



NEWNAN
GEORGIA • CITY OF HOMES

City of Newnan Planning Commission

Agenda for July 11, 2023 Planning Commission Meeting
7:00 PM, Richard A. Bolin Council Chambers, City Hall

1. Call to Order
2. Approval of Minutes
 - a. June PC Minutes
3. Public Hearings
 - a. Certificate of Appropriateness - 24 Burch Avenue
 - b. Rezoning - 2037 Newnan Crossing Bypass - RZ2023-02
4. Other Business
5. Adjourn

Any questions prior to the meeting
should be directed to the Planning and Zoning Department.

Phone: 770-254-2354

E-mail: tdunnavant@newnanga.gov



**CITY OF NEWNAN
Planning Commission
Meeting Minutes**

June 20, 2023
7:00 p.m.

Commissioners Present: Proctor Smith, Joe Crain, Jr., Chris Hunt, Fred Hamlin, Clay McEntire

Commissioners Absent: Robert Coggin, Alton West

Others in Attendance: Tracy Dunnavant, Planning & Zoning Director
Samantha Wood, Administrative Assistant Planning & Zoning
Dean Smith, Senior Planner
Brad Sears, City Attorney

CALL TO ORDER

Chairman Smith called the meeting to order at 7:00 p.m. in the Richard A. Bolin Council Chambers, City Hall, 25 LaGrange Street.

READING OF MINUTES

Chairman Smith asked if everyone reviewed the May 9, 2023 meeting minutes. Commissioner McEntire made a motion to approve the minutes. Commissioner Crain seconded the motion.

MOTION CARRIED (5-0)

Certificate of Appropriateness & Master Sign Plan – 19 Millard Farmer Industrial Blvd.

Dean Smith gave the staff report. Smith stated that the applicant wants to give a facelift to the existing building at 19 Millard Farmer Industrial Boulevard by adding landscape islands, new façade materials and brick surrounds for the existing monument signs. He provided additional detail regarding the elevations and the proposed signage. Smith stated that staff supports the approval of both the Certificate of Appropriateness and the Master Sign Plan.

Robert Burk, architect for the applicant, was present to answer questions.

Chairman Smith asked if this would be a complete tear down or just a facelift.

Burk stated that some portions of the building would be torn down, but it would mostly be just a facelift.

Chairman Smith asked if there would be any EFIS used in the project. Burk stated that no EFIS would be used. He added that the building would look brand new once the renovations were complete.

Commissioner Hamlin asked if the footprint was being extended on the right side. Burk stated that yes it would be extended to the right.

Chairman Smith stated that the plan looks great, but wanted to see if the applicant would be willing to dress up the Plato's Closet side as well. Burk stated that they would definitely be willing to do that.

Chairman Smith asked if they would be demolishing the existing signs or reusing them. Burk stated that they would be redoing the signs.

Commissioner Hamlin asked if there was a time frame for when they would be open. Burk stated that they would like to be open by next year.

Commissioner McEntire made a motion to approve the Certificate of Appropriateness and Master Sign Plan for 19 Millard Farmer Industrial Boulevard with the condition of the brick design being extended to include the wall facing Millard Farmer Industrial Boulevard. Commissioner Hamlin seconded the motion.

MOTION CARRIED (5-0)

PUBLIC COMMENTS

None

OTHER BUSINESS

Dunnavant stated that there would be a public hearing/rezoning at the July meeting.

ADJOURN

With no further business, the meeting adjourned at 7:14 p.m. on a motion from Commissioner Hunt and seconded by Commissioner Hamlin.

MOTION CARRIED (5-0)

Chairman Proctor Smith



NEWNAN
GEORGIA

City of Newnan, Georgia – Planning Commission

Date: July 11, 2023

Agenda Item: Certificate of Appropriateness Request –24 Burch Avenue

Prepared and presented by: Dean Smith, Senior Planner

Purpose:

This item involves a certificate of appropriateness application from Hank Arnold and Coweta F.O.R.C.E.. The applicant is requesting to demolish the existing structure at 24 Burch Avenue and build a new duplex structure.

Background:

Hank Arnold submitted a demolition permit to the City of Newnan's Building Department. Due to the fact that the structure is over 50 years old, the applicant needed to obtain permission from the Newnan City Council for the demolition. On June 13, 2023, the demolition request was heard by City Council. At the conclusion of the public hearing, City Council voted to approve the applicant's demolition request, conditioned upon the Planning Commission approving the plans for the new duplex structure via the Certificate of Appropriateness process. This process is similar to other new residential construction projects that have involved properties located in a Historic Residential Design Overlay District (HRDO)



Issues for Consideration for a Certificate of Appropriateness:

The first step in considering the appropriateness of the design for a new building in a historic district is to determine the area of influence which will be affected by the new development. New construction should enhance the overall character of the historic district and contribute to the district's ongoing evolution. New construction should be compatible with the dominant design characteristics of other residential buildings within the district. Design characteristics to be considered include building orientation and setback, scale, directional emphasis, shape, proportion, rhythm, massing, and architectural and site elements.

- a) **Building Orientation and Setback** – The front elevation will face the south side of the property. This is consistent with the existing structures that are adjacent to the site that area also oriented the same direction. It is also consistent with the building orientation of the existing structure. The new structure will comply with building setbacks for the zoning district.
- b) **Directional Emphasis** – The directional emphasis will be vertical and horizontal on side which is consistent with the dominant patterns within the area of influence.
- c) **Shape** – The proposed flat roof is consistent with those of existing commercial buildings within the area of influence.
- d) **Proportion** – The proportions of the new building are consistent with dominant patterns of proportion within the area of influence.
- e) **Rhythm** – The new building's design is consistent with existing building rhythms.

Options:

- A. Approve the Certificate of Appropriateness as presented.
- B. Approve the Certificate of Appropriateness with proffered conditions.
- C. Deny the Certificate of Appropriateness request.

Recommendation:

Certificate of Appropriateness - Staff has reviewed the certificate of appropriateness request and found it to be consistent with the standards governing renovations to structures in the Historic Residential Overlay Design District, which is the ordinance being used in this scenario. Staff would recommend approval of the Certificate of Appropriateness as presented.

Staff Recommends Option A

Attachments:

Applications and Supporting Materials
Photographs

Previous Discussions with the Commission: None

Photographs of existing structures in the area of influence























CITY OF NEWNAN, GEORGIA



Application Form

For

Certificate of Appropriateness



CITY OF NEWNAN, GEORGIA

25 LaGrange Street
Newnan, Georgia 30263
770-254-2354

APPLICATION FOR CERTIFICATE OF APPROPRIATENESS

Address of Property **24 Burch Avenue**

Name of Applicant **Hank Arnold**

Mailing Address **PO Box 2577**

Telephone **678-346-1292**

Property Owner (Use back if multiple names) **Coweta FORCE**

Mailing Address **140 Lagrange Street**

Telephone **678-346-1292**

Map # N _____ Block # _____ Parcel # **N 14 0004 009** Land Lot _____

District/Section _____ Present Zoning Classification _____

Present Land Use _____

No material change in the appearance of such historic property, or of a contributing or non-contributing building, structure, site or object within such historic district, shall be made or permitted to be made by the owner or occupant thereof, unless or until the application for a Certificate of Appropriateness has been submitted and approved by the Planning Commission.

If you have any questions concerning this process, you may call the Planning and Zoning Department at (770) 254-2354. Office hours are 8:00 a.m. to 5:00 p.m., Monday through Friday. The Planning Commission meets on the second Tuesday of each month. Applications must be submitted by 5:00 PM on the 15th day of the month prior to the month in which the application will be considered. Incomplete applications or applications submitted after the deadline will not be accepted.

NATURE OF PROPOSED WORK:

- | | |
|---|---|
| ☐ New Construction | ☐ Relocation of Building |
| ☐ Repairs or Alterations | ☐ Sign Erection or Placement |
| ☒ Demolition | ☐ Other |

Please describe the proposed Work to be Done (Use Additional Sheets if Necessary): _____

We propose to demolish the existing, uninhabitable structure and rebuild a duplex.

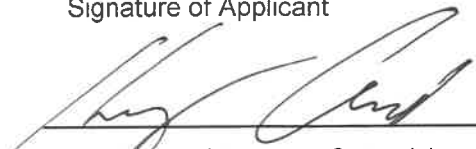
Included with the application, the following information is required:

- ✓ A completed application for Certificate of Approval.
- ✓ A conceptual site plan showing all buildings, parking, buffers, driveways and other information pertinent to the development of the site.
- ✓ Elevation drawings which shall include dimensions of all sides of existing and proposed structures, all related accessory structures to be developed or placed on the site including but not limited to solid waste and recycling containment areas, electrical service transformers, air conditioning units, satellite dishes and other utility or mechanical equipment. Locations of screening materials shall be clearly noted. This shall apply to both structures and equipment at grade or placed on roof tops.
- ✓ The exterior finish material selection for each building shall be clearly noted for each elevation and may be illustrated using a detail inset.
- ✓ To aid in evaluating the exterior design, the applicant shall submit schematic floor plans showing window, door and loading dock locations and other exterior features that clearly define the intent of the completed exterior of the structure.
- ✓ Colored renderings clearly indicating color choices or exterior building and finish material samples may be submitted.
- ✓ Sign packages which meet the requirements of this ordinance. (if applicable for non-residential projects)
- ✓ Photos of neighboring properties to ensure compatibility with the proposed design.
- ✓ Plat of property, illustrating existing development and proposed development;
- ✓ Demolition or relocation projects must be accompanied by post-demolition or relocation plans for the site;
- ✓ Other information as may be deemed necessary by the Zoning Administrator to evaluate the appearance of the completed structure, and;
- ✓ Check for applicable fee of \$150 per application.

I (We) do hereby certify the information provided herein is both complete and accurate to the best of my (our) knowledge, and I (we) understand any inaccuracies may be considered just cause for invalidation of this application, and any action taken on this application.



Signature of Applicant



Signature of Property Owner(s)

FOR OFFICIAL USE ONLY

RECEIVED BY Dean Smith

DATE OF FILING 6/27/23

HRC MEETING DATE 7/16/23

DATE OF NOTICE PUBLICATION _____

ACTION TAKEN (DATE) _____

THE UTILITIES SHOWN ON THIS PLAT WERE TAKEN FROM INFORMATION AVAILABLE AT THE TIME OF THE SURVEY AND MAY OR MAY NOT BE ACCURATE AS TO THE EXTENT AND OR LOCATION OF SAID UTILITIES.

THIS SURVEYOR DOES NOT GUARANTEE THAT ALL EASEMENTS WHICH MAY AFFECT THIS PROPERTY ARE SHOWN.

PLAT CERTIFICATION:

The field data, completed on 3/12/23, upon which this plot is based, has a closure prediction of one foot in 27,936 feet and an angular error of 0.1" per angle point, and was unadjusted. This plot has been calculated for closure and is found to be accurate within one foot in 96,629 feet. The linear and angular measurements shown on this plot were obtained using a Geomax Robotic Total Station and Geomax Zenith 35 GPS.

SES

THIS DRAWING IS THE PROPERTY OF SCANION ENGINEERING SERVICES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN, AND IS NOT TO BE USED ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT, OR REPRODUCED IN WHOLE OR IN PART, EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION.*

**ENGINEERING
PLANNING
SURVEYING**

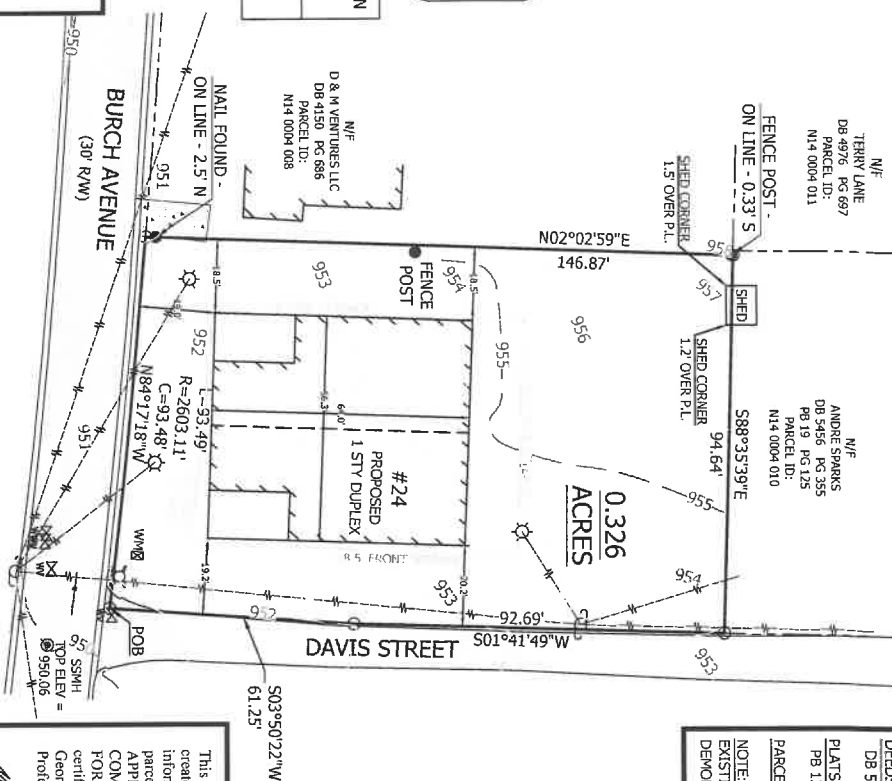
Project #:	221 EAST BANK STREET	Date
Project #1:	CRITFIN, GEORGIA 30023	
230421799	PHONE: (678) 967-2051 www.scanloneng.com	
3/24/2023	★ 1 SF 000859 ★	
Date:		
Scale:		
1" = 30'		
Drawn by:		
JWS		

SQUARE FOOT MINISTRY

LOCATED IN LAND LOT 27 OF THE 5th DISTRICT,
CITY OF NEWMAN, COWETA COUNTY, GEORGIA

BOUNDARY / AS-BUILT / TOPOGRAPHIC SURVEY FOR

SHEET DESCRIPTION
BOUNDARY / AS-BUILT
/ TOPOGRAPHIC
SURVEY
SHEET NUMBER
630B



REFERENCES & NOTES

CURRENT OWNER:
COWETA FORCE INC

DEEDS:
DB 5064 PG 441

PLATS:
PB 13 PG 289

PARCEL ID: N14 0004 009

NOTE:
EXISTING STRUCTURE TO BE
DEMOLISHED (NOT SHOWN)

SYMBOL LEGEND

- | | |
|---|-------------------------|
|  | IRON PIN FOUND |
|  | 1/2" REBAR SET |
|  | CONCRETE MONUMENT FOUND |
|  | UTILITY POLE |
|  | LIGHT POLE |
|  | UTILITY METER |
|  | FIRE HYDRANT |
|  | SANITARY SEWER MANHOLE |
|  | CLEAN OUT |
|  | WATER LINE |
|  | WIRE FENCE LINE |
|  | CHAIN LINK FENCE LINE |
|  | OVERHEAD POWER LINE |
|  | PROPERTY LINE |
|  | ADJACENT LOT LINE |
|  | LAND LOT LINE |
|  | ASPHALT AREA |
|  | CONCRETE AREA |

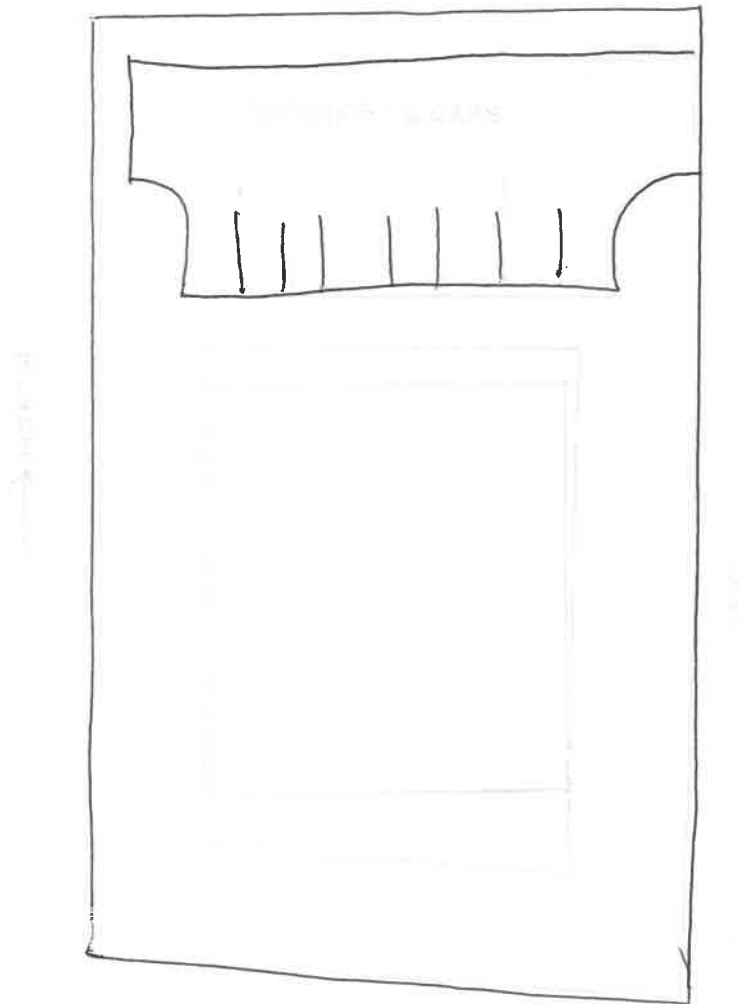
0 15 30 60 90
GRAPHIC SCALE: 1"=30'

This plat 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, plans or other instruments which created the parcel or parcels are stated herein. RECORDATION OF THIS PLAT 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. section 15-6-67.

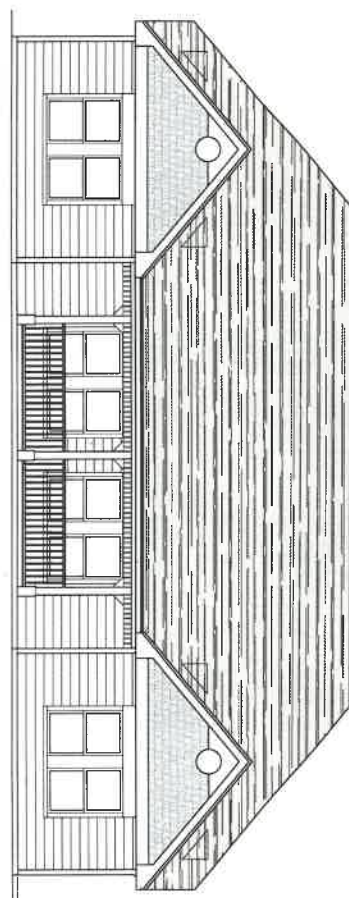
Mark A. Buckner 3/31/23
Mark A. Buckner GA RLTS 2422 Date

Mark A. Buckner GA RLS 2422

3/31/23
Date



COMETA FORCE
172



Cylindrical Rods	
C10	10" CIRCULAR POST
C12	12" CIRCULAR POST
C14	14" CIRCULAR POST
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C726	726" CIRCULAR POST
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C990	990" CIRCULAR POST
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C996	996" CIRCULAR POST
C998	998" CIRCULAR POST
C1000	1000" CIRCULAR POST

CLEAN JOIST-ACCOMMODABLE SPANS		JOIST SIZE	
W2 Southern Yellow Pine LIVE LOAD=20 psf DEAD LOAD=10 psf		2x6	2x8
JOIST SPACING	12" O.C.	20'-1"	23'-11"
	16" O.C.	17'-3"	20'-5"
	12'-6"		

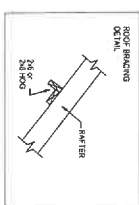
RAFTER ALLOWABLE SPACING		RAFTER SIZE			
2x Eastern Yellow Pine 12x (10x) 20x DFU (14x) 20x 24x		2x6	2x6	2x10	2x12
RAFTER SPACING	12" O.C.				
	12" O.C.				
	16" O.C.				
	11'-2"				

GENERAL NOTES

- [illegible]

FOUNDATION NOTES

1. ALL EXTERIOR WALL JOINTS ARE 7" W/ UNLESS OTHERWISE NOTED
2. CONCRETE SHALL BE 3000 PSI 28 DAY STRENGTH UNLESS OTHERWISE NOTED
3. ALL REBAR STEELS SHALL BE #2 VARIANAL UNLESS OTHERWISE NOTED
4. TIEBAR PROTECTION CO. TREATMENT BY SUPPLIER
5. METAL ANCHOR BOLTS MAY BE USED IN PLACE OF ANCHOR BOLTS AND MUST BE EVALUATED BY AN APPROVED ANCHORING SPECIALIST
6. ALL JOINTS SHALL BE PROPERLY DETAILED AND SHALL NOT BE USED AS A MEANS OF ATTACHMENT TO EXISTING STRUCTURE UNLESS SPECIFICALLY SET FORTH BY LOCAL SOIL CONDITIONS VARYING DISCREPANCY WITH LOCAL BUILDING OFFICIALS



FRAMING NOTES:

- [illegible]

EXTERIOR ELEVATION NOTES

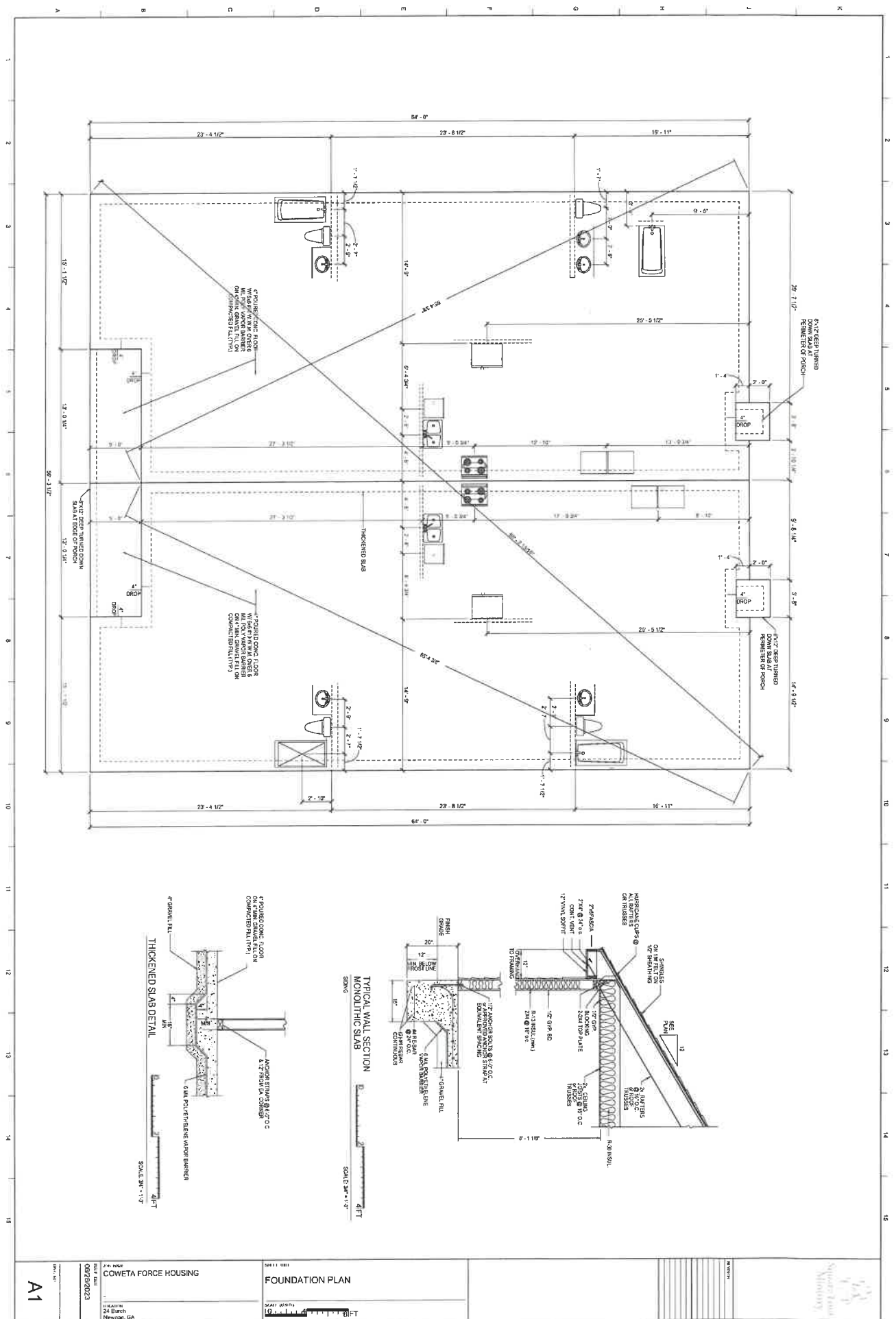
1. AN ASSUMED GRADE IS SHOWN THE ACTUAL FINISHED MAY VARY. THE LOT SHALL BE GRADED AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. THE GRADE SHOULD DROP A MINIMUM 6 INCHES WITHIN THE FIRST 10 FEET AWAY FROM THE FOUNDATION WALLS.
2. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE PROVIDED THE TOPS OF ALL EXTERIOR WINDOWS AND DOORS, AT WALL AND ROOF INTERSECTIONS.

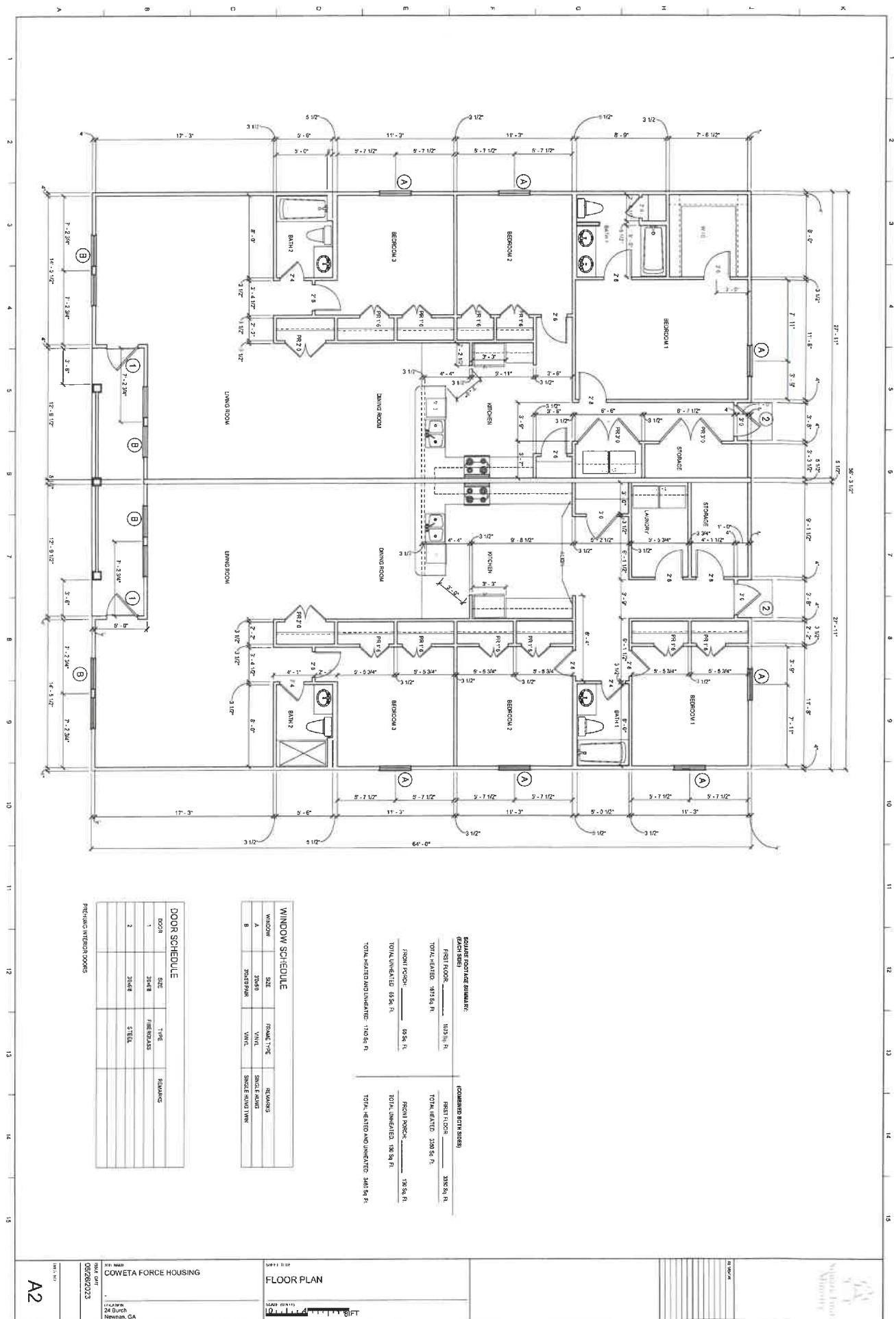
MISC

- 1 CLOSET SHELF HEIGHT OFF FLOOR
SINGLE: 55"
DOUBLE: 42" & 64"

SHEET LIST	
00	COVER SHEET
A1	FOUNDATION
A2	FLOOR PLAN
A3	ELEVATION
A4	ELECTRIC
A5	ROOF PLAN
A6	DETAILS

 State of Montana	B. G. 0000	SHEET 1 OF 1 COVER SHEET	JOB NO. 0000 COWETA FORCE HOUSING	DATE 06/20/2023	CO
	B. G. 0000	SCALE (SHEET) 24 Sheets 24 Sheets	B. G. 0000	DATE 06/20/2023	CO





SQUARE FOOTAGE SUMMARY:

FIRST FLOOR		COMBINED BOTH SIDES	
GRAND TOTAL	1633 sq. ft.	FIRST FLOOR	3266 sq. ft.
TOTAL HEATED	1633 sq. ft.	TOTAL HEATED	3266 sq. ft.
TOTAL UNHEATED	15 sq. ft.	TOTAL UNHEATED	30 sq. ft.
TOTAL HEATED AND UNHEATED	1648 sq. ft.	TOTAL HEATED AND UNHEATED	3296 sq. ft.

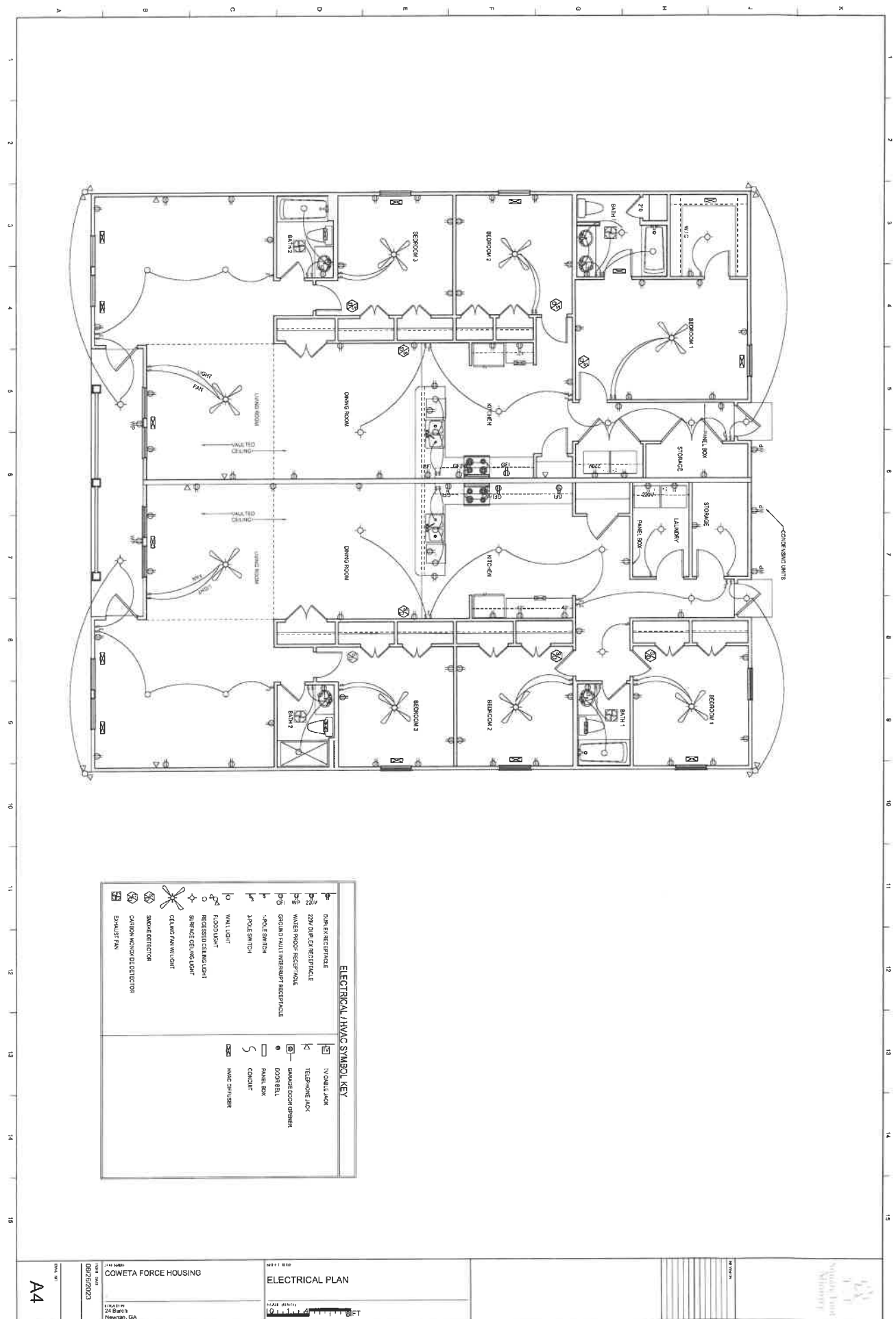
WINDOW SCHEDULE

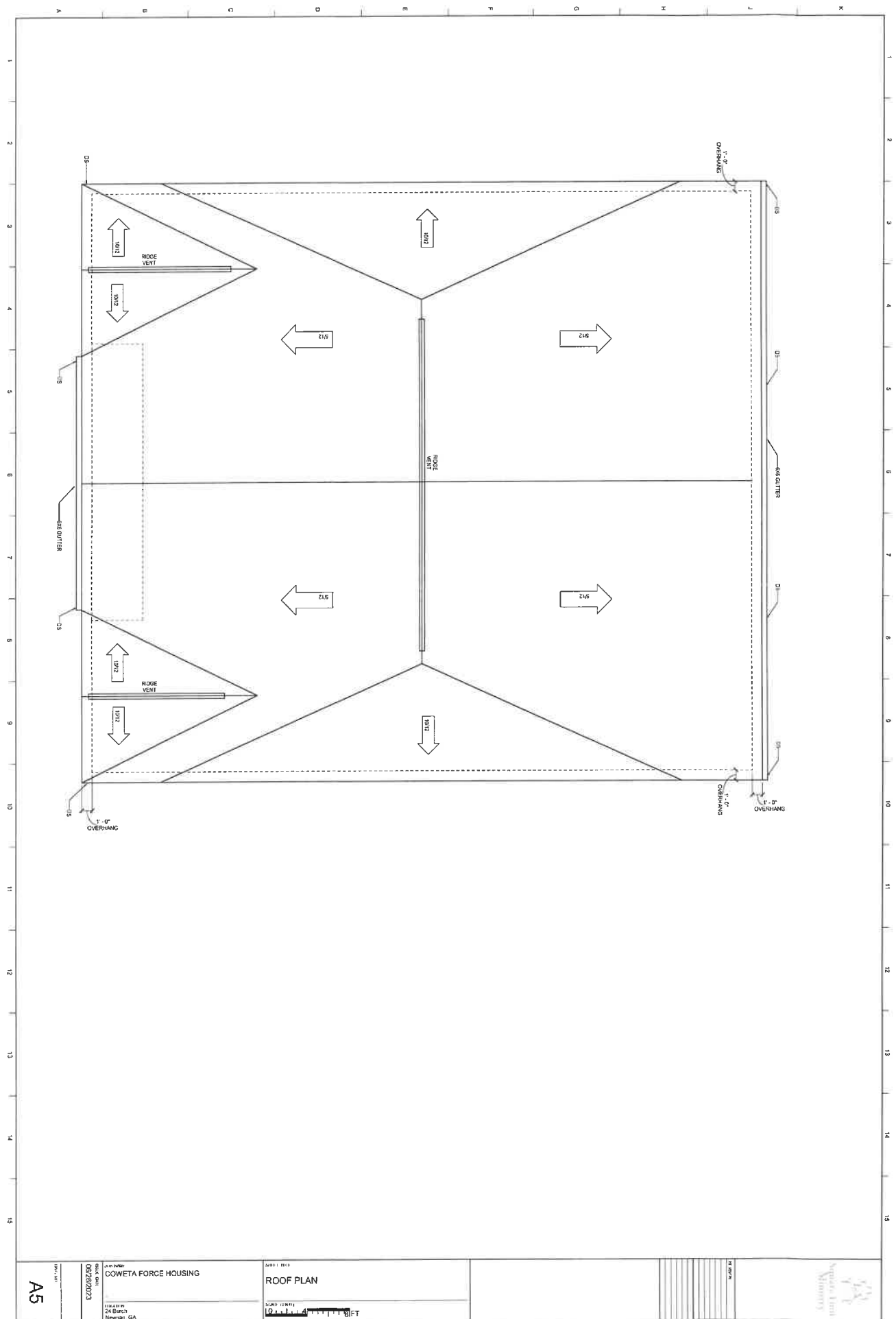
WINDOW	SIZE	FRAME TYPE	REMARKS
A	30x48	VINYL	SINGLE HUNG
B	20x36	VINYL	SINGLE HUNG TWIN

DOOR SCHEDULE

DOOR	SIZE	TYPE	REMARKS
1	36x68	FIBERGLASS	
2	36x68	STEEL	

INCLUDE INTERIOR DOORS





12/20/21

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----

SHEET 1 OF 1
ROOF PLAN
 SCALE: 1/8" = 1'-0"
 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

PROJECT: COWETA FORCE HOUSING
 DATE: 08/26/2023
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]
 LOCATION: Coweta, GA

A5



To: Mayor and Council

Date: July 11, 2023

Agenda Item: Rezoning - 2037 Newnan Crossing Bypass - RZ2023-02

Prepared By:

Purpose:

Background:

Funding:

Recommendation:

Attachments:

1. PC Agenda Packet-RZ2023-02-7.11.23

Previous Discussion with Council:



City of Newnan, Georgia – Planning Commission

Date: July 11, 2023

Agenda Item: Rezoning Request – RZ2023-02
35.49± acres located at 2037 Newnan Crossing Bypass
(Portion of Tax Parcel #087-5011-003)

Prepared and Presented by: Dean Smith, Senior Planner

REZONING ASSESSMENT

APPLICANT INFORMATION:

LDO Coweta, LLC, on behalf of the property owner Cate's Family Partnership
270 North Jeff Davis Drive
Fayetteville, GA 30214

The applicant (LDO Coweta, LLC) seeks to develop the subject property as a 163-unit townhome development. In order to accomplish this, the applicant is seeking an RMH (Residential Multiple Family Dwelling-Higher Density) zoning for 35.49 ± acres located on Newnan Crossing Bypass.

SITE INFORMATION:

The site consists of 35.49± acres located on Newnan Crossing Bypass. It is a portion of tax parcel id number 087-5011-003. The subject tract is located between Newnan Crossing Bypass and Interstate 85.

The site is currently undeveloped and zoned RS-15 (Suburban Residential Single-Family Dwelling District-Medium Density).

OVERVIEW OF REQUEST:

The applicant is requesting the rezoning of 35.49 ± acres located at 2037 Newnan Crossing Bypass. The property is currently zoned RS-15 (Suburban Residential Single-Family Dwelling District-Medium Density) and the applicant is requesting RMH (Residential Multiple Family Dwelling-Higher Density) for the construction of 163 fee simple townhomes.



CITY OF NEWNAN | Project Location



CITY OF NEWNAN
PLANNING DEPT.
25 LAGRANGE STREET
NEWNAN, GEORGIA 30263
www.cityofnewnan.com

1 inch = 300 feet
Date: 6/3/2022

LEGEND

- Project Location
- PARCELS
- CITY LIMITS

Parcel # 087 5011 003

ADDRESS

2037 NEWNAN CROSSING BYP
Newnan, GA 30263



The proposed development consists of 163 fee simple townhomes. Proposed amenities include: swimming pool; pavilion, dog park and several open space/passive park areas.



The development will limit rental units to a maximum of 10 percent of the total development, or no more than 16 units can be rental units.

STANDARDS:

In formulating a decision, the Zoning Ordinance requires the Planning Commission and the City Council to consider the following standards. Staff has assessed each standard and identified those with a green check mark ✓ as standards being met by the proposed rezoning and those with a red "X" ✗ as standards not being met.

1. **Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?** The subject tract is bordered predominantly by residential zoning designations. The residential portion of the MXD zoned site abuts on the northern property line; a residential multifamily zoning across Interstate 85 to the East; residential single-family neighborhood to the west and to the south, a combination of RC and C-8c zoning in Coweta County. There are existing multifamily developments to the north and east of the subject tract. The property to the south, was recently rezoned from RC to C-8c in Coweta County for the purpose of constructing a self-storage facility.

