



**City of Flowery Branch
City Council Meeting
Thursday, May 20, 2021, 6:00 PM
City of Flowery Branch City Hall
5410 West Pine Street, Flowery Branch, GA 30542**



CALL WORK SESSION TO ORDER:

PLEDGE OF ALLEGIANCE:

UNFINISHED BUSINESS - WORK SESSION:

- First Read of the rezoning application submitted by NNP-Looper Lake, LLC. to rezone tax parcel 15047 000885 from Planned Unit Development (PUD) to Planned Unit Development (PUD) with modified conditions.
[submittal binder 030421.pdf](#)
[Renderings.pdf](#)
[Staff Report SOTL.pdf](#)
[Sterling Commercial Marketing 2002-2021.pdf](#)
[Pool Comparison Amenity Overview.pdf](#)
[Ordinance SOTL Town.pdf](#)
- First Read of the rezoning request submitted by Mr. Bill Stark. Request is to rezone six parcels totaling 118 +/- acres from M-1 (Light Industrial) to R-3 (Multi-Family) with the intention to construct a residential community consisting of single family detached homes and townhomes. The request includes six (6) parcels and therefore requires six (6) corresponding ordinances. The ordinances are 625, 626, 627, 628 (encompassing phase one), and 629, 630 (encompassing phase two).
[Scanned complete rezoning application packet.pdf](#)
[Combined pdf.pdf](#)
[original layout & TSW suggestions.pdf](#)
[AIM Potential M1 Layout by Rochester.pdf](#)
[Staff Report .pdf](#)
[March 18 Buffer Plan.pdf](#)
[Mulberry Street Site Plan - including access RW \(markup\).pdf](#)
[Mulberry Flowery Branch Subdivision Traffic Impact Study.pdf](#)
[Combined 625-630 Incomplete for FIRST READ.pdf](#)

NEW BUSINESS-WORK SESSION:

- Resolution 21-004: 5318 Railroad Ave and The Depot Repairs Budget Adjustment Request
[EXECUTIVE SUMMARY - 5318 Railroad Ave and Depot Repairs Budget Adjustment.pdf](#)
[Resolution 21-004.pdf](#)
[Attachment A - Resolution 21-004 Budget Adjustment Form.pdf](#)
[Attachment B - Quotes.pdf](#)

DEPARTMENT REPORTS: -

- a. City Manager Report
- b. City Clerk Report
- c. Finance Director Report
- d. Planning Department Report
- e. Police Report
- f. Attorney Report
- g. Council Report

ADJOURNMENT WORK SESSION:

VOTING SESSION AGENDA

CALL VOTING SESSION TO ORDER:

PUBLIC COMMENTS: - Please limit to two minutes

CONSENT AGENDA:

- Consider April 15, 2021 Meeting Minutes
[April 15, 2021 Meeting Minutes.pdf](#)
- Consider Mayor Mike Miller Per Diem
[Mayor Miller Per Diem.pdf](#)

UNFINISHED BUSINESS - VOTING SESSION:

- First Read of the rezoning application submitted by NNP-Looper Lake, LLC. to rezone tax parcel 15047 000885 from Planned Unit Development (PUD) to Planned Unit Development (PUD) with modified conditions.
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- Heritage Homes Group, LLC Land Exchange Amendment
[FINAL FIRST_AMENDMENT_TO_REAL_ESTATE_EXCHANGE_AGREEMENT.docx](#)

NEW BUSINESS-VOTING SESSION:

- Resolution 21-004: 5318 Railroad Ave and The Depot Repairs Budget Adjustment Request
[EXECUTIVE SUMMARY - 5318 Railroad Ave and Depot Repairs Budget Adjustment.pdf](#)
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[Attachment B - Quotes.pdf](#)

EXECUTIVE SESSION:

APPOINTMENT OF VICKIE SHORT AS INTERIM CITY MANAGER

APPOINTMENT OF SHELIA COOPER AS INTERIM ASSISTANT CITY CLERK

ADJOURNMENT:

If you have a disability or impairment and need special assistance please contact the City Clerk prior to the meeting at 770-967-6371 - Meeting agenda is subject to change



FLOWERY BRANCH CITY COUNCIL

EXECUTIVE SUMMARY



SUBJECT: First Read of the rezoning application submitted by NNP-Looper Lake, LLC. to rezone tax parcel 15047 000885 from Planned Unit Development (PUD) to Planned Unit Development (PUD) with modified conditions.

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

This is a proposal to alter an approved PUD zoned project (Sterling on the Lake) by rezoning said project from PUD to PUD with modified conditions of zoning. The ordinances were originally approved as 239 and 240. Each additional request to alter the original approval retains the original ordinance number adding letters alphabetically to ease in the tracking of this project and its many changes over the years. The ordinances will be 239-L & 240-L.

FACTS AND ISSUES:

This is a proposal to alter the approved Sterling on the Lake subdivision by rezoning said project from PUD to PUD with modified conditions of zoning. The proposed modification would decrease the size of the current commercial/retail portion from 12+/- acres to 4 +/- acres allowing for the construction of 65 townhomes on the approximate 8 acre tract. Applicant has provided additional information for Council review and discussion. Please see attached documents regarding marketing statistics and amenities.

OPTIONS:

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

No

AMOUNT AND SOURCE OF FUNDS:

RECOMMENDATION:

First vote. Staff recommends approval.

SAMPLE MOTION:

No vote at this time.

COLLABORATING DEPARTMENT:

DEPARTMENT: Planning

Prepared by: Vickie Short

ATTACHMENTS

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- [Ordinance SOTL Town.pdf](#)



REZONING APPLICATION

Date: February 26, 2021

Address of Request:

Capitola Farm Road & Spout Springs Road, Flowery Branch, GA 30542

Tax Map # p/o 15047 000885 **Current Zoning:** PUD

Is this site located within the boundaries of the historic district? NO

Currently a conforming use? N/A

Any conditions of zoning, CUP's, etc.? All other conditions of zoning not deleted or revised by this application shall remain in full force and effect

Applicant Information

Name: NNP - Looper Lake, LLC

Address: 7004 Lake Sterling Blvd. Flowery Branch, GA 30542

E-mail address: cwhittaker@newlandco.com

Phone number: 678-960-0242

Signature: Chris A. Whittaker

Notary: LA Beaver





Property owner information (if different than the applicant)

Property owner (please print): SAME

Signature of property owner: Chris White VP Operations

Notary:



La Beaver

Property Information

Tax Map Number: 15047 000885

Current Zoning: PUD Total Acres: 7.95

Is this property located within the city-limits of Flowery Branch? YES

Proposed City of Flowery Branch Zoning: PUD

Current Use: undeveloped

Please review the Flowery Branch Code of Ordinances, Appendix C, "Zoning Ordinance", Article 34, for complete requirements.

Please provide the following at time of submittal in (one hard copy and digitally):

- Legal description
- Current survey of property



- Site plan shall meet the requirements of the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.5
- Development statistics per the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.6
- Analysis requirements per the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.7
- Detailed description of request
- Conflict of interest disclosure (attached)
- Disclosure of campaign contributions (attached)
- Names and addresses of adjoining property owners
- Reasons for requesting rezoning
- Signed statement authorizing City of Flowery Branch staff and/or City Council to inspect the subject property

Conflict of Interest Disclosure

Identify all members of the City Council of the City of Flowery Branch and Employees of the City of Flowery Branch Community Development Department who

Have a property interest in the real property affected by this request

NONE

Have a financial interest (direct ownership interest) of the total assets or capital stock of a business entity where such ownership interest is more than 10% in any business entity which has a property interest in the real property affected by this request

NONE

Have a member of the family (spouse, mother, father, brother, sister, son or daughter) having a property financial interest as herein defined, in the real property affected by this request

NONE



Disclosure of Campaign Contributions

List below the names of local government officials of the City of Flowery Branch to whom campaign contributions were made, within two (2) years immediately preceding the filing of this application, which campaign contributions total \$250.00 or more or to whom gifts were made having a total value of \$250.00 or more.

Elected Officials Name

Amount of Description of Gift

NONE

CITY STAFF ONLY

Application Received By: _____

Date: _____ Total Fee: _____



Legal Description

All that tract or parcel of land lying and being in G.M.D. 1270, City of Flowery Branch, Hall County, Georgia and being more particularly described as follows:

BEGINNING at the intersection of the southwestern Right-of-Way of Spout Springs Road (R/W varies) and the southeastern Right-of-Way of Capitola Farm Road (60' R/W); thence continuing along the southwesterly Right-of-Way of said Spout Springs Road South 25°37'24" East, a distance of 663.05 feet to a point; thence leaving said Right-of-Way and into the property now or formerly of NNP-Looper Lake, LLC South 51°28'20" West, a distance of 108.90 feet to a point; thence South 42°12'06" West, a distance of 64.95 feet to a point; thence South 16°35'34" West, a distance of 130.73 feet to a point; thence South 09°33'49" West, a distance of 138.31 feet to a point; thence South 14°03'35" East, a distance of 40.07 feet to a point; thence South 50°05'27" East, a distance of 133.00 feet to a point; thence South 71°36'03" West, a distance of 118.77 feet to a point; thence along the property now or formerly of Sterling on the Lake, Pod O North 16°21'56" West, a distance of 153.60 feet to a point; thence along the property now of formerly of Sterling on the Lake, Pod Q, Phase 2, Pod P North 10°14'19" West, a distance of 148.44 feet to a point; thence North 09°13'44" West, a distance of 119.09 feet to a point; thence North 12°07'47" East, a distance of 26.45 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 01°27'17" East, a distance of 57.67 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 09°46'11" West, a distance of 63.59 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 21°32'36" West, a distance of 63.59 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence South 62°34'11" West, a distance of 95.00 feet to a point; thence 164.12 feet along an arc of a curve to the left having a radius of 215.00 feet and a chord bearing and distance of North 49°17'54" West, 160.16 feet to a point; thence North 71°09'59" West, a distance of 63.20 feet to a point; thence 223.30 feet along an arc of a curve to the left having a radius of 395.00 feet and a chord bearing and distance of North 87°21'42" West, 220.34 feet to a point; thence North 19°04'20" West, a distance of 87.48 feet to a point; thence North 31°15'55" West, a distance of 102.02 feet to a point on the southeastern Right-of-Way of said Capitola Farm Road; thence along said Right-of-Way 51.29 feet along an arc of a curve to the left having a radius of 733.26 feet and a chord bearing and distance of North 54°33'32" East, 51.28 feet to a point; thence North 52°33'19" East, a distance of 159.85 feet to a point; thence 63.52 feet along an arc of a curve to the right having a radius of 431.40 feet and a chord bearing and distance of North 56°46'25" East, 63.47 feet to a point; thence North 60°59'32" East, a distance of 33.91 feet to a point; thence 480.02 feet along an arc of a curve to the right having a radius of 268.83 feet and a chord bearing and distance of North 71°54'29" East, 47.96 feet to a point; thence North 77°01'33" East, a distance of 296.98 feet to the ***Point of Beginning***.

Said tract contains 8.150 Acres.

Project Summary

LOCATION – Spout Springs Road & Capitola Farm Road

ACREAGE – 8.15 acres +/-

APPLICANT – NNP - Looper Lake, LLC

Summary

The accompanying application seeks a change of use from commercial to single family attached within the current PUD for Sterling on The Lake. The site would be developed for up to 65 townhomes with rear entry garages from either a public street or private alleyway. The townhome units will be 3 stories with a mix of architectural materials. A passive park area will be located near the entrance and sidewalks will provide both internal and external connections. The location and point of access will not impact current traffic flow within the Sterling on The Lake community. Completion of development is anticipated by 2022.

Site Description

The site has approximately 575 feet of frontage along the western right-of-way of Spout Springs Road and 650 feet of frontage along the southern right-of-way of Capitola Farm Road. The site is rectangular in shape with the majority being previously cleared and graded. A jurisdictional stream is located on the southern side of the property. Domestic water provided by the City of Gainesville is located in the right-of-way of Capitola Farm Road. Hall County sanitary sewer is located near the sites southwestern boundary line. All other dry utilities are located within a reasonable distance for service extensions. There are no known impediments to its successful development for the purposes intended.

Access

A single point of access to the property is proposed from Capitola Farm Road, approximately 250 LF from its intersection with Spout Springs Road.

Development Strategy

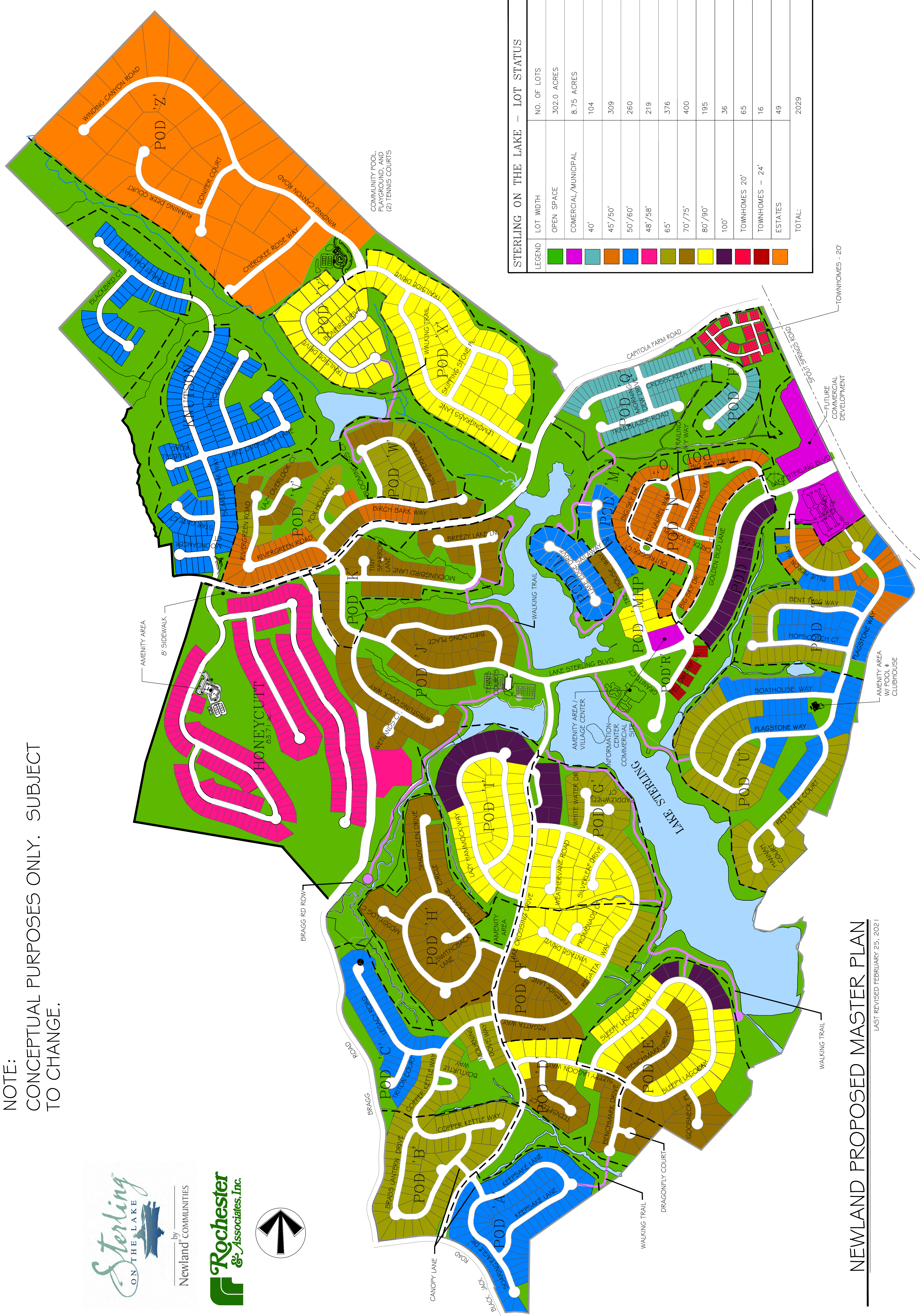
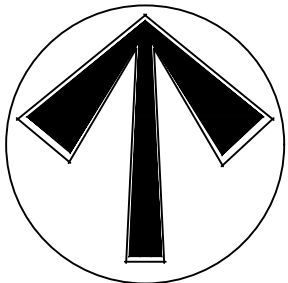
The site has been previously marketed for commercial uses but has received only limited interest due to a lack of direct access to Spout Springs Road and the ongoing widening project. The proposed townhome product will fill a product type void that is not currently served in the Sterling on The Lake community. Two commercial tracts will remain at Spout Springs Road and Lake Sterling Boulevard.



