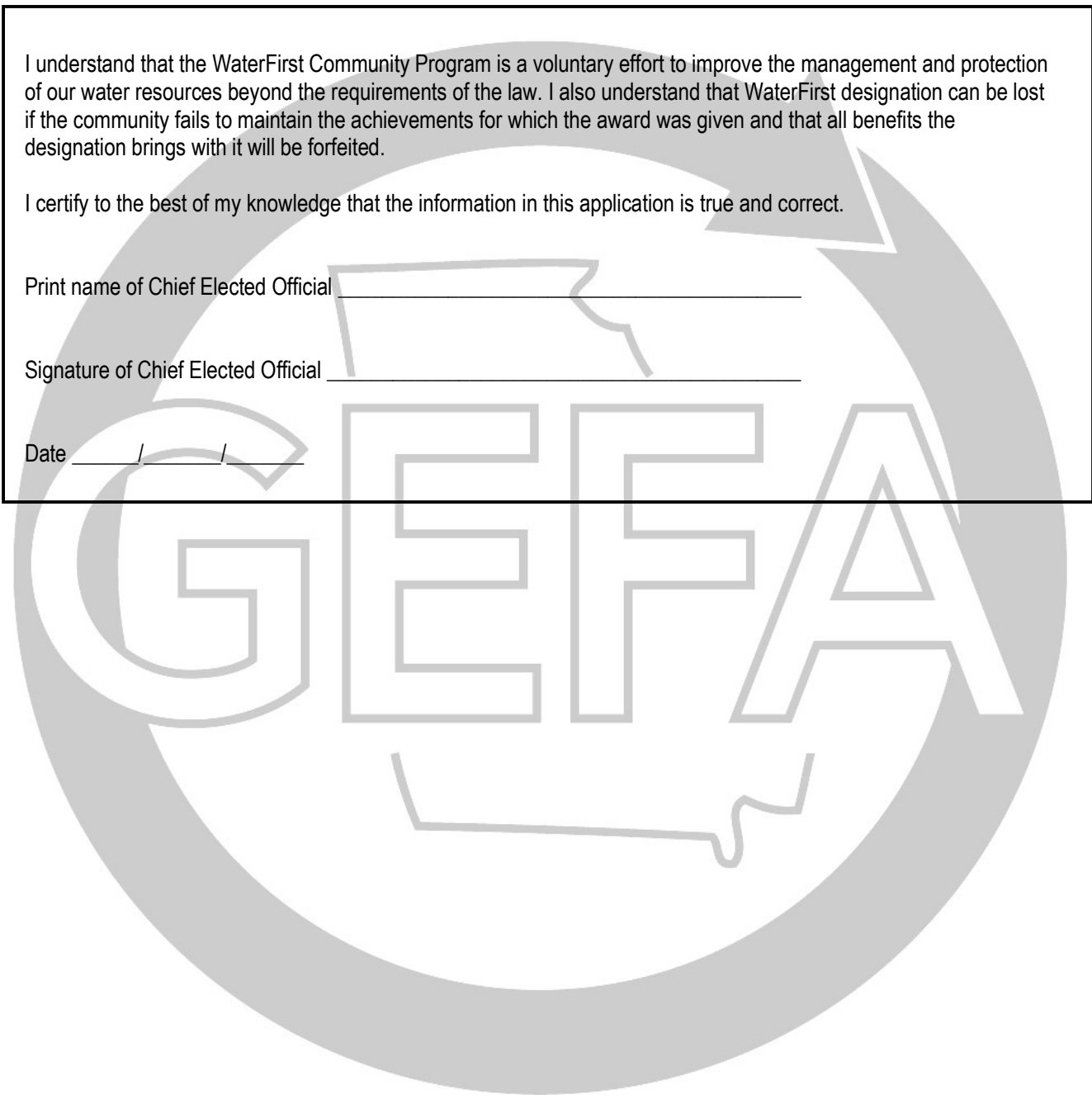
I understand that the WaterFirst Community Program is a voluntary effort to improve the management and protection of our water resources beyond the requirements of the law. I also understand that WaterFirst designation can be lost if the community fails to maintain the achievements for which the award was given and that all benefits the designation brings with it will be forfeited.

I certify to the best of my knowledge that the information in this application is true and correct.