With the existing residential developments that are on the north, east and west side of the subject property, higher density residential development would be a suitable use. This site is classified on the City's future land use map as Emerging Missing Middle Residential, which is defined as areas of medium-density (between 4 and 7 units per acre) and allow for a variety of housing products, including single-family homes, duplexes, triplexes, quadplexes, cottage homes and small apartment buildings.

Staff Assessment – PROPOSED USE IS SUITABLE ✓

2. **Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?** The most significant impact resulting from this rezoning would be an increase in traffic. The applicant has submitted a traffic impact study that estimates that the proposed development is expected to generate an additional 1,192 trips per day. The traffic study does not suggest adding traffic mitigation measures. The applicant's concept plan illustrates two points of ingress/egress from Newnan Crossing Bypass into the development. There is one full ingress/egress access point and the second access point is right in/right out only.

Staff Assessment – ADVERSE AFFECT WILL BE MINIMAL ✓

3. **Are their substantial reasons why the property cannot or should not be used as currently zoned?** The property is currently zoned for single-family residential development. However, the future land use map shows it has Emerging Missing Middle Residential and it has sat vacant with the current RS-15 zoning designation for over twenty years. There are environmental constraints on the property that limit the available area that can be developed, as illustrated on the survey and concept plans provided as an attachment to this report.

To date, the City has not been asked to review any proposed development for single-family houses, as allowed by the current zoning.

Staff Assessment – PROPERTY CAN BE DEVELOPED AS CURRENTLY ZONED, HOWEVER, NO DEVELOPMENTS UNDER CURRENT ZONING HAVE BEEN PRESENTED TO THE CITY X

4. **Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?** As a requirement for multifamily developments exceeding 150 units, the applicant must submit a Community Impact Assessment (CIA) which looks at the services listed above and provides a financial analysis of the project. A copy of the full assessment has been provided with the accompanying documentation for this report. A summary of the assessment's findings and additional information that has been provided since the study was completed is as follows:

- **Police:** Police Chief Blankenship has indicated that his department can service the development, citing that a strain would be put on calls for service and would cause additional maintenance on equipment, but states that it can be managed at current staff level.
- **Fire:** Chief Stephen Brown has indicated that NFD anticipates an additional 62 calls in a 12-month period and further states that the anticipated demand would potentially decrease response times in other service areas, stating that NFD does currently have the resources to service the project. Chief Brown further added that the increase in call volume will impact the Fire Department with additional wear and tear on equipment and will influence the effectiveness and strength of manpower, citing that the impact of the proposed property may require additional equipment and manpower in the future.
- **Newnan Utilities:** Newnan Utilities will be the water, and sewer provider for the project. Scott Tolar reviewed the project and indicated that there is ample capacity to serve the proposed facility. Needs from the developer in terms of each service has been included in the applicant's packet.
- **Engineering:**



The City of Newnan, Georgia

Office of the City Engineer

May 22, 2023

City Engineer Review

REZONING REQUEST

Portion of Tax Parcel 087 5011 003
35.4892 Acres
Newnan Crossing Bypass

Environmental:

1. The development plan shall follow the design standards and guidance per the Georgia Storm Water Management Manual, in compliance with the **Post-Development Stormwater Management Ordinance** for the City of Newnan.
Note a new requirement for on-site, runoff reduction, effective December 6, 2020.
2. The development plan shall include a three-phased erosion control plan in compliance with the **Soil Erosion, Sedimentation and Pollution Control Ordinance** for the City of Newnan.
3. All streams, wetlands and other environmentally sensitive areas such as floodplain and floodway shall be delineated and located within open space to the extent practically possible. The development plan shall be in compliance with the **Floodplain Management and Flood Damage Prevention Ordinance** for the City of Newnan. Any development within a floodplain or waters of the US shall be properly permitted with the Federal Emergency Management Agency (FEMA), or the United States Army Corp of Engineers (USACE), as applicable.
4. This site is located within a water supply watershed and thus increased stream buffers apply as follows: perennial streams shall carry an undisturbed stream buffer on 100 feet with an additional impervious surface setback of 50 feet; intermittent streams shall carry an undisturbed stream buffer of 50 feet with an additional 25 foot impervious surface setback. Buffers shall be measured from the point of wrested vegetation and shall be delineated in the field.
5. This site is located within the Stillwood Creek watershed drainage basin and stormwater management shall comply with the conditions set forth in the **Stillwood Creek Watershed Drainage Policy** as Section 10-169 of the **Post-Development Stormwater Management Ordinance** for the City of Newnan.

Transportation:

1. ADA compliant sidewalks, 6 feet in width, shall be provided along the public Right of Way for Newnan Crossing Bypass, the entire length of the parcel, to connect to existing sidewalk to the north. 5 foot sidewalks shall be provided throughout the proposed development, on both sides of all streets, and shall connect to the sidewalks in the Right of Way for Newnan Crossing Bypass.

25 La Grange Street

• Newnan, Georgia 30263 •

(678) 673-5560

2. Traffic impact study required. A traffic impact study shall include the intersections of Newnan Crossing Bypass with Lower Fayetteville Road, Lakeshore Parkway, and Poplar Road. Justification for trip distribution shall be included in the study. Mitigation shall be proposed for any negative impact to the level of service (LOS) at the intersections. The criteria for trip generation shall be derived from the latest edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE).
3. The primary driveway for the development shall line up with existing road, Lakeshore Parkway, at an existing median break. Dedicated left and right turn lanes shall be provided and designed in accordance with design standards for the Georgia Department of Transportation (GDOT). Pavement markings shall be designed in accordance with the GDOT and the Manual on Uniform Traffic Control Devices (MUTCD).
4. A secondary driveway shall be Right In/ Right Out, designed in accordance with standards for the GDOT, and shall include a dedicated right turn lane.
5. A warrant study shall be provided to determine the need for a traffic signal at the location of the primary driveway serving the development. The study shall include the projected traffic generated for any under-construction projects in proximity along Newnan Crossing Bypass. The developer shall bear, at a minimum, the proportional share for the cost for a traffic signal, if warranted, and the signal shall incorporate video detection (Gridsmart). The signal installation shall comply with the MUTCD, GDOT standards and details, GDOT standard specifications, and the National Electric Code (NEC).
6. The developer shall provide and install street lighting along Newnan Crossing Bypass, adjacent to the parcel, in accordance with the lighting standards for a multi-lane urban corridor for the electric provider for the development.
7. The developer shall consider an ADA compliant parking space adjacent to the proposed Dog Park, with access aisle.
8. Driveway length from sidewalk in the public Right of Way to face of garage door, and from the edge of pavement at private alley to face of garage door shall be 19'-0", minimum.

Respectfully,

Michael Klahr

William M. Klahr, P.E., CFM
Director of Engineering

- Traffic: A traffic impact study was performed for the proposed development. Pertinent excerpts from the traffic analysis are as follows:

Conclusions and Recommendations

This study assesses the traffic impact of a proposed residential townhome development in the City of Newnan. The site is located along the east side of Newnan Crossing Bypass near Lakeshore Parkway. The development will consist of 163 attached residential townhomes. The project will be served by two vehicular accesses on Newnan Crossing Bypass, with the main access aligning with the median break at Lakeshore Parkway and the second access being limited to right-in/right-out (RIRO). The following are the findings and recommendations of this study:

1. Existing traffic operations and delays are acceptable at the three study intersections. Therefore, no mitigation is identified for the existing condition.
2. Traffic volume growth in this area has been positive and modest and this is expected to continue into the future. Additional volume increases will result as the nearby Cresswinds DRI is developed.
3. With the growth in background traffic volumes, delays will increase moderately in the no-build condition. All delays will continue to be acceptable and no mitigation is identified for the no-build condition.
4. The proposed townhomes will generate 79 trips in the morning peak hour, 94 trips in the evening peak hour, and 1,192 daily trips.
5. The future analysis with the addition of the proposed townhomes' trips reveals modest increases in delays at the study intersections, but generally continued acceptable operations.
6. One approach – the eastbound approach of Lakeshore Parkway at Newnan Crossing Bypass – will just begin to fail at LOS E in the future p.m. peak hour. A change in control is not recommended based on the delay calculations. A signal warrant study performed for this intersection concludes that signalization is not justified.
7. A northbound right turn lane and a southbound left turn lane should be constructed on Newnan Crossing Bypass at the main project access.
8. The south access should be restricted to right-in / right-out (RIRO) movements and a northbound right turn lane should be added on Newnan Crossing Bypass at this access.
9. One entering lane and one exiting lane should be provided at each project access. Each exiting approach should be controlled by side street stop sign and accompanying stop bar.
10. There is a curve in Newnan Crossing Bypass that could potentially limit sight distance at the project accesses to and from the south. The project civil/site engineer should comply with all applicable design standards at the project accesses and internal roadways, including sight distances, turn lane storage and taper lengths, turn radii, driveway spacing, driveway widths, islands, angles with the adjacent roadways, and grades.

In response to the traffic study submitted, Michael Klahr, the City's Director of Engineering, provided the following statement, "...We are in receipt of the traffic study and signal warrant study as a part of the submittals for the subject project.... These are in review...It has become the desire of the City Council to initiate a peer review for traffic studies associated with proposed developments...I will be able to accept or propose mitigation once we have a peer review...."

- Coweta County Schools: Coweta County School System Director of Facilities, Ronnie Cheek responded to the request for the proposed development's impact on the school system. Mr. Cheek stated that the proposed development presents challenges when planning for school enrollment and meeting students' needs. Due the higher density housing in the area of the proposal, school capacity is an ongoing concern. Many schools serving the area in question are at or near capacity. Mr. Cheeks requested that if approved, the school system be provided with advance notice of the project's construction schedule, build-out timeline and the target market for the housing. The link embedded herein refers to a Coweta County School System Enrollment Analysis and Projection, dated January 2023, for your information and reference:

<https://www.dropbox.com/s/v4m45555zbpma7n/Enrollment%20Update%20-%202023%20%281%29-15019003c3pcg2ferbu0gem33f5zxbi.pdf?dl=0>

The following is the applicant's response to the school system's concerns:

❖ What is the construction schedule for the project?

- *Zoning – Approved Land Disturbance Permit – 12 months*
- *Phase 1 horizontal construction Final Plat – 15 months (includes main amenities)*
- *Phase 1 vertical construction (approximately 80 units) 18 months to build out following final plat.*
- *Phase 2 horizontal construction final plat (remaining 83 units) 18 months beginning 9 months after phase 1 final plat*
- *Phase 2 vertical construction (approximately 83 units) 18 months to build out following final plat.*

❖ Will the project be built in phases?

Yes- at least 2 phases.

❖ If phased construction is planned, what is the proposed build-out timeline?

See above.

❖ Will there be a targeted market, e.g., senior citizens?

Project is a fee simple market project.

- Tax Revenue: Per the CIA, it is estimated that the fair market value of the property identified as a portion of Tax Parcel 087-5011-003 would increase by 40% with the proposed improvements. The following table shows the estimated change in tax revenues for the County, City and School System:

Assessed Value * 40% * Millage Rate = Property Tax					
The subject property is assessed property taxes from Coweta County, Coweta Schools, and the City of Newnan. The 2002 Assessment provides for the following:					
	Assessed Value	*	40%	*	Millage Rate = Property Tax
Coweta County	\$4,639,967	*	40%	*	0.006162 = \$9,923.47
Coweta Schools	\$4,639,967	*	40%	*	0.017140 = \$27,602.77
City of Newnan	\$4,639,967	*	40%	*	0.003051 = \$4,913.42
Assuming each unit has a market value of \$400,000, and further assuming the assessed value is equal to the market value, the total project will have an assessed value of \$65,200,000. Applying the 2022 millage rates to this amount the project will yield the following property taxes:					
	Assessed Value	*	40%	*	Millage Rate = Property Tax
Coweta County	\$65,200,000	*	40%	*	0.006162 = \$160,704
Coweta Schools	\$65,200,000	*	40%	*	0.017140 = \$447,011
City of Newnan	\$65,200,000	*	40%	*	0.003051 = \$79,570

In addition to the estimated tax revenue, the project will also have a projected impact fee generation of \$181,062.03 to the City of Newnan and approximately \$500,000 to Newnan Utilities.

As with all development, the project will impact service provision. The question is whether or not it is excessive or burdensome. In this case, most of the service providers that have responded have indicated that they can service the development, but it will create a strain on their departments in terms of equipment wear and tear and manpower. School system has expressed concern about their ability to meet the proposal's projected population.

Staff Assessment – PROJECT WILL HAVE AN IMPACT, ESPECIALLY FOR TRAFFIC AND SCHOOLS X

- Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?** The Future Land Use Map shows this property as Emerging Missing Middle Residential. Newnan defines Emerging Missing Middle Residential as an area of medium-density residential, between 4-7 units per acre, which allows for a variety of housing products, including single-family homes, duplexes, triplexes, quadplexes, cottage homes and small apartment buildings.

Staff Assessment – THE FUTURE LAND USE MAP SHOWS THIS PROPERTY AS EMERGING MISSING MIDDLE RESIDENTIAL ✓

- Is the proposed use consistent with the purpose and intent of the proposed zoning district?** The RMH (Residential Multiple-Family Dwelling-Higher Density District) is intended to provide higher density multiple-family dwellings which may have a relatively intense concentration of dwelling units served by large open spaces consisting

of common areas and recreation facilities. There are a variety of housing products that are allowed in RMH zoned districts: manufactured housing; low-rise multiple family dwellings; two-family dwellings; garden apartments; apartment buildings; condominiums; townhouses and single-family detached homes. New RMH districts are most appropriately located adjacent to existing RMH districts in areas in transition between denser residential neighborhoods and commercial development, or in areas where the future land use map indicates would be appropriate for higher density residential uses. The mixed use zoned site to the north contains an apartment component (Springs at Newnan Apartments) with an effective unit count of 13 units per acre, representing a denser residential neighborhood than the proposed development.

Staff Assessment – PROPOSED USE IS CONSISTENT WITH THE PROPOSED ZONING DISTRICT ✓

7. **Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan?** The Future Land Use map also shows the property as Emerging Missing Middle Residential, which was a new category created by the City during the most recent comprehensive plan update adopted by City Council in the Fall of 2021.

Staff Assessment – RECENTLY COMPLETED UPDATES TO BOTH THE FUTURE LAND USE MAP AND COMPREHENSIVE PLAN SHOW THE PROPOSED DEVELOPMENT AS A USE CONSISTENT WITH EMERGING MISSING MIDDLE RESIDENTIAL ✓

8. **Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Within the past five years, the City has approved several new townhome developments the majority of which are market rate rentals. The proposed development would fall into the market rate category. The City routinely discusses high density multifamily developments, in various forms, on a regular basis with prospective developers.

This site is limited by natural features, topography and floodplain that restrict development. As the need for more housing opportunities continues to be an ongoing issue and concern for the City of Newnan, this is an area that the City identified, through the Comprehensive Plan and Future Land Use Map, as an area suitable for residential development of a denser nature.

Staff Assessment – THE PROPOSED PROJECT DOES REFLECT A REASONABLE BALANCE, BUT THE QUESTION IS WHETHER THIS IS THE APPROPRIATE LOCATION FOR A MULTIFAMILY TOWNHOME COMMUNITY ✓

SUMMARY OF STANDARD ASSEMENT:

After assessing the project based on the standards to be considered for rezoning requests, Staff found that the development meets **6 of the 8 standards**.

REGULATORY CRITERIA TO CONSIDER:

In February 2022, Newnan City Council adopted a revised Tree Conservation and Landscape Ordinance. Section 10-84 of that ordinance requires that any application for annexation, rezoning or preliminary subdivision plats, must include a Preliminary Tree Management Plan. This plan shall show the existing location and general tree canopy and shall also specify which areas are proposed to be conserved and/or replanted. The City Landscape Architect conducts a preliminary review and recommends conditions to consider during the approval of any of the aforementioned processes. The applicant has submitted a Preliminary Tree Management Plan, which is contained in the attachments. On June 15, 2023, Mike Furbush, City of Newnan's Landscape Architect and Beautification Director, provided the following comments pertaining to the applicant's preliminary tree management plan.

FERRY – NEWNAN CROSSING BY-PASS PROJECT **TREE MANAGEMENT PLAN COMMENTS (First Submittal & Review):**

May this serve as my plan review comments on the recently submitted Tree Management Plan for the proposed Ferry - Newnan Crossing By-Pass project. The Tree Management Plan provides a written description of the existing tree canopy along with the proposed tree save areas. However, the plan does not show the actual location of the trees on the overall site. The Tree Management Plan should show the entire site with the proposed site layout overlaid on an aerial photograph of the site. The proposed development is quite dense with 163 units shown with little room remaining for required tree plantings. We would love to see a typical building layout to show how much room is provided in the front and back of these units for required tree plantings. Projects, such as these, generally struggle to provide enough room for adequate tree plantings due to other site elements such as parking, water lines, and electrical transformers. As shown in the Site Data chart, there is almost one third of the site that is unbuildable due to floodplain, stream buffers, and a Georgia Power Easement. It is difficult to determine, from the conceptual layout, how much of the overall site will be disturbed, but typically high-density developments such as this one and the proposed site layout seem to indicate that almost all the property that can be disturbed will be graded to make the proposed layout work.

One favorable aspect of the proposed layout relates to the existing Interstate 85 tree lined corridor which the City of Newnan has successfully managed to maintain throughout various developments up and down the City's Interstate Corridor. The proposed project does not cross over a significant stream buffer with road crossing to access a portion of the site next to the Interstate. A road crossing would certainly adversely affect the existing stream buffer and also the existing tree line and buffer along the Interstate. Under the proposed conceptual layout there is a significant wooded area that will be used as tree save to produce additional and probably needed tree density units and also provide the desired and current tree buffer along the Interstate.

STAFF SUGGESTED CONDITIONS TO CONSIDER:

Should the Commission elect to recommend approval of the request, Staff would recommend the following condition be considered:

- The project will be consistent with the density, project data, amenities, proffered conditions and architectural details as provided as part of the application.
- The project will be capped at 163 units maximum.
- Developer will maintain 40 foot undisturbed landscape buffer on east side between any residential unit and Interstate 85 right-of-way.
- Developer will provide and install any required street lighting along Newnan Crossing Bypass, adjacent to the parcel and will install sidewalk along Newnan Crossing Bypass and internally throughout the proposed development in accordance with the City's standards.

According to the concept site plan, the following are proposed dimensional criteria for this project:

CURRENT ZONING:	RS-15
PROPOSED ZONING:	RML
TOTAL SITE AREA:	35.5
TOTAL UNITS PROPOSED	163
REAR LOADED WITH ALLEY 51.5% (28' X 52' UNIT SIZE)	84 UNITS
FRONT LOADED 48.5% (28' X 52' UNIT SIZE)	79 UNITS
MINIMUM LOT SIZE REQ'D:	2,600SF
LOT SIZE PROPOSED:	TO BE DETERMINED
SETBACKS	
MINOR STREET W/REAR GARAGE:	10'
MINOR STREET:	10'
STREET SIDE W/REAR GARAGE:	10'
STREET SIDE:	10'
REAR:	20'
MINIMUM LOT FRONTAGE:	20'
MINIMUM LOT DEPTH:	TO BE DETERMINED
PARKING REQUIRED (2 SPACES PER UNIT):	326 SPACES
PARKING PROVIDED	368 SPACES
TOWNHOMES:	326 SPACES
GUEST PARKING:	31 SPACES
AMENITY:	11 SPACES
OPEN SPACE REQUIRED (1,000 SF/UNIT):	3.7 ACRES
OPEN SPACE PROVIDED:	3.7 ACRES
DENSITY: (163 UNITS / 35.5AC)	4.59 UNITS/ACRE

1. Setbacks: The setbacks listed for minor street and street side are listed on the concept plan at “10 feet”. The setbacks required by the RMH zoning ordinance is 15 feet for minor street and street sides.
2. The 20-foot townhome width for rear access units is a deviation from the ordinance minimum building width in RMH zoning. The minimum building width for townhomes in RMH zoning district is 26 feet; however, this request has been added by the applicant as a proffered condition for consideration by the city.
3. On the concept plan, the lot size is listed as “To Be Determined”. Minimum lot size for townhomes in the RMH zoning district is 2,600 square feet. The applicant needs to provide information on the lot size if they are proposing lots less than 2,600 square feet for the city to consider as part of the rezoning request.

We posed these questions to the applicant for additional clarification on July 6, 2023. In response, the applicant provided the following responses:

Based on the site plan, please see my understanding of requested conditions (variances) along with my presumed reasoning for each below. As you know we are proposing over 50% of the townhomes be alley fed rear entry with a 2 car garage in the rear of the unit which will create a very attractive main entrance streetscape which is generating many of the variance requests.

1. Because we do have many of the units being alley fed or rear loaded, we are proposing a lot width of 20' as opposed to 26' given that we can still accommodate the 2-car garage in the rear as opposed to the front of the unit which alleviates the concern of parking in driveways. Do note that the front-loaded units are 28' wide as opposed to the minimum of 26', so we are 2' wider than the minimum on the front entry.
2. Inherently, we are also asking for a reduction for the minimum building line width from 26' to 20'.
3. Another result of the alley fed units is that we are proposing to pull those units closer to the street, so instead of a 15' FSB, we were requesting a 10' FSB.
4. Accordingly, we are requesting a reduction in the street side / minor street setback from 15' to 10' to match the fronts.
5. Because we were able to accommodate a reduction in townhome width while still achieving a 2 car rear entry garage, we are requesting the minimum lot size of 2,600 SF be reduced to 1,750 SF.

The deviations from RMH dimensional standards, as noted above, for setback reductions, lot width reductions, and for lot size reductions may be considered as additional proffered conditions to the other applicant-generated conditions that comprise this rezoning petition.

OPTIONS:

- A. Approve the rezoning request as submitted
- B. Approve the rezoning request with conditions
- C. Deny the rezoning request

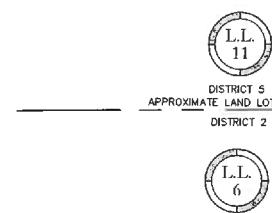
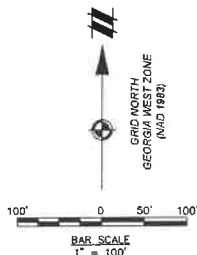
ATTACHMENTS: Application for Rezoning
 Location Map
 Community Impact Assessment
 Traffic Study

FILE NAME: \\g04324\4\23020205 Newnan Crossing Bypass\Newnan Crossing Bypass.dwg DATE: 4/25/2023 12:04 PM PLotted BY: C. L. Dredge, Jr. DATE: 4/25/2023 12:04 PM PLOT SCALE: 1"=100' (1"=100')

THIS BOX RESERVED FOR THE CLERK OF THE SUPERIOR COURT FILING INFORMATION

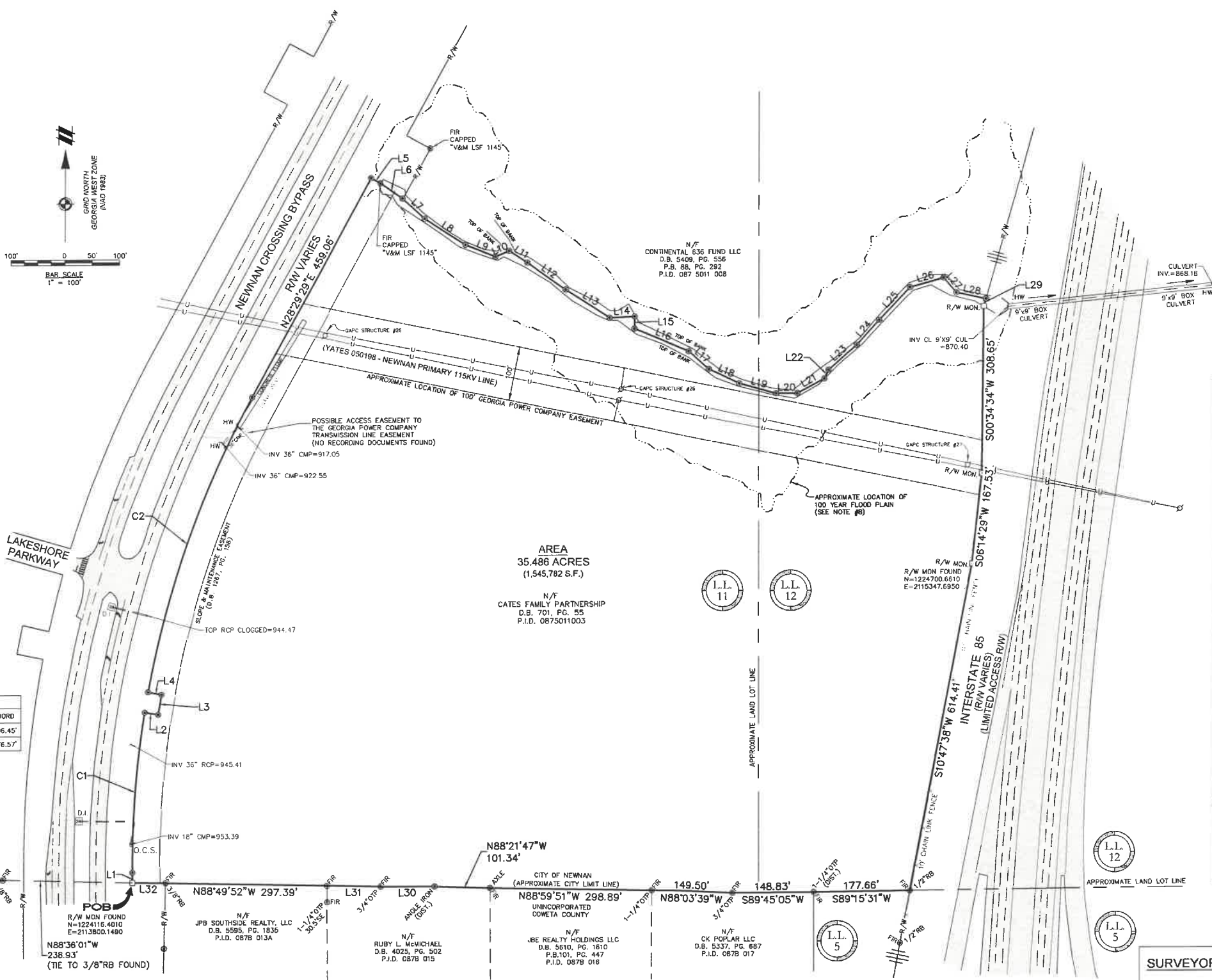
LINE #	BEARING	LENGTH
L1	N00°02'01"E	18.88'
L2	S81°02'20"E	25.00'
L3	N09°33'40"E	37.38'
L4	N79°50'20"W	25.00'
L5	S61°32'28"E	19.45'
L6	S54°47'38"E	49.60'
L7	S47°40'50"E	55.07'
L8	S56°53'40"E	88.01'
L9	S68°18'39"E	60.40'
L10	N66°34'33"E	27.86'
L11	S57°04'51"E	40.44'
L12	S54°52'18"E	86.87'
L13	S56°44'45"E	95.07'
L14	N87°51'48"E	47.03'
L15	S01°25'26"W	22.18'
L16	S67°48'20"E	108.92'
L17	S47°54'30"E	50.58'
L18	S64°35'48"E	62.13'
L19	S74°31'32"E	70.29'
L20	N89°21'50"E	38.61'
L21	N61°50'05"E	56.69'
L22	N26°02'33"E	17.77'
L23	N48°01'17"E	69.00'
L24	N42°28'18"E	62.16'
L25	N43°22'34"E	82.62'
L26	N74°13'26"E	64.34'
L27	S40°33'53"E	36.18'
L28	S77°49'00"E	56.05'
L29	S15°48'37"W	14.01'
L30	N89°51'48"W	98.93'
L31	N88°46'24"W	98.82'
L32	N89°25'47"W	80.39'

CURVE #	LENGTH	RADIUS	DELTA	CHD BEARING	CHORD
C1	296.78'	1809.88'	9°23'43"	S04°15'48"W	296.45'
C2	579.03'	1809.88'	18°19'51"	S19°19'35"W	576.57'



ABBREVIATIONS	
C1	CURVE NUMBER (SEE CURVE TABLE DATA)
CMF	CONCRETE MONUMENT FOUND
D.B.	DEED BOOK
E	EASTING
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FIR	FOUND IRON ROD
GAPC	GEORGIA POWER COMPANY
IRF	IRON ROD FOUND
L1	LINE NUMBER (SEE LINE TABLE DATA)
LB	LICENSED BUSINESS
LL	LAND LOT
LLC	LIMITED LIABILITY COMPANY
M	MEASURED
MON	MONUMENT
N	NORTHING
NAD	NORTH AMERICAN DATUM
NAVOD	NORTH AMERICAN VERTICAL DATUM
NF	NOW OR FORMERLY
O.C.S.	OUTLET CONTROL STRUCTURE
ORB	OFFICIAL RECORD BOOK
(R)	RECORD
P.O.B.	POINT OF BEGINNING
PG	PAGE
P.I.D.	PARCEL IDENTIFICATION NUMBER
RB	REBAR
RTK	REAL-TIME KINEMATIC
RAW	RIGHT-OF-WAY
TB	TOP OF BANK
TOS	TOP OF SLOPE
VRS	VIRTUAL REFERENCE STATION

LEGEND	
	FOUND MONUMENT
	IRON PIN SET
	SUBJECT BOUNDARY LINE
	ADJACENT BOUNDARY LINE
	RIGHT OF WAY LINE
	LAND LOT LINE
	EASEMENT LINE
	EXISTING FENCE
	FLOODPLAIN DELINEATION
	TOP OF BANK
	CATCH BASIN SQUARE
	CULVERT
	STORM SEWER
	ASPHALT PAVEMENT
	UTILITY POLE
	OVERHEAD UTILITY
	LIMITED ACCESS
	ROAD RIGHT-OF-WAY



SURVEY NOTES

- THIS PLAT WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS, OR ENTITY NAMED HEREON. THIS PLAT DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS OR ENTITY WITHOUT EXPRESS WRITTEN CERTIFICATION BY THE SURVEYOR NAMING SAID PERSON, PERSONS, OR ENTITY.
- EASEMENTS AND RIGHTS OF WAY OF WHICH THE SURVEYOR HAS KNOWLEDGE OF ARE SHOWN HEREON; OTHERS MAY EXIST OF WHICH THE SURVEYOR HAS NO KNOWLEDGE OF AND OF WHICH THERE IS NO OBSERVABLE EVIDENCE. THE PROPERTY SHOWN HEREON IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD BOTH WRITTEN AND UNWRITTEN.
- THIS SURVEY DOES NOT INCLUDE THE BENEFIT OF A TITLE COMMITMENT.
- NORTH ARROW AND BEARINGS SHOWN HEREON ARE BASED ON GEORGIA WEST ZONE - NAD 83 ADJUSTED 2011, USING GLOBAL POSITIONAL SYSTEM (GPS) AND OBTAINED BY RTK OBSERVATIONS ON 4/19/2023 USING THE TRIMBLE VRS SYSTEM. ALL DISTANCES ARE HORIZONTAL GROUND MEASUREMENTS EXPRESSED IN U.S. SURVEY FEET.
- FIELD CLOSURE: THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 154,368 FEET AND AN ANGULAR ERROR OF 3 SECONDS PER ANGLE POINT AND WAS ADJUSTED USING THE COMPASS RULE METHOD.
- PLAT CLOSURE: THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 648,312 FEET.
- EQUIPMENT USED FOR MEASUREMENT: ANGULAR/LINEAR: TRIMBLE S6 ROBOTIC TOTAL STATION TRIMBLE R10 GPS RECEIVER.
- FLOOD NOTE: ACCORDING TO THE FLOOD INSURANCE RATE MAP (FIRM) FOR COWETA COUNTY, GEORGIA, COMMUNITY-PANEL NUMBER 13070023D, DATED 2/8/2013, THE SUBJECT PROPERTY (A PORTION OF THE SUBJECT PROPERTY) IS IN A FLOOD HAZARD ZONE AND LIES WITHIN ZONE X, DETERMINED AS AREAS DETERMINED TO BE INSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. FLOOD LINE SHOWN HAS BEEN TAKEN AND DOWNLOADED FROM THE FEMA FLOOD MAP WEBSITE.
- ZONING: PROPERTY IS ZONED RS-15 (SUBURBAN RESIDENTIAL SINGLE-FAMILY DWELLING DISTRICT - MEDIUM DENSITY). JURISDICTION PER ONLINE INFORMATION, RESEARCHED 04/24/2023, NO ZONING REPORT PROVIDED TO SURVEYOR.
- PRIMARY BUILDING SETBACKS: 45'(R/W), 85'(C/L) FRONT / 12' SIDE / 35' REAR.
- STATE, COUNTY, & LOCAL BUFFERS AND SETBACKS MIGHT EXIST ON THE SUBJECT PROPERTY THAT ARE NOT SHOWN HEREON.
- UTILITIES: THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON VISIBLE STRUCTURES. THE PROPERTY SHOWN HEREON MAY BE SERVED BY UNDERGROUND UTILITIES WHICH ARE NOT SHOWN. ALL UTILITY COMPANIES SHOULD BE CONTACTED BEFORE BEGINNING ANY DESIGN OR CONSTRUCTION.
- SUBJECT PARCEL HAS DIRECT ACCESS TO PUBLIC RIGHT-OF-WAY. CURB CUTS AND DRIVEWAYS ARE LOCATED AS SHOWN.

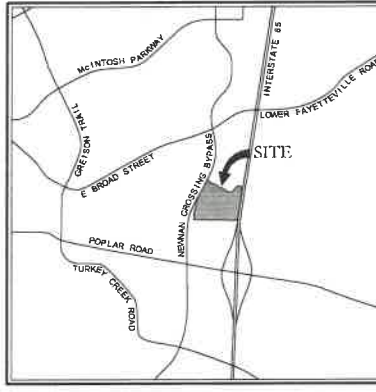
SURVEY REFERENCES

- BOUNDARY SURVEY FOR DOMINUM, INC. PREPARED BY TERRAMARK PROFESSIONAL LAND SURVEYING, DATED 12/18/20.
- COWETA COUNTY TAX MAPS.
- ALL OTHER REFERENCES ARE AS SHOWN HEREON.

SURVEYOR'S PLAT CERTIFICATION:

THIS PLAT 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 PLAT 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. SECTION 15-6-67.

CLYDE R. LUDREDGE, GEORGIA PROFESSIONAL LAND SURVEYOR
REGISTRATION NUMBER 2659
April 25, 2023
DATE



VICINITY MAP
NOT TO SCALE

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCURRED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE: CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE SURVEYOR SHALL BE EXPECTED TO ASSURE ANY RESPONSIBILITY FOR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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LOCATED IN	LAND LOT 11 & 12
5th DISTRICT	CITY OF NEWNAN
COWETA COUNTY, GEORGIA	

CLIENT	BRENT HOLDINGS, LLC
DATE	04/25/2023
BOUNDARY OF SURVEY	NEWNAN CROSSING BYPASS 2037 NEWNAN CROSSING BYPASS NEWNAN, GEORGIA 30263
REVISIONS	

DWG.	DAS	CH.	ORE
P.M.	KK		
CODE			
JOB	23002095		
SHEET NO.			

1 OF 1







TREE MANAGEMENT PLAN SITE DESCRIPTION

EXISTING TREE CANOPY:

THE ENTIRE SITE IS CURRENTLY FORESTED WITH A MIXTURE OF PINES AND HARDWOODS. THE MIXTURE IS TYPICAL OF SOUTHEASTERN FORESTS WITH PINES, HICKORIES, AND OAKS. THE ENTIRE SITE SLOPES TOWARD AN EXISTING STREAM PARALLEL TO I-85 INTO A FLOODPLAIN CONTAINING WETLANDS ON THE NORTHERN PORTION OF THE SITE. THE TREE CANOPY IS DENSE AND ONLY BISECTED BY AN EXISTING 100' POWER EASEMENT RUNNING FROM EAST TO WEST ON THE NORTHERN SECTION. THERE IS CURRENTLY A CLEAR DEMARCATION OF TREE CANOPY ON THREE SIDES: ON THE WEST THERE IS NEWNAN CROSSING BYPASS, POWER EASEMENT ON THE NORTH, AND I-85 ON THE EAST. THE SOUTH PORTION BLENDS INTO ADJACENT COMMERCIAL AND RESIDENTIAL PROPERTIES.

TREE SAVE AREAS:

THESE AREAS INCLUDE UNDEVELOPABLE LAND, ENVIRONMENTALLY SENSITIVE AREAS, AND BUFFERS TO REMAIN. JUST NORTH OF THE POWER EASEMENT, A SECTION OF FORESTED AREA WILL REMAIN IN THE NORTHERN PORTION OF THE SITE JUST SOUTH OF EXISTING RESIDENTIAL AREA. WETLANDS, FLOODPLAINS, AND STREAM BUFFERS WILL ALL REMAIN UNDISTURBED BY THE PROPOSED DEVELOPMENT AND ALLOW TO REMAIN IN ITS NATURAL STATE. DISTURBANCE OF TREE ROOT ZONES CAN NEGATIVELY AFFECT THE LONG-TERM HEALTH OF NATURAL AREAS. ROOT PROTECTION ZONES WILL BE IMPLEMENTED IN THE PRELIMINARY STAGES TO CREATE A CLEAR DELINEATION WITH PROTECTIVE TREE FENCING PROTECTING TREE ROOT ZONES AS PER LOCAL CODE. THIS DELINEATION WILL BE A THE LIMITS OF THE PROPOSED DEVELOPMENT. 4" ORANGE BARRIER FENCING WITH SIGNAGE PROHIBITING THE DISTURBANCE BEYOND THE FENCE. THE BARRIER FENCE SHALL BE PLACED PRIOR TO ANY SILT FENCE TRENCHING ALONG WITH INITIAL EROSION CONTROL BEST MANAGEMENT PRACTICES.

LEGEND

- 1 SUBDIVISION ENTRANCE
- 2 CLUBHOUSE AND POOL AMENITY AREA
- 3 TOWNHOMES
- 4 LANDSCAPE BUFFER
- 5 GREENSPACE
- 6 STORMWATER MANAGEMENT AREA
- 7 WETLANDS
- 8 MAINTENANCE BUILDING
- 9 EXISTING 100-YR FLOODPLAIN
- 10 FUTURE 100-YR FLOODPLAIN
- 11 EXISTING STREAM
- 12 100' STREAM BUFFER
- 13 100' GEORGIA POWER EASEMENT
- 14 DESIGNATED TREE SAVE AREA

SITE DATA

PROPOSED ZONING: RML
 TOTAL SITE AREA: 35.5 AC
 TOTAL DISTURBED ACRES: 19.9 AC
 TOTAL AREA IN UNDEVELOPABLE PORTIONS: 11.62 AC
 REMAINING TREE SAVE AREAS/ UNDISTURBED AREAS: 3.98 AC



NEWNAN CROSSING
 CONCEPTUAL LANDSCAPE & PRELIMINARY TREE MANAGEMENT PLAN



NEWNAN
GEORGIA

CITY OF NEWNAN, GEORGIA
Planning & Zoning Department

25 LaGrange Street
Newnan, Georgia 30263
Office (770) 254-2354
Fax (770) 254-2361

APPLICATION TO AMEND ZONING MAP

Note to Applicant: Please be sure to complete all entries on the application form. If you are uncertain to the applicability of an item, contact The Planning & Zoning Department at 770-254-2354. Incomplete applications or applications submitted after the deadline will not be accepted.

Name of Applicant LDO Coweta, LLC

Mailing Address 270 North Jeff Davis Drive, Fayetteville, GA 30214

Telephone 678.251.5046 Email: rferry@bretholdings.net

Property Owner (Use back if multiple names) Cate's Family Partnership

Mailing Address 815 Sheilia Lane, Great Falls, VA 22066 Attn: Eve Loudenback & CC: George Rosenzweig

Telephone eveloudenback@gmail.com or George Rosenzweig - 470-347-3651

Address/Location of Property 2037 Newnan Crossing Bypass

Tax Parcel No.: 087 5011 003 Land Lot 11&12

District/Section 5th district Size of Property (Square Feet or Acres) 35.486

Present Zoning Classification: RS-15 Proposed Zoning Classification: RMH

Present Land Use: Vacant

To the best of your ability, please answer the following questions regarding the application:

Explain how conditions have changed that renders the zoning map designation invalid and no longer applicable The subject property is adjacent to a property zoned MXD for the purpose of a multi-family age targeted development, due to the intensity of this site, the proposed rezoning is appropriate and more compatible to the MXD development than RS-15.

If the proposed zoning map change is an extension of an existing adjacent zoning district, provide an explanation why the proposed extension should be made NA

If the requested change is not designed to extend an adjacent zoning district, explain why this property should be placed in a different zoning district than all adjoining property. In other words, how does this property differ from adjoining property and why should it be subject to different restrictions? The tract to the north of the subject tract is a large multi-family development

zoned MXD. To the south are tracts in unincorporated Coweta County zoned C-8. The proposed zoning and use is a transition from the MXD development

to the north to the tracts in unincorporated Coweta County to the south.