NOTE:
CONCEPTUAL PURPOSES ONLY. SUBJECT
TO CHANGE.



by
Newland COMMUNITIES



STERLING ON THE LAKE – LOT STATUS		
LEGEND	LOT WIDTH	NO. OF LOTS
	OPEN SPACE	302.0 ACRES
	COMERCIAL/MUNICIPAL	8.75 ACRES
	40'	104
	45'/50'	309
	50'/60'	260
	48'/58'	219
	65'	376
	70'/75'	400
	80'/90'	195
	100'	36
	TOWNHOMES 20'	65
	TOWNHOMES – 24'	16
	ESTATES	49
	TOTAL:	2029

NEWLAND PROPOSED MASTER PLAN

LAST REVISED FEBRUARY 25, 2021

GENERAL NOTES:

- PARCEL SIZE - 8.15 AC.
- NUMBER OF LOTS - 65
- DENSITY 7.98 UNITS/AC.
- FRONT SETBACK - 10'
- PUBLIC STREET LOTS REAR SETBACK FROM BACK OF SIDEWALK - 20'
- ALLEY LOTS REAR SETBACK FROM BACK OF CURB - 20'
- SIDE SETBACK - 0'
- BUILDING SEPARATION - 20'

CAPITOLA FARM ROAD
60' R/W - 35 MPH

SPOUT SPRINGS ROAD
110' R/W - 45 MPH

MOSSY BOULDER
DRIVE

PASSIVE PARK
(OPEN SPACE)

ALLEY 2
(22' BC/BC)

ALLEY 1
(22' BC/BC)

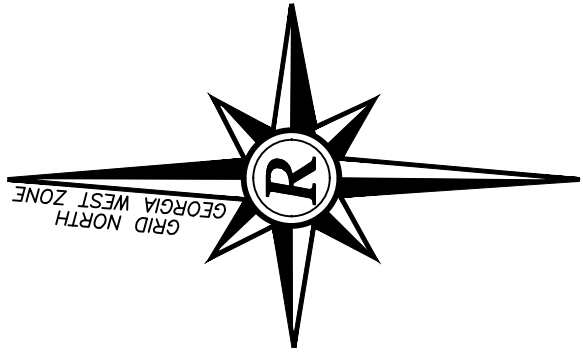
ROAD A
(50' R/W)

ROAD B
(50' R/W)

CROSSCREEK LANE
50' R/W

TYPICAL ALLEY
LOT

TYPICAL PUBLIC
LOT



Rochester & Associates, Inc.
425 Oak Street N.W. • Gainesville, Georgia 30501
(770) 718.0600 (770) 718.9090 Fax • www.rochester-assoc.com

REZONING PLAN
FOR:
STERLING ON THE LAKE
TOWNHOME SITE
LOCATED IN:
G.M.D. 1270
CITY OF FLOWERY BRANCH
HALL COUNTY, GEORGIA

NO.	DATE	DESCRIPTION

GRAPHIC SCALE
1" = 30'
0' 30' 60'

ANY CHANGES OR ALTERATIONS MADE TO THESE CONSTRUCTION DRAWINGS WITHOUT THE WRITTEN APPROVAL OF ROCHESTER & ASSOCIATES, INC. JOINS THE SEAL, SIGNATURE AND ANY LIABILITY ASSOCIATED WITH THIS PROJECT. ORIGINAL DRAWINGS ARE KEPT ON FILE FOR VERIFICATION OF ANY CHANGES.

DATE: 2/23/21
SCALE: 1"=30'
JOB NO. 0208033.PDO
DRAWN BY: ARJ
SHEET 1 OF 1

Development Statistics for Townhome Tract Amendment Request

- (a) Maximum and proposed height of any structure; 35'
- (b) Maximum and proposed gross square footage of the building area (nonresidential only); N/A
- (c) Color renderings of any proposed structures; See attached
- (d) Material list (with percentages) of any proposed structures;

All color schemes and exterior material selections must be submitted to the DRC for approval. A minimum of two exterior materials and a maximum of three exterior materials on each home is required.

- Corner lots will be required to wrap the front elevation material around the side of the flanking street.
 - All homes with front elevations including masonry must wrap the same material around the corner of the home a minimum of 2 feet (with the exception of Pods A, B & C). Masonry materials and patterns must be submitted to the DRC for approval.
- (e) Maximum and proposed number of dwelling units and minimum and proposed square footage of heated floor area for any dwelling unit (residential only); 65 units with a minimum heated floor area of 1400 SF
 - (f) Maximum and proposed lot coverage of building area (square feet and percent); 1000 SF with a lot coverage of 65%.
 - (g) Minimum and proposed square footage of landscaped area (square feet and percent); 15,000 SF in passive park area.
 - (h) Minimum, maximum and proposed number of parking spaces; one space per unit provided in paved driveway.
 - (i) Other dimensional information as may be required by the Zoning Administrator. TBD

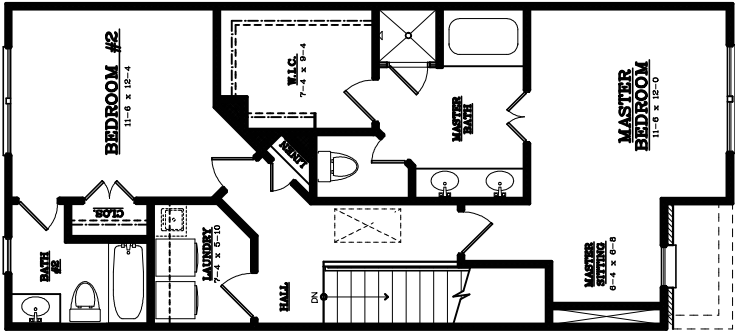
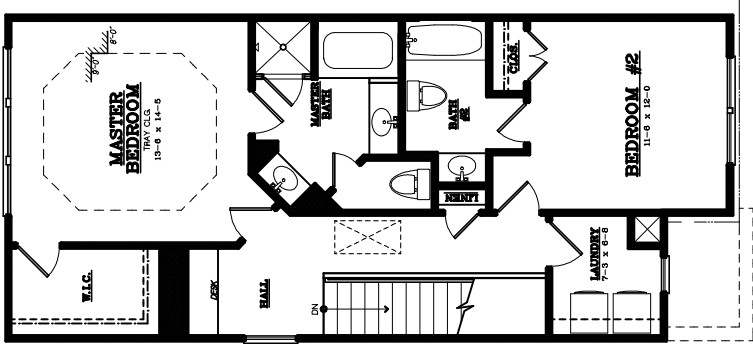
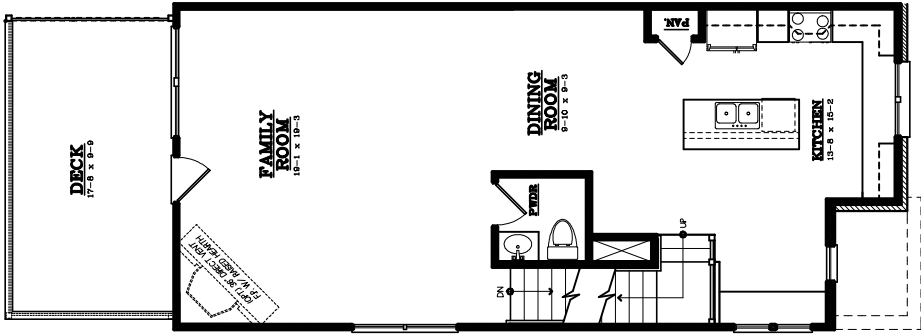
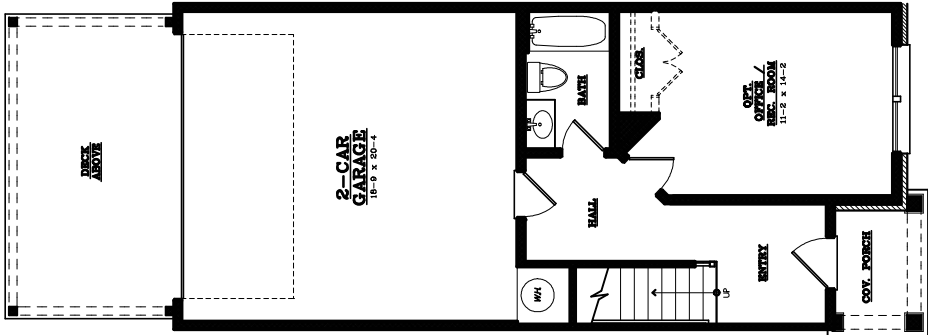
Townes at Sterling on the Lake

Capitola Farm Road Parcel



Townes at Sterling on the Lake

Capitola Farm Road Parcel



City of Flowery Branch Rezoning Application
REQUEST FOR STATISTICAL INFORMATION
Sterling on the Lake – Townhome Tract

1. Value of improvements at buildout:

- Development cost - \$ 30,000 per lot
- Vertical construction cost - \$ 120 per sf

2. Property tax revenue at buildout: (based on FMV of \$275,000)

- Hall County - \$ 196,110
- City of Flowery Branch - \$ 23,338

3. Schedule of construction;

- See below:

ITEM	START	FINISH
Design & Permitting	6/30/2021	8/29/2021
Land Development	9/3/2021	3/2/2022
Final Plat	3/12/2022	4/26/2022
Lot Sales	5/6/2022	5/31/2023
Residential CO's	7/20/2022	8/14/2023

4. Anticipated total square footage per unit:

- 1400 sf minimum

5. Total acreage to be developed:

- 7.95 acres in total

6. The Townhome Tract will contain approximately 0.25 acres in private rights-of-way.

7. The Townhome Tract will contain approximately 4.35 acres of open space/common area to be maintained by the existing HOA.

8. The Townhome Tract will contain approximately 1.05 acres of buffer and watershed protection.

A) The impervious buffer is applicable to the Townhome Tract.

B) No property lines may extend into the stream buffer.

C) The developer intends to dedicate street rights-of-way (where applicable) and storm sewer easements to the City of Flowery Branch.

9. Transportation alternatives:

- The Townhome Tract will have a pedestrian link along Spout Springs Road to the remainder of the community.

10. Amenities for Sterling on the Lake total more than 15 acres and (at buildout) will include the following:

- Lakes and Trails
- 3 Clubhouses
- 5 Pools
- 4 Children's Playgrounds
- Multiple pocket parks
- Children's Treehouse
- 12 Tennis Courts
- 2 Fire pits
- Lakeside pavilion with grill
- Boat dock and launch
- ¾ Basketball Court
- Picnic Island

11. A minimum of 9 street lights are planned for the Townhome Tract with a maximum spacing of 150 feet.

12. The Townhome Tract will include approximately 3,500 linear feet of sidewalk containing approximately 216 cubic yards of concrete.

13. Homes in the Townhome Tract will have access to high speed internet to the extent available from the service provider.

14. The Townhome Tract will contain areas for providing detention, water quality and stream protection.

15. An updated traffic study has not been completed for the Townhome Tract as the overall density will remain within previously studied and approved maximums.

16. There are no provisions for utilization and storage of reuse water in this plan.

17. The Townhome Tract, as proposed, will generate approximately 17,550 gallons per day of wastewater flow.

18. The maximum daily water consumption is approximately 17,550 gallons per day. Low flow fixtures are required by the development.

19. A preliminary design has been completed in order to evaluate the proposed density.

20. Public safety requirements related to life safety codes have been considered in the concept design.

21. The Hall County school system has been provided density and build out projections for the entirety of the community.

22. Copies of master covenants and guidelines have been previously filed and recorded.

Sterling on the Lake – Project Narrative

Applicant seeks to amend the conceptual site plan and conditions of approval relating to ordinance no. 239I & 240I, for the master planned community on 1007.91 ± acres generally known as “Sterling on the Lake” located in the PUD (Planned Unit Development) zoned district. The development is located adjacent to the intersection of Capitola Farm Road and Spout Springs Road. The amended property is described as: **(Townhome Tract)** - a 8.15 acre parcel of real property owned by NNP Looper Lake LLC, being known as the “Townhome” tract identified as a portion of tax identification number 15047-000885 located in GMD 1270 Flowery Branch District, Hall County, Georgia.

- The Sterling on the Lake Master Planned Development was originally approved (annexed and rezoned) by the Flowery Branch City Council on November 16, 2001, per Ordinances 239 and 240.
- On February 1, 2006, City Council approved a modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-A and 240-A.
- On September 9, 2006, City Council approved a second modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-B and 240-B.
- On August 15, 2007, City Council approved a third modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-C and 240-C.
- On November 25, 2008, City Council approved a fourth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-D and 240-D.
- On March 26, 2011, City Council approved a fifth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-E and 240-E.
- On March 15, 2012, City Council approved a sixth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-F and 240-F.
- On February 18, 2016, City Council approved a seventh modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-G and 240-G.
- On May 4, 2017, City Council approved an eight modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-H and 240-H.

- On March 15, 2018, City Council approved a ninth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-I and 240-I.
- On July 1, 2019, City Council approved a tenth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-J and 240-J.
- Per Article 8, Section 8.4 and Section 8.10 of the Flowery Branch Zoning Ordinance, the original PUD approval must be amended by the Governing Body in order to incorporate changes to the master plan approval and PUD conditional zoning.

APPLICANT’S REQUEST

Townhome Tract – The Applicant is requesting an amendment to the PUD master plan for Sterling on The Lake Master Planned Development.

- The development shall be substantially in accordance with the "Rezoning Plan" submitted as a part of the application.
- The plan will include both public right-of-way and private alleyways as depicted on the "Rezoning Plan". Private alleyways will be maintained solely by the Townhome sub-association.
- Each dwelling unit is required to provide a two car garage and space for two cars in the driveway.
- All requirements imposed under this Ordinance shall be the standards of the development regardless of any change in ownership.
- The elevations will be consistent with the attached exhibits. All elevations shall be reviewed and approved by the DRC Committee prior to submittal to the City.
- No fencing is permitted within the front setback areas.
- The residential development within the overall PUD shall be limited to a maximum of 2,029 housing units for the entire 1,007.91 ± acre PUD, within the City of Flowery Branch at the time of this approval, as approved under this ordinance. If additional land is approved for inclusion as residential development within the PUD, the number of housing units to be permitted and the gross density of residential development portions of the site (excluding commercial, institutional, recreational, and open space uses) shall be established in the subsequent approval as an amendment to the Sterling on the Lake Conceptual Master Plan.
- The PUD shall designate and maintain at least 302 acres of permanent open space, or thirty percent (30%) of the total land area

contained within the PUD, whichever is greater. For purposes of this zoning condition, permanent open space shall include lakes, buffers, and passive or active parks and recreation of the property, including those lands administered by a homeowners association; provided, however, that any buffer area counted as open space shall not be used for active recreational facilities. The open space shall be substantially in accordance with the areas colored green on the "Master Plan for Sterling on the Lake" (i.e., binding site plan) as determined by the Zoning Administrator.

STATEMENTS OF FACT

Pursuant to Article 34 of the Flowery Branch Zoning Ordinance this amendment to the conceptual master site plan and conditions of approval relating to Ordinance No. 239 and 240 (as amended most recently dated March 25, 2018), to add the Bragg tract to the master plan, submit the following Statements of Fact:

- (a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. **The requested use is for a residential use and is consistent with the surrounding uses.**
- (b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. **The proposed residential use of the property will not negatively impact any adjacent property as the both residential and commercial uses exist nearby.**
- (c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. **The property has been marketed for its current use for a number of years and has generated very little interest.**
- (d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. **The proposed residential use will not impact the existing infrastructure in comparison to the current use with the exception of schools where there could be a slight impact.**
- (e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. **The property is shown as Neighborhood Commercial on the character area map but is surrounded by Suburban Residential.**
- (f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal. **The demand for residential use is increasing while neighborhood commercial is declining in some areas. The lack of driveway from Spout Springs Road is challenging to the use of the property for commercial.**
- (g) Existing use(s) and zoning of the subject property and nearby properties. **Property to the east consists of a church campus, to the north a convenience store, to the west single family residential and to the south, undeveloped neighborhood commercial.**
- (h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under the existing zoning district classification. **The property has been marketed for its current use for a number of years and has generated very little interest. The lack of a driveway connection to Spout Springs is detrimental to its value for commercial development.**
- (i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. **The**

change of use is more compatible with the existing single family development to the west and will have no impact on the other adjacent uses.

(j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. The property is adjacent to an existing single family development and therefore would not create an isolated use.

(k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. The character of this area includes both residential and commercial use so there should be no impact on the general character of the district.

(l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Residential development is generally less intensive in its impact on the environmental issues mentioned.

(m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. This change of use will not be harmful to the overall zoning scheme as other residential uses currently exists adjacent to the property.

LEGAL DESCRIPTION

The modification of Ordinance No. 239 & 240 for a 1007± acre master planned development generally known as “Sterling on the Lake”, described on Exhibit A attached hereto.

Legal Description: (See Exhibit A)

The overall development is approximately 1007.91 +/- acres located adjacent to the intersection of Capitola Farm Road and Spout Springs Road. The property is described as: (**Townhome Tract**), approximately 8.15 ± acres known as the “Townhome” tract, identified as tax identification number 15047-000885, located in GMD 1270 Flowery Branch District, Hall County, Georgia.