Print name of Chief Elected Official _____

Signature of Chief Elected Official _____

Date ____/____/____



WaterFirst Checklist

Please indicate date completed or start date for program elements. For questions about the WaterFirst checklist, please email waterresources@gefa.ga.gov and vthom@gefa.ga.gov.

| | Date Completed | In Progress (Start Date) | Not Applicable | Write a short explanation of what has been completed. Please attach a copy of any referenced ordinances or documents. |
|--|----------------|--------------------------|----------------|--|
| Watershed Assessment | | | | |
| Evaluate existing stream conditions and threats to water quality. | 2001 | | | We have an intergovernmental agreement for the City of Gainesville to do stream walks throughout Hall County and assess the potential threats to the stream. |
| Identify watershed boundaries and organizations currently working within the watershed to improve and protect water resources. | Ongoing | | | Stormwater Hotline for citizens to report problems. |
| Implement a water quality monitoring program to include biological integrity and chemical and physical measures. | 2024 | | | The City of Gainesville does monitor over 78 sampling sites as well as 92 visual inspections throughout Hall County. |
| Determine areas where protection is critical as important wildlife habitat. | 2001 | | | We have an intergovernmental agreement for the City of Gainesville to do stream walks throughout Hall County and assess the wildlife habitat. |
| Adopt stream corridor protection and buffer requirements. | 2007 | | | Hall County has a stream buffer ordinance that adds 25 foot undisturbed and 25 foot non-impervious to the state buffer of 25 feet. We also have a watershed protection ordinance that doubles these buffers in sensitive areas. |
| Implement and enforce an effective sedimentation and erosion control program. | 2016 | | | Hall County has had an effective erosion and sedimentation control program for many years. We adopted the model ordinance from Metropolitan North Georgia Water Planning District and the Georgia Soil and Water Conservation Commission as they are provided to ensure our program is following the most updated guidance to protect our local water resources. Hall County's code enforcement and building inspectors enforce this program daily. |
| Require incorporation of water quality improvement measures in stormwater best management practices. | 2001 | | | We have had a stormwater ordinance that requires water quality BMP's since 2001. This ordinance is updated as required by MNGWPD. |
| Coordinate land use planning and zoning to promote water quality protection. | 2007 | | | Hall County has a conservation subdivision ordinance that clusters development and permits flexibility of design. Stormwater design and compliance is part of the plan review process coordinated by the planning and zoning department to meet requirements of MNGWPD. Code enforcement and building inspections enforces stormwater ordinances and public education is promoted through Adopt-A-Stream agreements, Etowah education program and a utility bill insert. |
| Adopt an open space preservation program. | 2007 | | | Hall County adopted a green space protection program on 11/22/2001. Hall County has adopted a conservation subdivision ordinance that clusters development and permits flexibility of design to minimize impervious and promote open space. |
| Adopt the Part 5 Environmental Criteria. | 2001 | | | Hall County has adopted Code Chapter 17.225 - "Protected water supply watershed, protected groundwater recharge area, and wetlands protection overlay zoning districts" which meets the part 5 environmental criteria. The protected water supply watershed ordinance doubles the width of the stream buffers within 7 miles upstream of the North Oconee River water intake. |
| Establish parking lot/road width standards to minimize impervious surfaces. | 2017 | | | Hall County has a conservation subdivision ordinance that clusters development and permits flexibility of design to minimize impervious and promote open space. |
| Stormwater Master Planning | | | | |
| Comply with state and federal regulations for stormwater permitting. | 2007 | | | Hall County is currently in compliance with annual reports to EPD as well as audits with Metropolitan North Georgia Water Planning District. |
| Establish a stormwater maintenance program or stormwater authority to manage stormwater program. | 2007 | | | Hall County maintains all accepted dry detention ponds from subdivisions. We inspect all residential and commercial stormwater BMP's since 2001 every year and ensure they are working properly. Our development review process ensures that new BMPS are as built certified and added to our inventory. |
| Evaluate existing stormwater/drainage systems to identify problem areas. | 2001 | | | Hall County maintains all accepted dry detention ponds from subdivisions. We inspect all residential and commercial stormwater BMP's since 2001 every year and ensure they are working properly. Our development review process ensures that new BMPS are as built certified and added to our inventory. |
| Exceed minimum measures required in Phase I or Phase II stormwater programs (Communities that do not fall under either phase should begin integrating the minimum measures). | 2001 | | | Hall County maintains all accepted dry detention ponds from subdivisions. We inspect all residential and commercial stormwater BMP's since 2001 every year and ensure they are working properly. Our development review process ensures that new BMPS are as built certified and added to our inventory. |