Please attach all the following items to the completed application:

1. A letter of intent giving the details of the proposed use of the property which should include, at a minimum, the following information:
 - What the property is to be used for, if known.
 - The size of the parcel or tract.
 - The zoning classification requested and the existing classification at the filing of this application.
 - The number of units proposed.
 - For non-residential projects, provide the density of development in terms of floor area ratio (FAR).
 - Any proposed buffers and modification to existing buffers.
 - Availability of water and sewer facilities including existing distance to property.
2. Name and mailing addresses of all owners of all property within 250 feet of the subject property (available from the County Tax Assessor records). This is encouraged to be submitted in a mail merge Microsoft Word data file format.
3. Legal description of property. This description must establish a point of beginning; and from the point of beginning, give each dimension bounding the property that the boundary follows around the property returning to the point of beginning. If there are multiple property owners, all properties must be combined into one legal description. If the properties are not contiguous, a separate application and legal description must be submitted for each property. For requests for multiple zoning districts, a separate application and legal description must be submitted for each district requested. A copy of the deed may substitute for a separate description.
4. A certified plat (stamped and dated) drawn to scale by a registered engineer, architect, land planner, land surveyor, or landscape architect that shall include the following information:
 - ✓ Boundary survey showing property lines with lengths and bearings
 - ✓ Adjoining streets, existing and proposed, showing right-of-way
 - ✓ Locations of existing buildings dimensioned and to scale, paved areas, dedicated parking spaces, and other property improvements
 - ✓ North arrow and scale
 - ✓ Adjacent land ownership, zoning and current land use
 - ✓ Total and net acreage of property
 - ✓ Proposed building locations
 - ✓ Existing and proposed driveway(s)
 - ✓ Lakes, ponds, streams, and other watercourses
 - ✓ Floodplain, wetlands, and slopes equal to or greater than 20 percent
 - ✓ Cemeteries, burial grounds, and other historic or culturally significant features
 - ✓ Required and/or proposed setbacks and buffers
5. Submit one (1) copy in an 18" x 24" format and one copy in a pdf digital file format.
6. Completed Proffered Conditions form.
7. Completed Disclosure of Campaign Contributions and Gifts form.
8. If the applicant and the property owner are not the same, complete the Property Owner's Authorization form and/or the Authorization of Attorney form.
9. For multiple owners, a Property Owner's Authorization form shall be submitted for each owner.
10. A community impact study must be submitted if the development meets any of the following criteria:
 - Office proposals in excess of 200,000 gross square feet
 - Commercial proposals in excess of 250,000 gross square feet
 - Industrial proposals which would employ over 500 persons
 - Multi-Family proposals in excess of 150 units

11. A Development of Regional Impact form shall be completed and submitted to the City if the request meets any of the criteria in §10-10 (b)(2)(h) on page 10-7 of the Newnan Zoning Ordinance.
12. Fees for Amending the Zoning Map shall be made payable to the **City of Newnan** and are listed below:
- Single-Family Application.....\$500.00/Plus \$15.00 Per Acre
 - ✓ Multi-Family Application.....\$1,387.15 \$500.00/Plus \$25.00 Per Acre
 - Office/Institutional Application.....\$500.00/Plus \$15.00 Per Acre
 - Commercial Application.....\$500.00/Plus \$25.00 Per Acre
 - Industrial Application.....\$500.00/Plus \$15.00 Per Acre
 - Mixed Use Application.....\$500.00/Plus Per Acre fee based upon proposed land use.
 - Planned Development Application.....\$500.00/Plus per Acre fee based upon proposed land use.
 - Overlay Zoning Application.....\$350.00

PLEASE NOTE: THIS APPLICATION MUST BE FILED BY THE 1st OF THE MONTH TO BE CONSIDERED FOR THE PLANNING COMMISSION MEETING OF THE FOLLOWING MONTH.

I (We) hereby authorize the staff of the City of Newnan to inspect the premises of the above-described property. I (We) do hereby certify the information provided herein is both complete and accurate to the best of my (our) knowledge, and I (we) understand that any inaccuracies may be considered just cause for invalidation of this application and any action taken on this application.

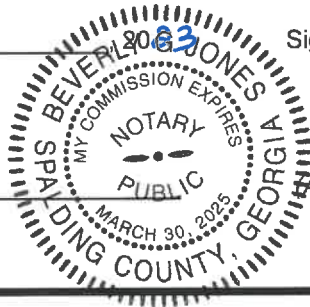
Sworn to and subscribed before me this

30th day of May

Signature of Applicant

[Signature]

[Signature]
Notary Public



(Affix Raised Seal Here)

FOR OFFICIAL USE ONLY

DATE OF PRE-APPLICATION CONFERENCE: April 18, 2023

RECEIVED BY: Tracy Dunnavant

DATE OF FILING: 05/31/23

FILING FEE RECEIVED: \$1,387.15

DATE OF NOTICE TO NEWSPAPER: _____

DATE OF PUBLIC HEARING: _____

PLANNING COMMISSION RECOMMENDATION (DATE): _____

DATE OF TRANSMITTAL TO CITY COUNCIL: _____

CITY COUNCIL DECISION (DATE): _____



NEWNAN
GEORGIA

City of Newnan, Georgia
Attachment A
Proffered Conditions

As part of an application for a rezoning, a property owner **MAY** proffer, in writing, proposed conditions to apply and be part of the rezoning being requested by the applicant. Proffered conditions may include written statements, development plans, profiles, elevations, or other demonstrative materials.
(Please refer to Article 10 of the Zoning Ordinance for complete details.)

Please list any written proffered conditions below:

50% of town homes will have vehicular access from a rear access garage, these units will be 20' wide. Rear access garages will be minimum 19' from alleyway.
50% of the town homes will have vehicular access from a front garage, these units will be 28' wide. Garages will be set a minimum of 19' from the sidewalk.

Any development plans, profiles, elevations, or other demonstrative materials presented as proffered conditions shall be referenced below and attached to this application:

See provided elevations and layout.

I do hereby certify the information provided herein is both complete and accurate to the best of my knowledge.


Signature of Applicant

Richard Ferry 
Type or Print Name and Title

Signature of Applicant's Representative

Type or Print Name and Title

 5/30/23
Signature of Notary Public Date





NEWMAN
GEORGIA

City of Newnan, Georgia
Attachment B

Disclosure of Campaign Contributions & Gifts

Application filed on _____, 20__ for action by the Planning Commission on rezoning requiring a public hearing on property described as follows:

Approximately 35.486 acres bounded on the west by Newnan Crossing Bypass, north by the Springs of Newnan

Apartments, east by Interstate 85, and south by transitional lots in unincorporated Coweta County. The property is proposed to be rezoned from RS-15 to RMH.

The undersigned below, making application for Planning Commission action, has complied with the Official Code of Georgia Section 36-67A-1, et.seq., Conflict of Interest in Zoning Actions, and has submitted or attached the required information on this form as provided.

All individuals, business entities, or other organizations¹ having a property or other interest in said property subject of this application are as follows:

Cates Family Partnership

Have you as applicant or anyone associated with this application or property, within the two (2) years immediately preceding the filing of this application, made campaign contributions aggregating \$250.00 or more to a member of the Newnan City Council or a member of the Newnan Planning Commission? ☐ Yes ☒ No

If YES, please complete the following section (attach additional sheets if necessary):

Name and Official Position of Government Official	Contributions (List all which aggregate to \$250 or more)	Date of Contribution (Within last 2 years)
/	/	/
/	/	/
/	/	/

I do hereby certify the information provided herein is both complete and accurate to the best of my knowledge.

CATES FAMILY PARTNERSHIP:

Eva A Loudenback
Signature of Applicant

By: Eve Loudenback, Managing Partner
Type or Print Name and Title

Signature of Applicant's Representative

Type or Print Name and Title

Richard A Perales 5-30-2020
Signature of Notary Public Date

 **Richard Alexander Perales**
Notary Public, State of Ohio
My Commission Expires
(Affix Seal Here) July 21, 2025
Commission Number
2020-RE-817394

¹Business entity may be a corporation, partnership, limited partnership, firm, enterprise, franchise, association, trade organization, or trust while other organization means non-profit organization, labor union, lobbyist or other industry or casual representative, church, foundation, club, charitable organization, or educational organization.



NEWNAN
GEORGIA

City of Newnan, Georgia
Attachment B

Disclosure of Campaign Contributions & Gifts

Application filed on May 31, 2023 for action by the Planning Commission on rezoning requiring a public hearing on property described as follows:

Town Home development on Newnan Crossing bypass

The undersigned below, making application for Planning Commission action, has complied with the Official Code of Georgia Section 36-67A-1, et.seq., Conflict of Interest in Zoning Actions, and has submitted or attached the required information on this form as provided.

All individuals, business entities, or other organizations¹ having a property or other interest in said property subject of this application are as follows:

Cole's Family Partnership

Brent Holdings, LLC LPO Concrete, LLC

Have you as applicant or anyone associated with this application or property, within the two (2) years immediately preceding the filing of this application, made campaign contributions aggregating \$250.00 or more to a member of the Newnan City Council or a member of the Newnan Planning Commission? ☐ Yes ☒ No

If YES, please complete the following section (attach additional sheets if necessary):

Name and Official Position of Government Official	Contributions (List all which aggregate to \$250 or more)	Date of Contribution (Within last 2 years)

I do hereby certify the information provided herein is both complete and accurate to the best of my knowledge.

[Signature]
Signature of Applicant

Richard Farley Manager Brent Holdings LPO Concrete LLC
Type or Print Name and Title

Signature of Applicant's Representative

Type or Print Name and Title

[Signature] 5/30/23
Signature of Notary Public Date



(Affix Raised Seal Here)

¹Business entity may be a corporation, partnership, limited partnership, firm, enterprise, franchise, association, trade organization, or trust while other organization means non-profit organization, labor union, lobbyist or other industry or casual representative, church, foundation, club, charitable organization, or educational organization.



City of Newnan, Georgia
Attachment C
Property Owner's Authorization

The undersigned below, or as attached, is the owner of the property which is the subject of this application. The undersigned does duly authorize the applicant named below to act as applicant in the pursuit of a rezoning of the property.

Name of Property Owner Eve Loudenback on behalf of Cates Family Partnership

Telephone Number 703-309-0909

Address of Subject Property The real property comprising approximately 35.486 acres located between Newnan
Crossing Bypass and Interstate 85 in the City of Newnan, Coweta, County, Georgia.

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

CATES FAMILY PARTNERSHIP :

By: Eva A Loudenback
Signature of Property Owner

Personally appeared before me

Eva A Loudenback

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

Richard Alexander Perales
Notary Public

5-30-2023
Date

(Affix Raised Seal Here)



Richard Alexander Perales
Notary Public, State of Ohio
My Commission Expires
July 21, 2025
Commission Number
2020-RE-817394



City of Newnan, Georgia
Attachment E
Rezoning Checklist

The following is a checklist of information required for the submittal of a rezoning application. The Planning & Zoning Department will not accept an incomplete application.

- ☒ Completed application form
- ☒ Letter of intent
- ☒ Names and addresses of all owners of all property within 250 feet of the subject property
- ☒ Legal description of property
- ☒ Certified plat
- ☒ Concept Plan
- ☒ to be provided Preliminary Tree Management Plan
- ☒ Completed Attachment A – Proffered Conditions (if applicable)
- ☒ Completed Attachment B – Disclosure of Campaign Contributions & Gifts (if applicable)
- ☒ to be provided Completed Attachment C – Property Owner's Authorization (if applicable)
- ☒ NA Completed Attachment D – Attorney's Authorization (if applicable)
- ☒ Community Impact Study (if applicable)
- ☒ Filing Fee in the form of a check payable to the **City of Newnan**

Note: Please attach this form to the filing application.

LDO Coweta, LLC

270 North Jeff Davis Drive
Fayetteville, GA 30214

May 26, 2023

City of Newnan, Georgia
Planning and Zoning Department
25 LaGrange Street
Newnan, Georgia 30263

Re: **LETTER OF INTENT FOR REZONING**
35.486 Acre Tract located on Newnan Crossing Bypass
From RS 15 to RMH for the 163 Town Homes

LDO Coweta, LLC respectfully submits this rezoning application in order to develop a 35.486-acre tract located on Newnan Crossing Bypass in the City of Newnan for the purpose of a 163-unit town home development. The property, currently zoned RS 15, is adjoined by a 30-acre MXD zoned tract recently developed into 320 apartment units.

The proposed development includes two attractive types of town homes. Upon entering the community, the units are 20-feet wide and three stories high. These units have vehicular access from a garage accessed by a rear alley way. The fronts only have pedestrian access only. The units that are further into the neighborhood are 28 feet wide and two stories high. These units have both pedestrian and vehicular access in the front of the unit.

The project will provide its residents with several recreational activities. These include a pool with pavilion and restrooms, landscaped parks, a dog park, and sidewalks throughout the neighborhood. The landscaped parks and open space will be owned and maintained by the community property owner's association.

LDO Coweta, LLC requests approval of the rezoning application in order to allow the construction of 163 market-priced, fee simple town homes. The proposed density is approximately 4.6 units/acre. Upon build-out, the development will be managed by a property owners association with recorded covenants that include, among other things, property and building maintenance, management of amenities, and restrictions limiting rental units to less than 10 percent.

Please feel free to contact me if you have any questions or comments.

Yours Truly,



Richard Ferry
Manager, LDO Coweta, LLC

Newnan Crossing Townhomes Community Impact Assessment

In accordance with Section 10-10 part (b)(2)(g), any multi-family proposal in excess of 150 units is required to provide a study of the proposed development's impact on:

1. Schools

See attached letter from Ronnie Cheek with Coweta County Schools. He requested the following information, our answers are in italics:

❖ What is the construction schedule for the project?

- *Zoning – Approved Land Disturbance Permit – 12 months*
- *Phase 1 horizontal construction Final Plat – 15 months (includes main amenities)*
- *Phase 1 vertical construction (approximately 80 units) 18 months to build out following final plat.*
- *Phase 2 horizontal construction final plat (remaining 83 units) 18 months beginning 9 months after phase 1 final plat*
- *Phase 2 vertical construction (approximately 83 units) 18 months to build out following final plat.*

❖ Will the project be built in phases?

Yes- at least 2 phases.

❖ If phased construction is planned, what is the proposed build-out timeline?

See above.

❖ Will there be a targeted market, e.g., senior citizens?

Project is a fee simple market project.

2. Roads and Streets

See attached letter from Michael Klahr

3. Police

No response was provided by the Newnan Police Department.

4. Fire

Fire Marshal Tim Cox was contacted and sent the following via email on May 22, 2023:

"The Fire Dept. have no record of hazardous material, fire violations nor environmental issues."

5. Sanitation

AmWaste provides solid waste removal for the City of Newnan. Staff of AmWaste were not able to provide an amount of waste that is typical in the City.

The City charges each residence \$97.20 per quarter. If built as proposed there will be 163 units. Annually, each unit will pay \$388.80 for solid waste removal services. In all, the development will generate \$63,374.40 annually.

6. Taxes

Property taxes are figured by multiplying the assessed value of the property by 40% and applying the effective millage rates to that amount less any exemptions.

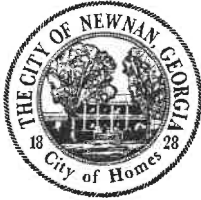
Assessed Value * 40% * Millage Rate = Property Tax

The subject property is assessed property taxes from Coweta County, Coweta Schools, and the City of Newnan. The 2002 Assessment provides for the following:

	Assessed Value	*	40%	*	Millage Rate	=	Property Tax
Coweta County	\$4,639,967	*	40%	*	0.006162	=	\$9,923.47
Coweta Schools	\$4,639,967	*	40%	*	0.017140	=	\$27,602.77
City of Newnan	\$4,639,967	*	40%	*	0.003051	=	\$4,913.42

Assuming each unit has a market value of \$400,000, and further assuming the assessed value is equal to the market value, the total project will have an assessed value of \$65,200,000. Applying the 2022 millage rates to this amount the project will yield the following property taxes:

	Assessed Value	*	40%	*	Millage Rate	=	Property Tax
Coweta County	\$65,200,000	*	40%	*	0.006162	=	\$160,704
Coweta Schools	\$65,200,000	*	40%	*	0.017140	=	\$447,011
City of Newnan	\$65,200,000	*	40%	*	0.003051	=	\$79,570



The City of Newnan, Georgia

Office of the City Engineer

May 22, 2023

City Engineer Review

REZONING REQUEST

Portion of Tax Parcel 087 5011 003
35.4892 Acres
Newnan Crossing Bypass

Environmental:

1. The development plan shall follow the design standards and guidance per the Georgia Storm Water Management Manual, in compliance with the **Post-Development Stormwater Management Ordinance** for the City of Newnan.
Note a new requirement for on-site, runoff reduction, effective December 6, 2020.
2. The development plan shall include a three-phased erosion control plan in compliance with the **Soil Erosion, Sedimentation and Pollution Control Ordinance** for the City of Newnan.
3. All streams, wetlands and other environmentally sensitive areas such as floodplain and floodway shall be delineated and located within open space to the extent practically possible. The development plan shall be in compliance with the **Floodplain Management and Flood Damage Prevention Ordinance** for the City of Newnan. Any development within a floodplain or waters of the US shall be properly permitted with the Federal Emergency Management Agency (FEMA), or the United States Army Corp of Engineers (USACE), as applicable.
4. This site is located within a water supply watershed and thus increased stream buffers apply as follows: perennial streams shall carry an undisturbed stream buffer on 100 feet with an additional impervious surface setback of 50 feet; intermittent streams shall carry an undisturbed stream buffer of 50 feet with an additional 25 foot impervious surface setback. Buffers shall be measured from the point of wrested vegetation and shall be delineated in the field.
5. This site is located within the Stillwood Creek watershed drainage basin and stormwater management shall comply with the conditions set forth in the **Stillwood Creek Watershed Drainage Policy** as Section 10-169 of the **Post-Development Stormwater Management Ordinance** for the City of Newnan.

Transportation:

1. ADA compliant sidewalks, 6 feet in width, shall be provided along the public Right of Way for Newnan Crossing Bypass, the entire length of the parcel, to connect to existing sidewalk to the north. 5 foot sidewalks shall be provided throughout the proposed development, on both sides of all streets, and shall connect to the sidewalks in the Right of Way for Newnan Crossing Bypass.

2. Traffic impact study required. A traffic impact study shall include the intersections of Newnan Crossing Bypass with Lower Fayetteville Road, Lakeshore Parkway, and Poplar Road. Justification for trip distribution shall be included in the study. Mitigation shall be proposed for any negative impact to the level of service (LOS) at the intersections. The criteria for trip generation shall be derived from the latest edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE).
3. The primary driveway for the development shall line up with existing road, Lakeshore Parkway, at an existing median break. Dedicated left and right turn lanes shall be provided and designed in accordance with design standards for the Georgia Department of Transportation (GDOT). Pavement markings shall be designed in accordance with the GDOT and the Manual on Uniform Traffic Control Devices (MUTCD).
4. A secondary driveway shall be Right In/ Right Out, designed in accordance with standards for the GDOT, and shall include a dedicated right turn lane.
5. A warrant study shall be provided to determine the need for a traffic signal at the location of the primary driveway serving the development. The study shall include the projected traffic generated for any under-construction projects in proximity along Newnan Crossing Bypass. The developer shall bear, at a minimum, the proportional share for the cost for a traffic signal, if warranted, and the signal shall incorporate video detection (Gridsmart). The signal installation shall comply with the MUTCD, GDOT standards and details, GDOT standard specifications, and the National Electric Code (NEC).
6. The developer shall provide and install street lighting along Newnan Crossing Bypass, adjacent to the parcel, in accordance with the lighting standards for a multi-lane urban corridor for the electric provider for the development.
7. The developer shall consider an ADA compliant parking space adjacent to the proposed Dog Park, with access isle.
8. Driveway length from sidewalk in the public Right of Way to face of garage door, and from the edge of pavement at private alley to face of garage door shall be 19'-0", minimum.

Respectfully,

Michael Klahr

William M. Klahr, P.E., CFM
Director of Engineering

Coweta County School System

170 Werz Industrial Blvd.
Newnan, GA 30263
Phone: 770-254-2750

May 30, 2023

Mr. Richard Ferry
Brent Holdings, LLC
270 North Jeff Davis Drive
Fayetteville, GA 30214

Re: Rezoning - Newnan Crossing Townhomes

Richard,

In response to your request for impact on the school system for the referenced project, we offer the following comments based on the information provided:

The proposed request for rezoning from a lower density (76 single family homes) to the higher density (163 townhomes) may present challenges when planning for school enrollment and meeting student needs. Due to the high density housing in the area of the proposal, school capacity is an ongoing concern. Current enrollment figures show the building utilization of the schools serving this area as follows:

- Newnan Crossing Elementary School - 100%
- Arnall Middle School - 81%
- East Coweta High School - 119%

If the request is approved, we would request that the developer provide us advanced notice of the following information for our planning purposes:

- ❖ What is the construction schedule for the project?
- ❖ Will the project be built in phases?
- ❖ If phased construction is planned, what is the proposed build-out timeline?
- ❖ Will there be a targeted market, e.g., senior citizens?

Thank you for the opportunity to provide feedback.

Sincerely,

Ronnie Cheek

Ronald C. Cheek
Director of Facilities
Coweta County Schools
(770)254-2750 x203
ronnie.cheek@cowetaschools.net

Cc: Tracy Dunnavant

Coweta Committed to Student Success

Coweta County School System

170 Werz Industrial Blvd.
Newnan, GA 30263
Phone: 770-254-2750

May 30, 2023

Mr. Richard Ferry
Brent Holdings, LLC
270 North Jeff Davis Drive
Fayetteville, GA 30214

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- ❖ Will there be a targeted market, e.g., senior citizens?

Thank you for the opportunity to provide feedback.

Sincerely,

Ronnie Cheek

Ronald C. Cheek
Director of Facilities
Coweta County Schools
(770)254-2750 x203
ronnie.cheek@cowetaschools.net

Cc: Tracy Dunnivant

Coweta Committed to Student Success

Property owners within 250'

1. CK Poplar LLC
Suite 200
300 Galleria Parkway SE
Atlanta, GA 30339
2. JBE Realty Holdings, LLC
5901 Peachtree Industrial BLVD
Atlanta, GA 30341
3. Ruby McMichael Estate
C/O Sheila Ann McMichael
19 Hickory Drive
Newnan, GA 30264
4. GTB Southside Realty LLC
2799 Piedmont Road NE
Atlanta, GA 30305
5. Poplar Road II, LLC
PO Box 71909
Newnan, GA 30271
6. Patrick Nugent II
135 Carlisle Street
Newnan, GA 30263
7. Jacob and Melanie Owens
141 Carlisle Street
Newnan, GA 30263
8. Elmorio and Deborah Brown
147 Carlisle Street
Newnan, GA 30263
9. Maricela Diaz
153 Carlisle Street
Newnan, GA 30263
10. Corey and Tonya Walton
159 Carlisle Street
Newnan, GA 30263
11. Alanna and Justin McCook and Troy O'Hearn Jr
167 Carlisle Street
Newnan, GA 30263
12. Lakeshore Homeowners Association
Suite 200B
500 Sugar Mill Road
Atlanta, GA 30350
13. Continental 636 Fund LLC
W 134 N 8675 Executive Parkway
Menomonee Falls, WI 53051

EXHIBIT "A"

PROPERTY DESCRIPTION

Being all that tract or parcel of land lying and being in Land Lots 11 & 12, 5th District, City of Newnan, Coweta County, Georgia and being more particularly described as follows:

Beginning for the same at a concrete right of way monument found at the intersection of the South Line of aforesaid Land Lot 11 and the Easterly Right-of-Way Line of Newnan Crossing Bypass, (a variable width right of way), as described in a deed recorded among the Land Records of Coweta County in Deed Book 1267, Page 158; thence, leaving the said Point of Beginning and running with the said line of Newnan Crossing Bypass

1. North 00° 02' 01" East, 18.88 feet; thence,
2. 296.78 feet along the arc of a curve deflecting to the right, having a radius of 1,809.86 feet and a chord bearing and distance of North 04° 15' 48" East, 296.45 feet; thence,
3. South 81° 02' 20" East, 25.00 feet; thence,
4. 37.38 feet along the arc of a curve deflecting to the right, having a radius of 1,784.86 feet and a chord bearing and distance of North 09° 33' 40" East, 37.38 feet; thence,
5. North 79° 50' 20" West, 25.00 feet; thence,
6. 579.02 feet along the arc of a curve deflecting to the right, having a radius of 1,809.86 feet and a chord bearing and distance of North 19° 19' 35" East, 576.56 feet; thence,
7. North 28° 29' 29" East, 459.07 feet; thence, leaving the aforesaid line of Newnan Crossing Bypass and running
8. South 61° 32' 28" East, 19.45 feet; thence, running adjacent to the property now or formerly owned by Continental, 449 Fund LLC, as described in a deed recorded among the aforesaid Land Records in Deed Book 4818, Page 179
9. South 54° 47' 38" East, 49.60 feet; thence,
10. South 47° 40' 50" East, 55.07 feet; thence,
11. South 56° 53' 40" East, 89.01 feet; thence,
12. South 68° 18' 39" East, 60.40 feet; thence,
13. North 66° 34' 33" East, 27.86 feet to a point in the centerline of a creek; thence, running with the centerline of said creek and continuing to run adjacent to the aforesaid Continental, 449 Fund LLC property
14. South 57° 04' 51" East, 40.44 feet; thence,
15. South 54° 52' 18" East, 86.87 feet; thence,
16. South 56° 44' 45" East, 95.07 feet; thence,
17. North 87° 51' 48" East, 47.03 feet; thence,
18. South 01° 25' 26" West, 22.18 feet; thence,
19. South 67° 48' 20" East, 108.92 feet; thence,
20. South 47° 54' 30" East, 50.58 feet; thence,
21. South 64° 35' 48" East, 62.13 feet; thence,
22. South 74° 31' 32" East, 70.29 feet; thence,
23. North 89° 21' 50" East, 38.61 feet; thence,
24. North 61° 50' 05" East, 56.69 feet; thence,
25. North 26° 02' 33" East, 17.77 feet; thence,
26. North 48° 10' 17" East, 69.00 feet; thence,
27. North 42° 28' 18" East, 62.16 feet; thence,

28. North 43° 22' 34" East, 82.62 feet; thence,
29. North 74° 13' 26" East, 64.34 feet; thence,
30. South 40° 33' 53" East, 36.18 feet; thence,
31. South 77° 49' 00" East, 56.05 feet to a point on the Westerly Right-of-Way Line of Interstate 85, (a variable width right of way); thence, running with the said line of Interstate 85
32. South 16° 05' 54" West, 13.59 feet to a concrete right of way monument found; thence,
33. South 00° 35' 22" West, 309.10 feet to a concrete right of way monument found; thence,
34. South 06° 16' 03" West, 167.45 feet to a concrete right of way monument found; thence,
35. South 10° 46' 58" West, 615.08 feet to a point of intersection with the South Line of aforesaid Land Lot 12; thence, leaving the aforesaid line of Interstate 85 and running with the said line of Land Lot 12
36. South 89° 34' 53" West, 177.58 feet to a 1 ¼ inch open top pipe found at the common corner of Land Lots 5 & 6, 2nd District of Coweta County; thence, continuing with the common line of aforesaid Land Lots 6, 11 & 12
37. South 89° 26' 39" West, 148.81 feet to a ¾ inch open top pipe found; thence,
38. North 87° 54' 51" West, 149.59 feet to a 1 ¼ inch open top pipe found; thence,
39. North 89° 00' 01" West, 298.97 feet to an axle found; thence,
40. North 88° 19' 10" West, 101.28 feet to an angle iron found; thence,
41. North 89° 52' 25" West, 98.96 feet to a 1 ¼ inch open top pipe found; thence,
42. North 88° 48' 32" West, 100.58 feet; thence,
43. North 88° 59' 55" West, 197.00 feet; thence,
44. North 88° 29' 32" West, 99.59 feet to a 3/8 inch rebar found at the intersection with the aforesaid line of Newnan Crossing Bypass; thence, running with the said line of Newnan Crossing Bypass
45. North 89° 24' 05" West, 60.31 feet to the Point of Beginning, containing 1,545,908 square feet or 35.4892 acres of land, more or less.

Property is subject to all easements and rights of way recorded and unrecorded.

Traffic Impact Study

Newnan Crossing Residential Townhome Development
City of Newnan, Georgia

June 16, 2023

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING



Traffic Impact Study

Newnan Crossing Residential Townhome Development City of Newnan, Georgia

study prepared for:

Brent Holdings, LLC
270 North Jeff Davis Drive
Fayetteville, GA 30214

June 16, 2023



MARC R. ACAMPORA, PE, LLC

TRAFFIC ENGINEERING

858 Myrtle Street, NE
Atlanta, Georgia 30308
(678) 637-1763

e-mail: acamporatraffic@comcast.net

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Introduction

This study assesses the traffic impact of a proposed residential townhome development in the City of Newnan, Georgia. The site is located along the east side of Newnan Crossing Bypass near Lakeshore Parkway, as shown in Figure 1. The development will consist of 163 attached residential townhomes. The project will be served by two vehicular accesses on Newnan Crossing Bypass, with the main access aligning with the median break at Lakeshore Parkway and the second access being limited to right-in/right-out (RIRO).

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed development, project future traffic volumes, assess the impact of the subject development, then develop conclusions and recommendations to mitigate the project traffic impact and ensure safe and efficient existing and future traffic conditions in the vicinity of the project.

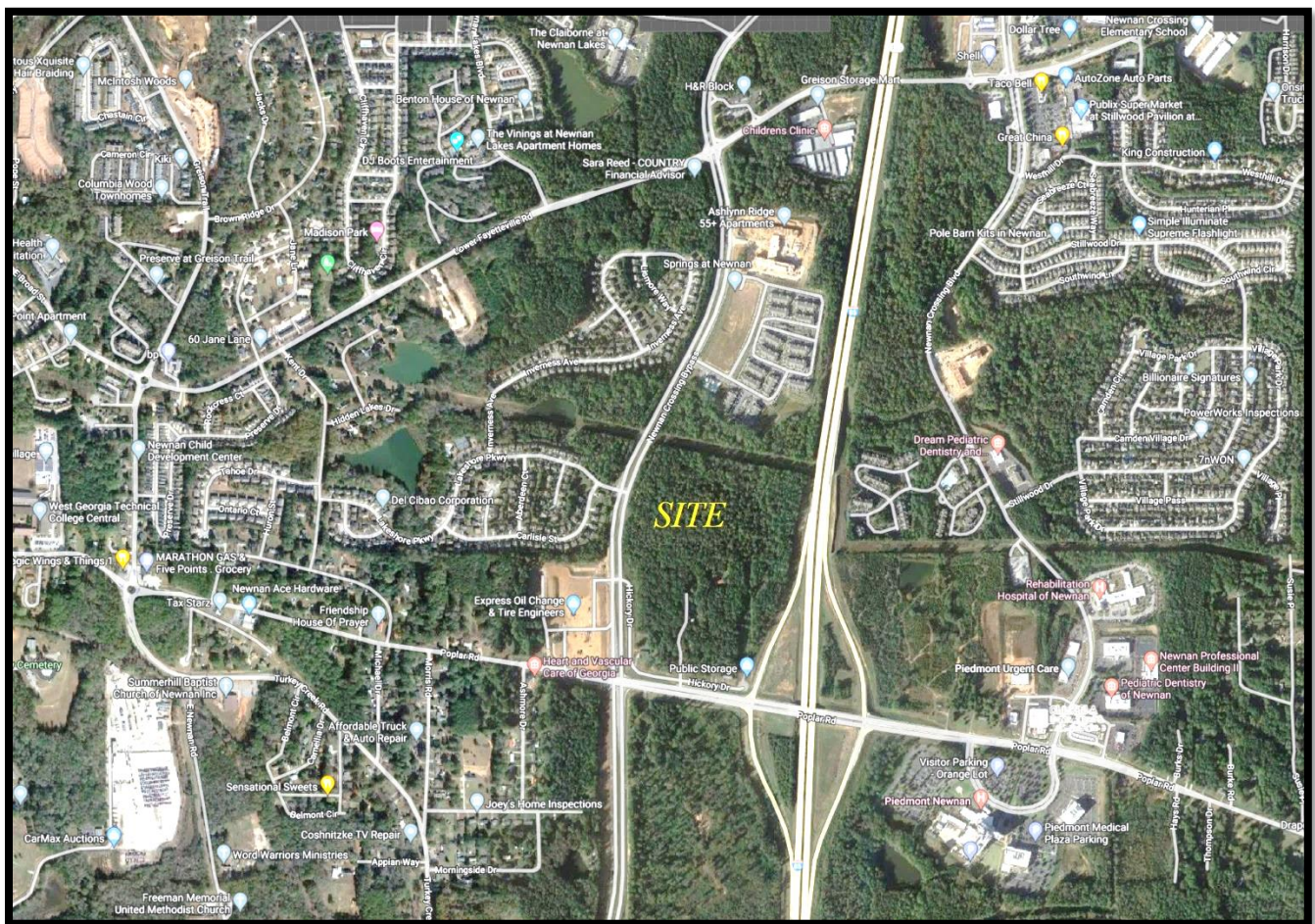


Figure 1 – Site Location Map

Existing Traffic Conditions

Existing traffic operating conditions in the vicinity of the proposed townhomes were assessed. The following is a description of existing transportation facilities, traffic volumes, and intersection operations.

Description of Existing Roadways

Newnan Crossing Bypass is a north-south urban collector that begins at SR 34 (north of which it is called Millard Farmer Industrial Boulevard), has a signalized intersection north of the site at Lower Fayetteville Road, passes the site, has a signalized intersection south of the site at Poplar Road, then continues to the south, terminating at SR 16. The road has two through lanes in each direction with a wide grassed median and exclusive left and right turn lanes at major intersections. The terrain is level to very gently rolling and the posted speed limit is 45 mph. In the vicinity of the site and to the south, the road primarily serves accesses to residential subdivisions, while there is a large retail node along the road to the north. A 24-hour bi-directional traffic count collected for this study in June 2023, with area schools in not session, revealed a northbound volume of 7,079 vehicles and a southbound volume of 6,954 vehicles, for a two-way 24-hour volume of 14,033 vehicles.

Lakeshore Parkway is a local two lane east-west subdivision street. The road terminates at a side street stop sign controlled T-intersection at Newnan Crossing Bypass. The posted speed limit is 25 mph.

Pedestrian, Bicycle, and Transit Accessibility

With the exception of a short segment on the west side of the road near Lakeshore Parkway, there is generally no sidewalk along Newnan Crossing Bypass. There are no dedicated bicycle lanes along nearby roadways and there is no regularly scheduled mass transit in the area.

Existing Traffic Volumes

Existing full turning movement peak hour traffic volume counts were collected at the following intersections in the vicinity of the site:

1. Newnan Crossing Bypass at Lower Fayetteville Road
2. Newnan Crossing Bypass at Lakeshore Parkway
3. Newnan Crossing Bypass at Poplar Road

In addition to the intersection counts, a 24-hour bi-directional count was collected on Newnan Crossing Bypass at Lakeshore Parkway.

The counts were collected on Tuesday, June 6, 2023, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. The counts at the Lakeshore Parkway intersection were collected from 7:00 a.m. to 7:00 p.m. Area schools were in recess for the summer on the day on which the counts were recorded. Therefore, a monthly adjustment factor

was applied to the counts. The June monthly adjustment factor of 1.00 for Factor Group 4 (Urban/Small Urban – Major Collectors, Minor Collectors, and Locals) was obtained from *Georgia's Traffic Monitoring Guide*, 2018, published by the Georgia DOT Office of Transportation Data.

The locations of the traffic counts are presented in Figure 2.

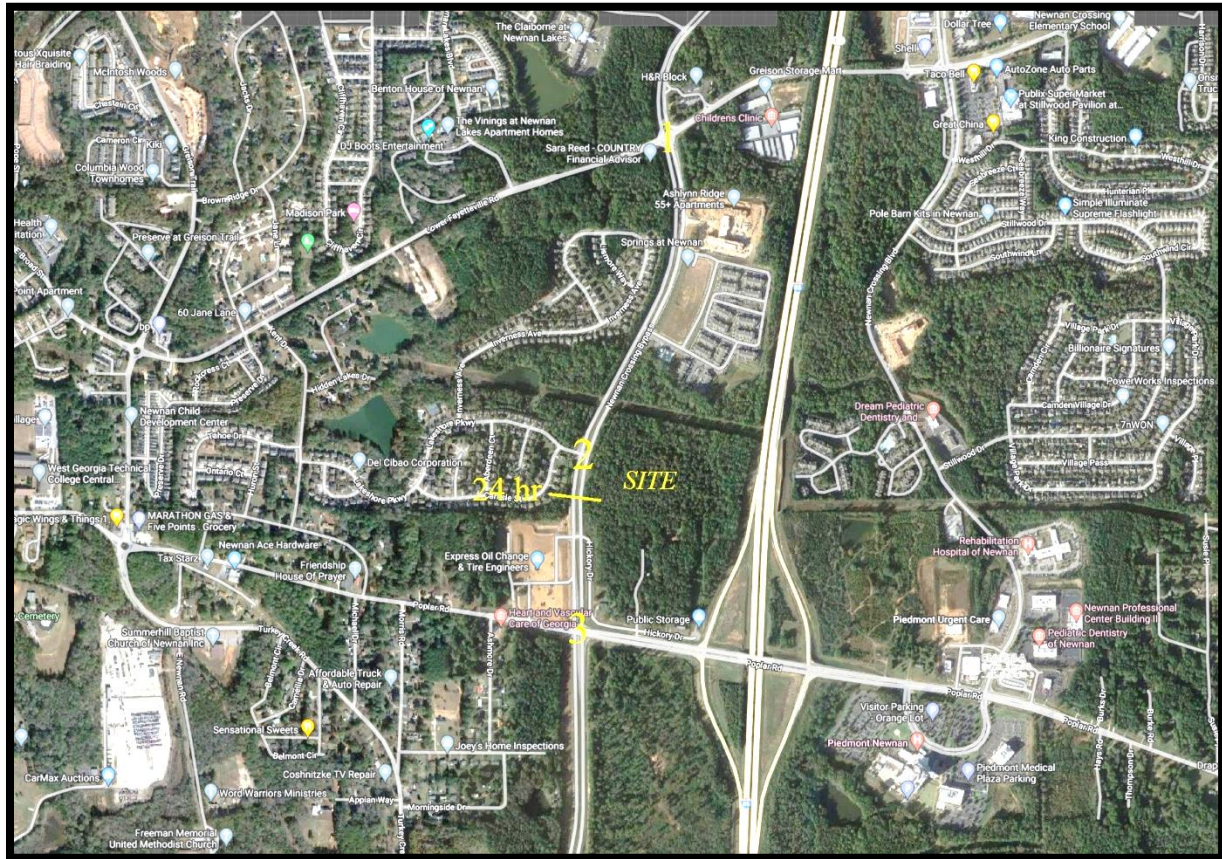


Figure 2 – Traffic Volume Count Locations

From the intersection turning movement count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the existing weekday a.m. and p.m. peak hour traffic volumes at each intersection and are shown in Figure 3. The raw count data is found in Appendix A.

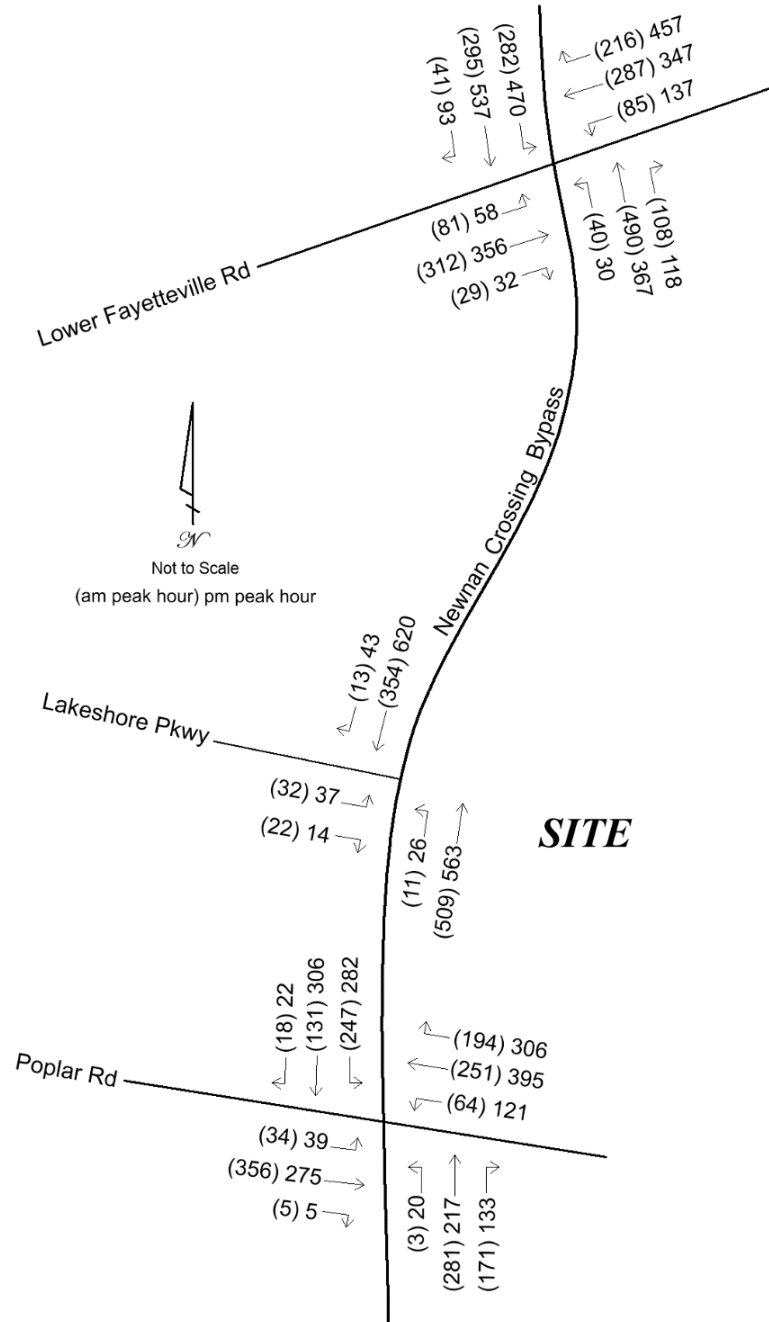


Figure 3 – Existing Weekday A.M. and P.M. Peak Hour Traffic Volumes

Existing Intersection Operations

Existing traffic operations were analyzed at the counted intersections using Synchro software, version 10, in accordance with the methodology presented in the Transportation Research Board's 2016 *Highway Capacity Manual (HCM 6)*. This methodology is presented in Appendix B. The results of the analysis are shown in Table 1. Computer printouts containing detailed results of the existing analysis are located in Appendix C. Levels of service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 1 – Existing Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Lower Fayetteville Rd at Newnan Crossing Bypass (signal)	C	27.3	C	34.1
northbound approach	C	25.7	C	32.7
southbound approach	B	17.1	C	24.9
eastbound approach	D	39.3	D	52.5
westbound approach	C	31.3	D	39.3
2. Newnan Xing Bypass at Lakeshore Parkway (side street stop)	A	1.1	A	1.2
northbound left turn	A	8.1	A	9.3
eastbound approach	B	14.3	C	23.0
3. Poplar Rd at Newnan Crossing Bypass (signal)	C	22.9	C	23.3
northbound approach	B	15.9	B	19.2
southbound approach	C	23.3	C	23.1
eastbound approach	C	24.1	C	22.3
westbound approach	C	26.4	C	26.0

The existing analysis reveals acceptable operating conditions at all study intersections. Therefore, no mitigation is recommended for the existing condition.