Adjoining Property Owners

Parcel ID ↕	Owner ↕	Property Address ↕
15046 000017	UNITED FOOD AND GAS INC	6360 SPOUT SPRINGS RD
15046 000069	ARCHBISHOP WILTON D GREGORY ARCHBISHOP	6367 SPOUT SPRINGS RD
15046 000139	CONSTANTINO T GARCIA	6363 SPOUT SPRINGS RD
15047 000001	ARCHBISHOP WILTON D GREGORY ARCHBISHOP	6439 SPOUT SPRINGS RD
15047 000002A	SHIRLEY L MOORE	6495 SPOUT SPRINGS RD
15047 000665	HALL COUNTY	6488 SPOUT SPRINGS RD
15047 000684	GREGORY L WITKOWSKI WITKOWSKI, WHITNEY A.	6807 LAKE STERLING BLVD
15047 000701	STERLING ON THE LAKE COMMUNITY ASSOCIATI	6872 LAKE STERLING BLVD
15047 000711	CEMETERY - NNP-LOOPER LAKE, LLC	LAKE STERLING BLVD
15047 000742	ANDREA N BOWEN BOWEN ROBERT D	6714 BIG SKY DR
15047 000743	ERIC M. BOWMAN BOWMAN, LAUREN A.	6718 BIG SKY DR
15047 000885	NNP-LOOPER LAKE LLC c/o NEWLAND COMMUNITIES	BIG SKY DR
15047 000885A	STERLING ON THE LAKE COMMUNITY ASSOCIATI C/O COMMUNITY MANAGMENT ASSOCIATES INC	6796 LAKE STERLING BLVD
15047 000887	MARY BETH TURLEY	6804 GOLDEN BUD LN
15047 000953	STERLING ON THE LAKE COMMUNITY ASSOCIATI	CROSSCREEK LN
15047B000001	JOSHUA HARWARD HARWARD, LAUREN	6403 MOSSY BOULDER DR
15047B000075	JOHN RINDFUSZ RINDFUSZ DEENA	6414 MOSSY BOULDER DR
15047B000076	THOMAS A Klaput Klaput Patricia M	6408 MOSSY BOULDER DR
15047B000077	JOSHUA E THOMAS THOMAS JESSICA BOWLES	6402 MOSSY BOULDER DR
15047H000050	STERLING ON THE LAKE COMMUNITY ASSOCIATI	6782 BLUE HERON WAY
15047P000001	DALE MARIE GRANT	6393 CROSSCREEK LN
15047P000013	D. R. HORTON, INC.	6380 CROSSCREEK LN
15047P000014	MIRIAM A NICHOLAS	6384 CROSSCREEK LN
15047P000015	EVAN H DOWLING DOWLING MARIA LORELLE	6388 CROSSCREEK LN
15047P000016	D. R. HORTON, INC.	6392 CROSSCREEK LN
15047P000017	MICHAEL KEITH JOHNSON JOHNSON MELISSA DANIELLE	6396 CROSSCREEK LN
15047P000018	CHRISTINE R. BECK SINGLETON, KIMBERLY ERIN	6402 CROSSCREEK LN
15047P000019	RICHARD LEE LASHBROOK LASHBROOK, KRISTEN PALEN	6406 CROSSCREEK LN
15047P000020	D. R. HORTON, INC.	6410 CROSSCREEK LN
15047P000021	NICOLAS PEMBERTON PEMBERTON JUSTINE	6414 CROSSCREEK LN
15047P000022	D. R. HORTON, INC.	6418 CROSSCREEK LN
15047Q000064	STACEY A. BURSINGER	6465 CROSSCREEK LN
15047Q000065	MATEUSZ JERZY MUDY	6461 CROSSCREEK LN
15047Q000066	LINDA S. WILLIAMS	6457 CROSSCREEK LN
15047Q000067	LAUREN TAMPLIN TAMPLIN, KRISTOFER	6453 CROSSCREEK LN
15047Q000068	SIDNI BRAUTIGAN	6449 CROSSCREEK LN
15047Q000069	KAREN E. ZARCONI	6445 CROSSCREEK LN
15047Q000070	KEVIN ANTHONY JONES JONES, ASHLEIGH	6441 CROSSCREEK LN
15047Q000071	KENNY A. CUEVAS, SR	6452 CROSSCREEK LN
15047Q000072	KERRI LYNN PARKS PARKS, STEVAN RODNEY	6456 CROSSCREEK LN
15047Q000073	RALPH RODRIGUEZ	6460 CROSSCREEK LN
15047Q000074	TAYLOR HEINICKE	6464 CROSSCREEK LN
15047Q000075	ANAHIS LEON CARPIO BARRIOS MORA, DANIEL	6468 CROSSCREEK LN



BY
NEWLAND



DISCLAIMER: THESE DRAWINGS ARE CONCEPTUAL AND SUBJECT TO CHANGE, NOT INTENDED FOR CONSTRUCTION.





BY
NEWLAND



DISCLAIMER: THESE DRAWINGS ARE CONCEPTUAL AND SUBJECT TO CHANGE, NOT INTENDED FOR CONSTRUCTION.





Staff Report

An application to rezone a portion of a parcel of land from Planned Unit Development (PUD) to Planned Unit Development (PUD) with modified conditions was submitted by NNP-Looper Lake, LLC. The following property is being considered:

Tax Parcel ID # 15047 000885



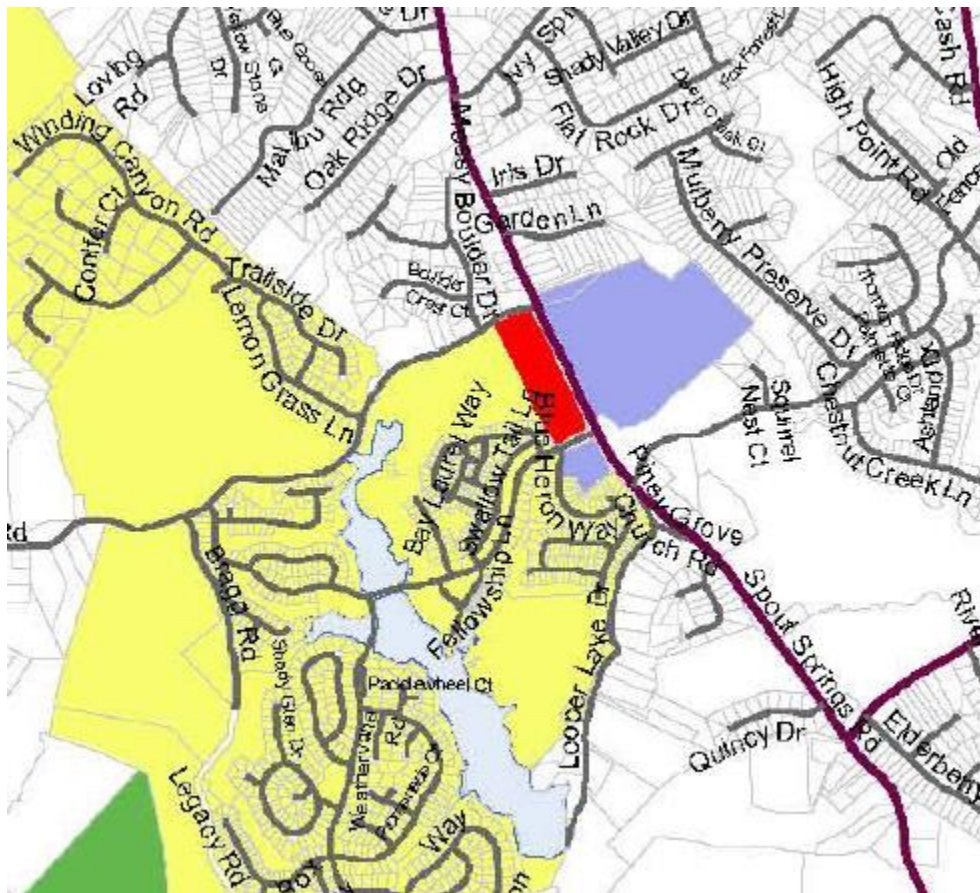
Currently, the entire parcel (12 +/- acres) is zoned PUD and is designated as for sale commercial/retail property. Applicant is requesting 8 +/- acres be removed from the commercial/retail development classification allowing for the construction of approximately 65 townhomes.



Comprehensive Plan

Designated as a “Neighborhood Commercial” character area.

Flowery Branch character area map:



The “Neighborhood Commercial” character area does not contemplate residential uses. Applicant proposes leaving 4 +/- acres as commercial. These parcels would keep the “Neighborhood Commercial” character area designation. The remaining land (8+/- acres) would not fit the “Suburban Neighborhood” character area designation that Sterling on the Lake currently holds, rather it would need to be reclassified as, “Urban Density Community”.



Neighborhood Commercial

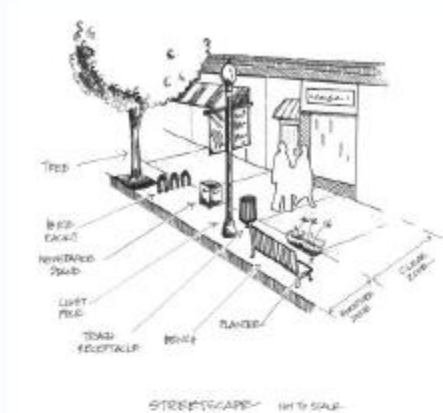
VISION: Attractive, non-auto related neighborhood businesses and services, with distinctive architectural features and a scale compatible with pedestrians and connected to adjacent residential neighborhoods.

USES AND INTENSITIES: Neighborhood-serving commercial intensities are within a range of approximately 10,000 to 15,000 square feet of building space per acre. Business establishments do not generally exceed 25,000 square feet in any one tenant space, to keep the bulk and intensity in scale with the needs of adjacent neighborhoods.

MAJOR FEATURES: Pedestrian accessibility is promoted via sidewalks connected to nearby neighborhoods, but uses are mostly reliant on the automobile for access. Nonetheless, buildings and developments are scaled to be compatible with and promote pedestrian activity. Open space is limited to suburban plazas or small open spaces. Three-story height limit. Entrances, frontages, and building façades are softened with landscaping and low-lying identification signs.

REGULATIONS: This character area will be implemented with a neighborhood commercial zoning district. Design guidelines will be provided, and neighborhood commercial projects will be required to complete design review. Minimum 15 percent of the lot is open space or landscaped.

QUALITY COMMUNITY OBJECTIVES IMPLEMENTED: Appropriate business, employment options, transportation alternatives, sense of place.



Jerry Weitz & Associates, Inc.
Planning & Development Consultants

Illustrative Pedestrian Features



Outdoor Seating and Attractive Lighting



Quality, Compatible Architectural Design
Including Signage



Suburban Neighborhood

VISION: Conventional suburban subdivisions with larger lots (1/3 to 1 acre) that may have cul-de-sacs and curvilinear streets. Houses are set back from the road. Streets are built to relatively wide standard when compared with traditional neighborhoods.

USES AND DENSITIES: Acceptable uses are almost exclusively single-family residences, though some civic and recreational uses integrated into subdivision plans are acceptable. Duplexes, townhouses, multi-family, and accessory apartments are not permitted. Densities are in the range of 1-3 dwelling units per acre.

MAJOR FEATURES: Houses are setback from city streets. Diverse architectural designs are required. Garages may be located in the front but should not be the dominant feature of the home.

REGULATIONS: To be implemented with existing residential zoning districts.

QUALITY COMMUNITY OBJECTIVES IMPLEMENTED: Open space preservation, housing opportunities, infill development, suburban sense of place.



Typical Street Scene in a Suburban Neighborhood



Dwelling Setback from Street



Conventional Suburban Subdivision
With cul de sacs

Jermy Wertz & Associates, Inc.
Planning & Development Consultants



Urban Density Community

VISION: Higher density, urban living environments.

USES AND DENSITIES: Acceptable uses include multi-family development (apartment complexes, townhouses, and manufactured home parks). Densities range from 6 to 12 units per acre.



Manufactured Home Park

MAJOR FEATURES: Master planned with high quality architecture, entrance landscaping, and recreational amenities.

REGULATIONS: To be implemented with existing multi-family residential zoning districts with design guidelines. Design review required.

QUALITY COMMUNITY OBJECTIVES IMPLEMENTED: Open space preservation, housing opportunities, infill development, urban sense of place.



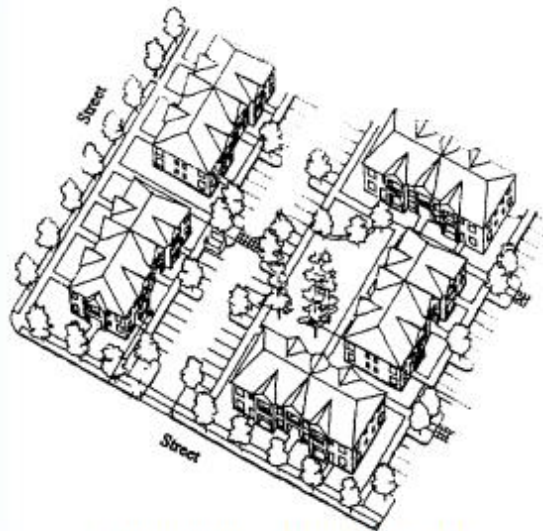
APARTMENT BUILDING



Typical Fee-Simple Townhouses



Apartments with Good Articulation of Buildings



Connectivity and Quality Design of Urban Density Communities



Proposal

Submitted by applicant:

Project Summary

LOCATION – Spout Springs Road & Capitola Farm Road

ACREAGE – 8.15 acres +/-

APPLICANT – NNP - Looper Lake, LLC

Summary

The accompanying application seeks a change of use from commercial to single family attached within the current PUD for Sterling on The Lake. The site would be developed for up to 65 townhomes with rear entry garages from either a public street or private alleyway. The townhome units will be 3 stories with a mix of architectural materials. A passive park area will be located near the entrance and sidewalks will provide both internal and external connections. The location and point of access will not impact current traffic flow within the Sterling on The Lake community. Completion of development is anticipated by 2022.

Site Description

The site has approximately 575 feet of frontage along the western right-of-way of Spout Springs Road and 650 feet of frontage along the southern right-of-way of Capitola Farm Road. The site is rectangular in shape with the majority being previously cleared and graded. A jurisdictional stream is located on the southern side of the property. Domestic water provided by the City of Gainesville is located in the right-of-way of Capitola Farm Road. Hall County sanitary sewer is located near the sites southwestern boundary line. All other dry utilities are located within a reasonable distance for service extensions. There are no known impediments to its successful development for the purposes intended.

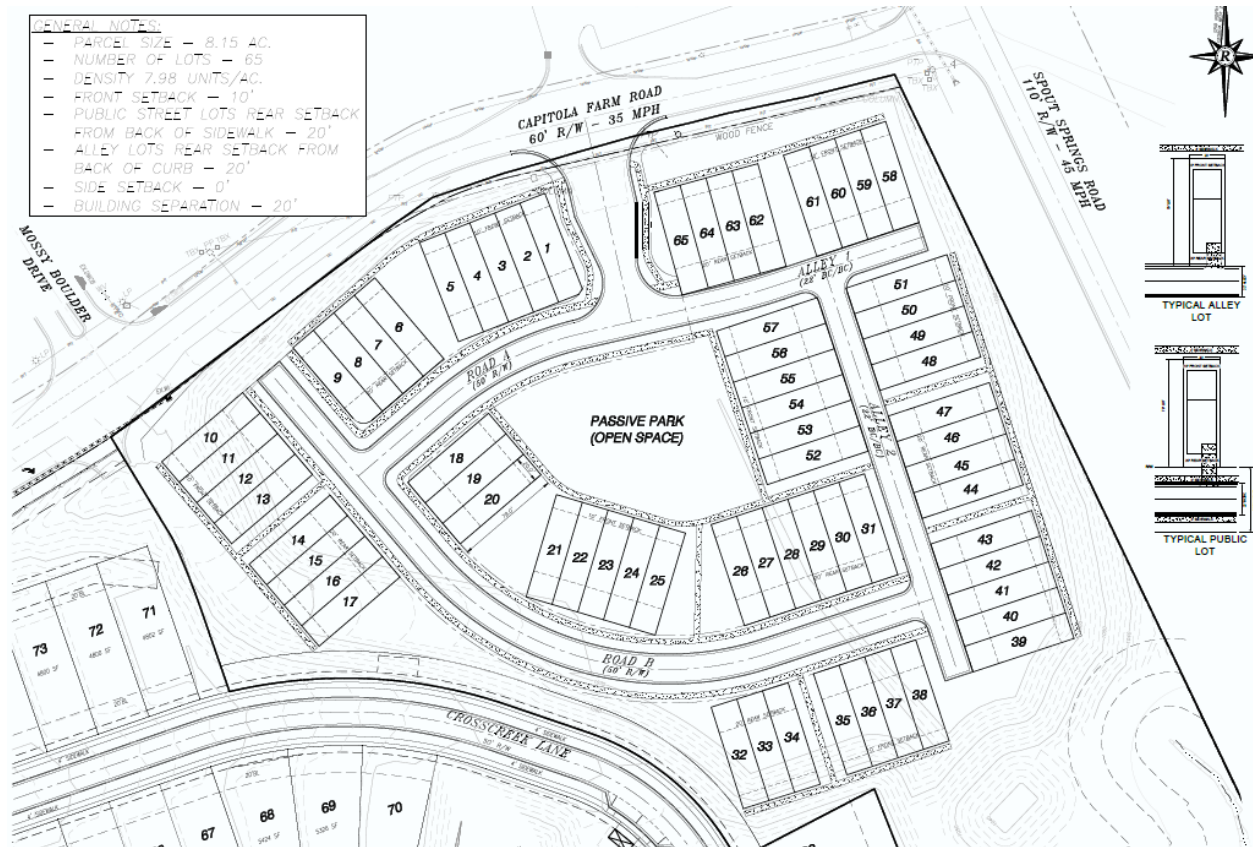
Access

A single point of access to the property is proposed from Capitola Farm Road, approximately 250 LF from its intersection with Spout Springs Road.

Development Strategy

The site has been previously marketed for commercial uses but has received only limited interest due to a lack of direct access to Spout Springs Road and the ongoing widening project. The proposed townhome product will fill a product type void that is not currently served in the Sterling on The Lake community. Two commercial tracts will remain at Spout Springs Road and Lake Sterling Boulevard.