| | | | | |
|--|---------|--|--|--|
| Retrofit and upgrade stormwater and drainage systems to prevent erosion. | 2001 | | | We inspect 20% of all our stormwater drainage systems per year and try to fix all the pipes that are not working properly. We spend \$300,000 per year typically on culvert repair and replacement projects. In addition we collect \$35 per resident and dedicate this money toward stormwater infrastructure repairs and upgrades. |
| Adopt land use and zoning ordinances to minimize impervious area. | 2007 | | | Hall County has adopted a Greenspace Program and a conservation subdivision ordinance that allows cluster development and permits flexibility of design to minimize impervious area in new development. |
| Use vegetative controls when appropriate for stormwater control instead of traditional structural measures. | 2007 | | | The conservation subdivision ordinance provides the preservation of green space as a non-structural stormwater runoff and watershed protection measure. Georgia Stormwater Management Manual and associated Water Quality Tool promotes the use of stormwater treatment with the vegetative controls through a system of credits. |
| Use engineered soils and landscape systems to offset impervious surfaces. | 2007 | | | Hall County uses the conservation subdivision ordinance as well as the most recent Georgia Stormwater Management Manual. |
| Treat stormwater on-site through innovative design. | 2007 | | | Georgia Stormwater Management Manual and associated Water Quality Tool promotes the use of stormwater treatment with the vegetative controls through a system of credits. |
| Adopt and enforce construction sedimentation and erosion control ordinances to limit construction site runoff. | 2016 | | | We adopted the model ordinance from Metropolitan Georgia Water Planning District and Soil Water Conservation Commission they provided to ensure our program is following the most updated guidance to protect our local water resources. |
| Update local flood insurance maps. | 2018 | | | We actively work with FEMA and Georgia EPD to coordinate and adopt all current map updates. Current FIRM map dates are April 2018 and December 2022. |
| Preserve and protect flood-prone lands and sensitive areas through a greenspace program. | 2007 | | | Hall County adopted a Greenspace Program to protect waterways and stream corridors. Also, the Conservation Subdivision Ordinance was passed to preserve in perpetuity unique or sensitive natural resources such as groundwater, floodplains, wetlands, streams, etc. |
| Adopt ordinances to address litter control and illicit discharge and detection. | 2006 | | | Hall County has both the Litter Control and Illicit Discharge and Detection Ordinance modeled from MNGWPD. Hall County installed a Bandalong Litter Trap on Flat Creek for the City of Gainesville, and this project was awarded the APWA 2016 Technical Innovation award. |
| Adopt land use ordinances that protect and preserve floodplain functions. | 2000 | | | Floodplain management/flood damage prevention ordinance protects and preserves floodplain functions. To gain a better FEMA flood insurance rating, Hall County performed a future flood conditions flood study and adopted an ordinance for protection of this flood zone. 11/22/2000. |
| Water Supply Planning | | | | |
| Identify future water supply needs based on population projections and water use trends. Identify conservation measures to reduce water use. | 2002 | | | Hall County does not have a public water system and reservoir is on hold. Utilize reuse to lower irrigation. The system is owned and operated by the City of Gainesville - WaterFirst |
| Evaluate the existing water supply infrastructure. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville - WaterFirst this is one of their components of their water system master plan. |
| Conduct a water supply needs analysis. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville - WaterFirst - This was completed during the last drought. Gainesville evaluated all surface water and ground water sources within Hall County. Gainesville evaluated the quality, quaint and relative cost of each option. Gainesville also is constantly evaluating our demand present and projected. |
| Develop a water supply master plan. | 2000 | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville - WaterFirst. Gainesville has a current project that addresses the long term condition and future of the drinking water state. |
| Develop a capital improvements plan (CIP) for water supply infrastructure. | Ongoing | | | Hall County conducts an annual CIP workshop. Hall County does not have a public water system. The system is owned and operated by the City of Gainesville - WaterFirst. The City of Gainesville conducts an annual CIP Workshop. |
| Water Supply Protection | | | | |
| Evaluate surface and groundwater protection alternatives. | | | | Hall County did a source water assessment plan (SWAP) that evaluates Cedar Creek Reservoir and North Oconee River. Additionally, Hall County has a protected water supply watershed, protected groundwater recharge area, and wetlands protection overlay ordinance which meets the Part 5 Environmental Criteria. |
| Identify sources of potential contamination and act to minimize those threats. | | | | Hall County did a source water assessment plan (SWAP) that evaluates Cedar Creek Reservoir and North Oconee River. Additionally, Hall County has a protected water supply watershed, protected groundwater recharge area, and wetlands protection overlay ordinance which meets the Part 5 Environmental Criteria. |