No-Build Traffic Condition

A 2028 no-build condition was developed. This represents the traffic volumes and control that will exist in the future at the anticipated date of the build-out of the Newnan Crossing Townhomes, but not including the project's trips. The purpose of the analysis of this condition is to isolate the traffic impacts of the proposed development from background growth in volumes that are expected to occur in the area while the project is under construction.

No-Build Volumes

In order to develop no-build volumes, background growth factors were developed using historic Georgia DOT 24-hour traffic counts that were collected in this area for the years 2017 through 2021 (the latest year for which data was available at the time of this study), as shown in Table 2.

Table 2 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates

Year	Poplar E of Newnan Crossing	Annual Growth	Lower Fayetteville W of Stonebridge	Annual Growth	E Broad E of Greison	Annual Growth
Station ID	077-0363		077-0353		077-0350	
2017	10,800		15,700		12,000	
2018	10,800	0.0%	15,700	0.0%	8,510	-29.1%
2019	10,900	0.9%	15,800	0.6%	8,570	0.7%
2020	13,400	22.9%	14,600	-7.6%	7,900	-7.8%
2021	14,400	7.5%	14,900	2.1%	8,530	8.0%
<i>avg growth</i>		5.9%		-1.0%		-6.6%

Growth in the area has fluctuated. Two of the three count locations saw a decrease from 2019 to 2020, which is attributable to the COVID-19 pandemic. The latest year saw modest positive growth. However, much of that is attributable to a return to pre-pandemic levels. There was a large increase in volume reported on Poplar Road east of Newnan Crossing Bypass from 2019 to 2020. However, review of the data at that location reveals that 2017, 2018, and 2019 were estimated counts and 2020 was an actual count. It seems probable that the estimated counts were low and the 2020 count corrected for those low estimates, rather than an actual increase of almost 23% in volume at that one location, while the other two locations experienced the decrease due to the pandemic during that same time period. For the five year period, two of the three count locations saw a slight overall decrease in volumes while the count location on Poplar Road saw +5.9% overall growth, noting that this is the location just described, with the expected low estimated volumes. Based on the growth trends identified in Table 2, and taking the pandemic and the likely low estimated counts into consideration, a 2.0% annual growth factor was applied to the existing volumes when projecting the future no-build volumes.

There is a Development of Regional Impact (DRI) called Cresswinds Coweta, which is under development between US 27 and Newnan Crossing Bypass, north of SR 16 and south of Turkey Creek Road. The project is a senior

community with 730 age-restricted single family homes. This DRI will have access to Newnan Crossing Bypass and, therefore, is expected to have a greater impact on volumes on Newnan Crossing Bypass than is covered by the 2.0% growth rate described above. The specific trips for this DRI were obtained from the traffic study prepared for that project by Keck & Wood, dated July 16, 2021. These specific trips were added to the study intersections, in addition to the 2.0% growth rate. The results are the 2028 no-build volumes that are expected at the study intersections at full build-out of the Newnan Crossing Bypass townhomes, but not including the townhomes' trips. Appendix A includes worksheets that show the growth rate and the Cresswinds DRI trips added at each intersection.

The existing traffic volumes were increased by the 2.0% annual growth factor, or 10.4%, to 2028 and the Cresswinds DRI trips were added. The results are the 2028 no-build traffic volumes that will be on the roadway network at buildout of the townhomes but not including the townhomes' trips.

Programmed Improvements

Programmed (scheduled and funded) and planned (anticipated) transportation infrastructure projects in the vicinity of the proposed development were researched. The following projects were identified that could affect traffic patterns, volumes, or capacity:

Georgia DOT Project #0004407 – This project consists of maintenance and operational improvements along Lower Fayetteville Road from Greison Trail to SR 54 (Fischer Road) in Coweta County. The existing two-lane roadway's pavement is being widened two feet on each side, except in the area of the Chandler's Lake Dam where all widening is occurring on the southern side of the roadway. The project includes leveling and resurfacing of the roadway, as well as shoulder improvements. The project is under construction.

County Project NR-9 – Southwest Newnan Bypass is a new road to the west of US 29 at Smokey Road. The project is considered mid-term and is not expected to be completed by the 2028 build-out of the proposed Newnan Crossing Townhomes.

County Project NR-10 – Newnan Crossing Bypass Access Road is a new road project but is considered long-term and is not expected to occur until well after the 2028 build-out of the proposed Newnan Crossing Townhomes.

The 2028 no-build analysis assumes the same lanes and control as the existing analysis.

No-Build Intersection Operations

The no-build condition includes the no-build traffic volumes added to the existing intersections with the current lanes and control. The 2028 volumes were entered into the Synchro model and the 2028 no-build traffic operations were analyzed at the study intersections. The results of the no-build analysis are shown in Table 3. Computer printouts containing detailed results of the no-build analysis are located in Appendix D. Levels of

service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 3 – No-Build Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Lower Fayetteville Rd at Newnan Crossing Bypass (signal)	C	31.8	D	44.9
northbound approach	C	31.5	D	43.3
southbound approach	C	22.7	D	45.9
eastbound approach	D	43.4	D	53.0
westbound approach	C	32.7	D	36.7
2. Newnan Xing Bypass at Lakeshore Parkway (side street stop)	A	1.3	A	1.5
northbound left turn	A	8.3	A	9.7
eastbound approach	C	15.4	D	29.5
3. Poplar Rd at Newnan Crossing Bypass (signal)	C	23.6	C	24.7
northbound approach	B	17.9	C	21.8
southbound approach	C	24.0	C	24.9
eastbound approach	C	24.7	C	22.8
westbound approach	C	26.5	C	27.2

The no-build analysis shows a moderate deterioration in operations due to anticipated growth in this area. However, operations at all locations will continue to be acceptable. Therefore, no mitigation is identified for the no-build condition.

Project Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed development, including a site description, how much traffic the project will generate, and where that traffic will travel.

Project Description

The development will consist of 163 attached residential townhomes. The project will be served by two vehicular accesses on Newnan Crossing Bypass, with the main access aligning with the median break at Lakeshore Parkway and the second access to the south of the main access and limited to right-in/right-out (RIRO). The site plan is presented in Figure 4.

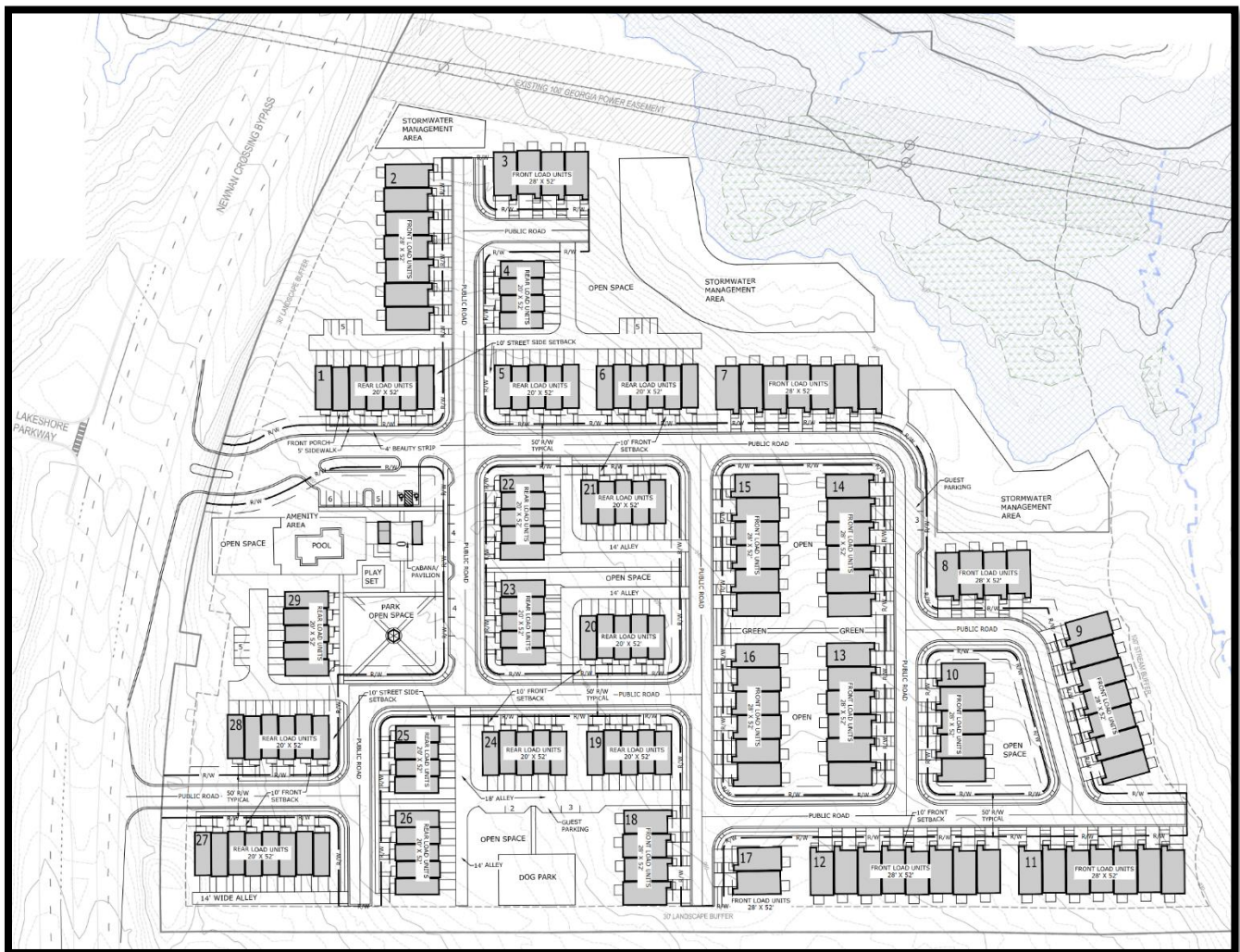


Figure 4 – Site Plan for Proposed Townhomes

Trip Generation

Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed development. The volume of traffic that will be generated by the townhomes was calculated using the equations in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (the current edition). ITE Land Use 215 – Single Family Attached Housing was chosen as representative of the project. The trip generation is summarized in Table 4.

Table 4 – Proposed Townhomes Trip Generation

Land Use	ITE Code	Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour		
			In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Townhomes	215	163 homes	20	59	79	55	39	94	596	596	1,192

The proposed townhomes will generate 79 trips in the morning peak hour, 94 trips in the evening peak hour, and 1,192 daily trips.

Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. The trip distribution percentages for the townhomes were developed based on the locations and proximity of likely trip origins and destinations including regional employment centers, retail and offices in the area, nearby schools, other regional trip attractors, and the major routes of travel in the area, most notably the interchange of I-85 at Poplar Road. The new project trips, shown in Table 4, were assigned to the roadway network based on the distribution percentages. The trip distribution percentages and the a.m. and p.m. peak hour trips expected to be generated by the proposed townhomes are shown in Figure 5.

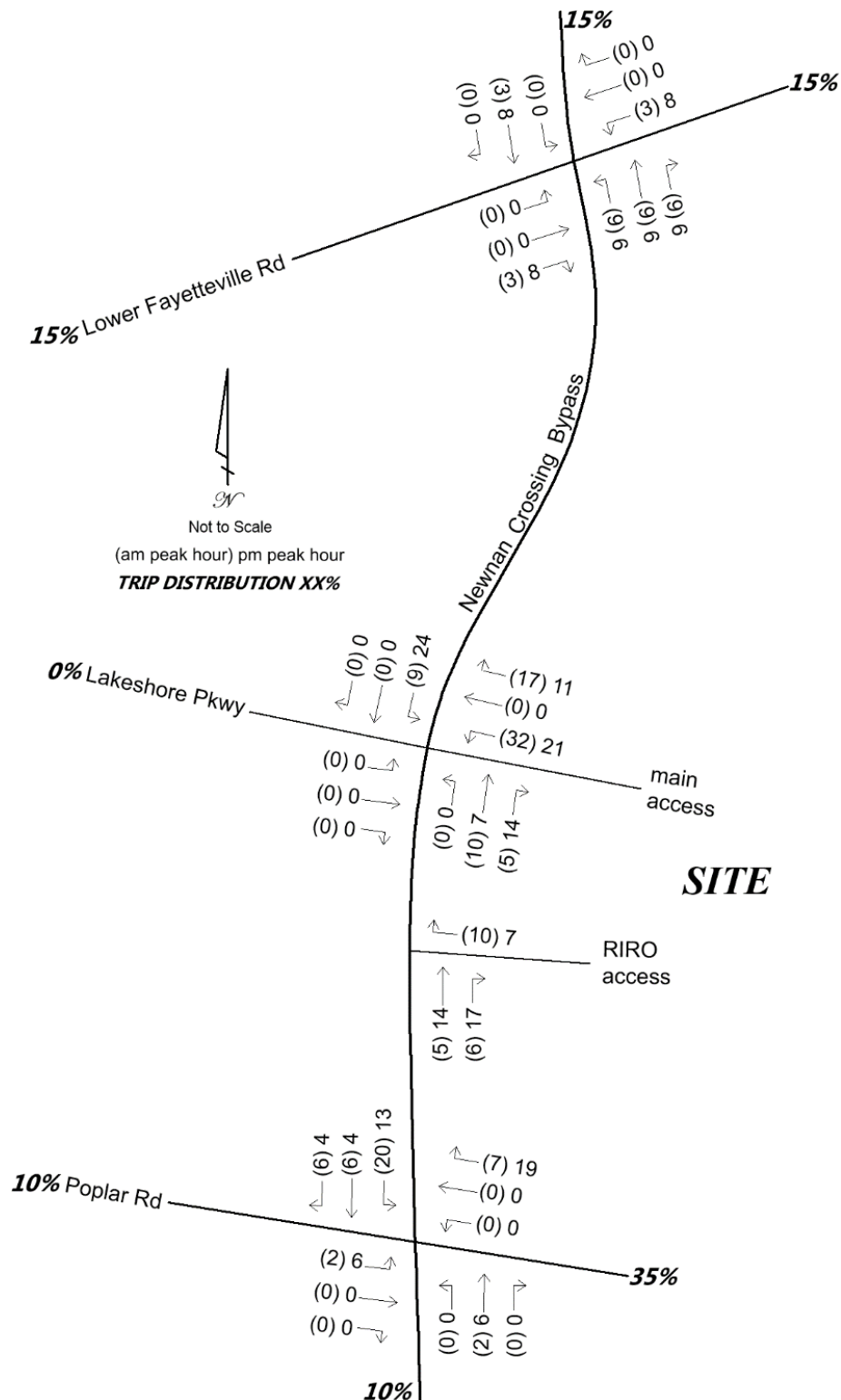


Figure 5 – Weekday A.M. and P.M. Peak Hour Project Trips and Distribution Percentages

Future Traffic Condition

The future volumes consist of the no-build volumes plus the trips that will be generated by the proposed townhomes. The future volumes are shown in Figure 6.

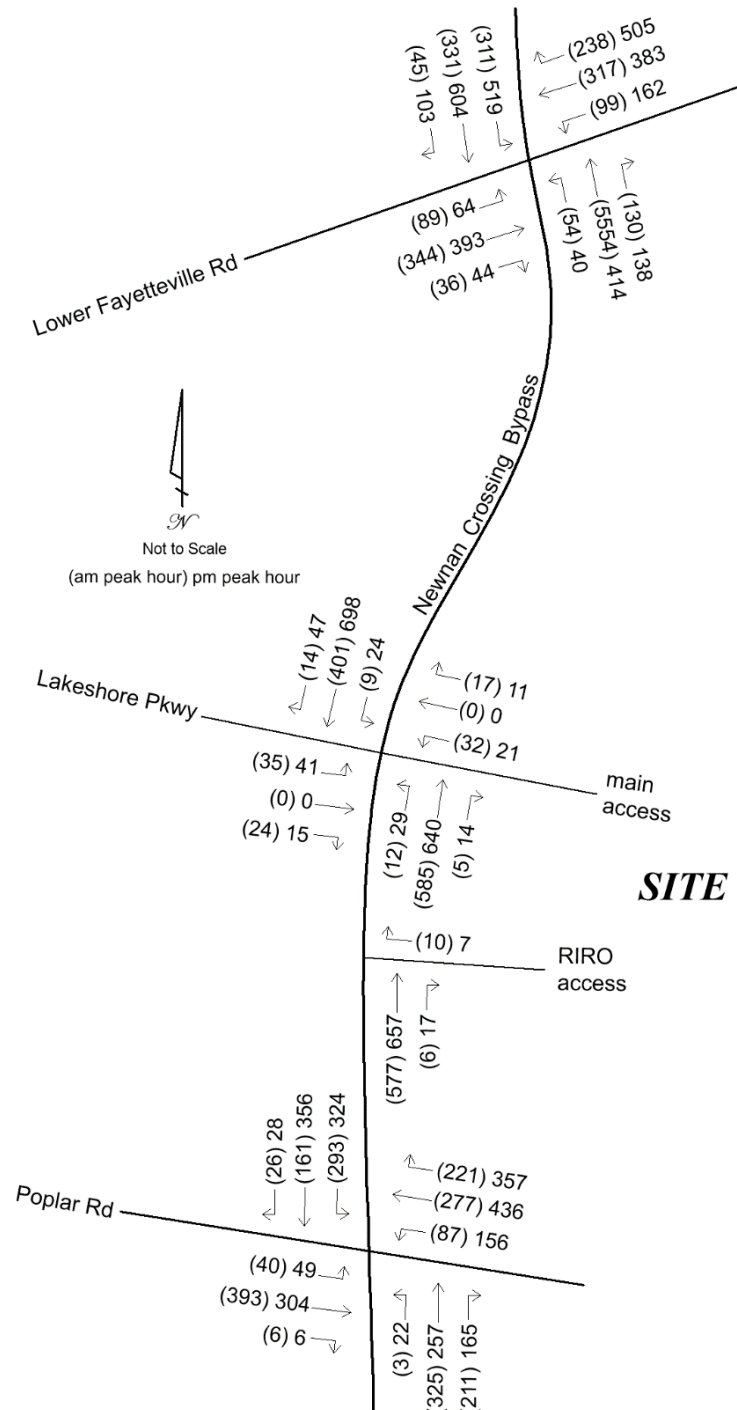


Figure 6 – Future Weekday A.M. and P.M. Peak Hour Volumes

Auxiliary Lane Requirements at Project Accesses

The City of Newnan Code, Chapter 18 – Streets, Sidewalks, and Public Places, Article IV – Driveway Access, Section 18-111 – Acceleration, Deceleration Lanes states:

- a) *Required.* At the driveways providing access to a nonresidential use or a multifamily (three or more dwelling units) or other residential use utilizing a common driveway entrance for three or more dwelling units on an arterial street, acceleration and deceleration lanes shall be constructed by the property owner in conjunction with the curb and gutter required above, and the length of curb and gutter shall be increased to the full length of such lanes.
 - 1) An acceleration lane shall not generally be required, but the driveway radius shall turn out as though a lane were to be provided and a taper shall be constructed.
 - 2) An acceleration lane shall be required where:
 - a. The owner's property extends to an intersection with a collector or arterial street within 150 feet of the driveway in the direction of traffic flow; or
 - b. The required taper will merge with the taper of an existing deceleration lane or is within 20 feet of merging.
- b) *Length.* Each such lane shall be 150 feet in length, with an additional tapered transition section 50 feet in length. Lane pavement width shall be 12 feet. Where the taper of a new deceleration lane will merge with the taper of an existing driveway or is within 20 feet of merging, the deceleration lane shall be extended to that driveway.
- c) *Property lines.* Where a lane or taper would merge with a lane or taper provided for adjoining property or would encroach on the corner radius of a street intersection, an altered design may be approved by the city manager. Where a lane or taper would extend across an extended property line, such lane or taper shall be constructed if there is adequate right-of-way in front of the adjoining property.
- d) *Right-of-way dedication.* Any additional right-of-way necessary for construction of a lane and the abutting curb and gutter and the accommodation of utilities shall be dedicated to the city by the property owner.

Newnan Crossing Bypass is a collector and, therefore, according to the Code, an acceleration lane and a deceleration lane are not required. However, given the four lane median divided parkway design of the road, this study recommends providing a northbound deceleration at each project access.

Additionally, given the four lane median divided parkway design of the road, this study recommends providing a southbound left turn lane at the main project access aligning with Lakeshore Parkway. No left turn lane is necessary at the southern access, since entering (and exiting) left turns will be prohibited by the right-in/right-out (RIRO) configuration.

One entering lane and one exiting lane should be provided at each access. Each exiting approach should be controlled by side street stop sign and accompanying stop bar.

Future Intersection Operations

An operational analysis was performed for the anticipated future project build-out at the study intersections and the project accesses. Table 5 presents the results of the future analysis. Computer printouts containing detailed results of the future analysis are located in Appendix E. Levels of service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 5 – Future Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Lower Fayetteville Rd at Newnan Crossing Bypass (signal)	C	32.3	D	45.5
northbound approach	C	31.3	D	43.6
southbound approach	C	22.5	D	46.9
eastbound approach	D	45.6	D	52.6
westbound approach	C	33.9	D	38.0
2. Newnan Xing Bypass at Lakeshore Pky / North Access (side street stop)	A	2.5	A	3.0
northbound left turn	A	8.3	A	9.7
southbound left turn (entering townhomes)	A	9.2	A	9.2
eastbound approach	C	19.1	E	46.5
westbound approach (exiting townhomes)	C	24.0	D	31.0
3. Poplar Rd at Newnan Crossing Bypass (signal)	C	23.7	C	25.7
northbound approach	B	18.4	C	22.2
southbound approach	C	24.0	C	25.8
eastbound approach	C	24.6	C	23.2
westbound approach	C	26.6	C	28.7
4. Newnan Crossing Bypass at South Access (side street stop)	A	0.1	A	0.1
westbound right turn (exiting townhomes)	B	10.7	B	10.7

The future analysis with the addition of the proposed townhomes' trips reveals continued acceptable traffic operations and delays at all locations except the eastbound approach of Lakeshore Parkway at Newnan Crossing Bypass. This is not unusual on a side street stop sign controlled approach at a busy thoroughfare. Mitigation would require a change in control to a signal or roundabout. However, signalization would introduce new delays to Newnan Crossing Bypass. Because the side street failing delay is LOS E (and not LOS F) and only for one approach during one time period, a change in control is not recommended based on the delay calculations. A signal warrant study was requested for this intersection by the City and that study was performed concurrently with this traffic impact study. The signal warrant study determined that signalization is not warranted either under the existing conditions or with the future volume projections. No additional mitigation, other than the turn lanes recommended at the project accesses, is identified as a consequence of the proposed townhomes.

There is a curve in Newnan Crossing Bypass that could potentially limit sight distance at the project accesses to and from the south. The project civil/site engineer should comply with all applicable design standards at the project accesses and internal roadways, including sight distances, turn lane storage and taper lengths, turn radii, driveway spacing, driveway widths, islands, angles with the adjacent roadways, and grades.

Conclusions and Recommendations

This study assesses the traffic impact of a proposed residential townhome development in the City of Newnan. The site is located along the east side of Newnan Crossing Bypass near Lakeshore Parkway. The development will consist of 163 attached residential townhomes. The project will be served by two vehicular accesses on Newnan Crossing Bypass, with the main access aligning with the median break at Lakeshore Parkway and the second access being limited to right-in/right-out (RIRO). The following are the findings and recommendations of this study:

1. Existing traffic operations and delays are acceptable at the three study intersections. Therefore, no mitigation is identified for the existing condition.
2. Traffic volume growth in this area has been positive and modest and this is expected to continue into the future. Additional volume increases will result as the nearby Cresswinds DRI is developed.
3. With the growth in background traffic volumes, delays will increase moderately in the no-build condition. All delays will continue to be acceptable and no mitigation is identified for the no-build condition.
4. The proposed townhomes will generate 79 trips in the morning peak hour, 94 trips in the evening peak hour, and 1,192 daily trips.
5. The future analysis with the addition of the proposed townhomes' trips reveals modest increases in delays at the study intersections, but generally continued acceptable operations.
6. One approach – the eastbound approach of Lakeshore Parkway at Newnan Crossing Bypass – will just begin to fail at LOS E in the future p.m. peak hour. A change in control is not recommended based on the delay calculations. A signal warrant study performed for this intersection concludes that signalization is not justified.
7. A northbound right turn lane and a southbound left turn lane should be constructed on Newnan Crossing Bypass at the main project access.
8. The south access should be restricted to right-in / right-out (RIRO) movements and a northbound right turn lane should be added on Newnan Crossing Bypass at this access.
9. One entering lane and one exiting lane should be provided at each project access. Each exiting approach should be controlled by side street stop sign and accompanying stop bar.
10. There is a curve in Newnan Crossing Bypass that could potentially limit sight distance at the project accesses to and from the south. The project civil/site engineer should comply with all applicable design standards at the project accesses and internal roadways, including sight distances, turn lane storage and taper lengths, turn radii, driveway spacing, driveway widths, islands, angles with the adjacent roadways, and grades.

Appendix A

Traffic Count Data and Volume Worksheets

Newnan Crossing Bypass Townhomes Traffic Impact Study

City of Newnan, Georgia

June 2023

Intersection: 1. Lower Fayetteville Road at Newnan Crossing Bypass

Weekday A.M. Peak Hour	Northbound Newnan Crossing Bypass				Southbound Newnan Crossing Bypass				Eastbound Lower Fayetteville Road				Westbound Lower Fayetteville Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, June 6, 2023 7:45-8:45)	40	490	108	638	282	295	41	618	81	312	29	422	85	287	216	588
June Monthly Adjustment Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Adjusted Existing Volumes	40	490	108	638	282	295	41	618	81	312	29	422	85	287	216	588
Annual Background Growth to 2028	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Cresswind DRI Trips	1	4	2	7	0	2	0	2	0	0	1	1	2	0	0	2
2028 No-Build Volumes	45	545	121	711	311	328	45	684	89	344	33	467	96	317	238	651
Proposed Newnan Crossing Bypass Townhomes Trips	9	9	9	27	0	3	0	3	0	0	3	3	3	0	0	3
2028 Build Volumes	54	554	130	738	311	331	45	687	89	344	36	470	99	317	238	654

Weekday P.M. Peak Hour	Northbound Newnan Crossing Bypass				Southbound Newnan Crossing Bypass				Eastbound Lower Fayetteville Road				Westbound Lower Fayetteville Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, June 6, 2023 4:30-5:30)	30	367	118	515	470	537	93	1100	58	356	32	446	137	347	457	941
June Monthly Adjustment Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Adjusted Existing Volumes	30	367	118	515	470	537	93	1100	58	356	32	446	137	347	457	941
Annual Background Growth to 2028	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Cresswind DRI Trips	1	3	2	6	0	3	0	3	0	0	1	1	3	0	0	3
2028 No-Build Volumes	34	408	132	575	519	596	103	1217	64	393	36	493	154	383	505	1042
Proposed Newnan Crossing Bypass Townhomes Trips	6	6	6	18	0	8	0	8	0	0	8	8	8	0	0	8
2028 Build Volumes	40	414	138	593	519	604	103	1225	64	393	44	501	162	383	505	1050

MARC R. ACAMPORA, PE, LLC

Newnan Crossing Bypass Townhomes Traffic Impact Study

City of Newnan, Georgia

June 2023

Intersection: 2 Lower Fayetteville Road at Lakeshore Parkway

Weekday A.M. Peak Hour	Northbound Newnan Crossing Bypass				Southbound Newnan Crossing Bypass				Eastbound Lakeshore Parkway				Westbound Project Main Access			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, June 6, 2023 7:30-8:30)	11	509		520		354	13	367	32		22	54				
June Monthly Adjustment Factor	1.00	1.00				1.00	1.00		1.00		1.00					
Adjusted Existing Volumes	11	509		520		354	13	367	32		22	54				
Annual Background Growth to 2028	10.4%	10.4%				10.4%	10.4%		10.4%		10.4%					
Cresswind DRI Trips	0	13		13		10	0	10	0		0	0				
2028 No-Build Volumes	12	575		587		401	14	415	35		24	60				
Proposed Newnan Crossing Bypass Townhomes Trips	0	10	5	15	9	0	0	9	0	0	0	0	32	0	17	49
2028 Build Volumes	12	585	5	602	9	401	14	424	35	0	24	60	32	0	17	49

Weekday P.M. Peak Hour	Northbound Newnan Crossing Bypass				Southbound Newnan Crossing Bypass				Eastbound Lakeshore Parkway				Westbound Project Main Access			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, June 6, 2023 4:45-5:45)	26	563		589		620	43	663	37		14	51				
June Monthly Adjustment Factor	1.00	1.00				1.00	1.00		1.00		1.00					
Adjusted Existing Volumes	26	563		589		620	43	663	37		14	51				
Annual Background Growth to 2028	10.4%	10.4%				10.4%	10.4%		10.4%		10.4%					
Cresswind DRI Trips	0	11		11		14	0	14	0		0	0				
2028 No-Build Volumes	29	633		661		698	47	746	41		15	56				
Proposed Newnan Crossing Bypass Townhomes Trips	0	7	14	21	24	0	0	24	0	0	0	0	21	0	11	32
2028 Build Volumes	29	640	14	682	24	698	47	770	41	0	15	56	21	0	11	32

MARC R. ACAMPORA, PE, LLC

Newnan Crossing Bypass Townhomes Traffic Impact Study

City of Newnan, Georgia

June 2023

Intersection: 3. Lower Fayetteville Road at Poplar Road

Weekday A.M. Peak Hour	Northbound Newnan Crossing Bypass				Southbound Newnan Crossing Bypass				Eastbound Poplar Road				Westbound Poplar Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, June 6, 2023 7:30-8:30)	3	281	171	455	247	131	18	396	34	356	5	395	64	251	194	509
June Monthly Adjustment Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Adjusted Existing Volumes	3	281	171	455	247	131	18	396	34	356	5	395	64	251	194	509
Annual Background Growth to 2028	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Cresswind DRI Trips	0	13	22	35	0	10	0	10	0	0	0	0	16	0	0	16
2028 No-Build Volumes	3	323	211	537	273	155	20	447	38	393	6	436	87	277	214	578
Proposed Newnan Crossing Bypass Townhomes Trips	0	2	0	2	20	6	6	32	2	0	0	2	0	0	7	7
2028 Build Volumes	3	325	211	539	293	161	26	479	40	393	6	438	87	277	221	585

Weekday P.M. Peak Hour	Northbound Newnan Crossing Bypass				Southbound Newnan Crossing Bypass				Eastbound Poplar Road				Westbound Poplar Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, June 6, 2023 5:00-6:00)	20	217	133	370	282	306	22	610	39	275	5	319	121	395	306	822
June Monthly Adjustment Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Adjusted Existing Volumes	20	217	133	370	282	306	22	610	39	275	5	319	121	395	306	822
Annual Background Growth to 2028	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Cresswind DRI Trips	0	11	18	29	0	14	0	14	0	0	0	0	22	0	0	22
2028 No-Build Volumes	22	251	165	437	311	352	24	687	43	304	6	352	156	436	338	929
Proposed Newnan Crossing Bypass Townhomes Trips	0	6	0	6	13	4	4	21	6	0	0	6	0	0	19	19
2028 Build Volumes	22	257	165	443	324	356	28	708	49	304	6	358	156	436	357	948

MARC R. ACAMPORA, PE, LLC

Newnan Crossing Bypass Townhomes Traffic Impact Study

City of Newnan, Georgia

June 2023

Intersection: 4. Newnan Crossing Bypass at Project RIRO Access

Weekday A.M. Peak Hour	Northbound Newnan Crossing Bypass			Southbound Newnan Crossing Bypass			Westbound Project Access	
	T	R	Tot	T	Tot		R	Tot
Counted Volumes (Tuesday, June 6, 2023 7:45-8:45)	518		518	368	368			
June Monthly Adjustment Factor	1.00			1.00				
Adjusted Existing Volumes	518		518	368	368			
Annual Background Growth to 2028	10.4%			10.4%				
Cresswind DRI Trips	0		0	0	0			
2028 No-Build Volumes	572		572	406	406			
Proposed Newnan Crossing Bypass Townhomes Trips	5	6	11	32	32		10	10
2028 Build Volumes	577	6	583	438	438		10	10

Weekday P.M. Peak Hour	Northbound Newnan Crossing Bypass			Southbound Newnan Crossing Bypass			Westbound Project Access	
	T	R	Tot	T	Tot		R	Tot
Counted Volumes (Tuesday, June 6, 2023 4:45-5:45)	582		582	628	628			
June Monthly Adjustment Factor	1.00			1.00				
Adjusted Existing Volumes	582		582	628	628			
Annual Background Growth to 2028	10.4%			10.4%				
Cresswind DRI Trips	0		0	0	0			
2028 No-Build Volumes	643		643	693	693			
Proposed Newnan Crossing Bypass Townhomes Trips	14	17	31	21	21		7	7
2028 Build Volumes	657	17	674	714	714		7	7

Newnan Crossing Bypass at project frontage Peak Hour Calculation

Tuesday, June 6, 2023

Begin Time	NB	Hourly	SB	Hourly	2-Way	Hourly
7:00 AM	85		75		160	
7:15 AM	111		78		189	
7:30 AM	124		106		230	
7:45 AM	160	480	95	354	255	834
8:00 AM	112	507	84	363	196	870
8:15 AM	116	512	87	372	203	884
8:30 AM	130	518	102	368	232	886
8:45 AM	123	481	85	358	208	839
4:00 PM	126		141		267	
4:15 PM	142		151		293	
4:30 PM	118		135		253	
4:45 PM	144	530	141	568	285	1098
5:00 PM	160	564	184	611	344	1175
5:15 PM	135	557	161	621	296	1178
5:30 PM	143	582	142	628	285	1210
5:45 PM	142	580	134	621	276	1201
6:00 PM	145	565	140	577	285	1142
6:15 PM	106	536	137	553	243	1089
24-Hour	7079		6954		14033	

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TMC Data
Newnan Crossing Bypass @
Lower Fayetteville Rd, Newnan, GA
7-9 AM | 4-6 PM

File Name : 47930001
Site Code : 47930001
Start Date : 6/6/2023
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lower Fayetteville Rd Eastbound					Lower Fayetteville Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	4	73	16	0	93	35	39	7	0	81	15	46	8	0	69	14	24	33	0	71	314
07:15 AM	3	93	18	0	114	33	42	10	0	85	13	51	8	0	72	11	68	47	0	126	397
07:30 AM	2	133	21	0	156	61	67	12	0	140	16	77	13	0	106	31	82	45	0	158	560
07:45 AM	6	165	34	0	205	70	76	10	0	156	23	72	8	0	103	15	83	66	0	164	628
Total	15	464	89	0	568	199	224	39	0	462	67	246	37	0	350	71	257	191	0	519	1899
08:00 AM	8	97	25	0	130	85	63	9	0	157	20	68	7	0	95	32	54	56	0	142	524
08:15 AM	11	112	22	0	145	54	74	11	0	139	17	73	7	0	97	18	73	54	0	145	526
08:30 AM	15	116	27	0	158	73	82	11	0	166	21	99	7	0	127	20	77	40	0	137	588
08:45 AM	4	103	23	0	130	79	66	7	0	152	15	68	8	0	91	20	93	50	0	163	536
Total	38	428	97	0	563	291	285	38	0	614	73	308	29	0	410	90	297	200	0	587	2174
*** BREAK ***																					
04:00 PM	10	104	18	0	132	103	124	18	0	245	21	92	9	0	122	37	88	94	0	219	718
04:15 PM	10	102	22	0	134	128	120	16	0	264	16	71	4	0	91	31	76	111	0	218	707
04:30 PM	8	72	23	0	103	121	123	21	0	265	17	90	4	0	111	33	77	127	0	237	716
04:45 PM	6	97	33	0	136	117	114	26	0	257	14	73	8	0	95	36	89	104	0	229	717
Total	34	375	96	0	505	469	481	81	0	1031	68	326	25	0	419	137	330	436	0	903	2858
05:00 PM	7	101	24	0	132	119	164	24	0	307	12	100	10	0	122	35	92	118	0	245	806
05:15 PM	9	97	38	0	144	113	136	22	0	271	15	93	10	0	118	33	89	108	0	230	763
05:30 PM	13	94	29	0	136	105	119	25	0	249	13	62	6	0	81	33	105	106	0	244	710
05:45 PM	15	87	27	0	129	84	110	19	0	213	11	68	6	0	85	30	96	93	0	219	646
Total	44	379	118	0	541	421	529	90	0	1040	51	323	32	0	406	131	382	425	0	938	2925
Grand Total	131	1646	400	0	2177	1380	1519	248	0	3147	259	1203	123	0	1585	429	1266	1252	0	2947	9856
Apprch %	6	75.6	18.4	0		43.9	48.3	7.9	0		16.3	75.9	7.8	0		14.6	43	42.5	0		
Total %	1.3	16.7	4.1	0	22.1	14	15.4	2.5	0	31.9	2.6	12.2	1.2	0	16.1	4.4	12.8	12.7	0	29.9	

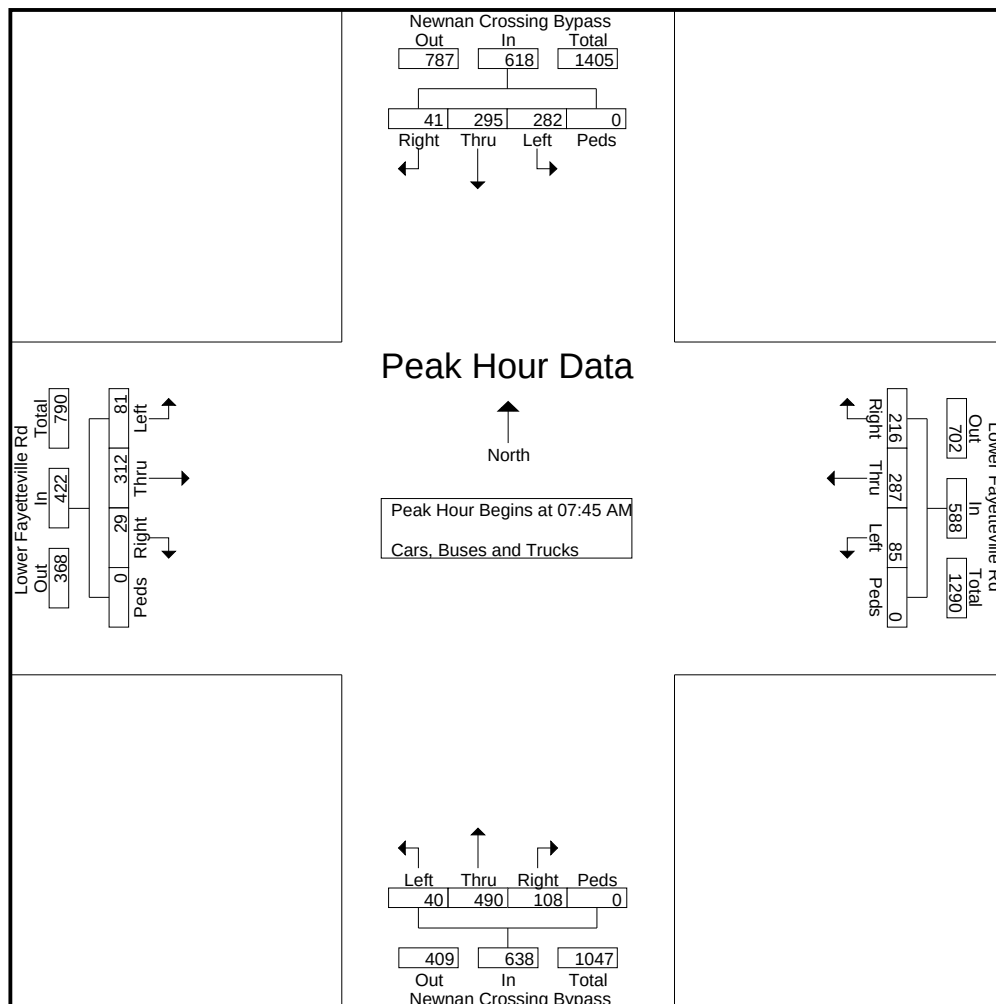
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TMC Data
Newnan Crossing Bypass @
Lower Fayetteville Rd, Newnan, GA
7-9 AM | 4-6 PM