GENERAL NOTES:

- PARCEL SIZE - 8.15 AC.
- NUMBER OF LOTS - 65
- DENSITY 7.98 UNITS/AC.
- FRONT SETBACK - 10'
- PUBLIC STREET LOTS REAR SETBACK FROM BACK OF SIDEWALK - 20'
- ALLEY LOTS REAR SETBACK FROM BACK OF CURB - 20'
- SIDE SETBACK - 0'
- BUILDING SEPARATION - 20'



Development Statistics for Townhome Tract Amendment Request

- (a) Maximum and proposed height of any structure; **35'**
- (b) Maximum and proposed gross square footage of the building area (nonresidential only); **N/A**
- (c) Color renderings of any proposed structures; **See attached**
- (d) Material list (with percentages) of any proposed structures;

All color schemes and exterior material selections must be submitted to the DRC for approval. A minimum of two exterior materials and a maximum of three exterior materials on each home is required.

 - Corner lots will be required to wrap the front elevation material around the side of the flanking street.
 - All homes with front elevations including masonry must wrap the same material around the corner of the home a minimum of 2 feet (with the exception of Pods A, B & C). Masonry materials and patterns must be submitted to the DRC for approval.
- (e) Maximum and proposed number of dwelling units and minimum and proposed square footage of heated floor area for any dwelling unit (residential only); **65 units with a minimum heated floor area of 1400 SF**
- (f) Maximum and proposed lot coverage of building area (square feet and percent); **1000 SF with a lot coverage of 65%.**
- (g) Minimum and proposed square footage of landscaped area (square feet and percent); **15,000 SF in passive park area.**
- (h) Minimum, maximum and proposed number of parking spaces; **one space per unit provided in paved driveway.**
- (i) Other dimensional information as may be required by the Zoning Administrator. **TBD**







**City of Flowery Branch Rezoning Application
REQUEST FOR STATISTICAL INFORMATION
Sterling on the Lake – Townhome Tract**

1. Value of improvements at buildout:
 - Development cost - \$ 30,000 per lot
 - Vertical construction cost - \$ 120 per sf
2. Property tax revenue at buildout: (based on FMV of \$275,000)
 - Hall County - \$ 196,110
 - City of Flowery Branch - \$ 23,338

3. Schedule of construction;

- See below:

ITEM	START	FINISH
Design & Permitting	6/30/2021	8/29/2021
Land Development	9/3/2021	3/2/2022
Final Plat	3/12/2022	4/26/2022
Lot Sales	5/6/2022	5/31/2023
Residential CO's	7/20/2022	8/14/2023

4. Anticipated total square footage per unit:
 - 1400 sf minimum
5. Total acreage to be developed:
 - 7.95 acres in total
6. The Townhome Tract will contain approximately 0.25 acres in private rights-of-way.
7. The Townhome Tract will contain approximately 4.35 acres of open space/common area to be maintained by the existing HOA.
8. The Townhome Tract will contain approximately 1.05 acres of buffer and watershed protection.
 - A) The impervious buffer is applicable to the Townhome Tract.
 - B) No property lines may extend into the stream buffer.
 - C) The developer intends to dedicate street rights-of-way (where applicable) and storm sewer easements to the City of Flowery Branch.
9. Transportation alternatives:
 - The Townhome Tract will have a pedestrian link along Spout Springs Road to the remainder of the community.



10. Amenities for Sterling on the Lake total more than 15 acres and (at buildout) will include the following:

- Lakes and Trails
- 3 Clubhouses
- 5 Pools
- 4 Children's Playgrounds
- Multiple pocket parks
- Children's Treehouse
- 12 Tennis Courts
- 2 Fire pits
- Lakeside pavilion with grill
- Boat dock and launch
- ¾ Basketball Court
- Picnic Island

11. A minimum of 9 street lights are planned for the Townhome Tract with a maximum spacing of 150 feet.

12. The Townhome Tract will include approximately 3,500 linear feet of sidewalk containing approximately 216 cubic yards of concrete.

13. Homes in the Townhome Tract will have access to high speed internet to the extent available from the service provider.

14. The Townhome Tract will contain areas for providing detention, water quality and stream protection.

15. An updated traffic study has not been completed for the Townhome Tract as the overall density will remain within previously studied and approved maximums.

16. There are no provisions for utilization and storage of reuse water in this plan.

17. The Townhome Tract, as proposed, will generate approximately 17,550 gallons per day of wastewater flow.

18. The maximum daily water consumption is approximately 17,550 gallons per day. Low flow fixtures are required by the development.

19. A preliminary design has been completed in order to evaluate the proposed density.

20. Public safety requirements related to life safety codes have been considered in the concept design.

21. The Hall County school system has been provided density and build out projections for the entirety of the community.

22. Copies of master covenants and guidelines have been previously filed and recorded.



Sterling on the Lake – Project Narrative

Applicant seeks to amend the conceptual site plan and conditions of approval relating to ordinance no. 239I & 240I, for the master planned community on 1007.91 ± acres generally known as “Sterling on the Lake” located in the PUD (Planned Unit Development) zoned district. The development is located adjacent to the intersection of Capitola Farm Road and Spout Springs Road. The amended property is described as: (Townhome Tract) - a 8.15 acre parcel of real property owned by NNP Looper Lake LLC, being known as the “Townhome” tract identified as a portion of tax identification number 15047-000885 located in GMD 1270 Flowery Branch District, Hall County, Georgia.

- The Sterling on the Lake Master Planned Development was originally approved (annexed and rezoned) by the Flowery Branch City Council on November 16, 2001, per Ordinances 239 and 240.
- On February 1, 2006, City Council approved a modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-A and 240-A.
- On September 9, 2006, City Council approved a second modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-B and 240-B.
- On August 15, 2007, City Council approved a third modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-C and 240-C.
- On November 25, 2008, City Council approved a fourth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-D and 240-D.
- On March 26, 2011, City Council approved a fifth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-E and 240-E.
- On March 15, 2012, City Council approved a sixth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-F and 240-F.
- On February 18, 2016, City Council approved a seventh modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-G and 240-G.
- On May 4, 2017, City Council approved an eight modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-H and 240-H.



- On March 15, 2018, City Council approved a ninth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-I and 240-I.
- On July 1, 2019, City Council approved a tenth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-J and 240-J.
- Per Article 8, Section 8.4 and Section 8.10 of the Flowery Branch Zoning Ordinance, the original PUD approval must be amended by the Governing Body in order to incorporate changes to the master plan approval and PUD conditional zoning.

APPLICANT'S REQUEST

Townhome Tract – The Applicant is requesting an amendment to the PUD master plan for Sterling on The Lake Master Planned Development.

- The development shall be substantially in accordance with the "Rezoning Plan" submitted as a part of the application.
- The plan will include both public right-of-way and private alleyways as depicted on the "Rezoning Plan". Private alleyways will be maintained solely by the Townhome sub-association.
- Each dwelling unit is required to provide a two car garage and space for two cars in the driveway.
- All requirements imposed under this Ordinance shall be the standards of the development regardless of any change in ownership.
- The elevations will be consistent with the attached exhibits. All elevations shall be reviewed and approved by the DRC Committee prior to submittal to the City.
- No fencing is permitted within the front setback areas.
- The residential development within the overall PUD shall be limited to a maximum of 2,029 housing units for the entire 1,007.91 ± acre PUD, within the City of Flowery Branch at the time of this approval, as approved under this ordinance. If additional land is approved for inclusion as residential development within the PUD, the number of housing units to be permitted and the gross density of residential development portions of the site (excluding commercial, institutional, recreational, and open space uses) shall be established in the subsequent approval as an amendment to the Sterling on the Lake Conceptual Master Plan.
- The PUD shall designate and maintain at least 302 acres of permanent open space, or thirty percent (30%) of the total land area



contained within the PUD, whichever is greater. For purposes of this zoning condition, permanent open space shall include lakes, buffers, and passive or active parks and recreation of the property, including those lands administered by a homeowners association; provided, however, that any buffer area counted as open space shall not be used for active recreational facilities. The open space shall be substantially in accordance with the areas colored green on the "Master Plan for Sterling on the Lake" (i.e., binding site plan) as determined by the Zoning Administrator.



STATEMENTS OF FACT

Pursuant to Article 34 of the Flowery Branch Zoning Ordinance this amendment to the conceptual master site plan and conditions of approval relating to Ordinance No. 239 and 240 (as amended most recently dated March 25, 2018), to add the Bragg tract to the master plan, submit the following Statements of Fact:

- (a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. *The requested use is for a residential use and is consistent with the surrounding uses.*
- (b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. *The proposed residential use of the property will not negatively impact any adjacent property as the both residential and commercial uses exist nearby.*
- (c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. *The property has been marketed for its current use for a number of years and has generated very little interest.*
- (d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. *The proposed residential use will not impact the existing infrastructure in comparison to the current use with the exception of schools where there could be a slight impact.*
- (e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. *The property is shown as Neighborhood Commercial on the character area map but is surrounded by Suburban Residential.*
- (f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal. *The demand for residential use is increasing while neighborhood commercial is declining in some areas. The lack of driveway from Spout Springs Road is challenging to the use of the property for commercial.*
- (g) Existing use(s) and zoning of the subject property and nearby properties. *Property to the east consists of a church campus, to the north a convenience store, to the west single family residential and to the south, undeveloped neighborhood commercial.*
- (h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under the existing zoning district classification. *The property has been marketed for its current use for a number of years and has generated very little interest. The lack of a driveway connection to Spout Springs is detrimental to its value for commercial development.*
- (i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. *The*



change of use is more compatible with the existing single family development to the west and will have no impact on the other adjacent uses.

(j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. The property is adjacent to an existing single family development and therefore would not create an isolated use.

(k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. The character of this area includes both residential and commercial use so there should be no impact on the general character of the district.

(l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Residential development is generally less intensive in its impact on the environmental issues mentioned.

(m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. This change of use will not be harmful to the overall zoning scheme as other residential uses currently exists adjacent to the property.

Staff Analysis

Flowerly Branch Zoning Ordinance Article 37 Rezoning and Conditional Use Applications

Sec. 34.7. - Analysis Requirements.

Applications to amend the official zoning map and applications for conditional uses shall provide a written analysis comparing the proposed action with the criteria in this Section. A zoning map amendment or conditional use application may be justified only if it bears a reasonable relationship to the public health, safety, morality, or general welfare, and after consideration of the analysis requirements which may in individual cases be considered criteria relevant to Zoning Administrator in making recommendations and by the Governing Body in the decision-making process.

Staff Response:

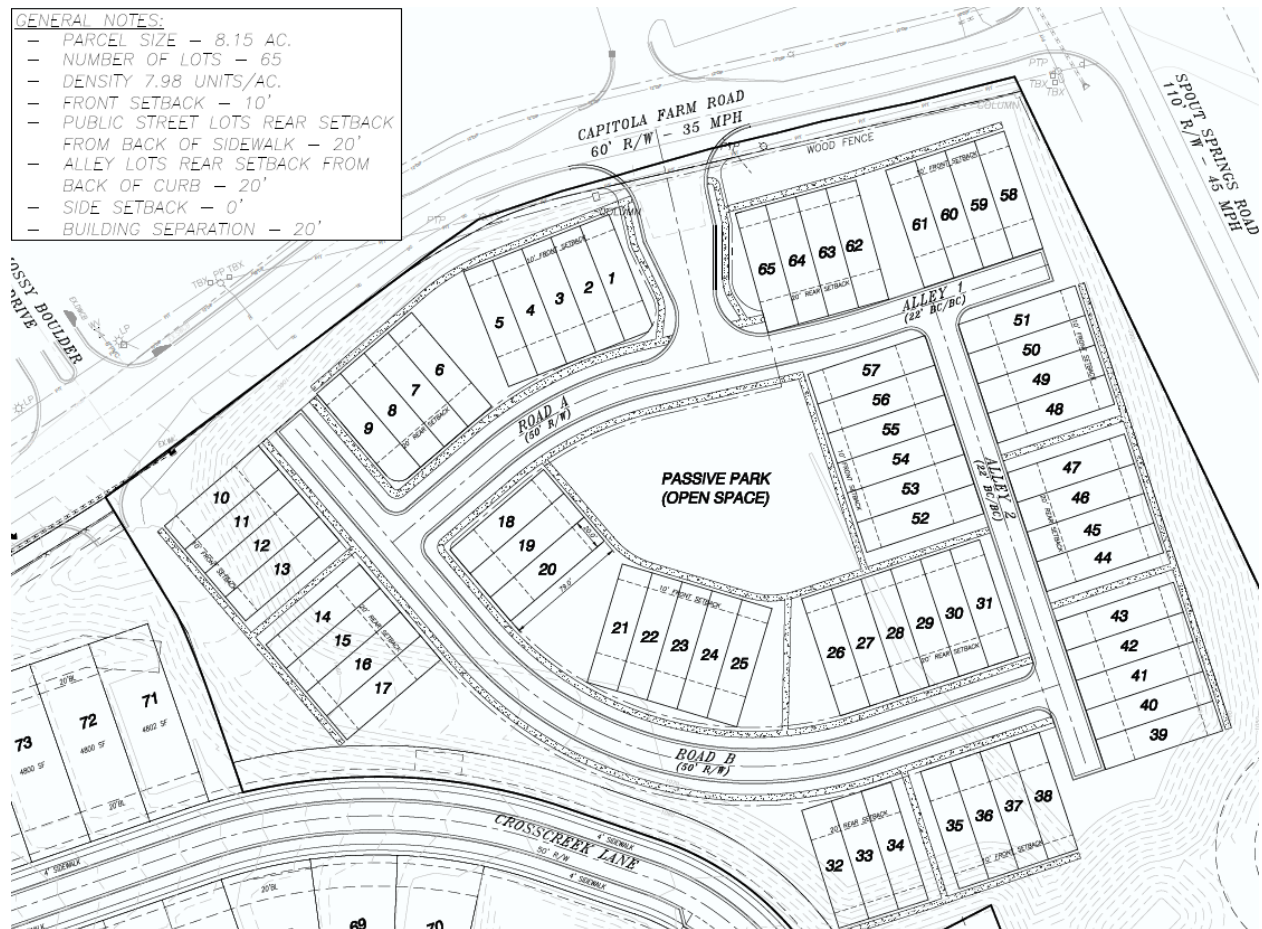
- (a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. Residential units are suitable as they are consistent with the surrounding area.
- (b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. The development will not adversely affect the area.
- (c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. Yes, current zoning and designation as commercial has a reasonable economic use although the land has been available for some time.



- (d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. *It is staff's opinion that the use will not create any unnecessary burdens.*
- (e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. *Currently, the Comprehensive Plan denotes this area as part of the "Neighborhood Commercial" character area. The proposed use (townhomes) does not meet the intent of the Comprehensive Plan (see previous comments regarding the Comprehensive Plan as part of this staff report). However, the proposed zoning change does not alter the entirety of the area designated "Neighborhood Commercial" and, if approved, would leave two outparcels to be developed as commercial according to guidelines and rules established by the Comprehensive Plan and City codes.*
- (f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal. *The demand for over 12 acres of commercial product at this location has not been high.*
- (g) Existing use(s) and zoning of the subject property and nearby properties. *Townhomes will become part of the Sterling on the Lake community.*
- (h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under the existing zoning district classification. *Staff does not have a specific number regarding property value, but the current zoning restrictions do not allow the proposed residential subdivision.*
- (i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. *Staff does not feel that the proposed will be a deterrent.*
- (j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. *N/A*
- (k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. *The proposed use will not be a detriment to the area and may help to make the commercial properties more viable.*
- (l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. *The development, if approved, will need to go through all the required development reviews to ensure all applicable codes and requirements are met.*
- (m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. *The proposed development will meet the intent of the Zoning Ordinance.*



Site Plan



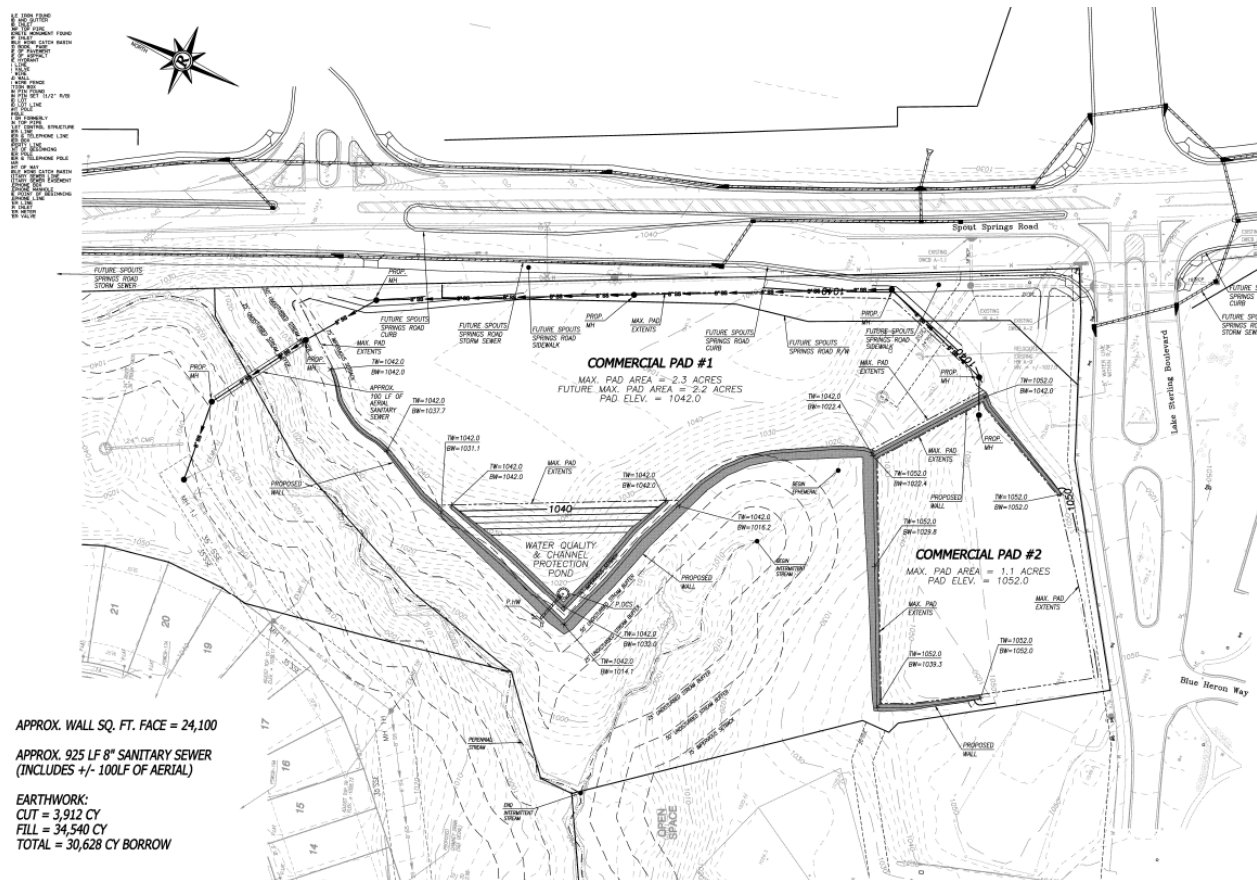
The site plan meets many of the standards the City looks for regarding layout and design. It contains sidewalks throughout, a central passive park, alley fed lots that face the street or the greenspace. The townhomes do not exceed the City desired runs of six and have two car garages. The only deficiency is a lack of extra parking for guests.