| | | | | |
|---|------------------|--|--|---|
| Implement water quality testing to ensure safety of water supply. | 2001 | | | Hall County does not have a public water system . The system is owned and operated by the City of Gainesville - WaterFirst. |
| Review current plant security. Determine and implement additional measures to increase security and reduce the threat of intentional contamination. | Ongoing | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville - WaterFirst. Gainesville has a current project that addresses the long term condition and future of the drinking water state. |
| Monitor system pressures, tank levels, and bacterial sampling points to determine any distribution problems or contamination of the system. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville |
| Identify land use tools to minimize contamination. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville |
| Identify necessary runoff control measures. | | | | Hall County has had an effective erosion and sedimentation control program for many years. We adopt a new model ordinance from Metropolitan North Georgia Water Planning District (MNGWPD) and Georgia Soil and Water Conservation Commission as they are provided to ensure our program is following the most updated guidance to protect our local water resources. |
| Update and distribute a Consumer Confidence Report annually. | N/A | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville. |
| Ensure plant operator certification is current. | Ongoing | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville |
| Develop a source water protection plan. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville |
| Water Conservation | | | | |
| Audit the water use system using AWWA standards to identify potential water conservation opportunities. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville |
| Develop and implement a water conservation plan. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville |
| Enact any necessary water restrictions and enforce restrictions that are in place. | Ongoing | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville |
| Preserve and protect flood prone lands and sensitive areas through a greenspace program. | 2007 | | | Conservation subdivision ordinance is to preserve in perpetuity unique or sensitive natural resources such as groundwater, floodplains, wetlands, streams etc. code 17.4.30 adoption conservation. |
| Review local ordinances and codes and determine opportunities for improving water conservation, including retrofitting existing buildings. | 2006 | | | Building Inspection does review plans with new plumbing codes and has international building code ordinance. Metro Plan parameter. |
| Provide rebates for high-efficiency toilets or coordinate toilet retrofits. | Ongoing | | | Since 2005 City of Gainesville has given a \$75 credit per toilet to any drinking water customers. We advertise as well through education. Metro Plan parameter. |
| Distribute indoor and outdoor water conservation kits to consumers. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville - WaterFirst. Metro Plan parameter. |
| Develop an implementation and evaluation strategy for conservation plan. | | | | Hall County partners with the City of Gainesville to alert citizen on water restrictions and water conservation education (and Elachee). Hall County does not have a public water system. The system is owned and operated by the City of Gainesville - WaterFirst. |
| Review water rate structure and determine if it encourages water conservation. Implement appropriate changes. | | | | Hall County does not have a public water system. The system is owned and operated by the City of Gainesville - WaterFirst. |
| Wastewater Planning | | | | |
| Evaluate existing facilities (size, capacity, condition, etc.). | 2022, 2017, 2012 | | | Expansion to 1.6 mgd SSWRF in 2024. Recently reviewed expansion plans - Spout Springs PER, DDR North Hall WRF. |
| Identify regulatory issues including existing and pending regulations, compliance issues, and required submittals and documentation. Prepare a plan to meet these requirements. | 2020 | | | Hall County Sewer Master Plan and Rate Study: 2020 Update |
| Perform an alternatives analysis that includes facility requirements, types of processes and facilities, cost-effectiveness, environmental considerations or constraints, and stakeholder issues. | 2017 | | | Rerouting flow to SSWRF project Mulberry Back Pumping. Looking to reroute lift stations to provide more economical approach. Working with developers to lower the number of lift station. Spout Springs PER. |
| Prepare projections of the future service area (service area, service population, high growth areas, sanitary flows, and infiltration/inflows). | 2017, 2012 | | | Sewer master planning. Spout Springs PER, DDR North Hall WRF. |
| Septic Tanks | | | | |
| Review whether areas on septic tanks should be converted to a sewer system. | Ongoing | | | Sewer Master Plans are going to be updated by end of 2018. Hall County, Environmental Health and City of Gainesville did a review of septic systems in Hall County with assistance of MNGWPDD. |
| Create a program to inspect, detect, and correct infiltration problems. | 2018 | | | 5 Year CIP submitted to Finance and Budget Committee as part of FY2019 Budget. |