File Name : 47930001
Site Code : 47930001
Start Date : 6/6/2023
Page No : 2

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lower Fayetteville Rd Eastbound					Lower Fayetteville Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	6	165	34	0	205	70	76	10	0	156	23	72	8	0	103	15	83	66	0	164	628
08:00 AM	8	97	25	0	130	85	63	9	0	157	20	68	7	0	95	32	54	56	0	142	524
08:15 AM	11	112	22	0	145	54	74	11	0	139	17	73	7	0	97	18	73	54	0	145	526
08:30 AM	15	116	27	0	158	73	82	11	0	166	21	99	7	0	127	20	77	40	0	137	588
Total Volume	40	490	108	0	638	282	295	41	0	618	81	312	29	0	422	85	287	216	0	588	2266
% App. Total		76.8	16.9			45.6	47.7				19.2	73.9				14.5	48.8	36.7			
PHF	.667	.742	.794	.000	.778	.829	.899	.932	.000	.931	.880	.788	.906	.000	.831	.664	.864	.818	.000	.896	.902



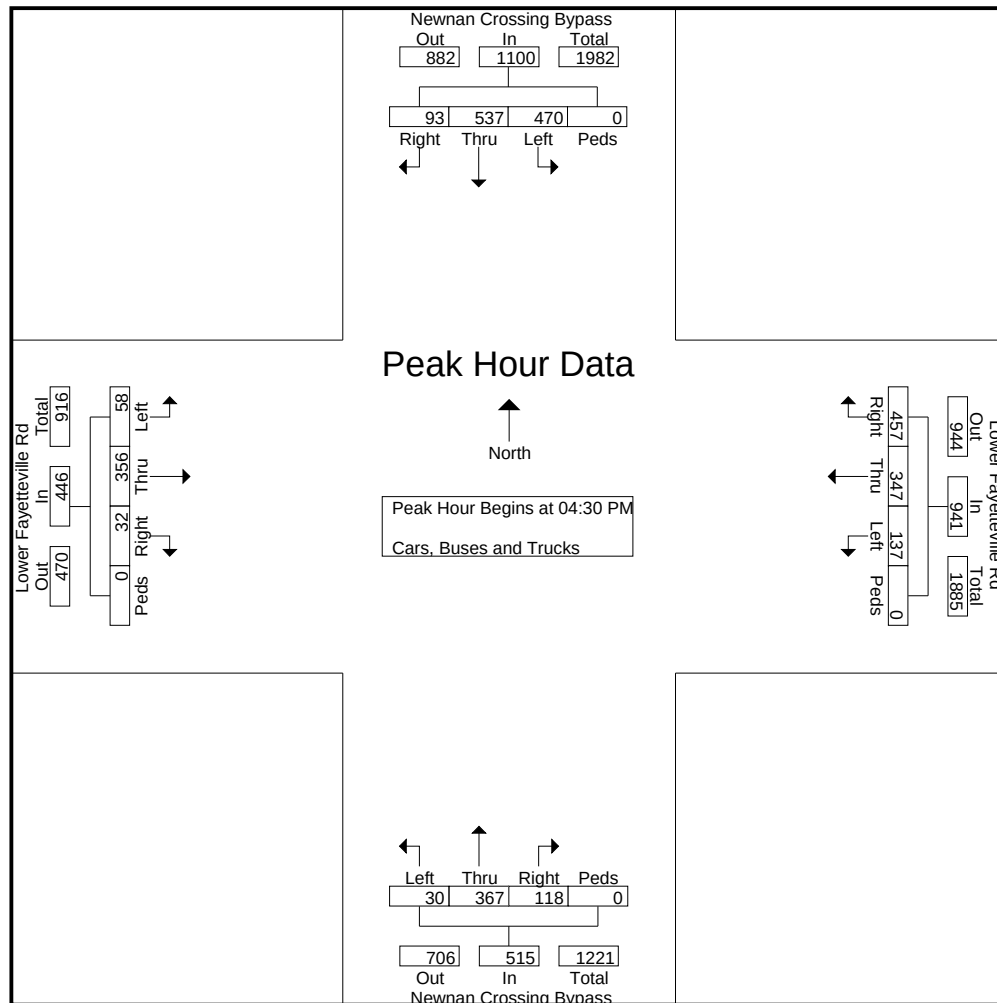
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TMC Data
Newnan Crossing Bypass @
Lower Fayetteville Rd, Newnan, GA
7-9 AM | 4-6 PM

File Name : 47930001
Site Code : 47930001
Start Date : 6/6/2023
Page No : 3

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lower Fayetteville Rd Eastbound					Lower Fayetteville Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. 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	8	72	23	0	103	121	123	21	0	265	17	90	4	0	111	33	77	127	0	237	716
04:45 PM	6	97	33	0	136	117	114	26	0	257	14	73	8	0	95	36	89	104	0	229	717
05:00 PM	7	101	24	0	132	119	164	24	0	307	12	100	10	0	122	35	92	118	0	245	806
05:15 PM	9	97	38	0	144	113	136	22	0	271	15	93	10	0	118	33	89	108	0	230	763
Total Volume	30	367	118	0	515	470	537	93	0	1100	58	356	32	0	446	137	347	457	0	941	3002
% App. Total		71.3	22.9			42.7	48.8					79.8				14.6	36.9	48.6			
PHF	.833	.908	.776	.000	.894	.971	.819	.894	.000	.896	.853	.890	.800	.000	.914	.951	.943	.900	.000	.960	.931



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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	87	0	0	88	0	66	4	0	70	7	0	10	0	17	0	0	0	0	0	175
07:15 AM	2	112	0	0	114	0	69	1	0	70	5	0	6	0	11	0	0	0	0	0	195
07:30 AM	3	119	0	0	122	0	97	1	0	98	10	0	10	0	20	0	0	0	0	0	240
07:45 AM	3	157	0	0	160	0	88	3	0	91	9	0	8	0	17	0	0	0	0	0	268
Total	9	475	0	0	484	0	320	9	0	329	31	0	34	0	65	0	0	0	0	0	878
08:00 AM	4	118	0	0	122	0	83	3	0	86	4	0	2	0	6	0	0	0	0	0	214
08:15 AM	1	115	0	0	116	0	86	6	0	92	9	0	2	0	11	0	0	0	0	0	219
08:30 AM	1	123	0	0	124	0	99	3	0	102	4	0	4	0	8	0	0	0	0	0	234
08:45 AM	2	116	0	0	118	0	82	4	0	86	2	0	4	0	6	0	0	0	0	0	210
Total	8	472	0	0	480	0	350	16	0	366	19	0	12	0	31	0	0	0	0	0	877
09:00 AM	7	100	0	0	107	0	64	4	0	68	10	0	3	0	13	0	0	0	0	0	188
09:15 AM	1	93	0	0	94	0	84	3	0	87	8	0	3	0	11	0	0	0	0	0	192
09:30 AM	2	100	0	0	102	0	87	2	0	89	7	0	5	0	12	0	0	0	0	0	203
09:45 AM	3	124	0	0	127	0	66	6	0	72	3	0	3	0	6	0	0	0	0	0	205
Total	13	417	0	0	430	0	301	15	0	316	28	0	14	0	42	0	0	0	0	0	788
10:00 AM	0	106	0	0	106	0	73	2	0	75	3	0	2	0	5	0	0	0	0	0	186
10:15 AM	2	138	0	0	140	0	72	0	0	72	4	0	1	0	5	0	0	0	0	0	217
10:30 AM	2	105	0	0	107	0	74	5	0	79	3	0	2	0	5	0	0	0	0	0	191
10:45 AM	2	127	0	0	129	0	65	2	0	67	2	0	6	0	8	0	0	0	0	0	204
Total	6	476	0	0	482	0	284	9	0	293	12	0	11	0	23	0	0	0	0	0	798
11:00 AM	1	92	0	0	93	0	89	3	0	92	8	0	1	1	10	0	0	0	0	0	195
11:15 AM	4	101	0	0	105	0	89	2	0	91	5	0	4	0	9	0	0	0	0	0	205
11:30 AM	4	129	0	0	133	0	92	7	0	99	7	0	4	0	11	0	0	0	0	0	243
11:45 AM	3	122	0	0	125	0	113	7	0	120	5	0	3	0	8	0	0	0	0	0	253
Total	12	444	0	0	456	0	383	19	0	402	25	0	12	1	38	0	0	0	0	0	896
12:00 PM	6	120	0	0	126	0	114	8	0	122	8	0	5	0	13	0	0	0	0	0	261
12:15 PM	5	129	0	0	134	0	117	8	0	125	8	0	3	0	11	0	0	0	0	0	270
12:30 PM	5	120	0	0	125	0	122	3	0	125	9	0	1	0	10	0	0	0	0	0	260
12:45 PM	3	120	0	0	123	0	116	11	0	127	5	0	1	0	6	0	0	0	0	0	256
Total	19	489	0	0	508	0	469	30	0	499	30	0	10	0	40	0	0	0	0	0	1047
01:00 PM	1	93	0	0	94	0	133	4	0	137	6	0	2	0	8	0	0	0	0	0	239
01:15 PM	2	105	0	0	107	0	124	5	0	129	8	0	3	0	11	0	0	0	0	0	247
01:30 PM	3	111	0	0	114	0	121	8	0	129	4	0	3	0	7	0	0	0	0	0	250
01:45 PM	2	127	0	0	129	0	123	5	0	128	5	0	3	0	8	0	0	0	0	0	265
Total	8	436	0	0	444	0	501	22	0	523	23	0	11	0	34	0	0	0	0	0	1001
02:00 PM	1	139	0	0	140	0	102	9	0	111	4	0	6	1	11	0	0	0	0	0	262
02:15 PM	3	107	0	0	110	0	125	5	0	130	2	0	3	0	5	0	0	0	0	0	245
02:30 PM	3	116	0	0	119	0	126	6	0	132	9	0	2	0	11	0	0	0	0	0	262
02:45 PM	2	98	0	0	100	0	117	11	0	128	7	0	6	0	13	0	0	0	0	0	241
Total	9	460	0	0	469	0	470	31	0	501	22	0	17	1	40	0	0	0	0	0	1010
03:00 PM	3	125	0	0	128	0	131	2	0	133	8	0	2	0	10	0	0	0	0	0	271
03:15 PM	8	109	0	0	117	0	128	4	0	132	5	0	1	0	6	0	0	0	0	0	255
03:30 PM	2	113	0	0	115	0	121	6	0	127	5	0	1	0	6	0	0	0	0	0	248
03:45 PM	6	147	0	0	153	0	127	8	0	135	6	0	3	0	9	0	0	0	0	0	297
Total	19	494	0	0	513	0	507	20	0	527	24	0	7	0	31	0	0	0	0	0	1071

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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 2

Groups Printed- Cars, Buses and Trucks

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	8	118	0	0	126	0	140	11	0	151	3	0	2	0	5	0	0	0	0	0	282
04:15 PM	6	126	0	0	132	0	151	5	0	156	5	0	2	0	7	0	0	0	0	0	295
04:30 PM	6	112	0	0	118	0	132	7	0	139	5	0	4	0	9	0	0	0	0	0	266
04:45 PM	3	141	0	0	144	0	139	11	0	150	8	0	3	0	11	0	0	0	0	0	305
Total	23	497	0	0	520	0	562	34	0	596	21	0	11	0	32	0	0	0	0	0	1148
05:00 PM	7	153	0	0	160	0	180	5	0	185	9	0	6	0	15	0	0	0	0	0	360
05:15 PM	6	136	0	0	142	0	160	15	0	175	13	0	3	0	16	0	0	0	0	0	333
05:30 PM	10	133	0	0	143	0	141	12	0	153	7	0	2	0	9	0	0	0	0	0	305
05:45 PM	7	135	0	0	142	0	124	12	0	136	7	0	2	0	9	0	0	0	0	0	287
Total	30	557	0	0	587	0	605	44	0	649	36	0	13	0	49	0	0	0	0	0	1285
06:00 PM	5	140	0	0	145	0	137	11	0	148	9	0	4	0	13	0	0	0	0	0	306
06:15 PM	5	101	0	0	106	0	132	18	0	150	3	0	6	0	9	0	0	0	0	0	265
06:30 PM	5	86	0	0	91	0	111	7	0	118	8	0	8	0	16	0	0	0	0	0	225
06:45 PM	4	84	0	0	88	0	115	10	0	125	6	0	1	0	7	0	0	0	0	0	220
Total	19	411	0	0	430	0	495	46	0	541	26	0	19	0	45	0	0	0	0	0	1016
Grand Total	175	5628	0	0	5803	0	5247	295	0	5542	297	0	171	2	470	0	0	0	0	0	11815
Apprch %	3	97	0	0		0	94.7	5.3	0		63.2	0	36.4	0.4		0	0	0	0		
Total %	1.5	47.6	0	0	49.1	0	44.4	2.5	0	46.9	2.5	0	1.4	0	4	0	0	0	0	0	

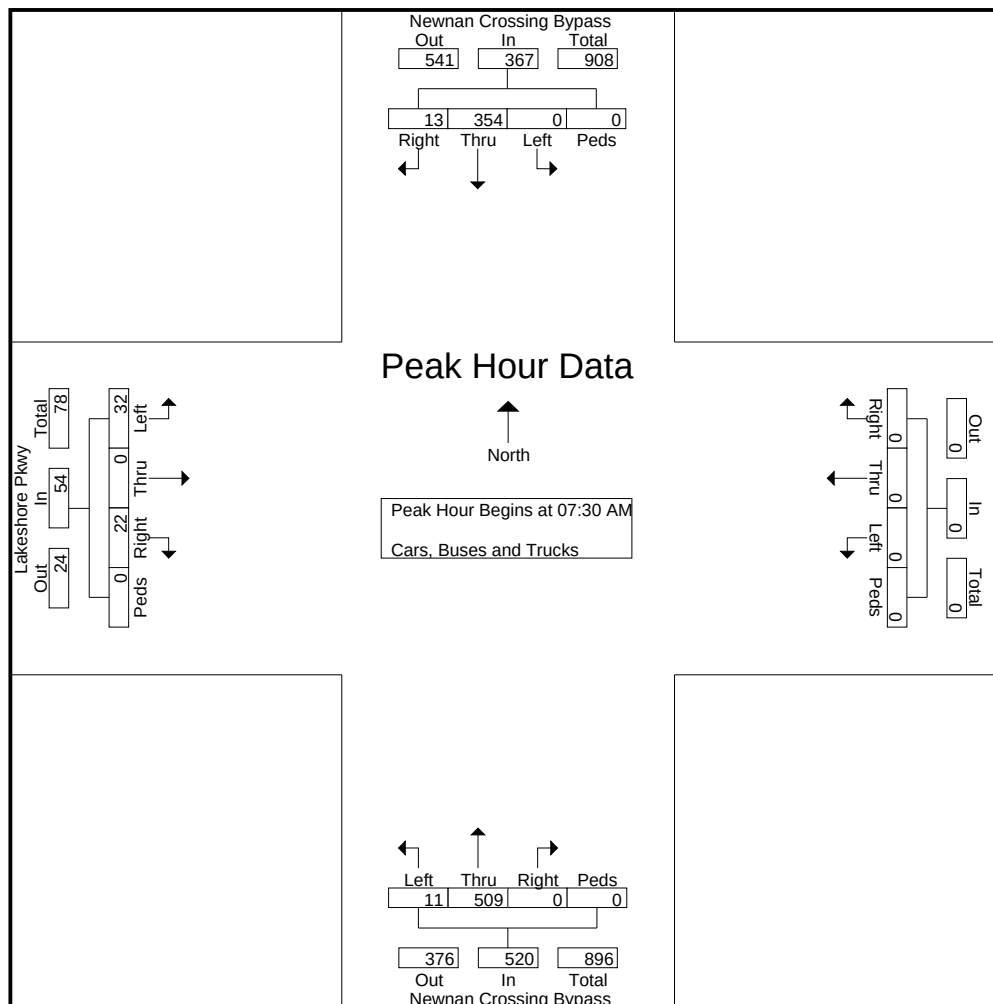
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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 3

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	3	119	0	0	122	0	97	1	0	98	10	0	10	0	20	0	0	0	0	0	240
07:45 AM	3	157	0	0	160	0	88	3	0	91	9	0	8	0	17	0	0	0	0	0	268
08:00 AM	4	118	0	0	122	0	83	3	0	86	4	0	2	0	6	0	0	0	0	0	214
08:15 AM	1	115	0	0	116	0	86	6	0	92	9	0	2	0	11	0	0	0	0	0	219
Total Volume	11	509	0	0	520	0	354	13	0	367	32	0	22	0	54	0	0	0	0	0	941
% App. Total	97.9					96.5					59.3					40.7					
PHF	.688	.811	.000	.000	.813	.000	.912	.542	.000	.936	.800	.000	.550	.000	.675	.000	.000	.000	.000	.000	.878



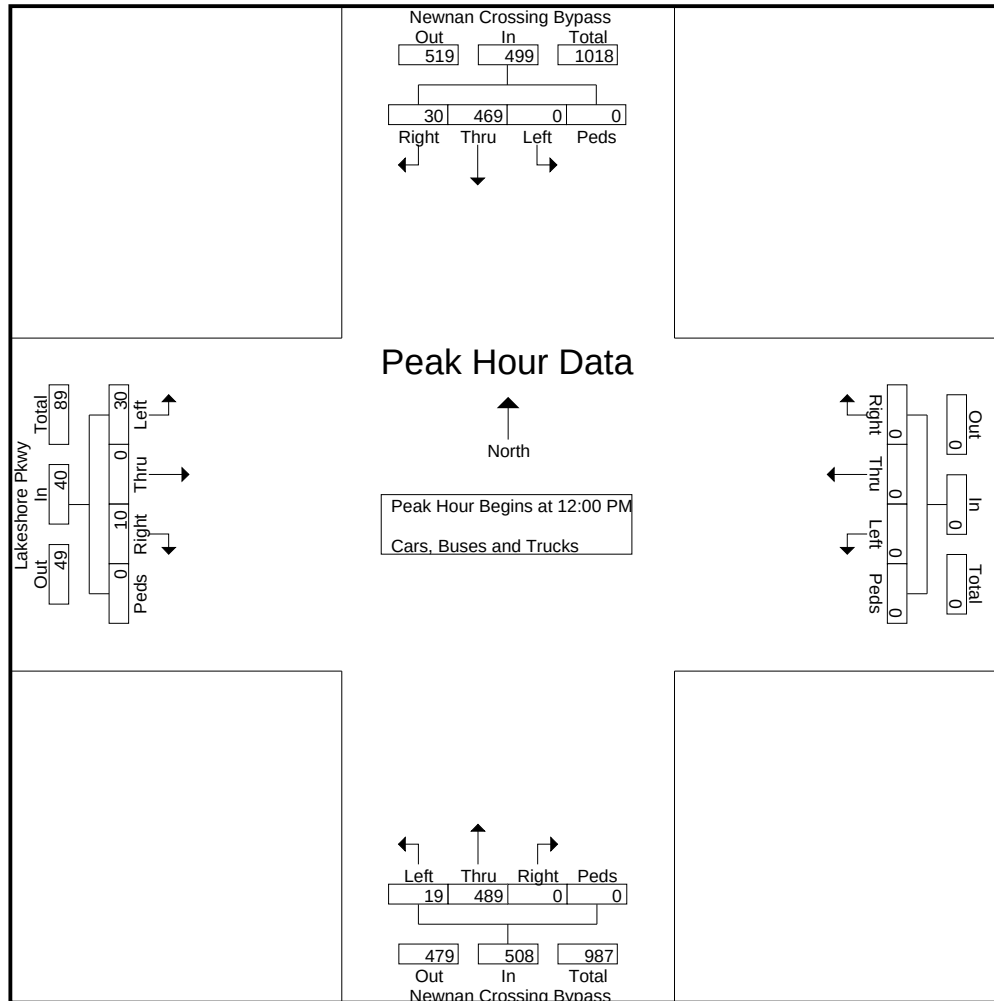
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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 4

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	6	120	0	0	126	0	114	8	0	122	8	0	5	0	13	0	0	0	0	0	261
12:15 PM	5	129	0	0	134	0	117	8	0	125	8	0	3	0	11	0	0	0	0	0	270
12:30 PM	5	120	0	0	125	0	122	3	0	125	9	0	1	0	10	0	0	0	0	0	260
12:45 PM	3	120	0	0	123	0	116	11	0	127	5	0	1	0	6	0	0	0	0	0	256
Total Volume	19	489	0	0	508	0	469	30	0	499	30	0	10	0	40	0	0	0	0	0	1047
% App. Total	96.3																				
PHF	.792	.948	.000	.000	.948	.000	.961	.682	.000	.982	.833	.000	.500	.000	.769	.000	.000	.000	.000	.000	.969



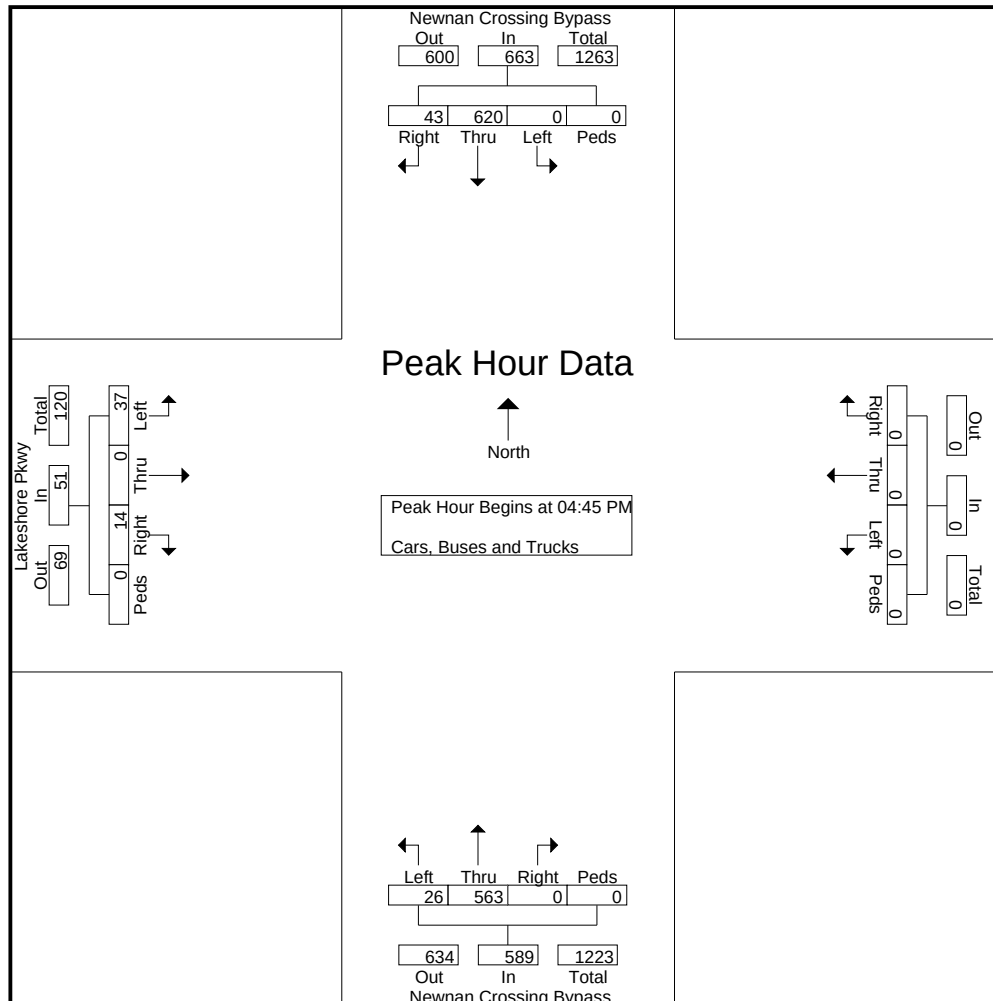
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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 5

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	3	141	0	0	144	0	139	11	0	150	8	0	3	0	11	0	0	0	0	0	305
05:00 PM	7	153	0	0	160	0	180	5	0	185	9	0	6	0	15	0	0	0	0	0	360
05:15 PM	6	136	0	0	142	0	160	15	0	175	13	0	3	0	16	0	0	0	0	0	333
05:30 PM	10	133	0	0	143	0	141	12	0	153	7	0	2	0	9	0	0	0	0	0	305
Total Volume	26	563	0	0	589	0	620	43	0	663	37	0	14	0	51	0	0	0	0	0	1303
% App. Total		95.6					93.5				72.5		27.5								
PHF	.650	.920	.000	.000	.920	.000	.861	.717	.000	.896	.712	.000	.583	.000	.797	.000	.000	.000	.000	.000	.905



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TMC Data
Newnan Crossing Bypass @ Poplar Rd
Newnan, GA
7-9 AM | 4-6 PM

File Name : 47930003
Site Code : 47930003
Start Date : 6/6/2023
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Poplar Rd Eastbound					Poplar Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	33	33	0	66	62	19	4	0	85	8	46	0	0	54	13	32	35	0	80	285
07:15 AM	1	57	45	0	103	52	21	0	0	73	3	85	0	0	88	15	45	38	0	98	362
07:30 AM	1	73	42	0	116	75	36	5	0	116	7	100	1	0	108	10	55	49	0	114	454
07:45 AM	1	77	46	0	124	64	28	4	0	96	12	86	0	0	98	26	84	55	0	165	483
Total	3	240	166	0	409	253	104	13	0	370	30	317	1	0	348	64	216	177	0	457	1584
08:00 AM	0	63	41	0	104	55	36	5	0	96	8	89	2	0	99	9	53	33	0	95	394
08:15 AM	1	68	42	0	111	53	31	4	0	88	7	81	2	0	90	19	59	57	0	135	424
08:30 AM	0	82	23	0	105	78	30	3	0	111	4	63	3	0	70	18	52	40	0	110	396
08:45 AM	1	63	28	0	92	63	28	5	0	96	4	55	1	0	60	21	65	38	0	124	372
Total	2	276	134	0	412	249	125	17	0	391	23	288	8	0	319	67	229	168	0	464	1586
*** BREAK ***																					
04:00 PM	1	50	33	0	84	52	88	10	0	150	8	64	1	0	73	19	87	66	0	172	479
04:15 PM	2	50	29	0	81	63	76	8	0	147	8	58	1	0	67	28	100	70	0	198	493
04:30 PM	1	49	34	0	84	48	85	10	0	143	7	56	2	0	65	22	98	53	0	173	465
04:45 PM	0	52	31	0	83	71	73	11	0	155	8	61	0	0	69	30	90	65	0	185	492
Total	4	201	127	0	332	234	322	39	0	595	31	239	4	0	274	99	375	254	0	728	1929
05:00 PM	8	64	34	0	106	90	87	6	0	183	6	76	2	0	84	27	107	81	0	215	588
05:15 PM	2	44	25	0	71	67	82	4	0	153	9	73	2	0	84	40	108	74	0	222	530
05:30 PM	8	42	42	0	92	66	78	6	0	150	15	63	0	0	78	23	85	72	0	180	500
05:45 PM	2	67	32	0	101	59	59	6	0	124	9	63	1	0	73	31	95	79	0	205	503
Total	20	217	133	0	370	282	306	22	0	610	39	275	5	0	319	121	395	306	0	822	2121
Grand Total	29	934	560	0	1523	1018	857	91	0	1966	123	1119	18	0	1260	351	1215	905	0	2471	7220
Apprch %	1.9	61.3	36.8	0		51.8	43.6	4.6	0		9.8	88.8	1.4	0		14.2	49.2	36.6	0		
Total %	0.4	12.9	7.8	0	21.1	14.1	11.9	1.3	0	27.2	1.7	15.5	0.2	0	17.5	4.9	16.8	12.5	0	34.2	

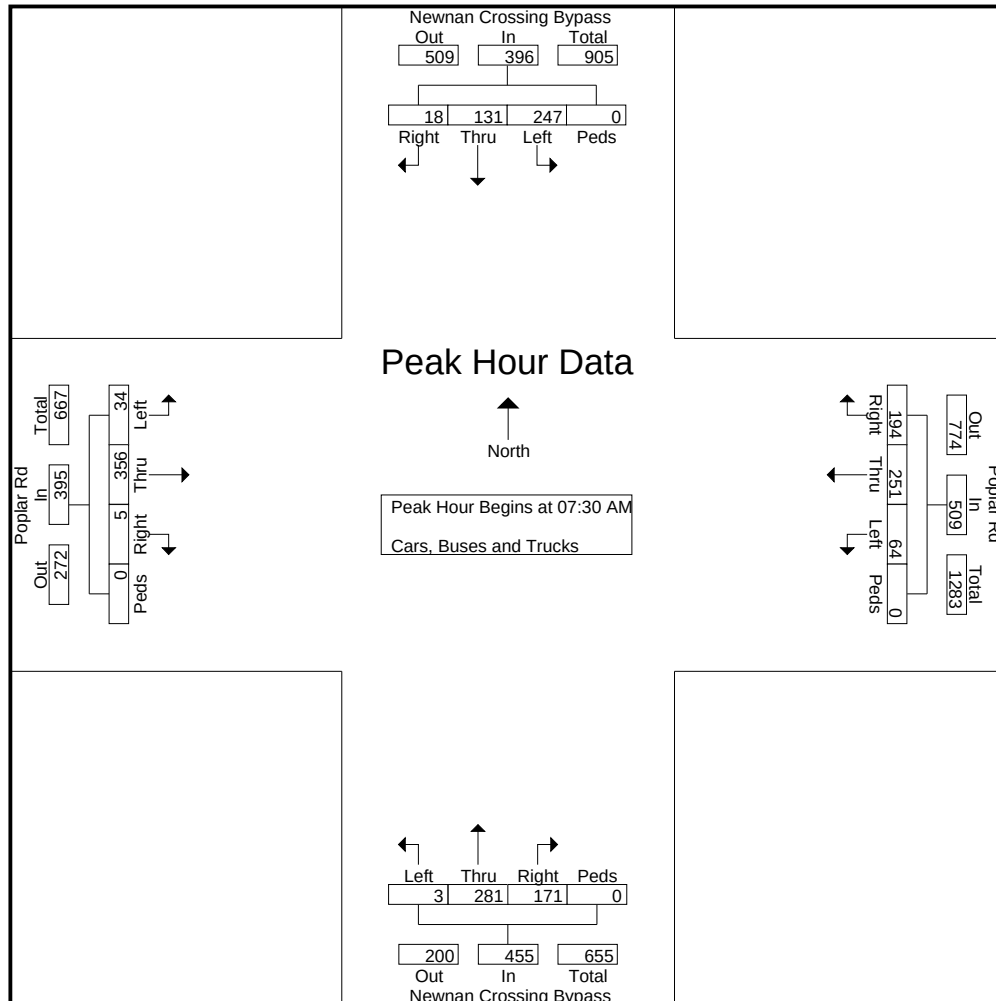
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TMC Data
Newnan Crossing Bypass @ Poplar Rd
Newnan, GA
7-9 AM | 4-6 PM

File Name : 47930003
Site Code : 47930003
Start Date : 6/6/2023
Page No : 2

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Poplar Rd Eastbound					Poplar Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	73	42	0	116	75	36	5	0	116	7	100	1	0	108	10	55	49	0	114	454
07:45 AM	1	77	46	0	124	64	28	4	0	96	12	86	0	0	98	26	84	55	0	165	483
08:00 AM	0	63	41	0	104	55	36	5	0	96	8	89	2	0	99	9	53	33	0	95	394
08:15 AM	1	68	42	0	111	53	31	4	0	88	7	81	2	0	90	19	59	57	0	135	424
Total Volume	3	281	171	0	455	247	131	18	0	396	34	356	5	0	395	64	251	194	0	509	1755
% App. Total		61.8	37.6			62.4	33.1				90.1					12.6	49.3	38.1			
PHF	.750	.912	.929	.000	.917	.823	.910	.900	.000	.853	.708	.890	.625	.000	.914	.615	.747	.851	.000	.771	.908



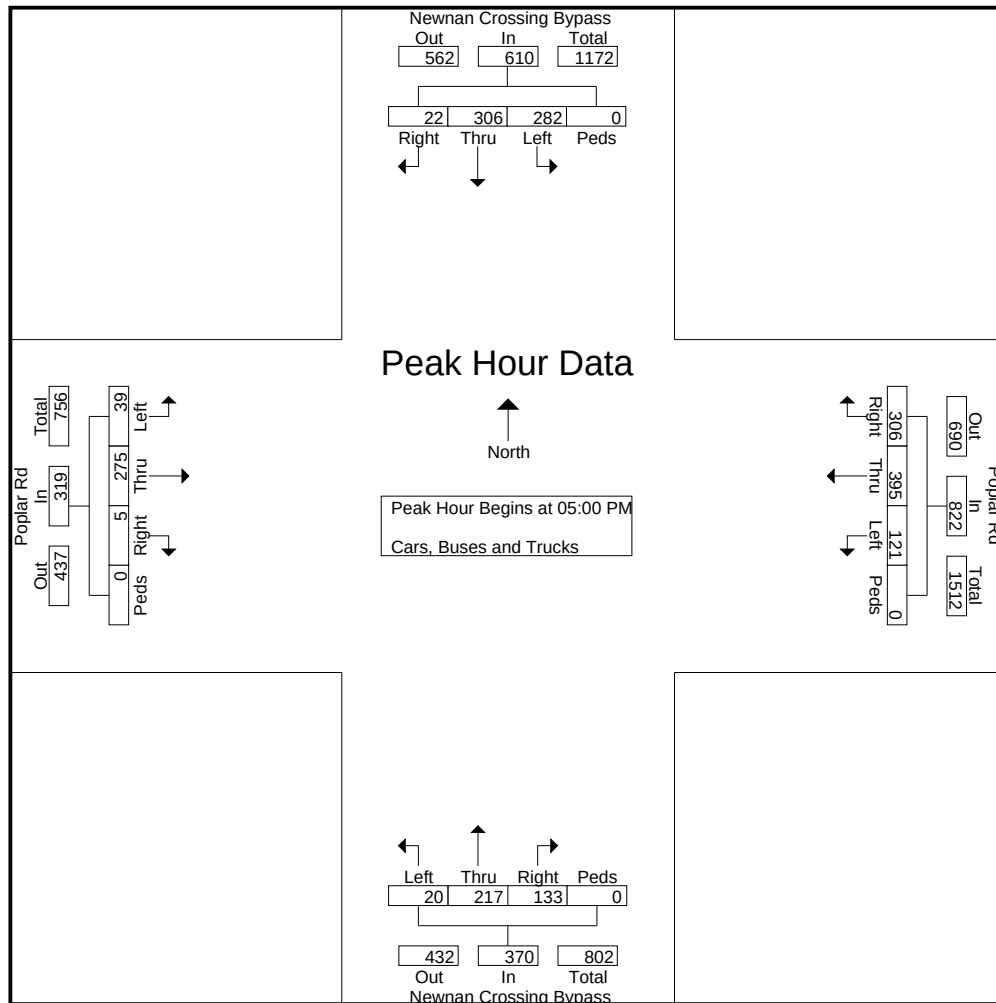
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TMC Data
Newnan Crossing Bypass @ Poplar Rd
Newnan, GA
7-9 AM | 4-6 PM

File Name : 47930003
Site Code : 47930003
Start Date : 6/6/2023
Page No : 3

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Poplar Rd Eastbound					Poplar Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	8	64	34	0	106	90	87	6	0	183	6	76	2	0	84	27	107	81	0	215	588
05:15 PM	2	44	25	0	71	67	82	4	0	153	9	73	2	0	84	40	108	74	0	222	530
05:30 PM	8	42	42	0	92	66	78	6	0	150	15	63	0	0	78	23	85	72	0	180	500
05:45 PM	2	67	32	0	101	59	59	6	0	124	9	63	1	0	73	31	95	79	0	205	503
Total Volume	20	217	133	0	370	282	306	22	0	610	39	275	5	0	319	121	395	306	0	822	2121
% App. Total		58.6	35.9			46.2	50.2				12.2	86.2				14.7	48.1	37.2			
PHF	.625	.810	.792	.000	.873	.783	.879	.917	.000	.833	.650	.905	.625	.000	.949	.756	.914	.944	.000	.926	.902



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Page 1

ADT Data

Site Code: 47930101
Newnan Crossing Bypass South of
Lakeshore Pkwy, Newnan, GA

Start Time	06-Jun-23 Tue	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		12	126			15	118				
12:15		9	134			10	119				
12:30		7	125			4	122				
12:45		2	123	30	508	4	116	33	475	63	983
01:00		6	94			4	134				
01:15		6	107			2	126				
01:30		9	114			8	123				
01:45		3	129	24	444	3	125	17	508	41	952
02:00		2	140			5	107				
02:15		2	110			3	127				
02:30		6	119			5	127				
02:45		3	100	13	469	3	122	16	483	29	952
03:00		1	128			1	132				
03:15		3	117			5	128				
03:30		10	115			4	121				
03:45		9	153	23	513	5	129	15	510	38	1023
04:00		3	126			8	141				
04:15		6	142			8	151				
04:30		7	118			5	135				
04:45		36	144	52	530	19	141	40	568	92	1098
05:00		23	160			12	184				
05:15		31	135			17	161				
05:30		48	143			28	142				
05:45		46	142	148	580	30	134	87	621	235	1201
06:00		36	145			50	140				
06:15		46	106			72	137				
06:30		68	91			81	118				
06:45		84	88	234	430	72	115	275	510	509	940
07:00		85	104			75	112				
07:15		111	69			78	108				
07:30		124	72			106	96				
07:45		160	60	480	305	95	89	354	405	834	710
08:00		112	68			84	79				
08:15		116	59			87	76				
08:30		130	60			102	64				
08:45		123	44	481	231	85	51	358	270	839	501
09:00		107	48			62	58				
09:15		91	26			86	59				
09:30		102	23			91	59				
09:45		127	20	427	117	68	56	307	232	734	349
10:00		106	17			74	44				
10:15		140	14			72	31				
10:30		107	12			75	24				
10:45		129	12	482	55	70	22	291	121	773	176
11:00		93	17			89	23				
11:15		105	11			90	20				
11:30		133	12			89	17				
11:45		125	7	456	47	115	15	383	75	839	122
Total		2850	4229			2176	4778			5026	9007
Percent		40.3%	59.7%			31.3%	68.7%			35.8%	64.2%
Grand Total		2850	4229			2176	4778			5026	9007
Percent		40.3%	59.7%			31.3%	68.7%			35.8%	64.2%

ADT ADT 14,033 AADT 14,033

Appendix B

Intersection Analysis Methodology

Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board's *Highway Capacity Manual*, 2016 edition (HCM 6). Synchro 10 software, which emulates the HCM 6 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and roundabouts and stop-sign controlled (unsignalized) intersections. Levels of service (LOS) are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay.

Signalized Intersections and Roundabouts – Level of service for a signalized intersection and a roundabout is defined in terms of control delay per vehicle. For signalized intersections and roundabouts, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections and roundabouts than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals/roundabouts, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections and roundabouts are shown in Table A.

Table A – Level of Service Criteria for Signalized Intersections and Roundabouts

Control Delay (s/veh)	LOS
≤ 10	A
> 10 and ≤ 20	B
> 20 and ≤ 35	C
> 35 and ≤ 55	D
> 55 and ≤ 80	E
> 80	F

Source: Highway Capacity Manual 6

Unsignalized Intersections – Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory, factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream. The level of service criteria for unsignalized intersections are presented in Table B.