If approved, the commercial would be reduced to 4 +/- acres. Access to sites per applicant: When the commercial was discussed with GDOT they initially were ok with the plan to create (1) Right in/Right out on Spout Springs and potentially (1) right in only. The upper parcel would have a drive onto Lake Sterling Blvd. likely aligned with the breaks in the center islands to allow for left out egress from the site.

Site Concept plans will be submitted when the site is fully contracted, and a potential developer has completed site design.

GDOT was not comfortable with multiple Right in Right out entries on Spout Springs with the Church entry across the way and the traffic routing planned (Michigan Left) which has been a serious issue with the Capitola Farm Corner sites since the road improvements have been design and begun. Commercial and retail developers want direct access to Spout Springs, and the median and one-way directional limitations are a negative we have been unable to overcome.





A close-up of the area where the townhomes/reduced commercial would be located if approved.





The status of the overall development if the townhome project is approved. The original overall unit count is limited to 2,000. If approved, the townhome development would push that number to 2,018.

POD BREAKDOWN										1/14/2021
POD	40'	45/50	55/60	65	70/75	80/90	100	TH	ESTATE	TOTAL
MHP			5		5	7				17
A				85						85
B				69						69
C			48	37						85
D					30	9				39
E					32	39	7			78
F					31	20				51
G			6	32	24		6			68
H					76					76
I					43		9			52
J					75					75
K					45					45
L&M			38							38
N		74								74
O		44								44
P	22									22
Q	82									82
R								16		16
S							14			14
T		20	45	41						106
U			58	78						136
V&W		41		34	39					114
X						79				79
Y						36				36
Z									49	49
KNUTSON		108	35							143
POD Z12		22	20							42
HONEYCUT		178								178
BRAGG		36								36
J **						4				4
Capitola TH								65		65
TOTAL ALL	104	523	255	376	400	194	36	81	49	2018
Percent Total Lots	5%	26%	13%	19%	20%	10%	2%	4%	2%	Exceeds Zoning
									Difference	-18
							Zoning	2 units/acre		1007.91
							Zoned Units based upon 2/ace			2016



Traffic Impact Study

Staff has not requested a traffic study at this time due to the relatively small number of homes proposed. If Mayor and Council would like a study performed it is appropriate to make this request if it is done in a timely manner.

Staff Recommendation

Staff recommends approval with the following conditions:

1. All conditions of zoning as set forth in Ordinances 239 and 240 and all subsequent and relevant modifications shall apply to the development.
2. Townhomes shall be limited to runs of no more than six.
3. Development shall generally adhere to the site plan as submitted.
4. Driveways shall be 23' as measured from the back of curb.
5. Front entrance plans shall be submitted at the time of, or prior to, applications for monument signs. Said plans shall clearly describe and show the precise landscaping proposed.
6. Townhomes shall be constructed in a manner that significantly adheres to the elevations as submitted.
 - A. Material shall be limited to brick, stacked stone, cementitious fiber board, and board and batten.
 - B. Elevations shall be submitted for each townhome at the time of permit.
 - C. Architectural shingles shall be used throughout the development.



Commercial Parcels Marketing Timeline

June 2002:

NNP-Looper Lake, LLC (“NNP”) purchases the property that will become Sterling on the Lake

2003-2004:

NNP negotiates with Hall County for potential Library and YMCA locations

2005:

NNP enters into contract with Hall County for Library location

NNP establishes Commercial sales strategy for additional parcels

May 2006:

Commercial appraisals performed by:

- Carr, Lawson, Cantrell & Associates, Inc.
- Metro Appraisals, Inc.

Hall County Library parcel closes

2006-2012:

Commercial marketing paused due to economic conditions

May 2012:

NNP enters into Commercial Listing Agreement with Resource Real Estate Partners, LLC

- Agreement expires and is not extended due to minimal interest from potential purchasers

2013:

NNP engages Real Estate Economics to perform a Market Study, which determines that interest in commercial site is not sufficient to resume actively marketing the parcels

2016-2018:

NNP team resumes marketing the commercial parcels:

- Develops “Commercial Opportunities” brochure for potential buyers
- Places signs on the commercial parcels with contact information for NNP office
- Clears & grades sites
- Tracks interested end users / tenants and forwards details to potential commercial developers
- Engages The Nielson Company to provide Demographic Data reporting
- Engages HGOR to develop conceptual site plans
- Engages Hyatt & Stubblefield to develop governing documents for the Commercial Properties
- Collaborates with Newland’s Vice President of Commercial Real Estate to market the parcels to Newland’s commercial partners across the country

August 2018-Present:

NNP enters into Commercial Listing Agreement with The Norton Agency

- Norton aggressively markets the commercial tracts locally and nationally through advertising, signage, trade shows and networking and provides weekly status updates to NNP team

NNP continues to work with Newland’s Vice President of Commercial Real Estate to present the parcels to Newland’s commercial partners across the country



Community Pool Comparison and Amenity Overview

Community	# Units	Pools	Units per Pool
<i>Sterling on the Lake</i>	2018	5	404
Reunion	800	2	400
Villages at Deaton Creek	1150	2	575
Del Webb - Chateau Elan	850	2	425
Mundy Mill	1136	2	568
Cresswind Lanier	934	2	467
Twin Lakes - Hoschton	2100	3	700
Sterling Amenity Overview			
	ZONING	STERLING	
Open Space	20%	30%	
Walking Jogging Trail	Yes	Yes	3 miles +/-
Passive Parks	Yes	Yes	4 ac Linear Park, 6+ Pocket Parks
Lake Activities	Yes	Yes	Fishing, Boating
Recreation Centers	Yes	Yes	Main Clubhouse, The Lodge, The Retreat, Lakeside Pavillion
Lifestyles	Yes	Yes	
Interconnecting Sidewalks	Yes	Yes	
Neighborhood Connectivity	Yes	Yes	
Gate Option	Yes	Yes	The Retreat/Honeycutt
Pod X - Pool/Playground/Tennis	Yes	Yes	
Honeycutt - Tennis	Yes	Yes	
Lower Lake Available Recreation	Yes	Yes	Fishing, Boating
Lake Side Pavillion	NO	Yes	Large Pavillion with fireplace and benches
Fire Pit	NO	Yes	(1) Current, plus (1) new in the Retreat
Tennis Courts	4	12	
Playgrounds	NO	4	
Tree House	NO	Yes	(1) Custom built tree house
Private Gazebo	NO	Yes	(1) Pod X entry

Public Hearing Published 03/10/21
Public Hearing 04/01/21

First Reading 05/20/21
Adopted 06/17/21

ORDINANCE NO. 239-L & 240-L

AN ORDINANCE AMENDING THE CONCEPTUAL SITE PLAN AND CONDITIONS OF APPROVAL RELATING TO ORDINANCE NUMBERS 239 AND 240, FOR THE MASTER PLANNED COMMUNITY KNOWN AS “STERLING ON THE LAKE”. THE REQUEST IS TO AMMEND THE PUD ZONING ON AN 8+/- ACRE PORTION OF A PIECE OF REAL PROPERTY IDENTIFIED AS TAX PARCEL 15047 0000885. THE REQUEST IS TO ALTER THE APPROVED CONDITIONS BY ALLOWING A RESIDENTIAL USE ON THE SUBJECT PROPERTY. SUBJECT PROPERTY IS SHOWN ON ATTACHED EXHIBIT “A” AND LEGALLY DESCRIBED ON ATTACHED EXHIBIT “B” AND SHALL BE SUBJECT TO ALL CONDITIONS SET FORTH AND SHOWN ON ATTACHED EXHIBIT “C”; PROVIDING FOR FINDINGS, SEVERABILITY, REPEALING CONFLICTING ORDINANCES, AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, NNP-Looper Lake, LLC owns all that tracts or parcels of land totaling 8+/- acres identified as Parcel Tax Identification No.15047 000885. Parcels are shown on Exhibit “A”, and as legally described on Exhibit “B”; and

WHEREAS, specific conditions shall be placed on subject parcels as shown on attached exhibit “C”; and

WHEREAS, the City Council of the City of Flowery Branch has considered the application of NNP-Looper Lake, LLC in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, the City Council held a public hearing at the meeting of April 1, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed modified rezoning of the current PUD (Planned Unit Development) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property could be used in accordance with the existing regulations and has a reasonable economic use as currently zoned PUD.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current zoning as opposed to the modified PUD.
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the change in zoning district map, or change in use, on the character of a zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The rezoning of the subject parcel, as shown on Exhibit “A” and as legally described in Exhibit “B”, to a modified PUD (Planned Unit Development). Conditions as set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 17th day of June 2021.

James M. Miller, Mayor

ATTEST

Vickie Short, City Clerk

APPROVED AS TO FORM

E. Ronald Bennett, Jr., City Attorney

A.2

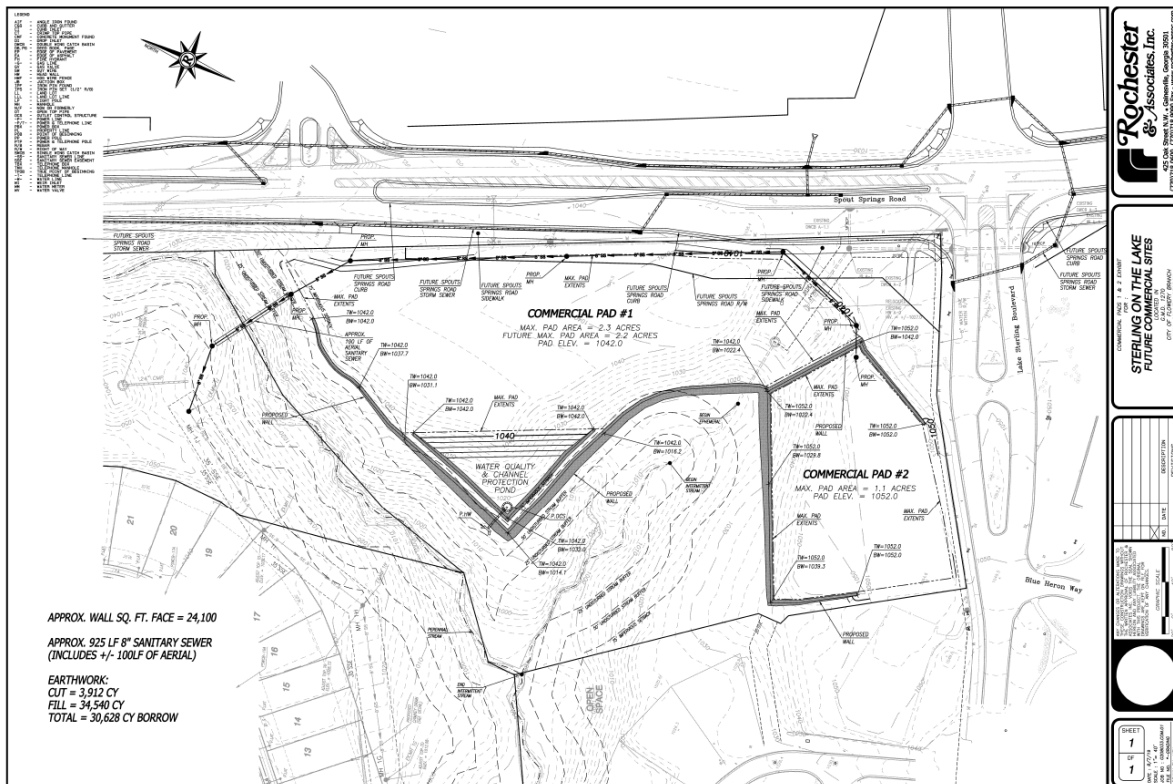


Exhibit "B"

Legal Description

All that tract or parcel of land lying and being in G.M.D. 1270, City of Flowery Branch, Hall County, Georgia and being more particularly described as follows:

BEGINNING at the intersection of the southwestern Right-of-Way of Spout Springs Road (R/W varies) and the southeastern Right-of-Way of Capitola Farm Road (60' R/W); thence continuing along the southwesterly Right-of-Way of said Spout Springs Road South 25°37'24" East, a distance of 663.05 feet to a point; thence leaving said Right-of-Way and into the property now or formerly of NNP-Looper Lake, LLC South 51°28'20" West, a distance of 108.90 feet to a point; thence South 42°12'06" West, a distance of 64.95 feet to a point; thence South 16°35'34" West, a distance of 130.73 feet to a point; thence South 09°33'49" West, a distance of 138.31 feet to a point; thence South 14°03'35" East, a distance of 40.07 feet to a point; thence South 50°05'27" East, a distance of 133.00 feet to a point; thence South 71°36'03" West, a distance of 118.77 feet to a point; thence along the property now or formerly of Sterling on the Lake, Pod O North 16°21'56" West, a distance of 153.60 feet to a point; thence along the property now or formerly of Sterling on the Lake, Pod Q, Phase 2, Pod P North 10°14'19" West, a distance of 148.44 feet to a point; thence North 09°13'44" West, a distance of 119.09 feet to a point; thence North 12°07'47" East, a distance of 26.45 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 01°27'17" East, a distance of 57.67 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 09°46'11" West, a distance of 63.59 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 21°32'36" West, a distance of 63.59 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence South 62°34'11" West, a distance of 95.00 feet to a point; thence 164.12 feet along an arc of a curve to the left having a radius of 215.00 feet and a chord bearing and distance of North 49°17'54" West, 160.16 feet to a point; thence North 71°09'59" West, a distance of 63.20 feet to a point; thence 223.30 feet along an arc of a curve to the left having a radius of 395.00 feet and a chord bearing and distance of North 87°21'42" West, 220.34 feet to a point; thence North 19°04'20" West, a distance of 87.48 feet to a point; thence North 31°15'55" West, a distance of 102.02 feet to a point on the southeastern Right-of-Way of said Capitola Farm Road; thence along said Right-of-Way 51.29 feet along an arc of a curve to the left having a radius of 733.26 feet and a chord bearing and distance of North 54°33'32" East, 51.28 feet to a point; thence North 52°33'19" East, a distance of 159.85 feet to a point; thence 63.52 feet along an arc of a curve to the right having a radius of 431.40 feet and a chord bearing and distance of North 56°46'25" East, 63.47 feet to a point; thence North 60°59'32" East, a distance of 33.91 feet to a point; thence 480.02 feet along an arc of a curve to the right having a radius of 268.83 feet and a chord bearing and distance of North 71°54'29" East, 47.96 feet to a point; thence North 77°01'33" East, a distance of 296.98 feet to the *Point of Beginning*.

Said tract contains 8.150 Acres.