| | | | | |
|---|---------------------------|--|--|---|
| Assess the feasibility of the project and create a Capital Improvement Plan as part of a Wastewater Master Plan. | | | | |
| Adopt ordinances to prohibit the installation of septic tanks in floodplains and stream buffers. | 2007 | | | Stream buffer ordinance prohibits any septic tanks or septic drain field to be in stream buffer or floodplain area. State of GA On-Site Sewage Management System Rules and Regulations require septic tanks to be at least 25ft from any creek and septic drain line must be at least 50ft from any creek. |
| Establish limitations on density in siting septic tanks. | | | | determining density limitations odor septic tanks. The Hall County Board of Health |
| Adopt programs to reduce hazardous waste discharges to septic tanks. | 1994 | | | Hazardous waste ordinance prevents disposal of hazardous wastes into surface and subsurface waters with the county limits. |
| Adopt an ordinance to require routine maintenance, including pumping, of septic systems. | | | | A recommended frequency of pumping residential septic tanks is provided in the septic tank manual. Hall County has worked with the Metro Water group to distribute pamphlets to citizen especially in its Environmental Health Office where citizen obtain permits for septic tanks. |
| Wastewater Treatment Plants | | | | |
| Adopt a policy of treating wastewater to a level that meets or exceeds all regulatory standards. | Jan 2004, Oct 2011 & 2017 | | | produces reuse quality water at the fraction of the permitted limits. Spout Springs WWTP Expansion, DO Upgrade. |
| Assess the level of wastewater treatment used in your POTW and the impact upon its receiving water body and watershed. | 2011 | | | EID and Watershed Assessment were created. Watershed Protection Plan, DDR. |
| Adopt programs to reduce hazardous waste discharges to wastewater collection system. | 2020 | | | Provided pamphlets to HOA and showed HOA Manager a site that could distribute digitally. |
| Management (CMOM) audit. | | | | completed, a complete evaluation will be conducted Need to review Sewer Use |
| Ensure that plant operator certifications are current. | Annually | | | Certification Levels annually. |
| Conduct a cost-effective analysis of residual bio solid recycling or composting. | | | | Hall County is hauling sludge to Lamar County Landfill. Looking into taking the sludge to Jackson County once their drying facility starts-up. |
| Provide educational materials on the uses and safety of bio solid recycling and/or composting, if bio solids are recycled or composted. | N/A | | | |
| Water Reclamation and Reuse | | | | |
| Identify potential uses of reclaimed water within the community. | Discontinued 2022 | | | Discontinued because it was not cost effective. |
| Include reclamation and reuse as part of conservation plans. | N/A | | | |
| Educational Outreach | | | | |
| Conduct public information campaign regarding storm drains, fertilizer and pesticide use and storage, management of hazardous materials, etc. | Ongoing | | | Hall County contracts with the Elachee Nature Center to educate Hall County students and citizens, we have a retrofit kit distribution with the City of Gainesville, and Rivers Alive stream clean up. Educational outreach is also coordinated with Lake Lanier Stakeholders, Lake Lanier Association and City of Gainesville. |
| Develop a volunteer Adopt-a-Stream program or other citizen participation program. | | | | City of Gainesville has a stream cleanup twice a year. |
| Involve the public in the protection of greenspace as a means to protect habitat and water quality. | 2000 | | | Hall County adopted their Greenspace Protection Plan after a series of seven public meetings to build broad public enthusiasm for the program. One of the goals of the program is to preserve open space in 5 categories of watersheds, primary stream buffering and greenways, open space, agriculture lands and comprehensive plan protections. |
| Provide Information on drinking water source and quality in addition to CCR | | | | Provided in public education, City of Gainesville agreement and Elachee Public education. |
| Implement a radon education program. | | | | Hall County provides funding to the University of Georgia Extension Service that provides information about Radon and water contamination in wells. |
| Involve stakeholders within the community to participate in creating and implementing a water conservation education plan. | 2007 | | | We have a steering committee meeting that is held twice a year. It includes City of Gainesville, Flowery Branch, and City of Oakwood. Also, includes the public and developers. |
| Conduct public information campaign regarding water conservation. | | | | Brochures in business licenses. We have an education program with Elachee Nature Center. |
| Conduct public information campaigns regarding proper septic tank siting, inspection, and maintenance. | 2007 | | | Hall County, City of Gainesville, Flowery Branch, and City of Oakwood and Environmental Health hold meetings to encourage proper septic maintenance. |
| Create and implement an education campaign to inform the public of water treatment standards and practices. | 2001 | | | The City of Gainesville has an educational program that goes throughout the Hall County School system. This also includes annual CCR reports sent to residents. |
| Provide educational materials on reclaimed water, its uses and benefits. | | | | Information on County's website. Need to place some handouts at Sterling's sales center and library. |
| Regional Water Planning | | | | |

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|---|---------|--|--|--|
| Participate in regional water supply planning. | Ongoing | | | Hall County is a very active member of Metro North Georgia Water Planning District and keeps abreast of MNGWPD Plan Updates and Ordinance changes. Also, Hall County participates in a regional collaborative effort to protect the water resources of the upper Chattahoochee River basin through membership in the Upper Chattahoochee Basin Group (UCBG). |
| Implemented any of the best management practices in your regional plan. | 2001 | | | Keep abreast of MNGWPD Plan updates and ordinance changes. All ordinances are up to date. |