Table B – Level of Service Criteria for Unsignalized Intersections

Control Delay (s/veh)	LOS
0 – 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E
> 50	F

Source: Highway Capacity Manual 6

Appendix C

Existing Intersection Operational Analysis

Newnan Crossing Townhomes

1: Newnan Crossing Bypass & Lower Fayetteville Road

existing a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	312	29	85	287	216	40	490	108	282	295	41
Future Volume (veh/h)	81	312	29	85	287	216	40	490	108	282	295	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1670	1683	1683	1670	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	98	376	0	94	319	0	51	628	0	303	317	0
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.78	0.78	0.78	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	2	2	3	2	2	2	2	2	2	2
Cap, veh/h	258	424		216	420		462	1030		435	1366	
Arrive On Green	0.06	0.25	0.00	0.06	0.25	0.00	0.04	0.32	0.00	0.15	0.43	0.00
Sat Flow, veh/h	1603	1670	1427	1603	1670	1427	1603	3198	1427	1603	3198	1427
Grp Volume(v), veh/h	98	376	0	94	319	0	51	628	0	303	317	0
Grp Sat Flow(s),veh/h/ln	1603	1670	1427	1603	1670	1427	1603	1599	1427	1603	1599	1427
Q Serve(g_s), s	3.7	17.9	0.0	3.5	14.6	0.0	1.7	13.7	0.0	9.8	5.2	0.0
Cycle Q Clear(g_c), s	3.7	17.9	0.0	3.5	14.6	0.0	1.7	13.7	0.0	9.8	5.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	424		216	420		462	1030		435	1366	
V/C Ratio(X)	0.38	0.89		0.44	0.76		0.11	0.61		0.70	0.23	
Avail Cap(c_a), veh/h	258	535		220	535		494	1030		519	1366	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.2	29.7	0.0	23.0	28.6	0.0	17.3	23.6	0.0	15.7	15.1	0.0
Incr Delay (d2), s/veh	0.9	13.9	0.0	1.4	4.7	0.0	0.1	2.7	0.0	3.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	8.2	0.0	1.3	5.9	0.0	0.6	5.1	0.0	3.4	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	43.5	0.0	24.3	33.3	0.0	17.4	26.3	0.0	18.9	15.5	0.0
LnGrp LOS	C	D		C	C		B	C		B	B	
Approach Vol, veh/h		474	A		413	A		679	A		620	A
Approach Delay, s/veh		39.3			31.3			25.7			17.1	
Approach LOS		D			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.6	31.1	9.4	25.5	7.9	39.8	9.6	25.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	16.5	23.9	5.1	26.5	5.1	35.3	5.1	26.5				
Max Q Clear Time (g_c+I1), s	11.8	15.7	5.5	19.9	3.7	7.2	5.7	16.6				
Green Ext Time (p_c), s	0.4	2.4	0.0	1.1	0.0	1.9	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			27.3									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Newnan Crossing Townhomes

2: Newnan Crossing Bypass & Lakeshore Parkway

existing a.m.

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	22	11	509	354	13
Future Vol, veh/h	32	22	11	509	354	13
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	-	160	-	-	160
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	81	81	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	32	14	628	377	14
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	719	189	391	0	-	0
Stage 1	377	-	-	-	-	-
Stage 2	342	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	363	821	1164	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	359	821	1164	-	-	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	655	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.3	0.2		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1164	-	466	-	-	
HCM Lane V/C Ratio	0.012	-	0.17	-	-	
HCM Control Delay (s)	8.1	-	14.3	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.6	-	-	

Newnan Crossing Townhomes 3: Newnan Crossing Bypass & Poplar Road

existing a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	356	5	64	251	194	3	281	171	247	131	18
Future Volume (veh/h)	34	356	5	64	251	194	3	281	171	247	131	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1796	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	391	0	83	326	0	3	305	0	291	154	0
Peak Hour Factor	0.91	0.91	0.91	0.77	0.77	0.77	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	7	2	2	7	2	2	2	2	2	2	2
Cap, veh/h	232	695		314	405		543	1230		412	1639	
Arrive On Green	0.04	0.20	0.00	0.06	0.23	0.00	0.00	0.35	0.00	0.12	0.46	0.00
Sat Flow, veh/h	1781	3413	1585	1781	1796	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	37	391	0	83	326	0	3	305	0	291	154	0
Grp Sat Flow(s),veh/h/ln	1781	1706	1585	1781	1796	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.1	6.8	0.0	2.4	11.4	0.0	0.1	4.1	0.0	5.4	1.6	0.0
Cycle Q Clear(g_c), s	1.1	6.8	0.0	2.4	11.4	0.0	0.1	4.1	0.0	5.4	1.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	695		314	405		543	1230		412	1639	
V/C Ratio(X)	0.16	0.56		0.26	0.81		0.01	0.25		0.71	0.09	
Avail Cap(c_a), veh/h	313	1522		384	828		684	1230		758	1639	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.2	23.7	0.0	19.2	24.2	0.0	14.0	15.5	0.0	28.0	10.0	0.0
Incr Delay (d2), s/veh	0.3	0.7	0.0	0.4	3.8	0.0	0.0	0.5	0.0	2.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.5	0.0	0.9	4.7	0.0	0.0	1.5	0.0	2.1	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	24.4	0.0	19.7	28.1	0.0	14.0	16.0	0.0	30.3	10.2	0.0
LnGrp LOS	C	C		B	C		B	B		C	B	
Approach Vol, veh/h		428	A		409	A		308	A		445	A
Approach Delay, s/veh		24.1			26.4			15.9			23.3	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	27.4	8.4	18.0	4.8	35.0	7.0	19.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.5	21.5	6.5	29.5	5.5	30.5	5.5	30.5				
Max Q Clear Time (g_c+I1), s	7.4	6.1	4.4	8.8	2.1	3.6	3.1	13.4				
Green Ext Time (p_c), s	0.6	1.5	0.0	2.2	0.0	0.8	0.0	1.5				
Intersection Summary												
HCM 6th Ctrl Delay			22.9									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Newnan Crossing Townhomes

1: Newnan Crossing Bypass & Lower Fayetteville Road

existing p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	356	32	137	347	457	30	367	118	470	537	93
Future Volume (veh/h)	58	356	32	137	347	457	30	367	118	470	537	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1683	1670	1683	1683	1670	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	64	391	0	143	361	0	34	412	0	522	597	0
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.89	0.89	0.89	0.90	0.90	0.90
Percent Heavy Veh, %	2	3	2	2	3	2	2	2	2	2	2	2
Cap, veh/h	216	423		202	452		302	736		588	1442	
Arrive On Green	0.04	0.25	0.00	0.06	0.27	0.00	0.03	0.23	0.00	0.25	0.45	0.00
Sat Flow, veh/h	1603	1670	1427	1603	1670	1427	1603	3198	1427	1603	3198	1427
Grp Volume(v), veh/h	64	391	0	143	361	0	34	412	0	522	597	0
Grp Sat Flow(s),veh/h/ln	1603	1670	1427	1603	1670	1427	1603	1599	1427	1603	1599	1427
Q Serve(g_s), s	2.6	20.3	0.0	5.5	17.9	0.0	1.4	10.1	0.0	21.3	11.2	0.0
Cycle Q Clear(g_c), s	2.6	20.3	0.0	5.5	17.9	0.0	1.4	10.1	0.0	21.3	11.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	423		202	452		302	736		588	1442	
V/C Ratio(X)	0.30	0.92		0.71	0.80		0.11	0.56		0.89	0.41	
Avail Cap(c_a), veh/h	235	440		202	452		341	736		588	1442	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.5	32.4	0.0	26.8	30.2	0.0	24.8	30.3	0.0	18.0	16.5	0.0
Incr Delay (d2), s/veh	0.8	24.6	0.0	10.7	9.7	0.0	0.2	3.1	0.0	15.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	10.5	0.0	2.7	7.9	0.0	0.5	4.0	0.0	9.2	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	57.0	0.0	37.5	40.0	0.0	24.9	33.4	0.0	33.4	17.4	0.0
LnGrp LOS	C	E		D	D		C	C		C	B	
Approach Vol, veh/h	455		A	504		A	446		A	1119		A
Approach Delay, s/veh	52.5			39.3			32.7			24.9		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.0	25.0	10.0	27.1	7.3	44.7	8.5	28.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	22.5	20.5	5.5	23.5	5.0	38.0	5.0	24.0				
Max Q Clear Time (g_c+I1), s	23.3	12.1	7.5	22.3	3.4	13.2	4.6	19.9				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.3	0.0	3.8	0.0	0.7				
Intersection Summary												
HCM 6th Ctrl Delay	34.1											
HCM 6th LOS	C											

Newnan Crossing Townhomes

2: Newnan Crossing Bypass & Lakeshore Parkway

existing p.m.

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	14	26	563	620	43
Future Vol, veh/h	37	14	26	563	620	43
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	-	160	-	-	160
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	92	92	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	18	28	612	689	48
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1051	345	737	0	-	0
Stage 1	689	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	222	651	865	-	-	-
Stage 1	460	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	215	651	865	-	-	-
Mov Cap-2 Maneuver	215	-	-	-	-	-
Stage 1	445	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	23	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	865	-	263	-	-	
HCM Lane V/C Ratio	0.033	-	0.242	-	-	
HCM Control Delay (s)	9.3	-	23	-	-	
HCM Lane LOS	A	-	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.9	-	-	

Newnan Crossing Townhomes 3: Newnan Crossing Bypass & Poplar Road

existing p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	275	5	121	395	306	20	217	133	282	306	22
Future Volume (veh/h)	39	275	5	121	395	306	20	217	133	282	306	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1796	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	289	0	130	425	0	23	249	0	340	369	0
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.87	0.87	0.87	0.83	0.83	0.83
Percent Heavy Veh, %	2	7	2	2	7	2	2	2	2	2	2	2
Cap, veh/h	225	831		425	503		448	1056		454	1431	
Arrive On Green	0.04	0.24	0.00	0.08	0.28	0.00	0.03	0.30	0.00	0.13	0.40	0.00
Sat Flow, veh/h	1781	3413	1585	1781	1796	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	41	289	0	130	425	0	23	249	0	340	369	0
Grp Sat Flow(s),veh/h/ln	1781	1706	1585	1781	1796	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.2	5.0	0.0	3.8	15.9	0.0	0.6	3.8	0.0	6.8	4.9	0.0
Cycle Q Clear(g_c), s	1.2	5.0	0.0	3.8	15.9	0.0	0.6	3.8	0.0	6.8	4.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	831		425	503		448	1056		454	1431	
V/C Ratio(X)	0.18	0.35		0.31	0.84		0.05	0.24		0.75	0.26	
Avail Cap(c_a), veh/h	283	1537		445	837		527	1056		723	1431	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.1	22.3	0.0	18.0	24.2	0.0	16.6	18.9	0.0	29.8	14.2	0.0
Incr Delay (d2), s/veh	0.4	0.2	0.0	0.4	4.2	0.0	0.0	0.5	0.0	2.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	0.0	1.4	6.5	0.0	0.2	1.5	0.0	2.7	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	22.5	0.0	18.4	28.4	0.0	16.6	19.5	0.0	32.3	14.6	0.0
LnGrp LOS	C	C		B	C		B	B		C	B	
Approach Vol, veh/h		330	A		555	A		272	A		709	A
Approach Delay, s/veh		22.3			26.0			19.2			23.1	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.9	25.7	9.9	21.9	6.3	33.2	7.3	24.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.9	18.8	6.2	32.1	5.0	28.7	5.1	33.2				
Max Q Clear Time (g_c+I1), s	8.8	5.8	5.8	7.0	2.6	6.9	3.2	17.9				
Green Ext Time (p_c), s	0.6	1.1	0.0	1.7	0.0	2.1	0.0	2.1				
Intersection Summary												
HCM 6th Ctrl Delay			23.3									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Appendix D

No-Build Intersection Operational Analysis

Newnan Crossing Townhomes

1: Newnan Crossing Bypass & Lower Fayetteville Road

no-build a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	344	33	96	317	238	45	545	121	311	328	45
Future Volume (veh/h)	89	344	33	96	317	238	45	545	121	311	328	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1670	1683	1683	1670	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	107	414	0	107	352	0	58	699	0	334	353	0
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.78	0.78	0.78	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	2	2	3	2	2	2	2	2	2	2
Cap, veh/h	253	456		209	456		427	941		410	1321	
Arrive On Green	0.06	0.27	0.00	0.06	0.27	0.00	0.04	0.29	0.00	0.16	0.41	0.00
Sat Flow, veh/h	1603	1670	1427	1603	1670	1427	1603	3198	1427	1603	3198	1427
Grp Volume(v), veh/h	107	414	0	107	352	0	58	699	0	334	353	0
Grp Sat Flow(s),veh/h/ln	1603	1670	1427	1603	1670	1427	1603	1599	1427	1603	1599	1427
Q Serve(g_s), s	4.1	20.5	0.0	4.1	16.6	0.0	2.1	16.9	0.0	11.7	6.2	0.0
Cycle Q Clear(g_c), s	4.1	20.5	0.0	4.1	16.6	0.0	2.1	16.9	0.0	11.7	6.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	456		209	456		427	941		410	1321	
V/C Ratio(X)	0.42	0.91		0.51	0.77		0.14	0.74		0.81	0.27	
Avail Cap(c_a), veh/h	253	518		209	518		452	941		440	1321	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.2	30.0	0.0	23.2	28.6	0.0	19.4	27.2	0.0	18.1	16.5	0.0
Incr Delay (d2), s/veh	1.1	18.5	0.0	2.1	6.3	0.0	0.1	5.3	0.0	10.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	9.9	0.0	1.5	6.9	0.0	0.7	6.6	0.0	4.9	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	48.6	0.0	25.3	34.9	0.0	19.6	32.5	0.0	28.7	17.0	0.0
LnGrp LOS	C	D		C	C		B	C		C	B	
Approach Vol, veh/h		521	A		459	A		757	A		687	A
Approach Delay, s/veh		43.4			32.7			31.5			22.7	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.4	29.7	9.6	27.8	8.2	39.8	9.6	27.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	15.5	24.9	5.1	26.5	5.1	35.3	5.1	26.5				
Max Q Clear Time (g_c+I1), s	13.7	18.9	6.1	22.5	4.1	8.2	6.1	18.6				
Green Ext Time (p_c), s	0.2	2.2	0.0	0.8	0.0	2.1	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			31.8									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Newnan Crossing Townhomes

2: Newnan Crossing Bypass & Lakeshore Parkway

no-build a.m.

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	34	12	575	401	14
Future Vol, veh/h	35	34	12	575	401	14
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	-	160	-	-	160
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	81	81	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	50	15	710	427	15
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	812	214	442	0	-	0
Stage 1	427	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	317	791	1114	-	-	-
Stage 1	626	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	313	791	1114	-	-	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	618	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	15.4	0.2		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1114	-	446	-	-	
HCM Lane V/C Ratio	0.013	-	0.228	-	-	
HCM Control Delay (s)	8.3	-	15.4	-	-	
HCM Lane LOS	A	-	C	-	-	
HCM 95th %tile Q(veh)	0	-	0.9	-	-	

Newnan Crossing Townhomes 3: Newnan Crossing Bypass & Poplar Road

no-build a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	393	6	87	277	214	3	323	211	273	155	20
Future Volume (veh/h)	38	393	6	87	277	214	3	323	211	273	155	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1796	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	432	0	113	360	0	3	351	0	321	182	0
Peak Hour Factor	0.91	0.91	0.91	0.77	0.77	0.77	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	7	2	2	7	2	2	2	2	2	2	2
Cap, veh/h	231	731		324	437		506	1166		438	1602	
Arrive On Green	0.04	0.21	0.00	0.07	0.24	0.00	0.00	0.33	0.00	0.13	0.45	0.00
Sat Flow, veh/h	1781	3413	1585	1781	1796	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	42	432	0	113	360	0	3	351	0	321	182	0
Grp Sat Flow(s),veh/h/ln	1781	1706	1585	1781	1796	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.2	7.8	0.0	3.3	13.0	0.0	0.1	5.1	0.0	6.1	2.0	0.0
Cycle Q Clear(g_c), s	1.2	7.8	0.0	3.3	13.0	0.0	0.1	5.1	0.0	6.1	2.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	731		324	437		506	1166		438	1602	
V/C Ratio(X)	0.18	0.59		0.35	0.82		0.01	0.30		0.73	0.11	
Avail Cap(c_a), veh/h	302	1464		369	797		629	1166		729	1602	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.5	24.3	0.0	19.4	24.6	0.0	15.4	17.2	0.0	28.9	10.9	0.0
Incr Delay (d2), s/veh	0.4	0.8	0.0	0.6	4.0	0.0	0.0	0.7	0.0	2.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.9	0.0	1.3	5.4	0.0	0.0	1.9	0.0	2.5	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	25.1	0.0	20.0	28.6	0.0	15.4	17.9	0.0	31.3	11.1	0.0
LnGrp LOS	C	C		C	C		B	B		C	B	
Approach Vol, veh/h		474	A		473	A		354	A		503	A
Approach Delay, s/veh		24.7			26.5			17.9			24.0	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	27.1	9.2	19.2	4.8	35.5	7.3	21.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.5	21.5	6.5	29.5	5.0	31.0	5.5	30.5				
Max Q Clear Time (g_c+I1), s	8.1	7.1	5.3	9.8	2.1	4.0	3.2	15.0				
Green Ext Time (p_c), s	0.6	1.7	0.0	2.4	0.0	1.0	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay			23.6									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Newnan Crossing Townhomes

1: Newnan Crossing Bypass & Lower Fayetteville Road

no-build p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	393	36	154	383	505	34	408	132	519	596	103
Future Volume (veh/h)	64	393	36	154	383	505	34	408	132	519	596	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1670	1683	1683	1670	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	70	432	0	160	399	0	38	458	0	577	662	0
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.89	0.89	0.89	0.90	0.90	0.90
Percent Heavy Veh, %	2	3	2	2	3	2	2	2	2	2	2	2
Cap, veh/h	229	462		217	506		263	589		547	1330	
Arrive On Green	0.05	0.28	0.00	0.07	0.30	0.00	0.03	0.18	0.00	0.27	0.42	0.00
Sat Flow, veh/h	1603	1670	1427	1603	1670	1427	1603	3198	1427	1603	3198	1427
Grp Volume(v), veh/h	70	432	0	160	399	0	38	458	0	577	662	0
Grp Sat Flow(s),veh/h/ln	1603	1670	1427	1603	1670	1427	1603	1599	1427	1603	1599	1427
Q Serve(g_s), s	2.8	22.6	0.0	6.5	19.6	0.0	1.7	12.2	0.0	23.8	13.7	0.0
Cycle Q Clear(g_c), s	2.8	22.6	0.0	6.5	19.6	0.0	1.7	12.2	0.0	23.8	13.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	462		217	506		263	589		547	1330	
V/C Ratio(X)	0.31	0.94		0.74	0.79		0.14	0.78		1.06	0.50	
Avail Cap(c_a), veh/h	289	470		217	506		298	589		547	1330	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.3	31.6	0.0	24.4	28.6	0.0	28.0	34.8	0.0	20.9	19.3	0.0
Incr Delay (d2), s/veh	0.7	26.0	0.0	12.3	8.2	0.0	0.2	9.7	0.0	54.0	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	11.7	0.0	3.0	8.4	0.0	0.6	5.3	0.0	16.2	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	57.7	0.0	36.6	36.7	0.0	28.3	44.5	0.0	74.9	20.6	0.0
LnGrp LOS	C	E		D	D		C	D		F	C	
Approach Vol, veh/h		502	A		559	A		496	A		1239	A
Approach Delay, s/veh		53.0			36.7			43.3			45.9	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.3	21.0	11.0	29.3	7.6	41.7	8.6	31.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	23.8	16.5	6.5	25.2	5.0	35.3	7.5	24.2				
Max Q Clear Time (g_c+I1), s	25.8	14.2	8.5	24.6	3.7	15.7	4.8	21.6				
Green Ext Time (p_c), s	0.0	0.6	0.0	0.2	0.0	4.0	0.0	0.6				
Intersection Summary												
HCM 6th Ctrl Delay			44.9									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Newnan Crossing Townhomes

2: Newnan Crossing Bypass & Lakeshore Parkway

no-build p.m.

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	41	15	29	633	698	47
Future Vol, veh/h	41	15	29	633	698	47
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	-	160	-	-	160
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	92	92	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	19	32	688	776	52
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1184	388	828	0	-	0
Stage 1	776	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	182	611	799	-	-	-
Stage 1	414	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	175	611	799	-	-	-
Mov Cap-2 Maneuver	175	-	-	-	-	-
Stage 1	397	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	29.5	0.4		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	799	-	216	-	-	
HCM Lane V/C Ratio	0.039	-	0.324	-	-	
HCM Control Delay (s)	9.7	-	29.5	-	-	
HCM Lane LOS	A	-	D	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-	

Newnan Crossing Townhomes 3: Newnan Crossing Bypass & Poplar Road

no-build p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	304	6	156	436	338	22	251	165	311	352	24
Future Volume (veh/h)	43	304	6	156	436	338	22	251	165	311	352	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1796	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	320	0	168	469	0	25	289	0	375	424	0
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.87	0.87	0.87	0.83	0.83	0.83
Percent Heavy Veh, %	2	7	2	2	7	2	2	2	2	2	2	2
Cap, veh/h	222	862		445	544		409	971		482	1370	
Arrive On Green	0.04	0.25	0.00	0.09	0.30	0.00	0.03	0.27	0.00	0.14	0.39	0.00
Sat Flow, veh/h	1781	3413	1585	1781	1796	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	45	320	0	168	469	0	25	289	0	375	424	0
Grp Sat Flow(s),veh/h/ln	1781	1706	1585	1781	1796	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.4	5.7	0.0	4.9	18.2	0.0	0.7	4.8	0.0	7.7	6.2	0.0
Cycle Q Clear(g_c), s	1.4	5.7	0.0	4.9	18.2	0.0	0.7	4.8	0.0	7.7	6.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	862		445	544		409	971		482	1370	
V/C Ratio(X)	0.20	0.37		0.38	0.86		0.06	0.30		0.78	0.31	
Avail Cap(c_a), veh/h	270	1431		464	814		481	971		678	1370	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	22.8	0.0	17.1	24.3	0.0	18.4	21.3	0.0	30.7	15.8	0.0
Incr Delay (d2), s/veh	0.4	0.3	0.0	0.5	6.3	0.0	0.1	0.8	0.0	3.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.1	0.0	1.8	7.8	0.0	0.3	1.9	0.0	3.2	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	23.0	0.0	17.6	30.6	0.0	18.4	22.0	0.0	34.4	16.4	0.0
LnGrp LOS	C	C		B	C		B	C		C	B	
Approach Vol, veh/h		365	A		637	A		314	A		799	A
Approach Delay, s/veh		22.8			27.2			21.8			24.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.8	24.7	11.2	23.2	6.5	33.0	7.5	26.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.5	19.0	7.5	31.0	5.0	28.5	5.0	33.5				
Max Q Clear Time (g_c+I1), s	9.7	6.8	6.9	7.7	2.7	8.2	3.4	20.2				
Green Ext Time (p_c), s	0.6	1.2	0.0	1.8	0.0	2.4	0.0	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			24.7									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Appendix E

Future Intersection Operational Analysis

Newnan Crossing Townhomes

1: Newnan Crossing Bypass & Lower Fayetteville Road

future a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	344	36	99	317	238	54	554	130	311	331	45
Future Volume (veh/h)	89	344	36	99	317	238	54	554	130	311	331	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1670	1683	1683	1670	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	107	414	0	110	352	0	69	710	0	334	356	0
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.78	0.78	0.78	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	2	2	3	2	2	2	2	2	2	2
Cap, veh/h	249	452		205	452		435	956		409	1325	
Arrive On Green	0.06	0.27	0.00	0.06	0.27	0.00	0.05	0.30	0.00	0.16	0.41	0.00
Sat Flow, veh/h	1603	1670	1427	1603	1670	1427	1603	3198	1427	1603	3198	1427
Grp Volume(v), veh/h	107	414	0	110	352	0	69	710	0	334	356	0
Grp Sat Flow(s),veh/h/ln	1603	1670	1427	1603	1670	1427	1603	1599	1427	1603	1599	1427
Q Serve(g_s), s	4.1	20.7	0.0	4.3	16.8	0.0	2.5	17.2	0.0	11.7	6.3	0.0
Cycle Q Clear(g_c), s	4.1	20.7	0.0	4.3	16.8	0.0	2.5	17.2	0.0	11.7	6.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	452		205	452		435	956		409	1325	
V/C Ratio(X)	0.43	0.92		0.54	0.78		0.16	0.74		0.82	0.27	
Avail Cap(c_a), veh/h	249	494		205	494		465	956		456	1325	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.6	30.5	0.0	23.6	29.0	0.0	19.3	27.2	0.0	18.1	16.6	0.0
Incr Delay (d2), s/veh	1.2	20.8	0.0	2.7	7.2	0.0	0.2	5.2	0.0	10.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	10.3	0.0	1.6	7.1	0.0	0.9	6.7	0.0	4.8	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.7	51.3	0.0	26.4	36.2	0.0	19.4	32.4	0.0	28.2	17.1	0.0
LnGrp LOS	C	D		C	D		B	C		C	B	
Approach Vol, veh/h		521	A		462	A		779	A		690	A
Approach Delay, s/veh		45.6			33.9			31.3			22.5	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.5	30.3	9.6	27.8	8.5	40.2	9.6	27.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	16.5	24.9	5.1	25.5	5.7	35.7	5.1	25.5				
Max Q Clear Time (g_c+I1), s	13.7	19.2	6.3	22.7	4.5	8.3	6.1	18.8				
Green Ext Time (p_c), s	0.3	2.1	0.0	0.6	0.0	2.1	0.0	1.0				

Intersection Summary

HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Newnan Crossing Townhomes

2: Newnan Crossing Bypass & Lakeshore Parkway/townhomes north access

future a.m.

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕	↙	↙	↕	↙
Traffic Vol, veh/h	35	0	24	32	0	17	12	585	5	9	401	14
Future Vol, veh/h	35	0	24	32	0	17	12	585	5	9	401	14
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	-	-	-	-	-	-	160	-	150	150	-	160
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	80	80	80	81	81	81	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	0	35	40	0	21	15	722	6	10	427	15
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	838	1205	214	986	1214	361	442	0	0	728	0	0
Stage 1	447	447	-	752	752	-	-	-	-	-	-	-
Stage 2	391	758	-	234	462	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	259	183	791	202	180	636	1114	-	-	871	-	-
Stage 1	560	572	-	368	416	-	-	-	-	-	-	-
Stage 2	605	413	-	748	563	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	246	179	791	189	176	636	1114	-	-	871	-	-
Mov Cap-2 Maneuver	246	179	-	189	176	-	-	-	-	-	-	-
Stage 1	553	566	-	363	411	-	-	-	-	-	-	-
Stage 2	577	408	-	706	557	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	19.1		24			0.2			0.2			
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1114	-	-	342	250	871	-	-				
HCM Lane V/C Ratio	0.013	-	-	0.254	0.245	0.011	-	-				
HCM Control Delay (s)	8.3	-	-	19.1	24	9.2	-	-				
HCM Lane LOS	A	-	-	C	C	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1	0.9	0	-	-				

Newnan Crossing Townhomes

4: Newnan Crossing Bypass & townhomes south access

future a.m.

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	577	6	0	438
Future Vol, veh/h	0	10	577	6	0	438
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	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	80	81	81	92	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	13	712	7	0	466
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	356	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	640	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	640	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.7	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	640		-		
HCM Lane V/C Ratio	-	0.02		-		
HCM Control Delay (s)	-	10.7		-		
HCM Lane LOS	-	B		-		
HCM 95th %tile Q(veh)	-	0.1		-		

Newnan Crossing Townhomes 3: Newnan Crossing Bypass & Poplar Road

future a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	393	6	87	277	221	3	325	211	293	161	26
Future Volume (veh/h)	40	393	6	87	277	221	3	325	211	293	161	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1796	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	432	0	113	360	0	3	353	0	345	189	0
Peak Hour Factor	0.91	0.91	0.91	0.77	0.77	0.77	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	7	2	2	7	2	2	2	2	2	2	2
Cap, veh/h	233	735		325	437		493	1136		465	1600	
Arrive On Green	0.04	0.22	0.00	0.07	0.24	0.00	0.00	0.32	0.00	0.13	0.45	0.00
Sat Flow, veh/h	1781	3413	1585	1781	1796	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	44	432	0	113	360	0	3	353	0	345	189	0
Grp Sat Flow(s),veh/h/ln	1781	1706	1585	1781	1796	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.3	7.8	0.0	3.3	13.1	0.0	0.1	5.2	0.0	6.6	2.1	0.0
Cycle Q Clear(g_c), s	1.3	7.8	0.0	3.3	13.1	0.0	0.1	5.2	0.0	6.6	2.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	735		325	437		493	1136		465	1600	
V/C Ratio(X)	0.19	0.59		0.35	0.82		0.01	0.31		0.74	0.12	
Avail Cap(c_a), veh/h	301	1462		370	796		616	1136		778	1600	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	24.3	0.0	19.3	24.7	0.0	15.8	17.7	0.0	28.6	11.0	0.0
Incr Delay (d2), s/veh	0.4	0.7	0.0	0.6	4.0	0.0	0.0	0.7	0.0	2.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.9	0.0	1.3	5.4	0.0	0.0	2.0	0.0	2.6	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.8	25.0	0.0	20.0	28.7	0.0	15.8	18.4	0.0	31.0	11.1	0.0
LnGrp LOS	C	C		B	C		B	B		C	B	
Approach Vol, veh/h		476	A		473	A		356	A		534	A
Approach Delay, s/veh		24.6			26.6			18.4			24.0	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.8	26.5	9.2	19.3	4.8	35.5	7.3	21.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	15.5	20.5	6.5	29.5	5.0	31.0	5.5	30.5				
Max Q Clear Time (g_c+I1), s	8.6	7.2	5.3	9.8	2.1	4.1	3.3	15.1				
Green Ext Time (p_c), s	0.7	1.6	0.0	2.4	0.0	1.0	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay			23.7									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Newnan Crossing Townhomes

1: Newnan Crossing Bypass & Lower Fayetteville Road

future p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	393	44	162	383	505	40	414	138	519	604	103
Future Volume (veh/h)	64	393	44	162	383	505	40	414	138	519	604	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1670	1683	1683	1670	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	70	432	0	169	399	0	45	465	0	577	671	0
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.89	0.89	0.89	0.90	0.90	0.90
Percent Heavy Veh, %	2	3	2	2	3	2	2	2	2	2	2	2
Cap, veh/h	229	462		218	507		268	590		543	1317	
Arrive On Green	0.05	0.28	0.00	0.07	0.30	0.00	0.04	0.18	0.00	0.26	0.41	0.00
Sat Flow, veh/h	1603	1670	1427	1603	1670	1427	1603	3198	1427	1603	3198	1427
Grp Volume(v), veh/h	70	432	0	169	399	0	45	465	0	577	671	0
Grp Sat Flow(s),veh/h/ln	1603	1670	1427	1603	1670	1427	1603	1599	1427	1603	1599	1427
Q Serve(g_s), s	2.8	22.6	0.0	6.5	19.6	0.0	2.0	12.4	0.0	23.7	14.0	0.0
Cycle Q Clear(g_c), s	2.8	22.6	0.0	6.5	19.6	0.0	2.0	12.4	0.0	23.7	14.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	462		218	507		268	590		543	1317	
V/C Ratio(X)	0.31	0.93		0.78	0.79		0.17	0.79		1.06	0.51	
Avail Cap(c_a), veh/h	272	472		218	507		299	590		543	1317	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.2	31.6	0.0	25.3	28.5	0.0	27.9	34.8	0.0	20.9	19.6	0.0
Incr Delay (d2), s/veh	0.7	25.7	0.0	15.9	8.1	0.0	0.3	10.3	0.0	56.1	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	11.7	0.0	3.3	8.3	0.0	0.8	5.4	0.0	16.4	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	57.3	0.0	41.2	36.6	0.0	28.1	45.1	0.0	77.0	21.0	0.0
LnGrp LOS	C	E		D	D		C	D		F	C	
Approach Vol, veh/h		502	A		568	A		510	A		1248	A
Approach Delay, s/veh		52.6			38.0			43.6			46.9	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.2	21.0	11.0	29.3	7.9	41.3	8.6	31.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	23.7	16.5	6.5	25.3	5.1	35.1	6.5	25.3				
Max Q Clear Time (g_c+I1), s	25.7	14.4	8.5	24.6	4.0	16.0	4.8	21.6				
Green Ext Time (p_c), s	0.0	0.6	0.0	0.2	0.0	4.0	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay 45.5

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Newnan Crossing Townhomes

2: Newnan Crossing Bypass & Lakeshore Parkway/townhomes north access

future p.m.

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕↕	↙	↙	↕↕	↙
Traffic Vol, veh/h	41	0	15	21	0	11	29	640	14	24	698	47
Future Vol, veh/h	41	0	15	21	0	11	29	640	14	24	698	47
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	-	-	-	-	-	-	160	-	150	150	-	160
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	92	92	92	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	0	19	26	0	14	32	696	15	27	776	52
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1242	1605	388	1202	1642	348	828	0	0	711	0	0
Stage 1	830	830	-	760	760	-	-	-	-	-	-	-
Stage 2	412	775	-	442	882	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	131	104	611	140	99	648	799	-	-	884	-	-
Stage 1	331	383	-	364	413	-	-	-	-	-	-	-
Stage 2	588	406	-	564	362	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	121	97	611	129	92	648	799	-	-	884	-	-
Mov Cap-2 Maneuver	121	97	-	129	92	-	-	-	-	-	-	-
Stage 1	318	371	-	349	396	-	-	-	-	-	-	-
Stage 2	552	390	-	530	351	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	46.5		31		0.4		0.3					
HCM LOS	E		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	799	-	-	154	178	884	-	-				
HCM Lane V/C Ratio	0.039	-	-	0.455	0.225	0.03	-	-				
HCM Control Delay (s)	9.7	-	-	46.5	31	9.2	-	-				
HCM Lane LOS	A	-	-	E	D	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	2.1	0.8	0.1	-	-				

Newnan Crossing Townhomes

4: Newnan Crossing Bypass & townhomes south access

future p.m.

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	657	17	0	714
Future Vol, veh/h	0	7	657	17	0	714
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	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	80	92	92	92	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	714	18	0	793
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	357	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	639	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	639	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.7	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	- 639		-		
HCM Lane V/C Ratio	-	- 0.014		-		
HCM Control Delay (s)	-	- 10.7		-		
HCM Lane LOS	-	- B		-		
HCM 95th %tile Q(veh)	-	- 0		-		

Newnan Crossing Townhomes 3: Newnan Crossing Bypass & Poplar Road

future p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	304	6	156	436	357	22	257	165	324	356	28
Future Volume (veh/h)	49	304	6	156	436	357	22	257	165	324	356	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1796	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	320	0	168	469	0	25	295	0	390	429	0
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.87	0.87	0.87	0.83	0.83	0.83
Percent Heavy Veh, %	2	7	2	2	7	2	2	2	2	2	2	2
Cap, veh/h	223	865		445	540		406	975		494	1387	
Arrive On Green	0.04	0.25	0.00	0.09	0.30	0.00	0.03	0.27	0.00	0.14	0.39	0.00
Sat Flow, veh/h	1781	3413	1585	1781	1796	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	52	320	0	168	469	0	25	295	0	390	429	0
Grp Sat Flow(s),veh/h/ln	1781	1706	1585	1781	1796	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.6	5.8	0.0	5.0	18.7	0.0	0.8	5.0	0.0	8.2	6.3	0.0
Cycle Q Clear(g_c), s	1.6	5.8	0.0	5.0	18.7	0.0	0.8	5.0	0.0	8.2	6.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	865		445	540		406	975		494	1387	
V/C Ratio(X)	0.23	0.37		0.38	0.87		0.06	0.30		0.79	0.31	
Avail Cap(c_a), veh/h	263	1300		487	772		476	975		663	1387	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.8	23.3	0.0	17.5	25.0	0.0	18.7	21.7	0.0	31.3	16.0	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.0	0.5	7.5	0.0	0.1	0.8	0.0	4.6	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.2	0.0	1.9	8.2	0.0	0.3	2.0	0.0	3.5	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.4	23.5	0.0	18.1	32.5	0.0	18.8	22.5	0.0	35.9	16.6	0.0
LnGrp LOS	C	C		B	C		B	C		D	B	
Approach Vol, veh/h		372	A		637	A		320	A		819	A
Approach Delay, s/veh		23.2			28.7			22.2			25.8	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	25.2	11.4	23.7	6.5	34.0	7.8	27.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.5	20.0	8.7	28.8	5.0	29.5	5.0	32.5				
Max Q Clear Time (g_c+I1), s	10.2	7.0	7.0	7.8	2.8	8.3	3.6	20.7				
Green Ext Time (p_c), s	0.6	1.3	0.1	1.8	0.0	2.5	0.0	2.1				
Intersection Summary												
HCM 6th Ctrl Delay			25.7									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Traffic Signal Needs Study

Newnan Crossing Bypass at Lakeshore Parkway /
Proposed Townhomes Northern Access

City of Newnan, Georgia

June 16, 2023

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING



Traffic Signal Needs Study

Newnan Crossing Bypass at Lakeshore Parkway / Proposed Townhomes Northern Access

City of Newnan, Georgia

study prepared for:

Brent Holdings, LLC
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June 16, 2023



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Introduction

The purpose of this study is to determine if signalization of the intersection of Newnan Crossing Bypass at Lakeshore Parkway and the future northern access to a proposed townhome development is justified now or will be justified in the future. The subject intersection is located in the City of Newnan, Georgia, as shown in Figure 1. In order to determine if a traffic signal is, or will be, warranted at this intersection, an evaluation was made of the applicable warrants described in the Federal Highway Administration's *Manual on Uniform Traffic Control Devices (MUTCD)*, 2009 edition (with revisions 1 and 2, May 2012), Chapter 4C – Traffic Control Signal Needs Studies. This report documents the findings of this analysis.

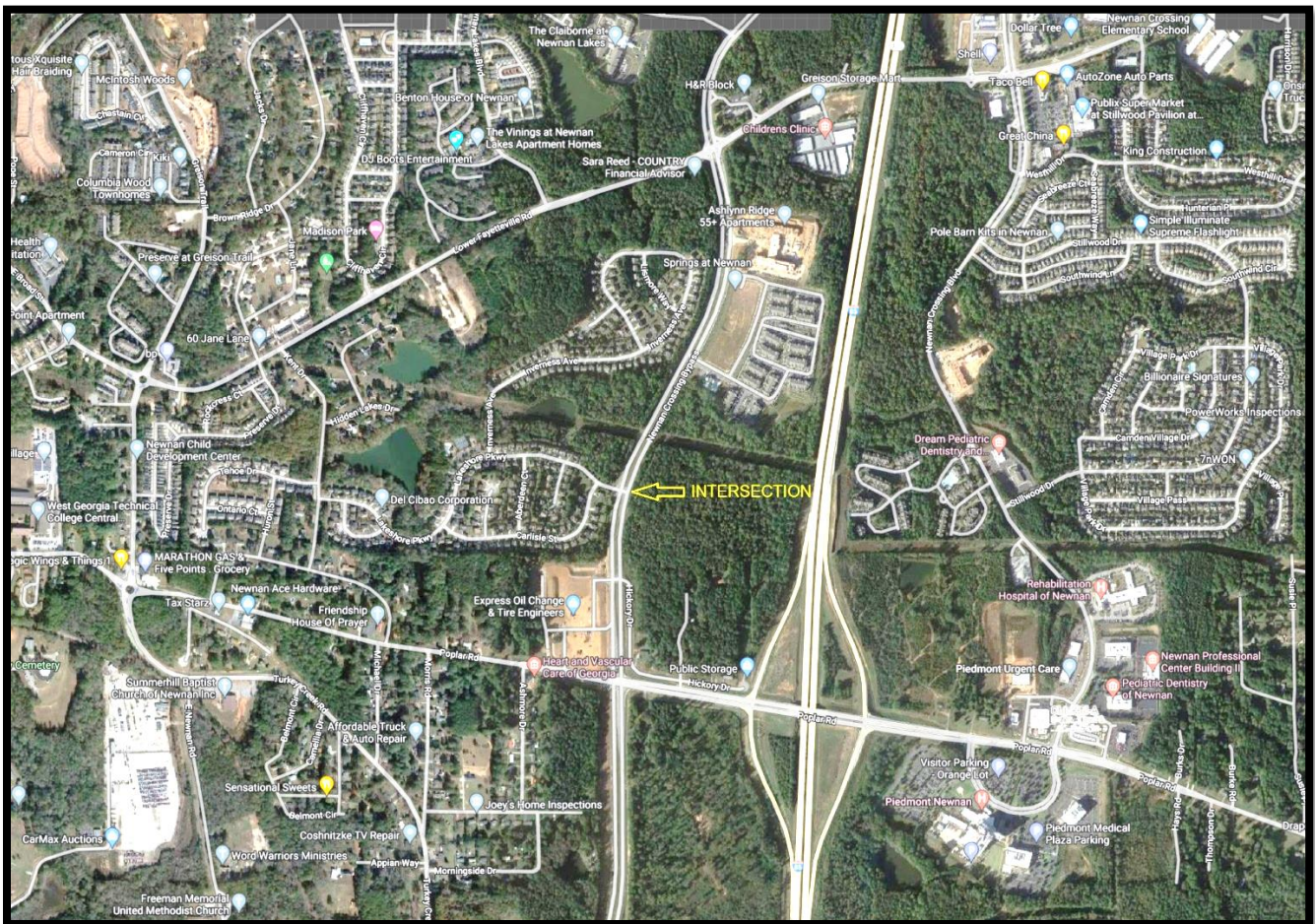


Figure 1 – Intersection Location Map

Existing Conditions

Newnan Crossing Bypass is a north-south urban collector that begins at SR 34 (north of which it is called Millard Farmer Industrial Boulevard), has a signalized intersection north of the subject intersection at Lower Fayetteville Road, passes the site, has a signalized intersection south of the subject intersection at Poplar Road, then continues to the south, terminating at SR 16. The road has two through lanes in each direction with a wide grassed median and exclusive left and right turn lanes at major intersections. The terrain is level to very gently rolling and the posted speed limit is 45 mph. In the vicinity of the intersection and to the south, the road primarily serves accesses to residential subdivisions, while there is a large retail node along the road to the north. A 24-hour bi-directional traffic count collected for this study in June 2023, with area schools in not session, revealed a northbound volume of 7,079 vehicles and a southbound volume of 6,954 vehicles, for a two way 24-hour volume of 14,033 vehicles.