Exhibit “C”
Conditions of Zoning

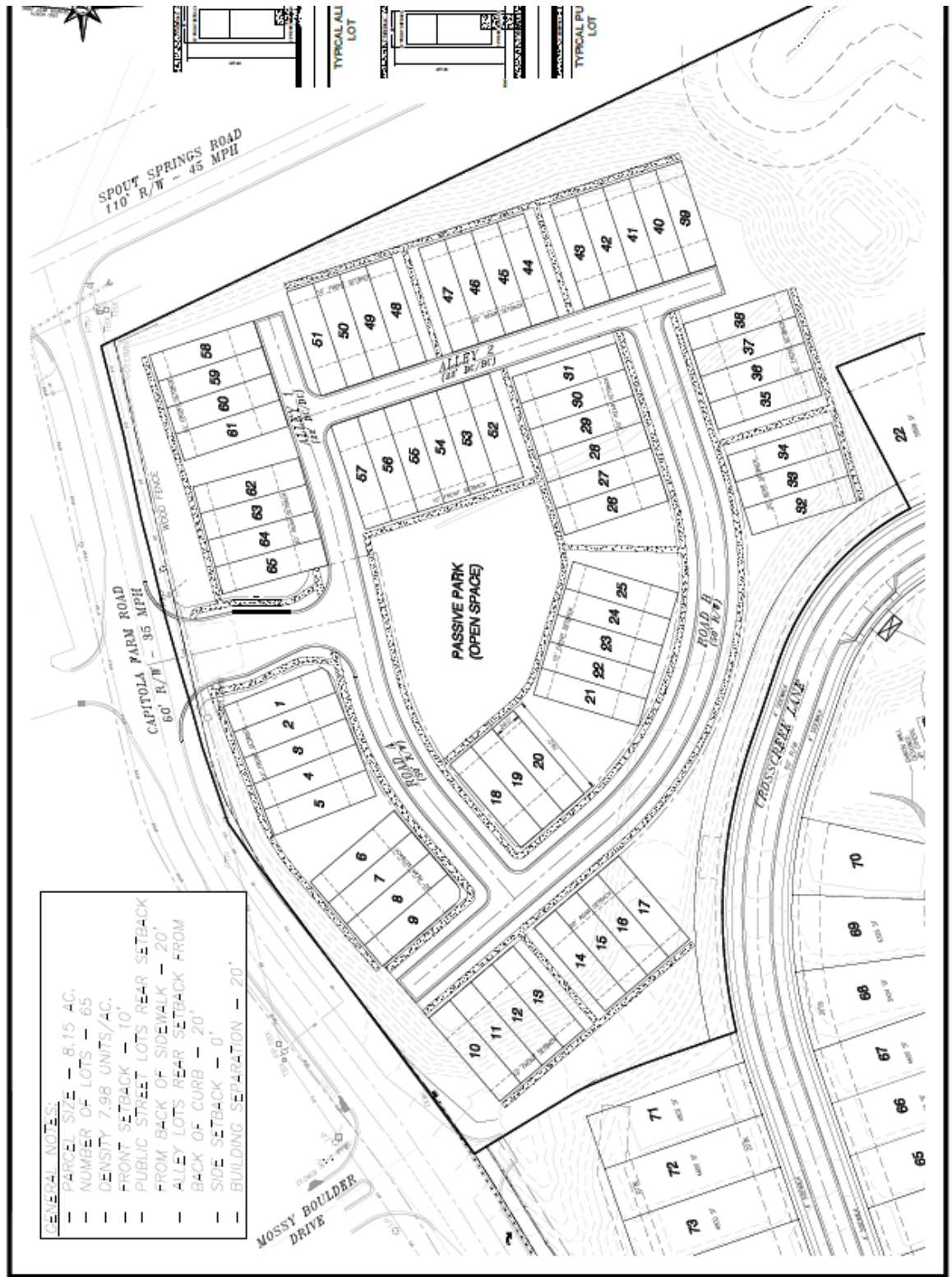
1. All conditions of zoning as set forth in Ordinances 239 and 240 and all subsequent and relevant modifications shall apply to the entire parcel except for the following changes:
 - A. Portion of parcel as shown as “Exhibit A; A.1”
 - 1) Shall be granted permission to construct townhomes.
 - 2) Townhomes shall significantly adhere to the renderings as shown below:





DISCLAIMER: THESE DRAWINGS ARE CONCEPTUAL AND SUBJECT TO CHANGE, NOT INTENDED FOR CONSTRUCTION.

3) Layout of townhomes shall generally adhere to the site plan as shown below:



- B. Portion of parcel as shown as “Exhibit A; A.2” shall adhere to all previously approved commercial conditions but shall no longer allow gas station as an allowed use.



FLOWERY BRANCH CITY COUNCIL



EXECUTIVE SUMMARY

SUBJECT: First Read of the rezoning request submitted by Mr. Bill Stark. Request is to rezone six parcels totaling 118 +/- acres from M-1 (Light Industrial) to R-3 (Multi-Family) with the intention to construct a residential community consisting of single family detached homes and townhomes. The request includes six (6) parcels and therefore requires six (6) corresponding ordinances. The ordinances are 625, 626, 627, 628 (encompassing phase one), and 629, 630 (encompassing phase two).

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

Tracts were rezoned from R-2 (Residential) to M-1 (Light Industrial) with the intent to construct an industrial park in 2014. The industrial park was never constructed. Although a site plan was not include in the rezoning(s) of 2014, one was recently crafted for the City by Rochester and Associates, Inc. to show a potential layout for an industrial site (see attached - AIM Potential M1 Layout by Rochester). Please note this plan includes additional parcels of land that are not included in the Bill Stark rezoning request.

March 18, 2021 work session discussion concerning buffers (plan attached below).

Updated May traffic study is attached.

FACTS AND ISSUES:

In reviewing the initial submittal Staff had concerns regarding the lack of connectivity between the two phases. Applicant would need to acquire additional land in order to connect the phases.

The applicant needs to have the entirety of the six parcels properly zoned for a higher density single family detached/townhome subdivision (R3) as part of the purchase agreement. The applicant is hesitant to acquire more land without having the proper zoning designation in place. In order to achieve this goal, and still meet the City's desire for a cohesive two-phase development, staff recommends rezoning all six parcels to the requested R3 zoning, but restricting phase two (parcels 08117 002001 & 08134 000006) as follows:

1. No permits shall be issued unless connectivity with phase one is achieved in a manner satisfactory to Flowery Branch Mayor and Council.
2. A revised site plan shall be submitted to Mayor and Council for approval prior to the issuance of any permits.
3. Elevations shall be submitted and approved by Mayor and Council prior to the issuance of any permits.
4. Ordinances 629 and 630 shall be amended prior to the final read to reflect the approved site plan, approved elevations, and all conditions as set forth by Mayor and Council.

OPTIONS:

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

No

AMOUNT AND SOURCE OF FUNDS:

RECOMMENDATION:

Approve as submitted and conditioned.

SAMPLE MOTION:

I make a motion to approve the first reading of ordinance 625 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 626 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 627 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 628 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 629 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 630 as submitted and conditioned.

COLLABORATING DEPARTMENT:

DEPARTMENT: Planning

Prepared by: Vickie Short

ATTACHMENTS

- [Scanned complete rezoning application packet.pdf](#)
- [Combined pdf.pdf](#)
- [original layout & TSW suggestions.pdf](#)
- [AIM Potential M1 Layout by Rochester.pdf](#)
- [Staff Report .pdf](#)
- [March 18 Buffer Plan.pdf](#)
- [Mulberry Street Site Plan - including access RW \(markup\).pdf](#)
- [Mulberry Flowery Branch Subdivision Traffic Impact Study.pdf](#)
- [Combined 625-630 Incomplete for FIRST READ.pdf](#)



Development Planning & Engineering, Inc.

Letter of Intent
City of Flowery Branch
Mulberry Street

20-085



Development Planning & Engineering, Inc.

Letter of Intent

City of Flowery Branch
Community Development
PO Box 757
Flowery Branch, Georgia 30542

Rich Atkinson
Director of Planning and Community Development

RE: Mulberry Street Tract (Parcel numbers 08117 002008A, 08117002016D, 08117 002016B, 08117 002061, 08117 002001, 08134 000006)

Dear Mr. Atkinson:

Please let this letter serve as our letter of intent to accompany our Rezoning Application for the project located in the 5000 block of Mulberry Street in the City of Flowery Branch, Hall County, Georgia. The proposed use for the property is an approximately 117.9-acre tract that will be completed in two phases. We are proposing Phase 1, with an acreage of 48.15 and 55 single family detached houses along with 140 attached townhomes, yielding a density of 4.33 lots per acre. Phase 2 has a boundary acreage of 69.8 acres with 144 single family detached homes, yielding a density of 2.06 units per acre. We are requesting the subject property be rezoned from the existing M-1 zoning to R3 Residential Multi-Family district.

We request to have the following Development Standards for the proposed project. This illustrates Bill Stark Communities commitment to building a quality development for the City of Flowery Branch and surrounding neighbors.

Proposed Development Standards

Sidewalks	• Five feet in Width on Internal Streets
Proposed Buffer	• 40 Foot Natural Undisturbed Buffer adjacent to Residentially zoned properties as shown on the Zoning Exhibit

Landscape Strip	• 10-foot landscape strip along Mulberry Street with trees and shrubs every 50 linear feet
Driveways	• Driveway width minimum 16 feet
House Square Footage	• 1,600 Square Feet Minimum
Setbacks Minimum Lot & Square Footage	• Single Family Detached • Minimum 6,000 Square Feet Phase 1 • Minimum 6,875 Square Feet Phase 2 • Front Setback 20 feet • Side Setback 5 feet • Rear Setback 25 feet • Townhome- As shown on zoning plan
Architecture	• All Facades to be a combination of brick, stone, and/or concrete siding • Minimum 2-foot brick water table • Architectural Shingles • Minimum of a Two Car Garage
Landscaping	• Landscaped Entrance • Front, Side and Rear Yards shall be sodded • All lawn and common area maintenance provided by a Mandatory HOA within attached townhome portion • All common area maintenance provided by a Mandatory HOA within the single-family subdivision (Phase 1 & Phase 2)
Proposed Amenities	• Parks and natural areas located within Phase 1 and Phase 2 • Active Amenity, walking path, dog park and large central park in Phase 1 • Recreation Area in Phase 2

According to the City of Flowery Branch comprehensive plan, housing should be “diverse and affordable housing that meets the needs of existing and future city residents, with a desirable mix of housing types, detached, single-family and townhouses. For planned traditional neighborhoods, acceptable uses are primarily single-family residences. Duplexes, townhouses, and accessory apartments may be permitted. Greens, plazas, and pocket parks incorporated into development plans.”

We feel that our project supports the spirit of the recommendations of the Comprehensive Plan by providing a mix of housing types and various parks and amenities with 199 single family detached units and 140 townhomes.

YOUR ENGINEERING PARTNER WITH THE *EXPERIENCE* YOU EXPECT AND THE *SERVICE* YOU DESERVE

dpengr.com • 5074 Bristol Industrial Way Suite A Buford, Georgia 30518 • Telephone: 770.271.2868 • Fax: 770.271.0779

We appreciate your consideration of this rezoning request and please do not hesitate to give us a call if you have any questions.

Sincerely,

Tonya Woods
Development Planning and Engineering

YOUR ENGINEERING PARTNER WITH THE *EXPERIENCE* YOU EXPECT AND THE *SERVICE* YOU DESERVE

dpengr.com • 5074 Bristol Industrial Way Suite A Buford, Georgia 30518 • Telephone: 770.271.2868 • Fax: 770.271.0779



Development Planning & Engineering, Inc.

Rezoning Application City of Flowery Branch Mulberry Street

20-085



REZONING APPLICATION

Date: 12/4/2020

Address of Request:

Mulberry Street (Parcels parcels 08117 002008A, 08117002016D, 08117 002016B,
08117 002061, 08117 002001, 08134 000006)

Tax Map # See above Current Zoning: M1

Is this site located within the boundaries of the historic district? No
Yes

Currently a conforming use?

Any conditions of zoning, CUP's, etc.? NA

Applicant Information

Name: Stark Land Development /Development Planning and Engineering

Address: 3719 Winder Highway, Flowery Branch Georgia 30542

5074 Bristol Industrial Way, Suite B, Buford Georgia 30518

E-mail address: billstarkproperties@gmail.com twoods@dpengr.com

Phone number: 770.231.3829 770.271.2868

Signature:

Notary:



Property owner information (if different than the applicant)

Property owner (please print): _____

Signature of property owner: _____

Notary:

Property Information

parcels (08117 002008A, 08117002016D, 08117 002016B, 08117
Tax Map Number: ~~002061, 08117 002001, 08134 000006~~)

Current Zoning: M1 Total Acres: 117.962

Is this property located within the city-limits of Flowery Branch? Yes

Proposed City of Flowery Branch Zoning: R3

Current Use: Vacant Land _____

**Please review the Flowery Branch Code of Ordinances, Appendix C,
“Zoning Ordinance”, Article 34, for complete requirements.**

**Please provide the following at time of submittal in (one hard copy and
digitally):**

- Legal description
- Current survey of property



- Site plan shall meet the requirements of the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.5
- Development statistics per the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.6
- Analysis requirements per the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.7
- Detailed description of request
- Conflict of interest disclosure (attached)
- Disclosure of campaign contributions (attached)
- Names and addresses of adjoining property owners
- Reasons for requesting rezoning
- Signed statement authorizing City of Flowery Branch staff and/or City Council to inspect the subject property

Conflict of Interest Disclosure

Identify all members of the City Council of the City of Flowery Branch and Employees of the City of Flowery Branch Community Development Department who

Have a property interest in the real property affected by this request

Have a financial interest (direct ownership interest) of the total assets or capital stock of a business entity where such ownership interest is more than 10% in any business entity which has a property interest in the real property affected by this request

Have a member of the family (spouse, mother, father, brother, sister, son or daughter) having a property financial interest as herein defined, in the real property affected by this request

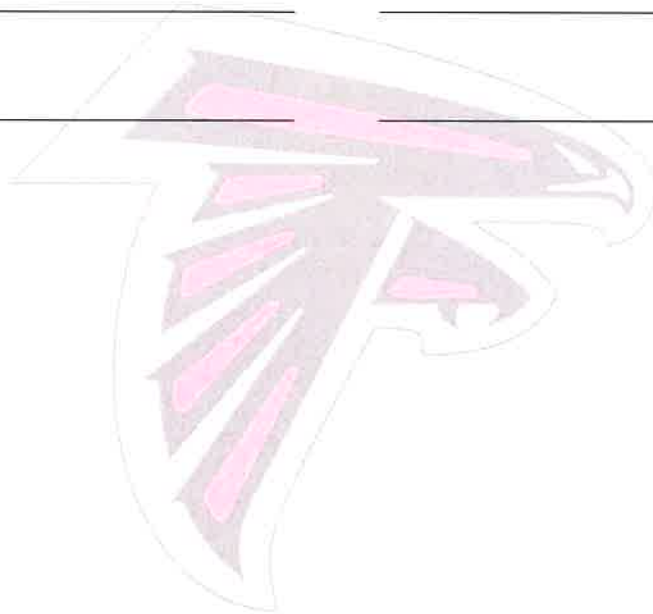


Disclosure of Campaign Contributions

List below the names of local government officials of the City of Flowery Branch to whom campaign contributions were made, within two (2) years immediately preceding the filing of this application, which campaign contributions total \$250.00 or more or to whom gifts were made having a total value of \$250.00 or more.

Elected Officials Name

Amount of Description of Gift



CITY STAFF ONLY

Application Received By: _____

Date: _____ Total Fee: _____





REZONING ADDITIONAL INFORMATION REQUIREMENT

Date:

____12/14/2020_____

Address of Request:

____Mulberry Street_____

Tax Map # ____Multiple parcels_____ Current Zoning: _M1_____

Please submit an analysis of the proposed project including:

1. Value of improvements upon complete build out.
Phase One approximately 44 million, Phase Two approximately 40 million
2. Property tax valuation based upon existing millage rate (indicate total tax expectation if project is phased).
3. Schedule of the total build out (showing a timeline of construction in months/years if project is phased). Phase One approximately 36 months, Phase Two 5 years
4. Anticipated total square footage (heated) to be built in the requested number of units.
542,000 Square feet
5. Total acreage developed with units. 117.96 acres
6. Total acreage for right of way and roads. 5850 linear feet x 50 feet
ROW=292,500 square feet= 6.7148 acres in ROW
7. Total acreage of open space/common area (include plan for maintenance of open space/common area). 19 acres/Phase 1 32 acres/Phase 2
8. Acreage required for buffer and watershed protection.



- Does the buffer comply with the current City ordinance? Yes
 - Do individual property lines for lots extend into the buffer? - Does the Developer intend to dedicate any of the site area to the City? If so, for what purpose? The majority of the stream buffers are located within common area, but there are several lots where the stream buffer encroaches.
9. Does your proposal consider Multi Transportation alternatives? (Please describe in detail) None
10. Please identify all amenities and total number of acres they incorporate by complete description. Multiple open spaces, parks, natural areas, and developed amenities. 19 acres/Phase 1 32 acres/Phase 2
11. Number of street lights and separation table as proposed on your site plan. Approximately 60 street lights
12. Will Technology Development be included in this development? Fiber/Internet/TV
13. List the total linear feet and cubic yards for sidewalks.
- Phase 1
- $5850 \text{ linear feet} \times 2 = 11,700 \times 5 \text{ feet in width} = 58,500 \times .33 \text{ feet} = 19,305 / 27 = 715 \text{ cubic yards}$
- Phase 2
- $7125 \text{ linear feet} \times 2 = 14,250 \times 5 \text{ feet in width} = 71,250 \times .33 \text{ feet} = 23,512 / 27 = 870 \text{ cubic yards}$
14. Are appropriate storm water controls provided in your proposal? Are these controls completely and accurately reflected on all drawings and plans? Conceptual Stormwater facilities shown, to be fully engineered prior to land disturbance permitting



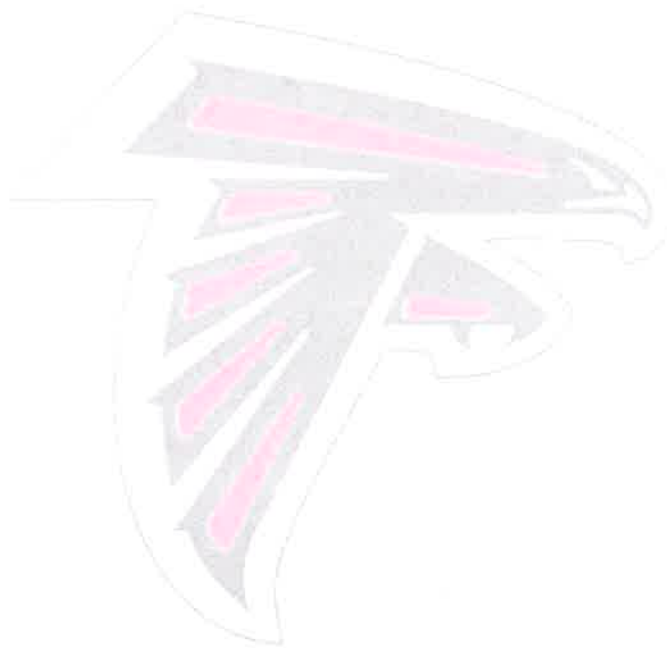
15. Has a transportation/traffic study been done to predict the impact of anticipated traffic? Has the project been reviewed by all appropriate County and State agencies relating to transportation issues? No
16. Does the proposal provide for utilization of “reuse” water? Is this depicted on the plans? Do the plans provide for storage of “reuse” water? No
17. What is the total capacity for daily Wastewater Management? $270 \times 339 = 91,530$ GPD
18. What is the anticipated maximum daily water consumption? Are low flow fixtures required by the development? 270 GPD per day per unit
19. Has a slope and grade study been done on this development? Does the study reflect density placement? Preliminary evaluation
20. Please identify what public safety needs are being considered for the project? NA
21. Has the Hall County School System been notified of the proposed density for this project? Not at this time
22. Please provide a copy of all private covenants and/or architectural guidelines to be filed regarding this development. To be provided
23. Information as required under Ordinance No. 349 for preliminary plat approval if rezoning involves subdivision. Ordinance No. 349 can be found at www.flowerybranchga.org



CITY STAFF ONLY

Received By: _____

Date: _____ Total Fee: _____



Rezoning Applicant's Response

Mulberry Street

Flowery Branch

(a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. *The proposed use of a R3 is suitable in view of the use of nearby properties.*

(b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. *Currently the project is zoned agriculture. The proposed zoning of R3 will not adversely affect the existing use or usability of the adjacent or nearby property.*

(c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. *No, the property does not have a reasonable economic use as currently zoned as industrial.*

(d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. *The proposed zoning of R3, and a planned 199 single family houses and 144 townhomes unit development would not cause an excessive or burdensome use of streets, facilities, utilities or schools.*

(e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. *The City's Comprehensive Plan shows the area being mixed use in nature, but this area would also be conducive to a neighborhood with varying housing types and prices. According to the Plan, one goal is:*

"3. Housing: Protect neighborhoods and promote diverse and affordable housing that meets the needs of existing and future city residents. Techniques to implement this goal include: residential and planned unit development zoning districts, subdivision regulations, community development plans, neighborhood improvement plans and programs, and housing code enforcement."

This R3 zoning district would promote additional housing options within the City.

(f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal. *Additional residential units within this area would further the growth of this part of the City and County. Due to the surrounding property uses, the property would best be suited for a zoning of the R3 zoning classification.*

(g) Existing use(s) and zoning of the subject property and nearby properties. *Within the immediate area, there are commercial and residential uses.*

(h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under

the existing zoning district classification. *This property has been vacant, due to the topography and creeks, the proposed plan encompasses protection of these areas.*

(i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. *This development would not deter improvement of the adjacent properties. It will increase housing options within the area.*

(j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. *This would not create an isolated zoning district. A mix of single family and attached single family is a compatible to the surrounding areas.*

(k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. *No negative effects would arise due to a change in the use or character of this zoning district.*

(l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. *The environmental impact would be minimal, as all local and state municipality ordinances regarding drainage, erosion, flooding, air and water quality would be met. The sensitive areas located within the site have been protected.*

(m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. *The Comprehensive Map provides for this area to be mixed use. The proposed plan will meet the purpose of the zoning ordinance.*



Development Planning & Engineering, Inc.

Legal Description
City of Flowery Branch
Mulberry Street

20-085

LEGAL DESCRIPTION

All that tract or parcel of land lying and being in Land Lot 117 of the 8th District, City of Flowery Branch, Hall County, Georgia and being more particularly described as follows.

Beginning at the Land Lot Corner common to Land Lots 116, 117, 133 and 134; THENCE North 15 degrees 02 minutes 30 seconds East for a distance of 1214.17 feet to a point on the easterly right-of-way of Flowery Way (50' r/w), said point being THE TRUE POINT OF BEGINNING;

THENCE North 54 degrees 28 minutes 51 seconds West a distance of 79.88 feet to a point;

THENCE along a curve to the right for an arc length of 83.93 feet, having a radius of 97.73 feet, being subtended by a chord bearing North 27 degrees 50 minutes 09 seconds West, for a distance of 81.37 feet to a point;

THENCE North 00 degrees 37 minutes 14 seconds East a distance of 37.65 feet to a point;

THENCE along a curve to the left for an arc length of 161.59 feet, having a radius of 1062.34 feet, being subtended by a chord bearing North 02 degrees 23 minutes 32 seconds East, for a distance of 161.43 feet to a point;

THENCE North 59 degrees 21 minutes 52 seconds East a distance of 550.94 feet to a point;

THENCE North 29 degrees 41 minutes 03 seconds West a distance of 227.76 feet to a point;

THENCE North 60 degrees 06 minutes 17 seconds East a distance of 95.98 feet to a point;

THENCE North 05 degrees 32 minutes 20 seconds West a distance of 505.00 feet to a point;

THENCE North 30 degrees 48 minutes 47 seconds West a distance of 200.02 feet to a point;

THENCE North 60 degrees 07 minutes 29 seconds East a distance of 546.35 feet to a point;

THENCE North 61 degrees 45 minutes 30 seconds West a distance of 170.77 feet to a point;

THENCE North 40 degrees 21 minutes 09 seconds East a distance of 281.72 feet to a point;

THENCE North 62 degrees 53 minutes 14 seconds West a distance of 366.82 feet to a point;

THENCE North 08 degrees 38 minutes 44 seconds West a distance of 3.72 feet to a point;

THENCE North 34 degrees 56 minutes 31 seconds East a distance of 32.42 feet to a point;

THENCE North 56 degrees 32 minutes 25 seconds East a distance of 104.80 feet to a point;

THENCE North 27 degrees 43 minutes 17 seconds East a distance of 60.76 feet to a point;

THENCE North 39 degrees 43 minutes 06 seconds East a distance of 52.39 feet to a point;

THENCE North 46 degrees 23 minutes 29 seconds East a distance of 104.80 feet to a point;

THENCE North 45 degrees 36 minutes 51 seconds East a distance of 102.84 feet to a point;

THENCE North 60 degrees 29 minutes 30 seconds East a distance of 49.12 feet to a point;

THENCE North 54 degrees 07 minutes 44 seconds East a distance of 93.75 feet to a point;

THENCE North 42 degrees 33 minutes 43 seconds East a distance of 80.31 feet to a point located on the westerly right-of-way of Mulberry Street;

THENCE South 21 degrees 44 minutes 30 seconds East a distance of 175.25 feet along said right-of-way to a point;

THENCE along a curve to the right for an arc length of 313.04 feet, having a radius of 2200.00 feet, being subtended by a chord bearing South 17 degrees 39 minutes 56 seconds East, for a distance of 312.77 feet along said right-of-way to a point;

THENCE South 13 degrees 35 minutes 21 seconds East a distance of 195.20 feet along said right-of-way to a point;

THENCE along a curve to the left for an arc length of 57.05 feet, having a radius of 2300.00 feet, being subtended by a chord bearing South 14 degrees 18 minutes 00 seconds East, for a distance of 57.05 feet along said right-of-way along said right-of-way to a point;

THENCE South 15 degrees 10 minutes 26 seconds East a distance of 185.01 feet along said right-of-way to a point;

THENCE South 56 degrees 37 minutes 14 seconds West a distance of 346.80 feet leaving said right-of-way to a point;

THENCE South 58 degrees 04 minutes 45 seconds East a distance of 70.72 feet to a point;

THENCE South 33 degrees 41 minutes 04 seconds East a distance of 326.98 feet to a point;

THENCE North 68 degrees 43 minutes 53 seconds East a distance of 204.17 feet to a point located on the southwesterly right-of-way of Mulberry Street;

THENCE South 34 degrees 22 minutes 19 seconds East a distance of 56.13 feet along said right-of-way to a point;

THENCE South 50 degrees 07 minutes 20 seconds East a distance of 100.00 feet along said right-of-way to a point;

THENCE South 59 degrees 48 minutes 22 seconds East a distance of 100.00 feet along said right-of-way to a point;

THENCE South 59 degrees 21 minutes 30 seconds West a distance of 309.92 feet leaving said right-of-way to a point;

THENCE South 48 degrees 30 minutes 26 seconds East a distance of 170.07 feet to a point;

THENCE North 47 degrees 46 minutes 21 seconds East a distance of 318.84 feet to a point located on the southwesterly right-of-way of Mulberry Street;

THENCE along a curve to the right for an arc length of 94.92 feet, having a radius of 425.00 feet, being subtended by a chord bearing South 53 degrees 05 minutes 41 seconds East, for a distance of 94.72 feet along said right-of-way to a point;

THENCE South 46 degrees 41 minutes 47 seconds East a distance of 67.27 feet along said right-of-way to a point;

THENCE South 47 degrees 35 minutes 36 seconds West a distance of 347.20 feet leaving said right-of-way to a point;

THENCE South 27 degrees 38 minutes 32 seconds East a distance of 367.62 feet to a point;

THENCE South 60 degrees 15 minutes 22 seconds West a distance of 649.98 feet to a point;

THENCE South 60 degrees 16 minutes 13 seconds West a distance of 352.85 feet to a point;

THENCE North 48 degrees 12 minutes 16 seconds West a distance of 30.32 feet to a point;

THENCE North 02 degrees 53 minutes 11 seconds West a distance of 24.24 feet to a point;

THENCE North 24 degrees 11 minutes 12 seconds West a distance of 30.92 feet to a point;

THENCE North 40 degrees 44 minutes 55 seconds East a distance of 27.08 feet to a point;

THENCE North 07 degrees 29 minutes 14 seconds East a distance of 37.47 feet to a point;

THENCE North 56 degrees 00 minutes 04 seconds West a distance of 35.03 feet to a point;

THENCE South 78 degrees 44 minutes 58 seconds West a distance of 37.19 feet to a point;

THENCE North 10 degrees 05 minutes 48 seconds West a distance of 14.68 feet to a point;

THENCE North 11 degrees 22 minutes 48 seconds East a distance of 35.30 feet to a point;

THENCE North 06 degrees 31 minutes 58 seconds East a distance of 20.38 feet to a point;

THENCE North 39 degrees 32 minutes 23 seconds West a distance of 28.59 feet to a point;

THENCE North 04 degrees 29 minutes 41 seconds West a distance of 33.89 feet to a point;

THENCE North 00 degrees 17 minutes 51 seconds West a distance of 39.43 feet to a point;

THENCE North 04 degrees 15 minutes 12 seconds East a distance of 30.56 feet to a point;

THENCE South 60 degrees 19 minutes 46 seconds West a distance of 742.04 feet to a point, said point being THE TRUE POINT OF BEGINNING.

Said tract contains an area of 48.156 acres more or less.

Together with:

All that tract or parcel of land lying and being in Land Lot 116 and 117 of the 8th District, City of Flowery Branch, Hall County, Georgia and being more particularly described as follows.

Beginning at the Land Lot Corner common to Land Lots 116, 117, 133 and 134; THENCE South 30 degrees 22 minutes 57 seconds East for a distance of 1101.65 feet to a point; THENCE South 30 degrees 21 minutes 16 seconds East for a distance of 218.48 feet to a point, said point being THE TRUE POINT OF BEGINNING;

THENCE North 48 degrees 22 minutes 48 seconds East a distance of 875.57 feet to a point;
THENCE North 11 degrees 52 minutes 38 seconds East a distance of 26.55 feet to a point;
THENCE North 50 degrees 18 minutes 59 seconds East a distance of 47.92 feet to a point;
THENCE North 01 degrees 30 minutes 02 seconds West a distance of 62.59 feet to a point;
THENCE North 13 degrees 27 minutes 39 seconds East a distance of 69.62 feet to a point;
THENCE North 73 degrees 24 minutes 27 seconds East a distance of 32.42 feet to a point;
THENCE North 28 degrees 33 minutes 29 seconds West a distance of 42.32 feet to a point;
THENCE North 17 degrees 38 minutes 29 seconds East a distance of 31.76 feet to a point;
THENCE North 32 degrees 22 minutes 06 seconds East a distance of 80.36 feet to a point;
THENCE North 74 degrees 02 minutes 00 seconds East a distance of 46.63 feet to a point;
THENCE North 12 degrees 58 minutes 57 seconds East a distance of 49.55 feet to a point;
THENCE North 07 degrees 31 minutes 42 seconds West a distance of 50.45 feet to a point;
THENCE North 30 degrees 16 minutes 15 seconds East a distance of 26.90 feet to a point;
THENCE North 10 degrees 19 minutes 38 seconds West a distance of 26.62 feet to a point;
THENCE North 58 degrees 48 minutes 33 seconds East a distance of 24.02 feet to a point;
THENCE North 41 degrees 18 minutes 24 seconds East a distance of 34.46 feet to a point;
THENCE North 16 degrees 53 minutes 06 seconds West a distance of 36.79 feet to a point;
THENCE North 77 degrees 44 minutes 30 seconds East a distance of 26.19 feet to a point;
THENCE North 06 degrees 55 minutes 46 seconds East a distance of 19.96 feet to a point;
THENCE North 58 degrees 22 minutes 20 seconds East a distance of 32.80 feet to a point;
THENCE North 52 degrees 55 minutes 19 seconds East a distance of 39.42 feet to a point;
THENCE North 44 degrees 28 minutes 57 seconds East a distance of 28.81 feet to a point;
THENCE North 38 degrees 27 minutes 51 seconds East a distance of 28.60 feet to a point;
THENCE North 63 degrees 30 minutes 30 seconds West a distance of 21.24 feet to a point;
THENCE North 14 degrees 15 minutes 36 seconds West a distance of 47.62 feet to a point;
THENCE North 41 degrees 07 minutes 00 seconds East a distance of 23.46 feet to a point;
THENCE North 08 degrees 45 minutes 20 seconds West a distance of 35.65 feet to a point;
THENCE North 10 degrees 03 minutes 40 seconds East a distance of 44.66 feet to a point;
THENCE North 13 degrees 34 minutes 23 seconds West a distance of 63.51 feet to a point;
THENCE South 72 degrees 35 minutes 22 seconds West a distance of 35.85 feet to a point;
THENCE North 27 degrees 17 minutes 06 seconds East a distance of 43.82 feet to a point;
THENCE North 29 degrees 54 minutes 21 seconds West a distance of 49.61 feet to a point;
THENCE North 26 degrees 51 minutes 13 seconds West a distance of 95.89 feet to a point;
THENCE North 17 degrees 28 minutes 07 seconds West a distance of 55.39 feet to a point;
THENCE North 23 degrees 53 minutes 55 seconds West a distance of 149.25 feet to a point;
THENCE North 17 degrees 29 minutes 34 seconds West a distance of 47.91 feet to a point;
THENCE North 31 degrees 06 minutes 18 seconds West a distance of 33.89 feet to a point;

THENCE North 12 degrees 15 minutes 25 seconds West a distance of 26.69 feet to a point;
 THENCE North 65 degrees 43 minutes 13 seconds East a distance of 21.21 feet to a point;
 THENCE North 60 degrees 10 minutes 55 seconds East a distance of 787.01 feet to a point;
 THENCE North 21 degrees 58 minutes 54 seconds West a distance of 529.33 feet to a point;
 THENCE North 50 degrees 49 minutes 21 seconds East a distance of 298.67 feet to a point;
 THENCE South 42 degrees 11 minutes 33 seconds East a distance of 439.12 feet to a point;
 THENCE North 47 degrees 05 minutes 23 seconds East a distance of 201.10 feet to a point located on the southwesterly right-of-way of Mulberry Street;
 THENCE South 46 degrees 31 minutes 54 seconds East a distance of 178.61 feet along said right-of-way to a point;
 THENCE South 56 degrees 13 minutes 11 seconds West a distance of 409.48 feet leaving said right-of-way to a point;
 THENCE South 21 degrees 49 minutes 31 seconds East a distance of 400.05 feet to a point;
 THENCE along a curve to the left for an arc length of 289.42 feet, having a radius of 60.00 feet, being subtended by a chord bearing South 09 degrees 09 minutes 33 seconds East, for a distance of 80.01 feet to a point;
 THENCE North 80 degrees 50 minutes 59 seconds East a distance of 12.88 feet to a point;
 THENCE South 14 degrees 42 minutes 21 seconds East a distance of 467.39 feet to a point located on the northwesterly right-of-way of Lanier Parkway State Hwy. #365 (I-985);
 THENCE South 31 degrees 59 minutes 20 seconds West a distance of 146.27 feet along said right-of-way to a point;
 THENCE South 29 degrees 20 minutes 32 seconds West a distance of 506.50 feet along said right-of-way to a point;
 THENCE South 36 degrees 25 minutes 35 seconds West a distance of 258.07 feet along said right-of-way to a point;
 THENCE South 20 degrees 56 minutes 49 seconds West a distance of 240.77 feet along said right-of-way to a point;
 THENCE South 36 degrees 05 minutes 29 seconds West a distance of 215.20 feet along said right-of-way to a point;
 THENCE North 67 degrees 12 minutes 40 seconds West a distance of 10.00 feet along said right-of-way to a point;
 THENCE South 22 degrees 47 minutes 20 seconds West a distance of 701.09 feet along said right-of-way to a point;
 THENCE South 30 degrees 41 minutes 18 seconds West a distance of 300.64 feet along said right-of-way to a point;
 THENCE South 23 degrees 03 minutes 37 seconds West a distance of 301.00 feet along said right-of-way to a point;
 THENCE South 26 degrees 52 minutes 28 seconds West a distance of 325.95 feet along said right-of-way to a point;
 THENCE North 30 degrees 22 minutes 57 seconds West a distance of 1255.51 feet leaving said right-of-way to a point, said point being THE TRUE POINT OF BEGINNING.