Lakeshore Parkway is a local two lane east/west subdivision street. The road terminates at a side street stop sign controlled T-intersection at Newnan Crossing Bypass. The posted speed limit is 25 mph.

With the exception of a short segment on the west side of the road near Lakeshore Parkway, there is generally no sidewalk along Newnan Crossing Bypass. There are no dedicated bicycle lanes along nearby roadways and there is no regularly scheduled mass transit in the area.

Figure 2 is a Google Maps photograph of the existing conditions at the study intersection while Figure 3 is an aerial photograph of the intersection.



Figure 2 – Newnan Crossing Bypass Facing South Toward Subject Intersection



Figure 3 – Aerial Photograph of Intersection

Existing Traffic Volumes

A 12-hour full turning movement count was collected at the existing intersection of Newnan Crossing Bypass at Lakeshore Parkway on Tuesday, June 6, 2023. Area schools were in recess for the summer on the day on which the counts were recorded. Therefore, a monthly adjustment factor was applied to the counts. The June monthly adjustment factor of 1.00 for Factor Group 4 (Urban/Small Urban – Major Collectors, Minor Collectors, and Locals) was obtained from *Georgia's Traffic Monitoring Guide*, 2018, published by the Georgia DOT Office of Transportation Data. A spreadsheet showing the hourly volume calculations for this analysis and the raw count data are found in the appendix.

Future Traffic Volumes

Historic Georgia DOT AADT count data at nearby count stations were used to develop traffic volume growth projections. This data is documented in Table 1.

Table 1 – Georgia DOT Historic AADT Volumes and Growth Rates

Year	Poplar E of Newnan Crossing	Annual Growth	Lwr Fayetteville W of Stonebridge	Annual Growth	E Broad E of Greison	Annual Growth
Station ID	077-0363		077-0353		077-0350	
2017	10,800		15,700		12,000	
2018	10,800	0.0%	15,700	0.0%	8,510	-29.1%
2019	10,900	0.9%	15,800	0.6%	8,570	0.7%
2020	13,400	22.9%	14,600	-7.6%	7,900	-7.8%
2021	14,400	7.5%	14,900	2.1%	8,530	8.0%
avg growth		5.9%		-1.0%		-6.6%

Growth in the area has fluctuated. Two of the three count locations saw a decrease from 2019 to 2020, which is attributable to the COVID-19 pandemic. The latest year saw modest positive growth. However, much of that is attributable to a return to pre-pandemic levels. There was a large increase in volume reported on Poplar Road east of Newnan Crossing Bypass from 2019 to 2020. However, review of the data at that location reveals that 2017, 2018, and 2019 were estimated counts and 2020 was an actual count. It seems probable that the estimated counts were low and the 2020 count corrected for those low estimates, rather than an actual increase of almost 23% in volume at that one location, while the other two locations experienced the decrease due to the pandemic during that same time period. For the five year period, two of the three count locations saw a slight overall decrease in volumes while the count location on Poplar Road saw +5.9% overall growth, noting that this is the location just described, with the expected low estimated volumes. Based on the growth trends identified in Table 1, and taking the pandemic and the likely low estimated counts into consideration, a 2.0% annual growth factor was applied to the existing volumes when projecting the future no-build volumes.

There is a Development of Regional Impact (DRI) called Cresswinds Coweta, that is under development between US 27 and Newnan Crossing Bypass, north of SR 16 and south of Turkey Creek Road. The project is a senior community with 730 age-restricted single family homes. This DRI will have access to Newnan Crossing Bypass and, therefore, is expected to have a greater impact on volumes on Newnan Crossing Bypass than is covered by the 2.0% growth rate described above. The specific trips for this DRI were obtained from the traffic study prepared for that project by Keck & Wood, dated July 16, 2021. These specific trips were added to the study intersection, in addition to the 2.0% growth rate.

The existing volumes, increased by the background annual growth rate plus the trips from the Cresswinds DRI, produce the 2028 no-build volumes that are expected at the study intersection at full build-out of the Newnan Crossing Bypass townhomes, but not including the townhomes' trips. The appendix includes a worksheet that shows the growth rate and the Cresswinds DRI trips added at the intersection.

Programmed Transportation Infrastructure Improvements

Programmed (scheduled and funded) and planned (anticipated) transportation infrastructure projects in the vicinity of the proposed development were researched. The following projects were identified that could affect traffic patterns, volumes, or capacity:

Georgia DOT Project #0004407 – This project consists of maintenance and operational improvements along Lower Fayetteville Road from Greison Trail to SR 54 (Fischer Road) in Coweta County. The existing two-lane roadway's pavement is being widened two feet on each side, except in the area of the Chandler's Lake Dam where all widening is occurring on the southern side of the roadway. The project includes leveling and resurfacing of the roadway, as well as shoulder improvements. The project is under construction.

County Project NR-9 – Southwest Newnan Bypass is a new road to the west of US 29 at Smokey Road. The project is considered mid-term and is not expected to be completed by the 2028 build-out of the proposed Newnan Crossing Townhomes.

County Project NR-10 – Newnan Crossing Bypass Access Road is a new road project but is considered long-term and is not expected to occur until well after the 2028 build-out of the proposed Newnan Crossing Townhomes.

Proposed Townhomes Development

The fourth approach of the subject intersection will become the northern full-movement access to a proposed townhomes development. The trips that will be generated by the development were projected in a traffic impact study by Marc R Acampora, PE, LLC, dated June 16, 2023. The development will consist of 163 attached residential townhomes. The project will be served by two vehicular accesses on Newnan Crossing Bypass, with the main access aligning with the median break at Lakeshore Parkway and the second access to the south of the main access and limited to right-in/right-out (RIRO). The site plan is presented in Figure 4.



Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed development. The volume of traffic that will be generated by the townhomes was calculated using the equations in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (the current edition). ITE Land Use 215 – Single Family Attached Housing was chosen as representative of the project. The trip generation is summarized in Table 2.

Table 2 – Proposed Townhomes Trip Generation

Land Use	ITE Code	Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour		
			In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Townhomes	215	163 homes	20	59	79	55	39	94	596	596	1,192

The proposed townhomes will generate 79 trips in the morning peak hour, 94 trips in the evening peak hour, and 1,192 daily trips.

In order to determine the turning movement volumes entering and exiting at the proposed main access on Newnan Crossing Bypass, the trips shown above in Table 2, were distributed to the roadway network and assigned to the subject intersection by movement. This was done in the traffic impact study for the development, referenced above. The weekday a.m. and p.m. peak hour and 24-hour turn movement volumes entering and exiting the project, as developed in the traffic impact study, are presented in Table 3.

Table 3 – Newnan Crossing Bypass at Townhomes North Access Entering and Exiting Volumes

Movement / Time Period	Newnan Crossing Bypass Northbound		Newnan Crossing Bypass Southbound		Townhomes North Access Westbound		
	Through	Right	Left	Through	Left	Through	Right
A.M. Peak Hour Trips	10	5	9	0	32	0	17
P.M. Peak Hour Trips	7	14	24	0	21	0	11
24-Hour Trips	107	180	268	0	328	0	268

In order to determine the trip generation for the proposed development for other hours of the day outside the peak hours, an hourly distribution was applied to the townhomes' 24 hour trips. The hourly distribution of townhomes' trips throughout a day was obtained from the ITE *Trip Generation Manual, 10th Edition*. The hourly distribution was applied to the 24-hour volumes to develop the entering and exiting trips, by hour, at the proposed townhomes' access. A spreadsheet showing the hourly volume calculations for this analysis is located in the appendix of this report.

Right-Turn Volume Reductions

The MUTCD states: "Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor street traffic count when evaluating the count against the above signal warrants." In reviewing the conditions at this intersection, and the modest side street approach delays determined in the traffic impact study, it was concluded that signalization would most likely be justified if needed to facilitate turns from the side street approaches. Therefore, 100% of the side street turns were included in the analysis. This produces a conservatively high analysis, most likely to satisfy volume-based signal warrants.

Crash Data

The Georgia Electronic Accident Reporting System (GEARS) was used to obtain crash data at the intersection of Newnan Crossing Bypass at Lakeshore Parkway for the five year period from January 1, 2018 through December 31, 2022. Figure 5 shows the GEARS crash map and data.

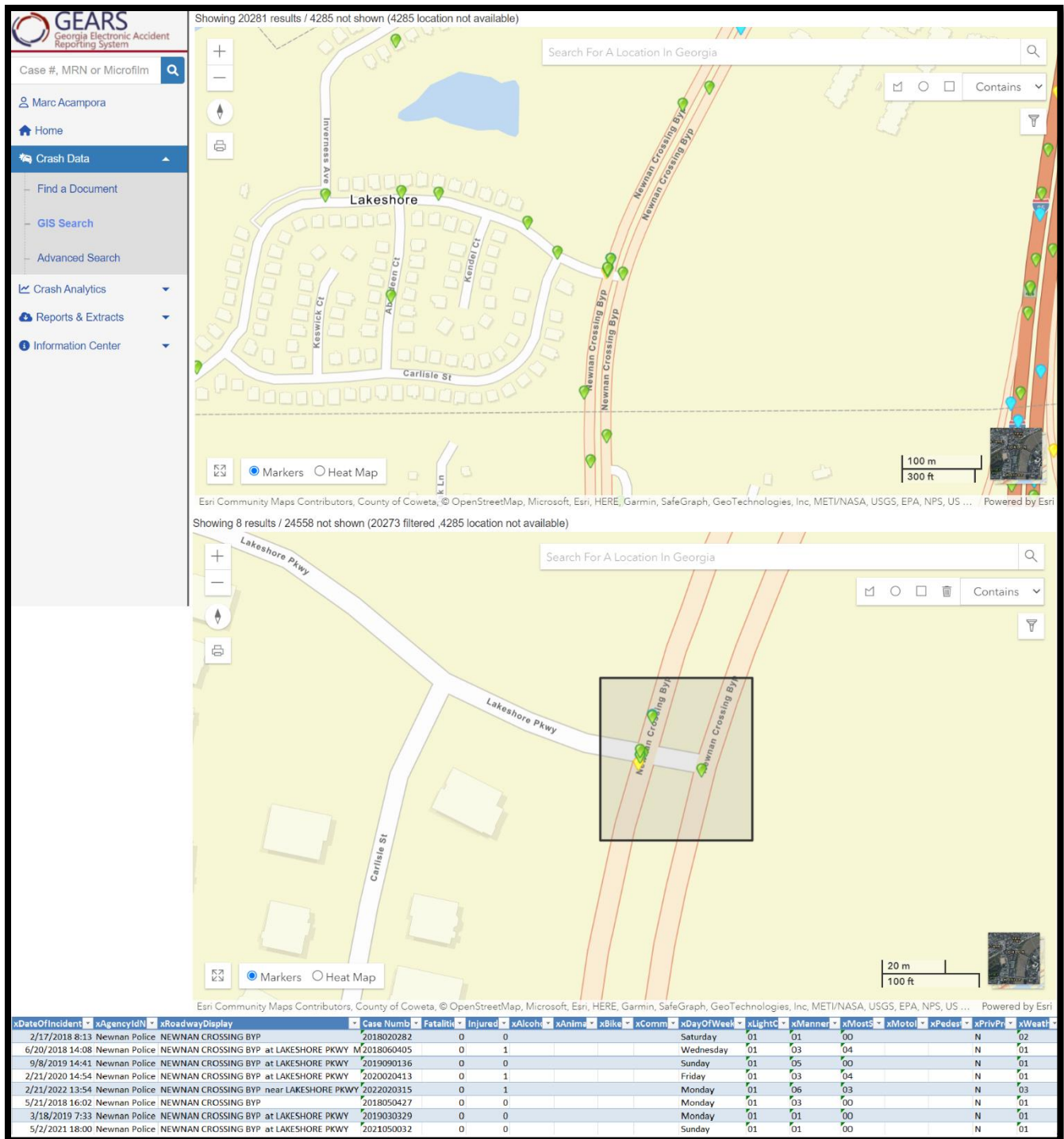


Figure 5 – Crash Map and Data

These results are discussed under the Crash Experience Warrant.

Newnan Crossing Bypass at Lakeshore Parkway, Newnan
Traffic Signal Needs Study

MARC R. ACAMPORA, PE, LLC
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Evaluation of Signal Warrants

An evaluation was made of the applicable warrants for traffic signal installation described in the Federal Highway Administration's *Manual on Uniform Traffic Control Devices* (MUTCD), 2009 edition (with revisions 1 and 2, May 2012), Chapter 4C – Traffic Control Signal Needs Studies. The analysis was made for the existing conditions as well as for the future conditions with the added fourth approach access to the proposed townhomes, at build-out of that development. The following is a more complete description of each warrant, and the results of the analysis. Spreadsheets in the appendix show the calculations of the volume-based warrants.

Warrant 1. Eight-Hour Vehicular Volume

The need for a traffic control signal shall be considered if an engineering study finds that one of the following conditions exist for each of any 8 hours of an average day:

- A. The vehicles per hour given in both of the 100 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection; or
- B. The vehicles per hour given in both of the 100 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

In applying each condition the major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of these 8 hours.

Option: If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 70 percent columns in Table 4C-1 may be used in place of the 100 percent columns.

OR

The need for a traffic control signal shall be considered if an engineering study finds that both of the following conditions exist for each of any 8 hours of an average day:

- A. The vehicles per hour given in both of the 80 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection; and
- B. The vehicles per hour given in both of the 80 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

These major-street and minor-street volumes shall be for the same 8 hours for each condition; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Option: If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

Based on the guidance provided in the MUTCD, the intersection was considered to have two or more lanes on each major street (Newnan Crossing Bypass) approach and one lane on the minor street (Lakeshore Parkway and proposed townhomes access) approaches. The posted speed limit exceeds 40 mph and, therefore, the Option was applied.

MUTCD Table 4C-1 – Warrant 1 – Eight Hour Vehicular Volume

Condition A

Number of Lanes 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

Number of Lanes 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
source: Table 4C-1 of the 2009 MUTCD

Existing: There is one (1) hour that meet the minimum criteria. **Warrant 1 is NOT SATISFIED.**

Future: There are two (2) hours that meet the minimum criteria. **Warrant 1 is NOT SATISFIED.**

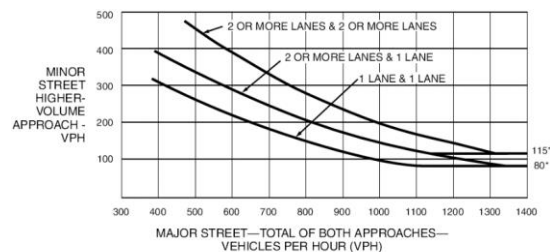
Warrant 2. Four-Hour Vehicular Volume

The need for a traffic control signal shall be considered if an engineering study finds that, for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) all fall above the applicable curve in Figure 4C-1 for the existing combination of approach lanes. On the minor street, the higher volume shall not be required to be on the same approach during each of these 4 hours.

Option: If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-2 may be used in place of Figure 4C-1.

Based on the guidance provided in the MUTCD, the intersection was considered to have two or more lanes on each major street (Newnan Crossing Bypass) approach and one lane on the minor street (Lakeshore Parkway and proposed townhomes access) approaches. The posted speed limit exceeds 40 mph and, therefore, the Option was applied.

MUTCD Figure 4C-1 – Warrant 2 – Four Hour Vehicular Volume

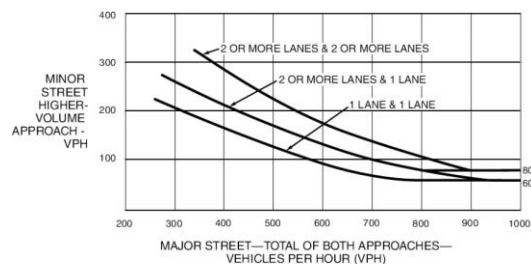


*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

source: Figure 4C-1 of the 2009 MUTCD

MUTCD Figure 4C-2 – Warrant 2 – Four Hour Vehicular Volume (70% Factor)

(community less than 10,000 population or above 40 mph on major street)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

source: Figure 4C-2 of the 2009 MUTCD

Existing: There are zero (0) hours that meet the minimum criteria. **Warrant 2 is NOT SATISFIED.**

Future: There is one (1) hour that meets the minimum criteria. **Warrant 2 is NOT SATISFIED.**

Warrant 3. Peak Hour

This signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time. The need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

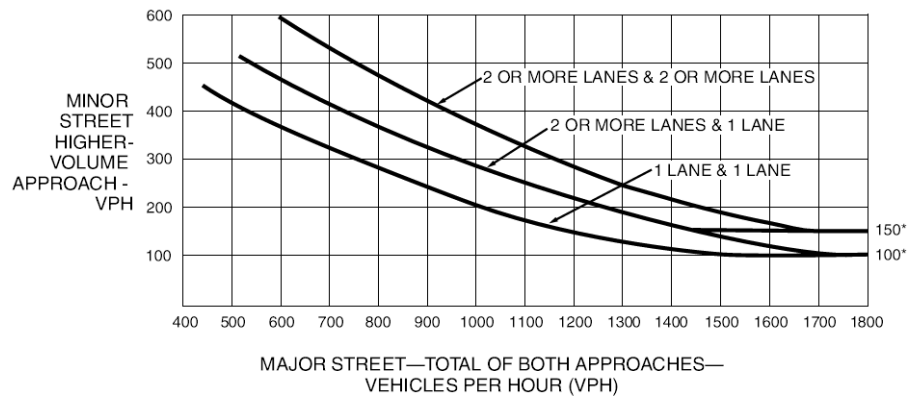
1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach; and
2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and
3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

Option: If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-4 may be used in place of Figure 4C-3 to evaluate the criteria in the second category of the Standard. If this warrant is the only warrant met and a traffic control signal is justified by an engineering study, the traffic control signal may be operated in the flashing mode during the hours that the volume criteria of this warrant are not met.

Based on the guidance provided in the MUTCD, the intersection was considered to have two or more lanes on each major street (Newnan Crossing Bypass) approach and one lane on the minor street (Lakeshore Parkway and proposed townhomes access) approaches. The posted speed limit exceeds 40 mph and, therefore, the Option was applied.

MUTCD Figure 4C-3 – Warrant 3 – Peak Hour

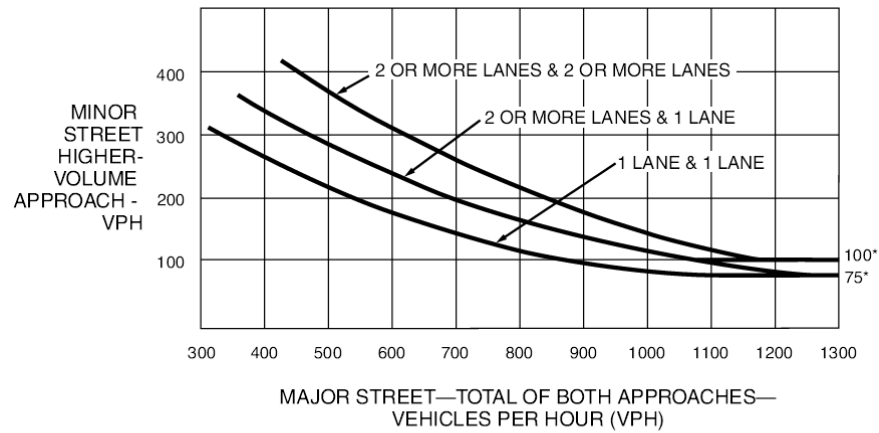


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

source: Figure 4C-3 of the 2009 MUTCD

MUTCD Figure 4C-4 – Warrant 3 – Peak Hour (70% Factor)

(community less than 10,000 population or above 40 mph on major street)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

source: Figure 4C-4 of the 2009 MUTCD

Existing: There are zero (0) hours that meet the minimum criteria. **Warrant 3 is NOT SATISFIED.**

Future: There are zero (0) hours that meet the minimum criteria. **Warrant 3 is NOT SATISFIED.**

Warrant 4. Pedestrian Volume

The need for a traffic control signal at an intersection or midblock crossing shall be considered if an engineering study finds that one of the following criteria is met:

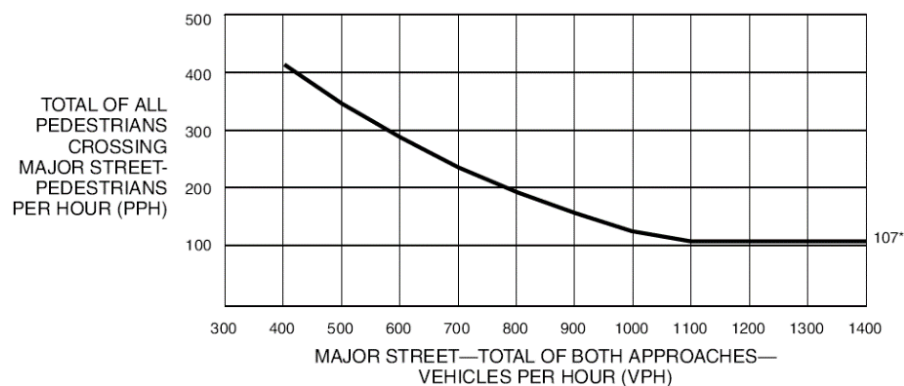
- A. For each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the curve in Figure 4C-5; or
- B. For 1 hour (any four consecutive 15-minute periods) of an average day, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) falls above the curve in Figure 4C-7.

Option: If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 35 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-6 may be used in place of Figure 4C-5 to evaluate Criterion A in Paragraph 2, and Figure 4C-8 may be used in place of Figure 4C-7 to evaluate Criterion B in Paragraph 2.

The Pedestrian Volume signal warrant shall not be applied at locations where the distance to the nearest traffic control signal or STOP sign controlling the street that pedestrians desire to cross is less than 300 feet unless the proposed traffic control signal will not restrict the progressive movement of traffic. If this warrant is met and a traffic control signal is justified by an engineering study, the traffic control signal shall be equipped with pedestrian signal heads complying with the provisions set forth in Chapter 4E.

Option: The criterion for the pedestrian volume crossing the major street may be reduced as much as 50 percent if the 15th-percentile crossing speed of pedestrians is less than 3.5 feet per second. A traffic control signal may not be needed at the study location if adjacent coordinated traffic control signals consistently provide gaps of adequate length for pedestrians to cross the street.

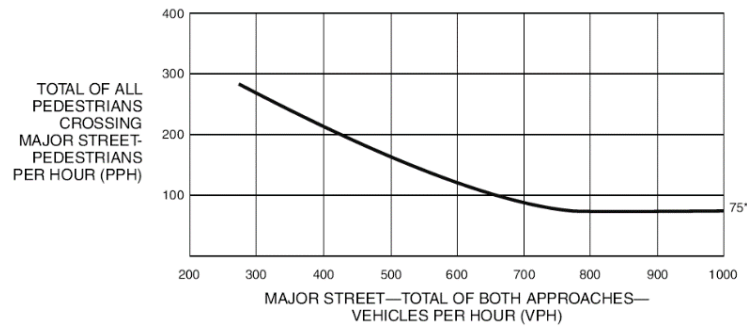
MUTCD Figure 4C-5 – Warrant 4 – Pedestrian Four Hour Volume



*Note: 107 pph applies as the lower threshold volume.

source: Figure 4C-5 of the 2009 MUTCD

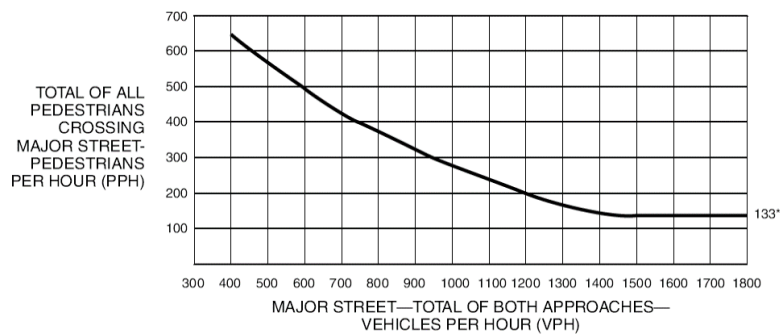
MUTCD Figure 4C-6 – Warrant 4 – Pedestrian Four Hour Volume (70% Factor)



*Note: 75 pph applies as the lower threshold volume.

source: Figure 4C-6 of the 2009 MUTCD

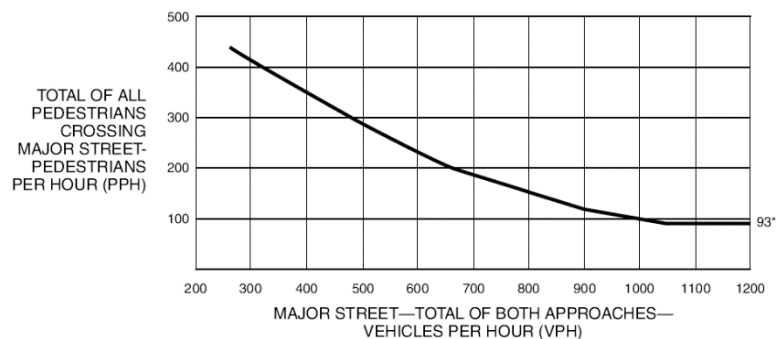
MUTCD Figure 4C-7 – Warrant 4 – Pedestrian Peak Hour



*Note: 133 pph applies as the lower threshold volume.

source: Figure 4C-7 of the 2009 MUTCD

MUTCD Figure 4C-8 – Warrant 4 – Pedestrian Peak Hour (70% Factor)



*Note: 93 pph applies as the lower threshold volume.

source: Figure 4C-8 of the 2009 MUTCD

Pedestrian activity at this intersection was observed to be low and this is expected to continue into the future.

Existing: There are zero (0) hours that meet the minimum criteria. **Warrant 4 is NOT SATISFIED.**

Future: It is expected that there will be zero (0) hours that meet the minimum criteria. **Warrant 4 is NOT SATISFIED.**

Warrant 5. School Crossing

The need for a traffic control signal shall be considered when an engineering study of the frequency and adequacy of gaps in the vehicular traffic stream as related to the number and size of groups of schoolchildren at an established school crossing across the major street shows that the number of adequate gaps in the traffic stream during the period when the schoolchildren are using the crossing is less than the number of minutes in the same period (see Section 7A.03) and there are a minimum of 20 schoolchildren during the highest crossing hour.

Before a decision is made to install a traffic control signal, consideration shall be given to the implementation of other remedial measures, such as warning signs and flashers, school speed zones, school crossing guards, or a grade-separated crossing. The School Crossing signal warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 300 feet unless the proposed traffic control signal will not restrict the progressive movement of traffic.

Warrant 5 is NOT APPLICABLE.

Warrant 6. Coordinated Signal System

The need for a traffic control signal shall be considered if an engineering study finds that one of the following criteria is met:

- A. On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.
- B. On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.

Warrant 6 is NOT APPLICABLE.

Warrant 7. Crash Experience

The need for a traffic control signal shall be considered if an engineering study finds that all of the following criteria are met:

- A. Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and
- B. Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and
- C. For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 percent columns of Condition A in Table 4C-1 (see Section 4C.02), or the vph in both of the 80 percent columns of

Condition B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. These major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Option: If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

In the five year period, there were eight (8) reported crashes at the intersection of Newnan Crossing Bypass at Lakeshore Parkway. Three (3) were angle crashes with none involving injuries. Three (3) were rear end collisions with two (2) involving injuries. There was one (1) sideswipe in the opposite direction with no injuries. One (1) was a crash that did not involve another vehicle and injuries were involved. There were no fatalities.

The low number of crashes leads to the conclusion that there is no discernible crash pattern. Of the two most common types of crashes at the intersection, angle and head-on (three (3) each in the five year period), angle crashes are susceptible to correction by a signal, but rear-end collisions are not, and may be exacerbated by a signal. There was no 12 month period during which the required five (5) crash standard was satisfied. Therefore, Part B of the crash experience warrant is not satisfied.

Warrant 7 is NOT SATISFIED.

Warrant 8. Roadway Network

The need for a traffic control signal shall be considered if an engineering study finds that the common intersection of two or more major routes meets one or both of the following criteria:

- A. The intersection has a total existing, or immediately projected, entering volume of at least 1,000 vehicles per hour during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study, that meet one or more of Warrants 1, 2, and 3 during an average weekday; or
- B. The intersection has a total existing or immediately projected entering volume of at least 1,000 vehicles per hour for each of any 5 hours of a non-normal business day (Saturday or Sunday).

A major route as used in this signal warrant shall have at least one of the following characteristics:

- A. It is part of the street or highway system that serves as the principal roadway network for through traffic flow.
- B. It includes rural or suburban highways outside, entering, or traversing a city.
- C. It appears as a major route on an official plan, such as a major street plan in an urban area traffic and transportation study.

Warrant 8 is NOT APPLICABLE.

Warrant 9. Intersection Near a Grade Crossing

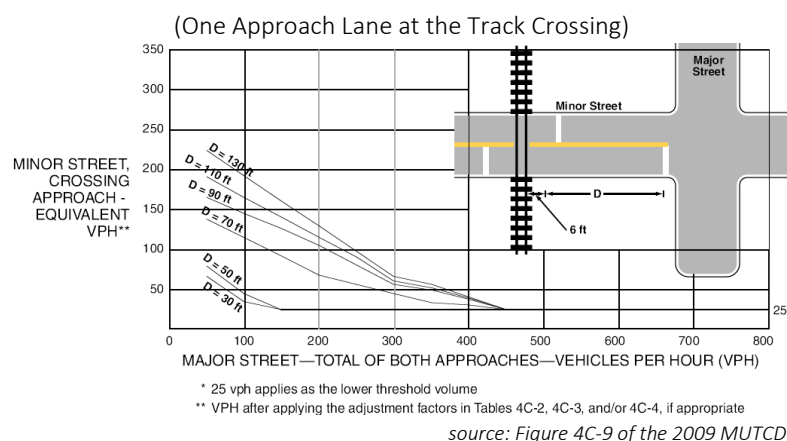
The need for a traffic control signal shall be considered if an engineering study finds that both of the following criteria are met:

- A. A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach; and
- B. During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the minor-street approach that crosses the track (one direction only, approaching the intersection) falls above the applicable curve in Figure 4C-9 or 4C-10 for the existing combination of approach lanes over the track and the distance D, which is the clear storage distance as defined in Section 1A.13.

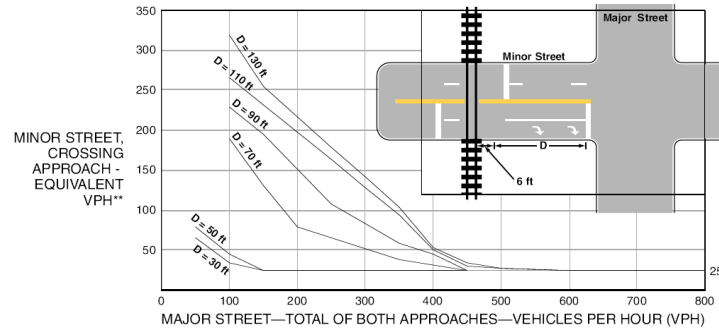
Option: The minor-street approach volume may be multiplied by up to three adjustment factors as provided in Paragraphs 6 through 8. Because the curves are based on an average of four occurrences of rail traffic per day, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-2 for the appropriate number of occurrences of rail traffic per day. Because the curves are based on typical vehicle occupancy, if at least 2% of the vehicles crossing the track are buses carrying at least 20 people, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-3 for the appropriate percentage of high-occupancy buses. Because the curves are based on tractor-trailer trucks comprising 10% of the vehicles crossing the track, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-4 for the appropriate distance and percentage of tractor-trailer trucks.

If this warrant is met and a traffic control signal at the intersection is justified by an engineering study, then:

- A. The traffic control signal shall have actuation on the minor street;
- B. Preemption control shall be provided in accordance with Sections 4D.27, 8C.09, and 8C.10; and
- C. The grade crossing shall have flashing-light signals (see Chapter 8C).MUTCD Figure 4C-9 – Warrant 9 – Intersection Near a Grade Crossing



MUTCD Figure 4C-10 – Warrant 9 – Intersection Near a Grade Crossing
(Two or More Approach Lanes at the Track Crossing)



* 25 vph applies as the lower threshold volume

** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

source: Figure 4C-10 of the 2009 MUTCD

MUTCD Table 4C-2 – Warrant 9 – Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

source: Table 4C-2 of the 2009 MUTCD

MUTCD Table 4C-3 – Warrant 9 – Adjustment Factor for Percentage of High-Occupancy Buses

% of High Occupancy Buses on Minor Street Approach*	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

*A high-occupancy bus is defined as a bus occupied by at least 20 people.

source: Table 4C-3 of the 2009 MUTCD

MUTCD Table 4C-4 – Warrant 9 – Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

source: Table 4C-4 of the 2009 MUTCD

Warrant 9 is NOT APPLICABLE.

Summary of Warrants for Signalization and Conclusion

Table 4 provides a summary of the analysis of the warrants for signalization at the intersection of Newnan Crossing Bypass at Lakeshore Parkway / Proposed Townhomes Access.

Table 4 – Summary of Warrants – Newnan Crossing Bypass at Lakeshore Parkway / Proposed Townhomes Access

Warrant	Existing		Future	
	Hours Met	Satisfied?	Hours Met	Satisfied?
1. Eight Hour	1	No	2	No
2. Four Hour	0	No	1	No
3. Peak Hour	0	No	0	No
4. Pedestrian	0	No	0	No
5. School Crossing	NA	NA	NA	NA
6. Coordination	NA	NA	NA	NA
7. Crash Experience	4	No	7	No
8. Network	NA	NA	NA	NA
9. Railroad Crossing	NA	NA	NA	NA

NA = not applicable

The analysis reveals that no warrants are satisfied in the existing condition or future condition. Therefore, it is concluded that signalization of this intersection is not justified.

Appendix

Reliable Traffic Data Services

Tel: (770) 578-8158 | Fax: (770) 578-8159
Info@reliabletraffic.org | www.reliabletraffic.org

TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	87	0	0	88	0	66	4	0	70	7	0	10	0	17	0	0	0	0	0	175
07:15 AM	2	112	0	0	114	0	69	1	0	70	5	0	6	0	11	0	0	0	0	0	195
07:30 AM	3	119	0	0	122	0	97	1	0	98	10	0	10	0	20	0	0	0	0	0	240
07:45 AM	3	157	0	0	160	0	88	3	0	91	9	0	8	0	17	0	0	0	0	0	268
Total	9	475	0	0	484	0	320	9	0	329	31	0	34	0	65	0	0	0	0	0	878
08:00 AM	4	118	0	0	122	0	83	3	0	86	4	0	2	0	6	0	0	0	0	0	214
08:15 AM	1	115	0	0	116	0	86	6	0	92	9	0	2	0	11	0	0	0	0	0	219
08:30 AM	1	123	0	0	124	0	99	3	0	102	4	0	4	0	8	0	0	0	0	0	234
08:45 AM	2	116	0	0	118	0	82	4	0	86	2	0	4	0	6	0	0	0	0	0	210
Total	8	472	0	0	480	0	350	16	0	366	19	0	12	0	31	0	0	0	0	0	877
09:00 AM	7	100	0	0	107	0	64	4	0	68	10	0	3	0	13	0	0	0	0	0	188
09:15 AM	1	93	0	0	94	0	84	3	0	87	8	0	3	0	11	0	0	0	0	0	192
09:30 AM	2	100	0	0	102	0	87	2	0	89	7	0	5	0	12	0	0	0	0	0	203
09:45 AM	3	124	0	0	127	0	66	6	0	72	3	0	3	0	6	0	0	0	0	0	205
Total	13	417	0	0	430	0	301	15	0	316	28	0	14	0	42	0	0	0	0	0	788
10:00 AM	0	106	0	0	106	0	73	2	0	75	3	0	2	0	5	0	0	0	0	0	186
10:15 AM	2	138	0	0	140	0	72	0	0	72	4	0	1	0	5	0	0	0	0	0	217
10:30 AM	2	105	0	0	107	0	74	5	0	79	3	0	2	0	5	0	0	0	0	0	191
10:45 AM	2	127	0	0	129	0	65	2	0	67	2	0	6	0	8	0	0	0	0	0	204
Total	6	476	0	0	482	0	284	9	0	293	12	0	11	0	23	0	0	0	0	0	798
11:00 AM	1	92	0	0	93	0	89	3	0	92	8	0	1	1	10	0	0	0	0	0	195
11:15 AM	4	101	0	0	105	0	89	2	0	91	5	0	4	0	9	0	0	0	0	0	205
11:30 AM	4	129	0	0	133	0	92	7	0	99	7	0	4	0	11	0	0	0	0	0	243
11:45 AM	3	122	0	0	125	0	113	7	0	120	5	0	3	0	8	0	0	0	0	0	253
Total	12	444	0	0	456	0	383	19	0	402	25	0	12	1	38	0	0	0	0	0	896
12:00 PM	6	120	0	0	126	0	114	8	0	122	8	0	5	0	13	0	0	0	0	0	261
12:15 PM	5	129	0	0	134	0	117	8	0	125	8	0	3	0	11	0	0	0	0	0	270
12:30 PM	5	120	0	0	125	0	122	3	0	125	9	0	1	0	10	0	0	0	0	0	260
12:45 PM	3	120	0	0	123	0	116	11	0	127	5	0	1	0	6	0	0	0	0	0	256
Total	19	489	0	0	508	0	469	30	0	499	30	0	10	0	40	0	0	0	0	0	1047
01:00 PM	1	93	0	0	94	0	133	4	0	137	6	0	2	0	8	0	0	0	0	0	239
01:15 PM	2	105	0	0	107	0	124	5	0	129	8	0	3	0	11	0	0	0	0	0	247
01:30 PM	3	111	0	0	114	0	121	8	0	129	4	0	3	0	7	0	0	0	0	0	250
01:45 PM	2	127	0	0	129	0	123	5	0	128	5	0	3	0	8	0	0	0	0	0	265
Total	8	436	0	0	444	0	501	22	0	523	23	0	11	0	34	0	0	0	0	0	1001
02:00 PM	1	139	0	0	140	0	102	9	0	111	4	0	6	1	11	0	0	0	0	0	262
02:15 PM	3	107	0	0	110	0	125	5	0	130	2	0	3	0	5	0	0	0	0	0	245
02:30 PM	3	116	0	0	119	0	126	6	0	132	9	0	2	0	11	0	0	0	0	0	262
02:45 PM	2	98	0	0	100	0	117	11	0	128	7	0	6	0	13	0	0	0	0	0	241
Total	9	460	0	0	469	0	470	31	0	501	22	0	17	1	40	0	0	0	0	0	1010
03:00 PM	3	125	0	0	128	0	131	2	0	133	8	0	2	0	10	0	0	0	0	0	271
03:15 PM	8	109	0	0	117	0	128	4	0	132	5	0	1	0	6	0	0	0	0	0	255
03:30 PM	2	113	0	0	115	0	121	6	0	127	5	0	1	0	6	0	0	0	0	0	248
03:45 PM	6	147	0	0	153	0	127	8	0	135	6	0	3	0	9	0	0	0	0	0	297
Total	19	494	0	0	513	0	507	20	0	527	24	0	7	0	31	0	0	0	0	0	1071

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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 2

Groups Printed- Cars, Buses and Trucks

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	8	118	0	0	126	0	140	11	0	151	3	0	2	0	5	0	0	0	0	0	282
04:15 PM	6	126	0	0	132	0	151	5	0	156	5	0	2	0	7	0	0	0	0	0	295
04:30 PM	6	112	0	0	118	0	132	7	0	139	5	0	4	0	9	0	0	0	0	0	266
04:45 PM	3	141	0	0	144	0	139	11	0	150	8	0	3	0	11	0	0	0	0	0	305
Total	23	497	0	0	520	0	562	34	0	596	21	0	11	0	32	0	0	0	0	0	1148
05:00 PM	7	153	0	0	160	0	180	5	0	185	9	0	6	0	15	0	0	0	0	0	360
05:15 PM	6	136	0	0	142	0	160	15	0	175	13	0	3	0	16	0	0	0	0	0	333
05:30 PM	10	133	0	0	143	0	141	12	0	153	7	0	2	0	9	0	0	0	0	0	305
05:45 PM	7	135	0	0	142	0	124	12	0	136	7	0	2	0	9	0	0	0	0	0	287
Total	30	557	0	0	587	0	605	44	0	649	36	0	13	0	49	0	0	0	0	0	1285
06:00 PM	5	140	0	0	145	0	137	11	0	148	9	0	4	0	13	0	0	0	0	0	306
06:15 PM	5	101	0	0	106	0	132	18	0	150	3	0	6	0	9	0	0	0	0	0	265
06:30 PM	5	86	0	0	91	0	111	7	0	118	8	0	8	0	16	0	0	0	0	0	225
06:45 PM	4	84	0	0	88	0	115	10	0	125	6	0	1	0	7	0	0	0	0	0	220
Total	19	411	0	0	430	0	495	46	0	541	26	0	19	0	45	0	0	0	0	0	1016
Grand Total	175	5628	0	0	5803	0	5247	295	0	5542	297	0	171	2	470	0	0	0	0	0	11815
Apprch %	3	97	0	0		0	94.7	5.3	0		63.2	0	36.4	0.4		0	0	0	0		
Total %	1.5	47.6	0	0	49.1	0	44.4	2.5	0	46.9	2.5	0	1.4	0	4	0	0	0	0	0	

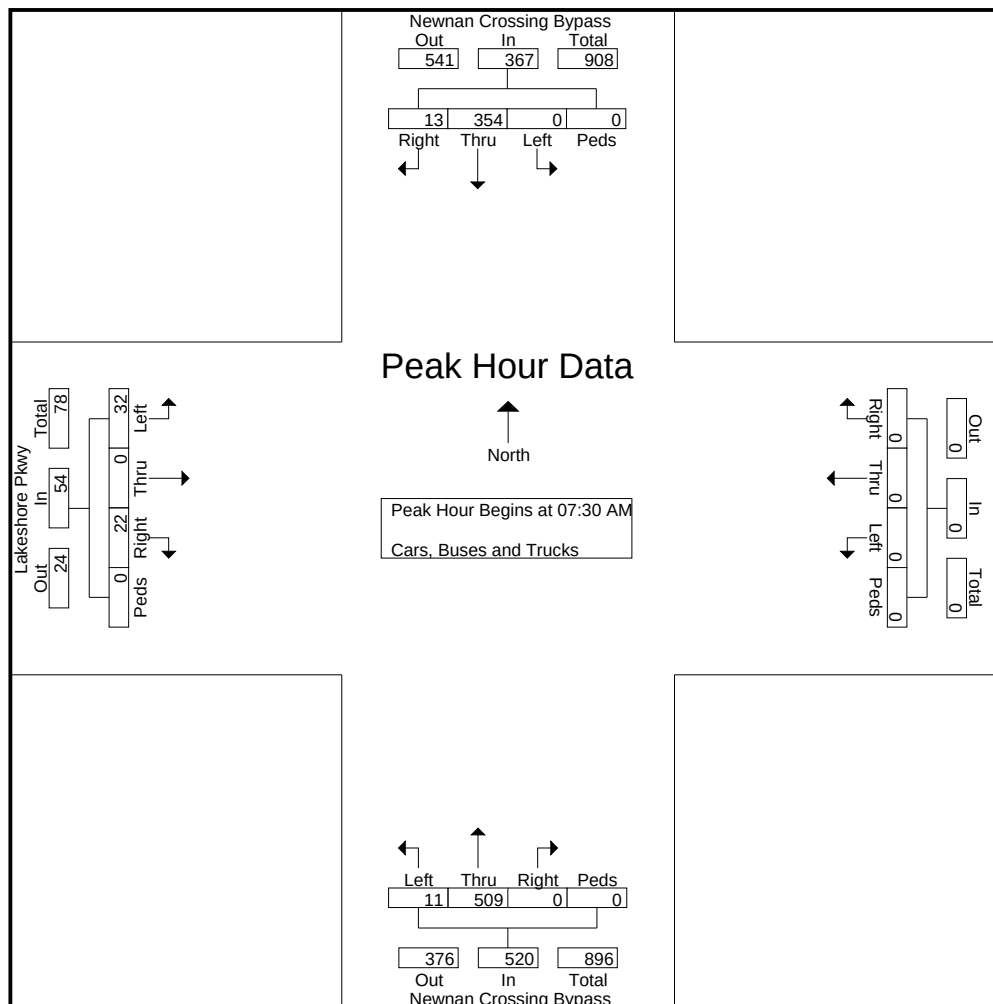
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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 3

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	3	119	0	0	122	0	97	1	0	98	10	0	10	0	20	0	0	0	0	0	240
07:45 AM	3	157	0	0	160	0	88	3	0	91	9	0	8	0	17	0	0	0	0	0	268
08:00 AM	4	118	0	0	122	0	83	3	0	86	4	0	2	0	6	0	0	0	0	0	214
08:15 AM	1	115	0	0	116	0	86	6	0	92	9	0	2	0	11	0	0	0	0	0	219
Total Volume	11	509	0	0	520	0	354	13	0	367	32	0	22	0	54	0	0	0	0	0	941
% App. Total	97.9					96.5					59.3					40.7					
PHF	.688	.811	.000	.000	.813	.000	.912	.542	.000	.936	.800	.000	.550	.000	.675	.000	.000	.000	.000	.000	.878



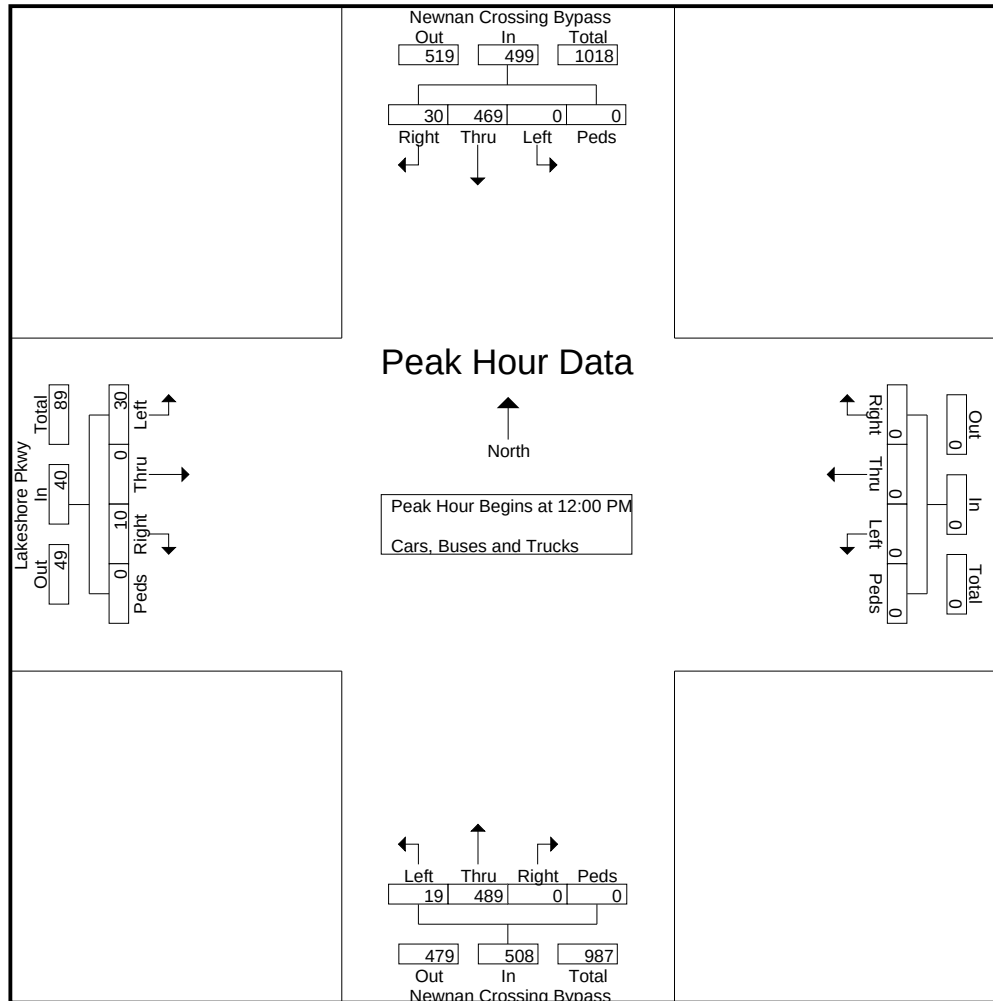
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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 4

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	6	120	0	0	126	0	114	8	0	122	8	0	5	0	13	0	0	0	0	0	261
12:15 PM	5	129	0	0	134	0	117	8	0	125	8	0	3	0	11	0	0	0	0	0	270
12:30 PM	5	120	0	0	125	0	122	3	0	125	9	0	1	0	10	0	0	0	0	0	260
12:45 PM	3	120	0	0	123	0	116	11	0	127	5	0	1	0	6	0	0	0	0	0	256
Total Volume	19	489	0	0	508	0	469	30	0	499	30	0	10	0	40	0	0	0	0	0	1047
% App. Total	96.3																				
PHF	.792	.948	.000	.000	.948	.000	.961	.682	.000	.982	.833	.000	.500	.000	.769	.000	.000	.000	.000	.000	.969



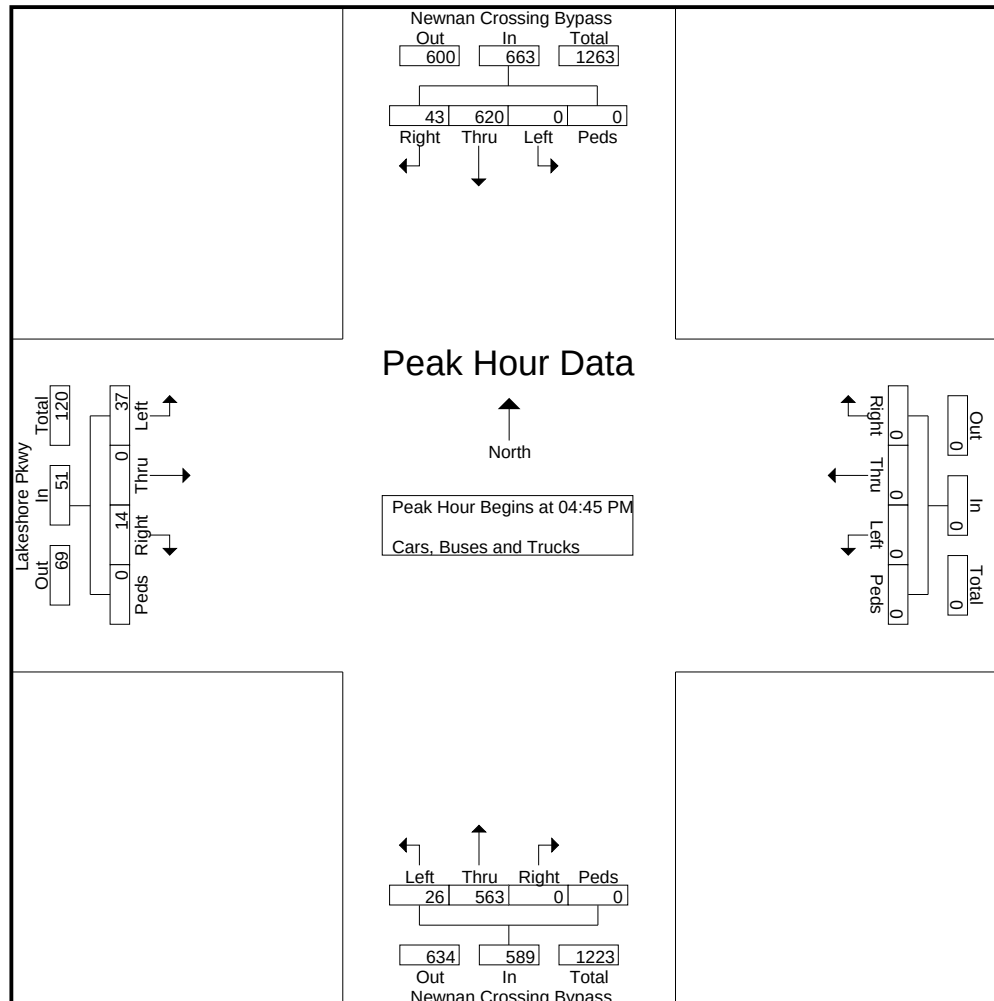
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TMC Data
Newnan Crossing Bypass @ Lakeshore Pkwy
Newnan, GA
7 AM - 7 PM

File Name : 47930002
Site Code : 47930002
Start Date : 6/6/2023
Page No : 5

	Newnan Crossing Bypass Northbound					Newnan Crossing Bypass Southbound					Lakeshore Pkwy Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	3	141	0	0	144	0	139	11	0	150	8	0	3	0	11	0	0	0	0	0	305
05:00 PM	7	153	0	0	160	0	180	5	0	185	9	0	6	0	15	0	0	0	0	0	360
05:15 PM	6	136	0	0	142	0	160	15	0	175	13	0	3	0	16	0	0	0	0	0	333
05:30 PM	10	133	0	0	143	0	141	12	0	153	7	0	2	0	9	0	0	0	0	0	305
Total Volume	26	563	0	0	589	0	620	43	0	663	37	0	14	0	51	0	0	0	0	0	1303
% App. Total	95.6					93.5					72.5					27.5					
PHF	.650	.920	.000	.000	.920	.000	.861	.717	.000	.896	.712	.000	.583	.000	.797	.000	.000	.000	.000	.000	.905



Newnan Crossing Bypass at Lakeshore Parkway and at Proposed Townhomes Access
City of Newnan, Georgia

June 2023

Counted Volumes - Counted Tuesday, June 6, 2023

Begin Time	Northbound				Southbound				Eastbound				Westbound				Intersection
	Newnan Crossing Bypass				Newnan Crossing Bypass				Lakeshore Parkway				Proposed Townhomes Access				
	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot	
12:00 midnight	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	9	475	0	484	0	320	9	329	31	0	34	65	0	0	0	0	878
8:00 AM	8	472	0	480	0	350	16	366	19	0	12	31	0	0	0	0	877
9:00 AM	13	417	0	430	0	301	15	316	28	0	14	42	0	0	0	0	788
10:00 AM	6	476	0	482	0	284	9	293	12	0	11	23	0	0	0	0	798
11:00 AM	12	444	0	456	0	383	19	402	25	0	12	37	0	0	0	0	895
12:00 noon	19	489	0	508	0	469	30	499	30	0	10	40	0	0	0	0	1047
1:00 PM	8	436	0	444	0	501	22	523	23	0	11	34	0	0	0	0	1001
2:00 PM	9	460	0	469	0	470	31	501	22	0	17	39	0	0	0	0	1009
3:00 PM	19	494	0	513	0	507	20	527	24	0	7	31	0	0	0	0	1071
4:00 PM	23	497	0	520	0	562	34	596	21	0	11	32	0	0	0	0	1148
5:00 PM	30	557	0	587	0	605	44	649	36	0	13	49	0	0	0	0	1285
6:00 PM	19	411	0	430	0	495	46	541	26	0	19	45	0	0	0	0	1016
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	175	5628	0	5803	0	5247	295	5542	297	0	171	468	0	0	0	0	11813

No-Build Volumes - Counted Increased by 2% per year for 5 years = 10.4% growth + additional 2% on NB/SB through for Cresswinds DRI

Begin Time	Northbound				Southbound				Eastbound				Westbound				Intersection
	Newnan Crossing Bypass				Newnan Crossing Bypass				Lakeshore Parkway				Proposed Townhomes Access				
	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot	
12:00 midnight	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	10	534	0	544	0	360	10	370	34	0	38	72	0	0	0	0	985
8:00 AM	9	531	0	539	0	393	18	411	21	0	13	34	0	0	0	0	985
9:00 AM	14	469	0	483	0	338	17	355	31	0	15	46	0	0	0	0	884
10:00 AM	7	535	0	542	0	319	10	329	13	0	12	25	0	0	0	0	896
11:00 AM	13	499	0	512	0	430	21	451	28	0	13	41	0	0	0	0	1005
12:00 noon	21	550	0	571	0	527	33	560	33	0	11	44	0	0	0	0	1175
1:00 PM	9	490	0	499	0	563	24	587	25	0	12	38	0	0	0	0	1124
2:00 PM	10	517	0	527	0	528	34	563	24	0	19	43	0	0	0	0	1133
3:00 PM	21	555	0	576	0	570	22	592	26	0	8	34	0	0	0	0	1202
4:00 PM	25	559	0	584	0	632	38	669	23	0	12	35	0	0	0	0	1289
5:00 PM	33	626	0	659	0	680	49	729	40	0	14	54	0	0	0	0	1442
6:00 PM	21	462	0	483	0	556	51	607	29	0	21	50	0	0	0	0	1140
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	193	6326	0	6519	0	5898	326	6223	328	0	189	517	0	0	0	0	13259

Hourly Distribution of 24-hour Multifamily Housing (Low-Rise) Trips, from ITE Trip Generation Manual, 10th Edition, peak hours omitted, to be inserted below

Begin Time	Northbound				Southbound				Eastbound				Westbound				
	Newnan Crossing Bypass				Newnan Crossing Bypass				Lakeshore Parkway				Proposed Townhomes Access				
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		
12:00 midnight	0	0.3%	0.7%		0.7%	0	0		0	0	0		0.3%	0	0.3%		
1:00 AM	0	0.1%	0.4%		0.4%	0	0		0	0	0		0.1%	0	0.1%		
2:00 AM	0	0.3%	0.3%		0.3%	0	0		0	0	0		0.3%	0	0.3%		
3:00 AM	0	0.4%	0.3%		0.3%	0	0		0	0	0		0.4%	0	0.4%		
4:00 AM	0	1.0%	0.4%		0.4%	0	0		0	0	0		1.0%	0	1.0%		
5:00 AM	0	2.6%	0.1%		0.1%	0	0		0	0	0		2.6%	0	2.6%		
6:00 AM	0	5.8%	1.1%		1.1%	0	0		0	0	0		5.8%	0	5.8%		
7:00 AM	0	0.0%	0.0%		0.0%	0	0		0	0	0		0.0%	0	0.0%		
8:00 AM	0	9.1%	4.0%		4.0%	0	0		0	0	0		9.1%	0	9.1%		
9:00 AM	0	7.2%	3.9%		3.9%	0	0		0	0	0		7.2%	0	7.2%		
10:00 AM	0	4.7%	3.9%		3.9%	0	0		0	0	0		4.7%	0	4.7%		
11:00 AM	0	5.5%	4.9%		4.9%	0	0		0	0	0		5.5%	0	5.5%		
12:00 noon	0	5.4%	5.6%		5.6%	0	0		0	0	0		5.4%	0	5.4%		
1:00 PM	0	4.9%	4.8%		4.8%	0	0		0	0	0		4.9%	0	4.9%		
2:00 PM	0	6.0%	5.9%		5.9%	0	0		0	0	0		6.0%	0	6.0%		
3:00 PM	0	5.2%	8.3%		8.3%	0	0		0	0	0		5.2%	0	5.2%		
4:00 PM	0	5.1%	10.0%		10.0%	0	0		0	0	0		5.1%	0	5.1%		
5:00 PM	0	0.0%	0.0%		0.0%	0	0		0	0	0		0.0%	0	0.0%		
6:00 PM	0	6.3%	9.5%		9.5%	0	0		0	0	0		6.3%	0	6.3%		
7:00 PM	0	4.3%	7.1%		7.1%	0	0		0	0	0		4.3%	0	4.3%		
8:00 PM	0	3.5%	5.7%		5.7%	0	0		0	0	0		3.5%	0	3.5%		
9:00 PM	0	1.4%	4.7%		4.7%	0	0		0	0	0		1.4%	0	1.4%		
10:00 PM	0	1.0%	2.9%		2.9%	0	0		0	0	0		1.0%	0	1.0%		
11:00 PM	0	0.4%	1.5%		1.5%	0	0		0	0	0		0.4%	0	0.4%		
Total	0	80.5%	86.0%		86.0%	0	0		0	0	0		80.5%	0	80.5%		

sums less than 100% because peak hours omitted, substituted below

Townhomes Trips																		
Begin Time	Northbound				Southbound				Eastbound				Westbound				Intersection	
	Newnan Crossing Bypass				Newnan Crossing Bypass				Lakeshore Parkway				Proposed Townhomes Access					
	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot		
12:00 midnight	0	0	1	1	2	0	0	2	0	0	0	0	1	0	0	1	5	
1:00 AM	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2	
2:00 AM	0	0	0	1	1	0	0	1	0	0	0	0	1	0	0	1	3	
3:00 AM	0	0	0	1	1	0	0	1	0	0	0	0	1	0	1	2	4	
4:00 AM	0	1	1	2	1	0	0	1	0	0	0	0	3	0	2	5	8	
5:00 AM	0	3	0	3	0	0	0	0	0	0	0	0	9	0	4	13	16	
6:00 AM	0	6	2	8	3	0	0	3	0	0	0	0	19	0	9	28	39	
7:00 AM	0	10	5	15	9	0	0	9	0	0	0	0	32	0	17	49	73	
8:00 AM	0	10	6	16	11	0	0	11	0	0	0	0	30	0	15	44	71	
9:00 AM	0	8	6	13	10	0	0	10	0	0	0	0	24	0	12	35	59	
10:00 AM	0	5	6	11	10	0	0	10	0	0	0	0	15	0	8	23	44	
11:00 AM	0	6	7	13	13	0	0	13	0	0	0	0	18	0	9	27	53	
12:00 noon	0	6	8	14	15	0	0	15	0	0	0	0	18	0	9	26	55	
1:00 PM	0	5	7	12	13	0	0	13	0	0	0	0	16	0	8	24	49	
2:00 PM	0	6	9	15	16	0	0	16	0	0	0	0	20	0	10	29	60	
3:00 PM	0	6	12	18	22	0	0	22	0	0	0	0	17	0	8	25	65	
4:00 PM	0	5	15	20	27	0	0	27	0	0	0	0	17	0	8	25	72	
5:00 PM	0	7	14	21	24	0	0	24	0	0	0	0	21	0	11	32	77	
6:00 PM	0	7	14	21	25	0	0	25	0	0	0	0	21	0	10	31	77	
7:00 PM	0	5	10	15	19	0	0	19	0	0	0	0	14	0	7	21	55	
8:00 PM	0	4	8	12	15	0	0	15	0	0	0	0	11	0	6	17	45	
9:00 PM	0	2	7	8	13	0	0	13	0	0	0	0	5	0	2	7	28	
10:00 PM	0	1	4	5	8	0	0	8	0	0	0	0	3	0	2	5	18	
11:00 PM	0	0	2	3	4	0	0	4	0	0	0	0	1	0	1	2	9	
Total	0	86	127	213	231	0	0	231	0	0	0	0	264	0	130	393	837	

Townhomes 24-Hour Vol

Enter
596

Exit
596

Total Future Trips																		
Begin Time	Northbound				Southbound				Eastbound				Westbound				Intersection	
	Newnan Crossing Bypass				Newnan Crossing Bypass				Lakeshore Parkway				Proposed Townhomes Access					
	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot		
12:00 midnight	0	0	1	1	2	0	0	2	0	0	0	0	1	0	0	1	5	
1:00 AM	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2	
2:00 AM	0	0	0	1	1	0	0	1	0	0	0	0	1	0	0	1	3	
3:00 AM	0	0	0	1	1	0	0	1	0	0	0	0	1	0	1	2	4	
4:00 AM	0	1	1	2	1	0	0	1	0	0	0	0	3	0	2	5	8	
5:00 AM	0	3	0	3	0	0	0	0	0	0	0	0	9	0	4	13	16	
6:00 AM	0	6	2	8	3	0	0	3	0	0	0	0	19	0	9	28	39	
7:00 AM	10	544	5	559	9	360	10	379	34	0	38	72	32	0	17	49	1058	
8:00 AM	9	540	6	555	11	393	18	422	21	0	13	34	30	0	15	44	1056	
9:00 AM	14	476	6	497	10	338	17	365	31	0	15	46	24	0	12	35	943	
10:00 AM	7	540	6	552	10	319	10	340	13	0	12	25	15	0	8	23	940	
11:00 AM	13	505	7	525	13	430	21	465	28	0	13	41	18	0	9	27	1058	
12:00 noon	21	555	8	585	15	527	33	575	33	0	11	44	18	0	9	26	1231	
1:00 PM	9	495	7	511	13	563	24	600	25	0	12	38	16	0	8	24	1173	
2:00 PM	10	523	9	542	16	528	34	578	24	0	19	43	20	0	10	29	1193	
3:00 PM	21	561	12	594	22	570	22	614	26	0	8	34	17	0	8	25	1268	
4:00 PM	25	564	15	604	27	632	38	696	23	0	12	35	17	0	8	25	1361	
5:00 PM	33	633	14	680	24	680	49	753	40	0	14	54	21	0	11	32	1519	
6:00 PM	21	469	14	504	25	556	51	633	29	0	21	50	21	0	10	31	1217	
7:00 PM	0	5	10	15	19	0	0	19	0	0	0	0	14	0	7	21	55	
8:00 PM	0	4	8	12	15	0	0	15	0	0	0	0	11	0	6	17	45	
9:00 PM	0	2	7	8	13	0	0	13	0	0	0	0	5	0	2	7	28	
10:00 PM	0	1	4	5	8	0	0	8	0	0	0	0	3	0	2	5	18	
11:00 PM	0	0	2	3	4	0	0	4	0	0	0	0	1	0	1	2	9	
Total	193	6412	127	6732	231	5898	326	6454	328	0	189	517	264	0	130	393	14096	

MARC R ACAMPORA, PE, LLC

Newnan Crossing Bypass at Lakeshore Parkway and at Proposed Townhomes Access
City of Newnan, Georgia

Signal Needs Analysis - Volume Based Warrants - Existing Condition

June 2023

Counted Volumes - Counted Tuesday, June 6, 2023

Begin Time	Northbound				Southbound				Eastbound				Westbound			
	Newnan Crossing Bypass				Newnan Crossing Bypass				Lakeshore Parkway				Proposed Townhomes Access			
	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot
12:00 midnight	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	9	475	0	484	0	320	9	329	31	0	34	65	0	0	0	0
8:00 AM	8	472	0	480	0	350	16	366	19	0	12	31	0	0	0	0
9:00 AM	13	417	0	430	0	301	15	316	28	0	14	42	0	0	0	0
10:00 AM	6	476	0	482	0	284	9	293	12	0	11	23	0	0	0	0
11:00 AM	12	444	0	456	0	383	19	402	25	0	12	37	0	0	0	0
12:00 noon	19	489	0	508	0	469	30	499	30	0	10	40	0	0	0	0
1:00 PM	8	436	0	444	0	501	22	523	23	0	11	34	0	0	0	0
2:00 PM	9	460	0	469	0	470	31	501	22	0	17	39	0	0	0	0
3:00 PM	19	494	0	513	0	507	20	527	24	0	7	31	0	0	0	0
4:00 PM	23	497	0	520	0	562	34	596	21	0	11	32	0	0	0	0
5:00 PM	30	557	0	587	0	605	44	649	36	0	13	49	0	0	0	0
6:00 PM	19	411	0	430	0	495	46	541	26	0	19	45	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Eight Hour Warrant

Begin	Major Street	Minor Street	Option 1				Option 2			
Time	Two Way	Heavier	Condition A OR		Condition B		Condition A AND		Condition B	
		(100% rights)	Main 420	Side 105	Main 630	Side 53	Main 336	Side 84	Main 504	Side 42
12:00 midnight	0	0								
1:00 AM	0	0								
2:00 AM	0	0								
3:00 AM	0	0								
4:00 AM	0	0								
5:00 AM	0	0								
6:00 AM	0	0								
7:00 AM	813	65	main		main	side	main		main	side
8:00 AM	846	31	main		main		main		main	
9:00 AM	746	42	main		main		main		main	side
10:00 AM	775	23	main		main		main		main	
11:00 AM	858	37	main		main		main		main	
12:00 noon	1007	40	main		main		main		main	
1:00 PM	967	34	main		main		main		main	
2:00 PM	970	39	main		main		main		main	
3:00 PM	1040	31	main		main		main		main	
4:00 PM	1116	32	main		main		main		main	
5:00 PM	1236	49	main		main		main		main	side
6:00 PM	971	45	main		main		main		main	side
7:00 PM	0	0								
8:00 PM	0	0								
9:00 PM	0	0								
10:00 PM	0	0								
11:00 PM	0	0								
hours satisfied			0		1		0			

Four Hour Warrant

Begin Time	Major Street	Minor Street	Above Curve?
12:00 midnight	0	0	
1:00 AM	0	0	
2:00 AM	0	0	
3:00 AM	0	0	
4:00 AM	0	0	
5:00 AM	0	0	
6:00 AM	0	0	
7:00 AM	813	65	no
8:00 AM	846	31	no
9:00 AM	746	42	no
10:00 AM	775	23	no
11:00 AM	858	37	no
12:00 noon	1007	40	no
1:00 PM	967	34	no
2:00 PM	970	39	no
3:00 PM	1040	31	no
4:00 PM	1116	32	no
5:00 PM	1236	49	no
6:00 PM	971	45	no
7:00 PM	0	0	
8:00 PM	0	0	
9:00 PM	0	0	
10:00 PM	0	0	
11:00 PM	0	0	
hours satisfied			0

Peak Hour Warrant

Begin Time	Major Street	Minor Street	Total Int Volume	Total Stopped Delay	Minor Volume	Total Intersection	Condition B Above
	Two Way	Heavier (100% rights)	100% minor RT	>4 veh-hrs	>100?	>800	Curve?
12:00 midnight	0	0	0				
1:00 AM	0	0	0				
2:00 AM	0	0	0				
3:00 AM	0	0	0				
4:00 AM	0	0	0				
5:00 AM	0	0	0				
6:00 AM	0	0	0				
7:00 AM	813	65	878		no	yes	no
8:00 AM	846	31	877		no	yes	no
9:00 AM	746	42	788		no	no	no
10:00 AM	775	23	798		no	no	no
11:00 AM	858	37	895		no	yes	no
12:00 noon	1007	40	1047		no	yes	no
1:00 PM	967	34	1001		no	yes	no
2:00 PM	970	39	1009		no	yes	no
3:00 PM	1040	31	1071		no	yes	no
4:00 PM	1116	32	1148		no	yes	no
5:00 PM	1236	49	1285		no	yes	no
6:00 PM	971	45	1016		no	yes	no
7:00 PM	0	0	0				
8:00 PM	0	0	0				
9:00 PM	0	0	0				
10:00 PM	0	0	0				
11:00 PM	0	0	0				
hours satisfied				0			0

Crash Experience Warrant

Begin Time	Major Street	Minor Street	Crash Experience Volume Criterion C			
	Two Way	Heavier (100% rights)	Condition A OR		Condition B	
			Main 336	Side 84	Main 504	Side 42
12:00 midnight	0	0				
1:00 AM	0	0				
2:00 AM	0	0				
3:00 AM	0	0				
4:00 AM	0	0				
5:00 AM	0	0				
6:00 AM	0	0				
7:00 AM	813	65	main		main	side
8:00 AM	846	31	main		main	
9:00 AM	746	42	main		main	side
10:00 AM	775	23	main		main	
11:00 AM	858	37	main		main	
12:00 noon	1007	40	main		main	
1:00 PM	967	34	main		main	
2:00 PM	970	39	main		main	
3:00 PM	1040	31	main		main	
4:00 PM	1116	32	main		main	
5:00 PM	1236	49	main		main	side
6:00 PM	971	45	main		main	side
7:00 PM	0	0				
8:00 PM	0	0				
9:00 PM	0	0				
10:00 PM	0	0				
11:00 PM	0	0				
hours satisfied			0		4	

MARC R. ACAMPORA, PE, LLC

Newnan Crossing Bypass at Lakeshore Parkway and at Proposed Townhomes Access
City of Newnan, Georgia

Signal Needs Analysis - Volume Based Warrants - Future Condition

June 2023

Future Volumes

Begin Time	Northbound				Southbound				Eastbound				Westbound			
	Newnan Crossing Bypass				Newnan Crossing Bypass				Lakeshore Parkway				Proposed Townhomes Access			
	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot	Left	Thru	Right	Tot
12:00 midnight	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	10	544	5	559	9	360	10	379	34	0	38	72	32	0	17	49
8:00 AM	9	540	6	555	11	393	18	422	21	0	13	34	30	0	15	44
9:00 AM	14	476	6	497	10	338	17	365	31	0	15	46	24	0	12	35
10:00 AM	7	540	6	552	10	319	10	340	13	0	12	25	15	0	8	23
11:00 AM	13	505	7	525	13	430	21	465	28	0	13	41	18	0	9	27
12:00 noon	21	555	8	585	15	527	33	575	33	0	11	44	18	0	9	26
1:00 PM	9	495	7	511	13	563	24	600	25	0	12	38	16	0	8	24
2:00 PM	10	523	9	542	16	528	34	578	24	0	19	43	20	0	10	29
3:00 PM	21	561	12	594	22	570	22	614	26	0	8	34	17	0	8	25
4:00 PM	25	564	15	604	27	632	38	696	23	0	12	35	17	0	8	25
5:00 PM	33	633	14	680	24	680	49	753	40	0	14	54	21	0	11	32
6:00 PM	21	469	14	504	25	556	51	633	29	0	21	50	21	0	10	31
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Eight Hour Warrant

Begin Time	Major Street	Minor Street	Option 1				Option 2			
			Condition A OR		Condition B		Condition A AND		Condition B	
			Two Way	Heavier						
		(100% rights)	Main 420	Side 105	Main 630	Side 53	Main 336	Side 84	Main 504	Side 42
12:00 midnight	0	0								
1:00 AM	0	0								
2:00 AM	0	0								
3:00 AM	0	0								
4:00 AM	0	0								
5:00 AM	0	0								
6:00 AM	0	0								
7:00 AM	937	72	main		main	side	main		main	side
8:00 AM	977	44	main		main		main		main	side
9:00 AM	862	46	main		main		main		main	side
10:00 AM	892	25	main		main		main		main	
11:00 AM	990	41	main		main		main		main	
12:00 noon	1160	44	main		main		main		main	side
1:00 PM	1112	38	main		main		main		main	
2:00 PM	1120	43	main		main		main		main	side
3:00 PM	1208	34	main		main		main		main	
4:00 PM	1300	35	main		main		main		main	
5:00 PM	1433	54	main		main	side	main		main	side
6:00 PM	1136	50	main		main		main		main	side
7:00 PM	0	0								
8:00 PM	0	0								
9:00 PM	0	0								
10:00 PM	0	0								
11:00 PM	0	0								
hours satisfied			0		2		0			

Four Hour Warrant

Begin Time	Major Street	Minor Street	Above Curve?
12:00 midnight	0	0	
1:00 AM	0	0	
2:00 AM	0	0	
3:00 AM	0	0	
4:00 AM	0	0	
5:00 AM	0	0	
6:00 AM	0	0	
7:00 AM	937	72	yes
8:00 AM	977	44	no
9:00 AM	862	46	no
10:00 AM	892	25	no
11:00 AM	990	41	no
12:00 noon	1160	44	no
1:00 PM	1112	38	no
2:00 PM	1120	43	no
3:00 PM	1208	34	no
4:00 PM	1300	35	no
5:00 PM	1433	54	no
6:00 PM	1136	50	no
7:00 PM	0	0	
8:00 PM	0	0	
9:00 PM	0	0	
10:00 PM	0	0	
11:00 PM	0	0	
hours satisfied			1

Peak Hour Warrant

Begin Time	Major Street	Minor Street	Total Int Volume	Total Stopped Delay	Minor Volume	Total Intersection	Condition B Above
	Two Way	Heavier (100% rights)	100% minor RT	>4 veh-hrs	>100?	>800	Curve?
12:00 midnight	0	0	0				
1:00 AM	0	0	0				
2:00 AM	0	0	0				
3:00 AM	0	0	0				
4:00 AM	0	0	0				
5:00 AM	0	0	0				
6:00 AM	0	0	0				
7:00 AM	937	72	1009		no	yes	no
8:00 AM	977	44	1021		no	yes	no
9:00 AM	862	46	908		no	yes	no
10:00 AM	892	25	917		no	yes	no
11:00 AM	990	41	1031		no	yes	no
12:00 noon	1160	44	1204		no	yes	no
1:00 PM	1112	38	1149		no	yes	no
2:00 PM	1120	43	1163		no	yes	no
3:00 PM	1208	34	1242		no	yes	no
4:00 PM	1300	35	1336		no	yes	no
5:00 PM	1433	54	1487		no	yes	no
6:00 PM	1136	50	1186		no	yes	no
7:00 PM	0	0	0				
8:00 PM	0	0	0				
9:00 PM	0	0	0				
10:00 PM	0	0	0				
11:00 PM	0	0	0				
hours satisfied					0		0

Crash Experience Warrant

Begin Time	Major Street	Minor Street	Crash Experience Volume Criterion C			
	Two Way	Heavier (100% rights)	Condition A OR		Condition B	
			Main 336	Side 84	Main 504	Side 42
12:00 midnight	0	0				
1:00 AM	0	0				
2:00 AM	0	0				
3:00 AM	0	0				
4:00 AM	0	0				
5:00 AM	0	0				
6:00 AM	0	0				
7:00 AM	937	72	main		main	side
8:00 AM	977	44	main		main	side
9:00 AM	862	46	main		main	side
10:00 AM	892	25	main		main	
11:00 AM	990	41	main		main	
12:00 noon	1160	44	main		main	side
1:00 PM	1112	38	main		main	
2:00 PM	1120	43	main		main	side
3:00 PM	1208	34	main		main	
4:00 PM	1300	35	main		main	
5:00 PM	1433	54	main		main	side
6:00 PM	1136	50	main		main	side
7:00 PM	0	0				
8:00 PM	0	0				
9:00 PM	0	0				
10:00 PM	0	0				
11:00 PM	0	0				
hours satisfied			0		7	

MARC R. ACAMPORA, PE, LLC



06/20/23

Reference: 2037 Newnan Crossing Bypass

Dear Tracy,

After reviewing call history for multiple developments that could compare to this one development, it is estimated that there will be an increase of approximately 565 calls, 4 motor vehicle accidents and 15 traffic stops in a three-year period for this development.

There would be an increase of people and vehicle traffic to the area, it would have a slight impact on motor vehicle accidents and calls of service to that area while also effecting call service and response times to other parts to the city.

It is believed that a strain would be placed on calls for service and would cause additional maintenance on equipment, but can be manage at current staff level.

Thanks,

Brent Blankenship

Chief of Police

Newnan Police Department



NEWNAN FIRE DEPARTMENT

23 JEFFERSON STREET • NEWNAN, GA 30263
770-253-1851 (P) • 770-638-8678 (F)



Stephen R. Brown, Fire Chief

June 20, 2023

Dear Dean,

The following information is regarding the proposal for 163 fee-simple town-houses.

At this time, the Newnan Fire Department has the resources to provide services for the addition of these proposed properties. However, a high-density development such as this, upon full completion will impact the specific area with a significant increase in population. The growth in population will ultimately result in increased call volume and response times to the proposed property and to the current established areas served. The increase in call volume will impact our department with additional wear and tear on equipment and will influence the effectiveness and strength of our manpower.

In the past, we've had request for impact analysis on other similar proposed properties in the area, as well. It does create cause for concern regarding the effectiveness of fire services. We strive for excellence and to continue serving our citizens as we do currently, therefore the impact of the proposed property may require additional equipment and manpower at the Newnan Fire Department, in the future.

Best Regards,



Stephen Brown



June 29, 2023

Dean Smith
Senior Planner
City of Newnan
25 LaGrange Street
Newnan, Georgia 30263

RE: 153 Unit Townhomes in Newnan, GA, Parcel #087 5011 003

Mr. Smith

I am writing per your request to confirm that Newnan Utilities will be the water and sewer service provider for the above referenced project. At this time Newnan Utilities has ample capacity to serve this proposed facility based on the following information:

- Parcel Number 087 5011 003
- 44.60 Acres
- Attached concept plan

1. Sanitary Sewer:

- a. Developer shall connect to Newnan Utilities Sanitary Sewer System.
- b. Developer is responsible for all upgrade costs necessary to serve said property, but not limited to:
 - i. Design and Construction of development of sanitary sewer system per Newnan Utilities Specifications.
 - ii. Design and construction of connection to Newnan Utilities Sanitary Sewer System.
 - iii. Cost for analyzing existing sanitary sewer system by an engineer firm approved by Newnan Utilities.
 - iv. Existing sanitary sewer upgrades to handle proposed development. This is to include any lift station upgrades, gravity sanitary sewer upgrades, Sanitary sewer force main upgrades, and any other upgrades deemed necessary by Newnan Utilities.
 - v. Line extension fees associated with connection to Newnan Utilities Sanitary Sewer System.

70 Sewell Road
Newnan, GA 30263
770-683-5516
770-683-0292 fax
www.NewnanUtilities.org

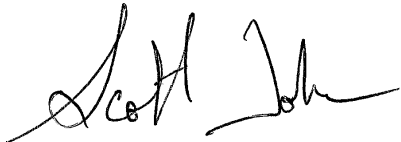
- vi. Sanitary Sewer Impact fees associated with connection to Newnan Utilities Sanitary Sewer System.

2. Water:

- a. Developer shall connect to Newnan Utilities Water System.
- b. Developer is responsible for all upgrade costs necessary to serve said property, but not limited to:
 - i. Construction of development of water system per Newnan Utilities Specifications.
 - ii. Design and construction of connection to Newnan Utilities Water System.
 - iii. Cost for analyzing existing water sewer system by an engineer firm approved by Newnan Utilities.
 - iv. Existing water upgrades to handle proposed development. This is to include water system upgrades, fire protection upgrades, and any other upgrades deemed necessary by Newnan Utilities.
 - v. Cost of all water meters, and any additional costs pertaining to the monitoring of water meters.
 - vi. Line extension fees associated with connection to Newnan Utilities Sanitary Sewer System.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott Tolar', with a stylized flourish at the end.

Scott Tolar, P.E.
Newnan Utilities
(770) 301-0245
stolar@newnanutilities.org



70 Sewell Road
Newnan, GA 30263
770-683-5516
770-683-0292 fax
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