Said tract contains an area of 69.806 acres more or less.



Development Planning & Engineering, Inc.

Adjacent Property Owners
City of Flowery Branch
Mulberry Street

20-085



Development Planning & Engineering, Inc.

Adjacent Property Owners
Mulberry Street Rezoning
M1-R3

08117 002053
DONALD SHANE JONES
5533 OAKFERN TRL
FLOWERY BRANCH, GA 30542

08117 002052
CNC PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS ROAD
BUFORD, GA 30518

08117 002051
CARL N. CLARK ESTATE PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS ROAD
BUFORD, GA 30518

08117 002050
CNC PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS ROAD
BUFORD, GA 30518

08117 002049
WILLIAM TERRY MOONEY
MOONEY JOAN
BOX 307 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08117 002062
GLORIA ANN PEAK
2640 LANIER BEACH SOUTH RD.
CUMMING, GA 30041

08117 002016L
GARY LEE PRUITT
5693 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08117 002016E
ELIZABETH I JOHNSON
5707 FLOWERY BRANCH WAY
FLOWERY BRANCH, GA 30542

08117 002042
LILLIE RHONDA MCKENZIE
MCKENZIE JOHN R
5733 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000009
DERRELL CHASTAIN
5737 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000013
ROBERT WAYNE CARROLL III
P O BOX 15424
CHESAPEAKE, VA 23328

08116 000037
CATHY E LONGINO
JOINER NANCY E
6533 BEARING DRIVE
FLOWERY BRANCH, GA 30542

08116 000038
MARTHA N SPARKS
6526 BEARING DRIVE
FLOWERY BRANCH, GA 30542

08116 000043
MICHAEL ERNEST PEKRUL
PEKRUL, SHEILA
6467 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000044
MARIA L WOLSCHLEGER
6473 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000046
ANNA L ROSADO
ROSADO JR EDWIN D
6485 FLOWERY WAY
FLOWERY BRANCH, GA 30542

YOUR ENGINEERING PARTNER WITH THE **EXPERIENCE** YOU EXPECT AND THE **SERVICE** YOU DESERVE

dpengr.com • 5074 Bristol Industrial Way Suite A Buford, Georgia 30518 • Telephone: 770.271.2868 • Fax: 770.271.0779

08116 000047
KEITH HENRY WEIMER
KARANTZA, KIMBERLY ANN
6501 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000048
CHRISTOPHER PAUL ZETROUER
ZETROUER, TONYA
6512 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000023
THE CHARLES D. & SHIRLEY L. TITSHAW FAMI
1840 MADDOX ROAD
HOSCHTON, GA 30548

08117 002001A
JACOBO VITAL
VITAL MARIA M
5656 MULBERRY STREET
FLOWERY BRANCH, GA 30542

08117 002002
RICKEY L PAYNE
5648 MULBERRY STREET
FLOWERY BRANCH, GA 30542

08117 002005
CARLTON G BINGHAM
P O BOX 61
FLOWERY BRANCH, GA 30542

08117 002003
EDMOND JUNIOR BINGHAM
BINGHAM SANDRA K
5632 MULBERRY ST
FLOWERY BRANCH, GA 30542

08117 002019
TEX R PENLAND
5602 MULBERRY ST
FLOWERY BRANCH, GA 30542

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08117 002016C
JOHNNY A MCCLURE
P O BOX 44
FLOWERY BRANCH, GA 30542

08117 002016A
SUE C. CLARK PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS
BUFORD, GA 30518

08117 002006
CARL N. CLARK ESTATE PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS
BUFORD, GA 30518

08117 002007
BAILEY FAMILY ENTERPRISES, LLC
P.O. BOX 868
FLOWERY BRANCH, GA 30542

08117 002012
BAILEY FAMILY ENTERPRISES, LLC
P.O. BOX 868
FLOWERY BRANCH, GA 30542

08117 002010
DARRELL K TERRY
P O BOX 420
FLOWERY BRANCH, GA 30542

08117 002015
JW BAILEY FAMILY PARTNERSHIP LLC
P.O. BOX 267
FLOWERY BRANCH, GA 30542

08117 002059
JW BAILEY FAMILY PARTNERSHIP LLC
P.O. BOX 267
FLOWERY BRANCH, GA 30542

08117 002048
CARL N CLARK
6164 LAKE LANIER HEIGHTS ROAD
BUFORD, GA 30518

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08116 000045
JOHN W MARSHALL
MARSHALL BILLIE J
6479 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000022 and
08116 000023
THE CHARLES D. & SHIRLEY L. TITSHAW FAMI
1840 MADDUX ROAD
HOSCHTON, GA 30548

YOUR ENGINEERING PARTNER WITH THE *EXPERIENCE* YOU EXPECT AND THE *SERVICE* YOU DESERVE

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Development Planning & Engineering, Inc.

Property Inspection Form
City of Flowery Branch
Mulberry Street

20-085

I, _____
owner of parcels 08117 002008A, 08117002016D, 08117 002016B, 08117 002061, 08117
002001, 08134 000006, hereby grant the City of Flowery Branch Staff and/or City Council to inspect
the above subject property as necessary for the rezoning application process.

Printed name:

Signature, date



1X6 Fascia
 1X4 Frieze
 1X4 Trim
 1X6 Header
 1X8 Band

Stark Properties
Mulberry Park/Flowery Branch Townhomes
“A” Elevation

01.21.21



1x6 Fascia
 1x4 Frieze
 1x4 Trim
 1x6 Header
 1x8 Band

Stark Properties Mulberry Park/Flowery Branch Townhomes “B” Elevation

01.21.21



The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e. applicable code, structural, and MEP design requirements, unit plan / floor plan changes, etc.).
 ©2021 gmdesigngroup of ga, inc. 98



Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation

1X6 Fascia
 1X4 Frieze
 1X4 Trim
 1X6 Header
 1X8 Band



- 1x6 Fascia
- 1x4 Frieze
- 1x4 Trim
- 1x6 Header
- 1x8 Band

Stark Properties
Mulberry Park/Flowery Branch Townhomes
“A” Elevation

01.22.21





Stark Properties
Mulberry Park/Flowery Branch Townhomes
“B” Elevation

01.22.21

1x6 Fascia
 1x4 Frieze
 1x4 Trim
 1x6 Header
 1x8 Band

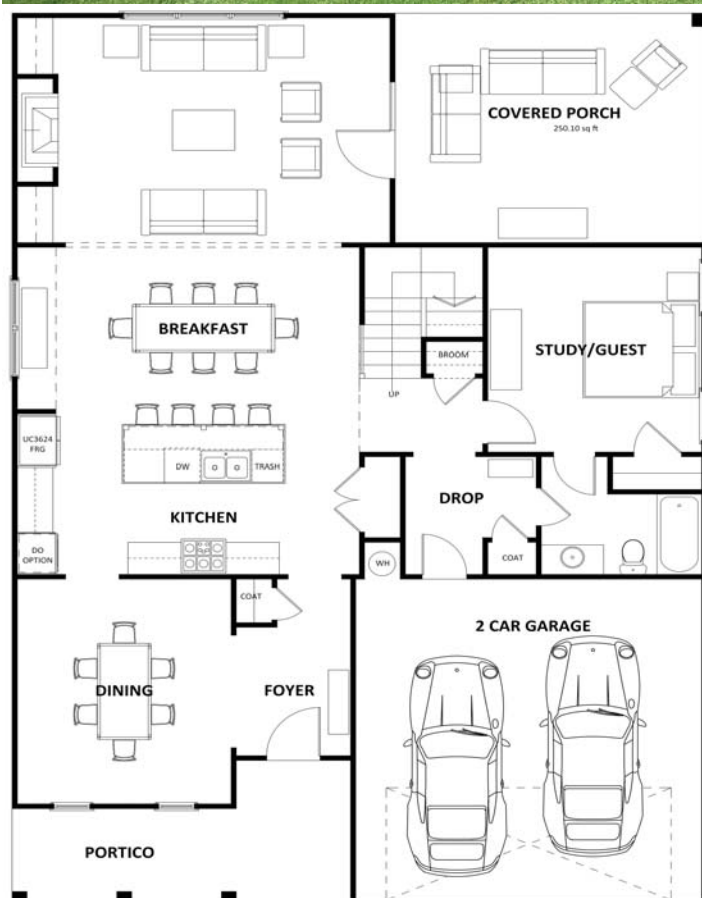




1x6 Fascia
1x4 Frieze
1x4 Trim
1x6 Header
1x8 Band

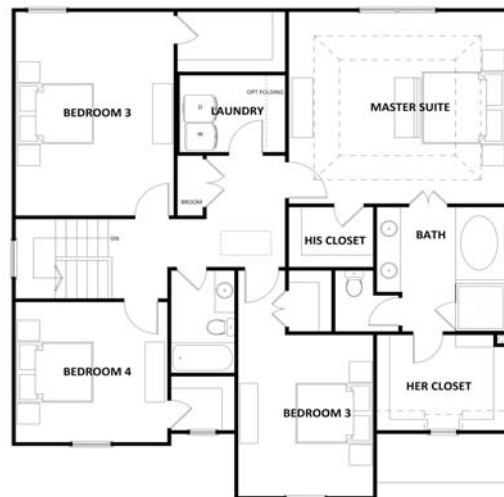
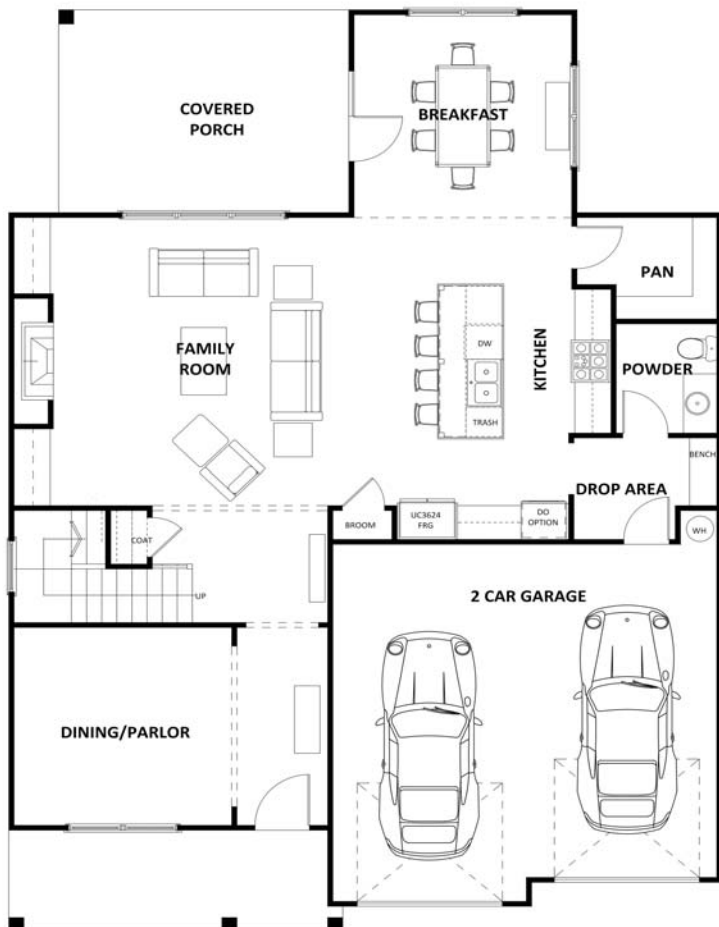
Stark Properties **Mulberry Park/Flowery Branch Townhomes** **"C" Elevation**

01.22.21



For more information on the Maddox please visit www.BowenHomes.com or call 770-271-4414  103

All information above is believed to be accurate but is not warranted. Offer subject to errors, changes, omissions, prior sales and withdrawals without notice. Pictures and renderings are for illustrative purposes only.



"A"



"B"

For more information on the Miller please visit www.BowenHomes.com or call 770-271-4414



"A"

COVERED
PORCH

"B"

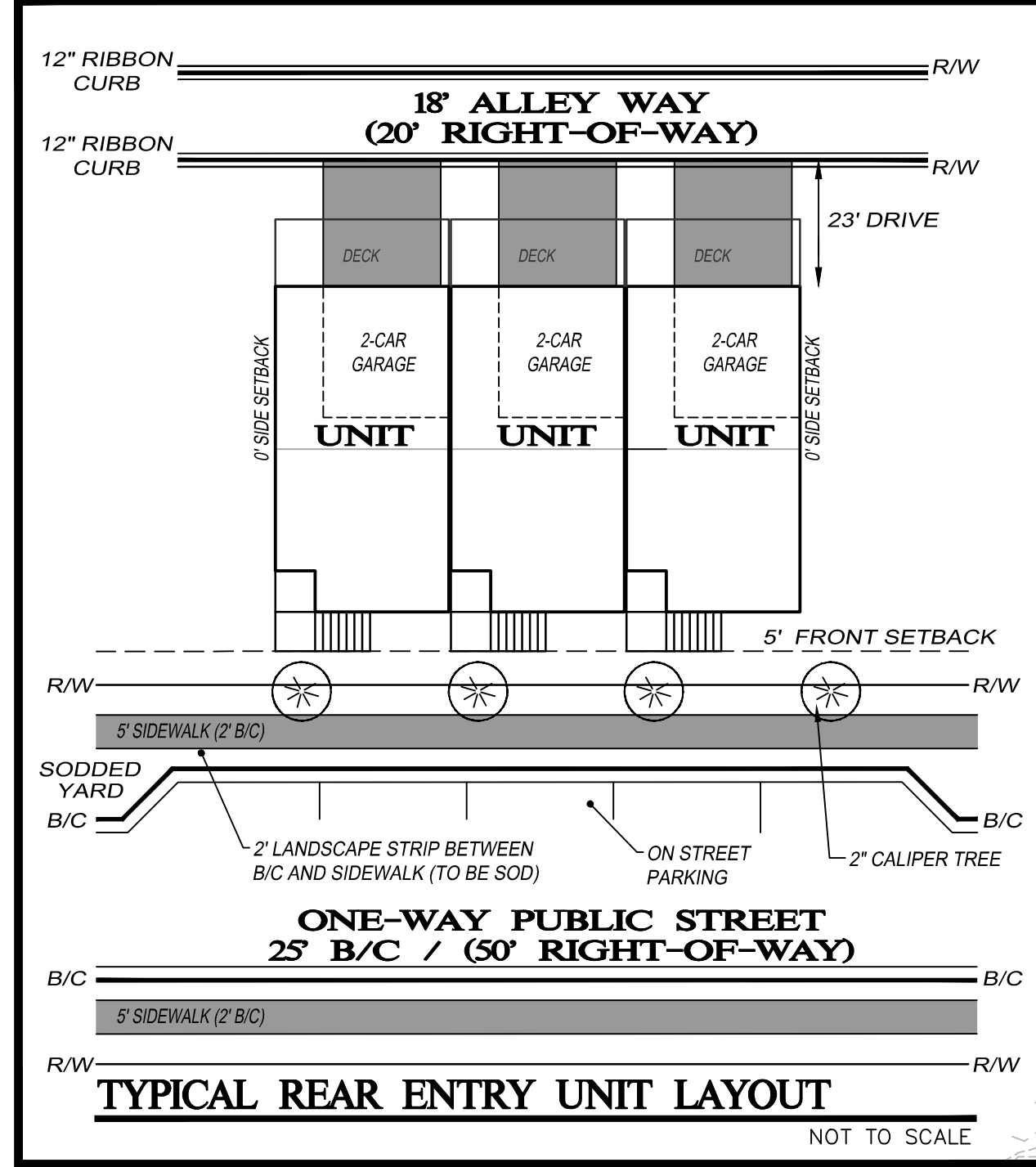
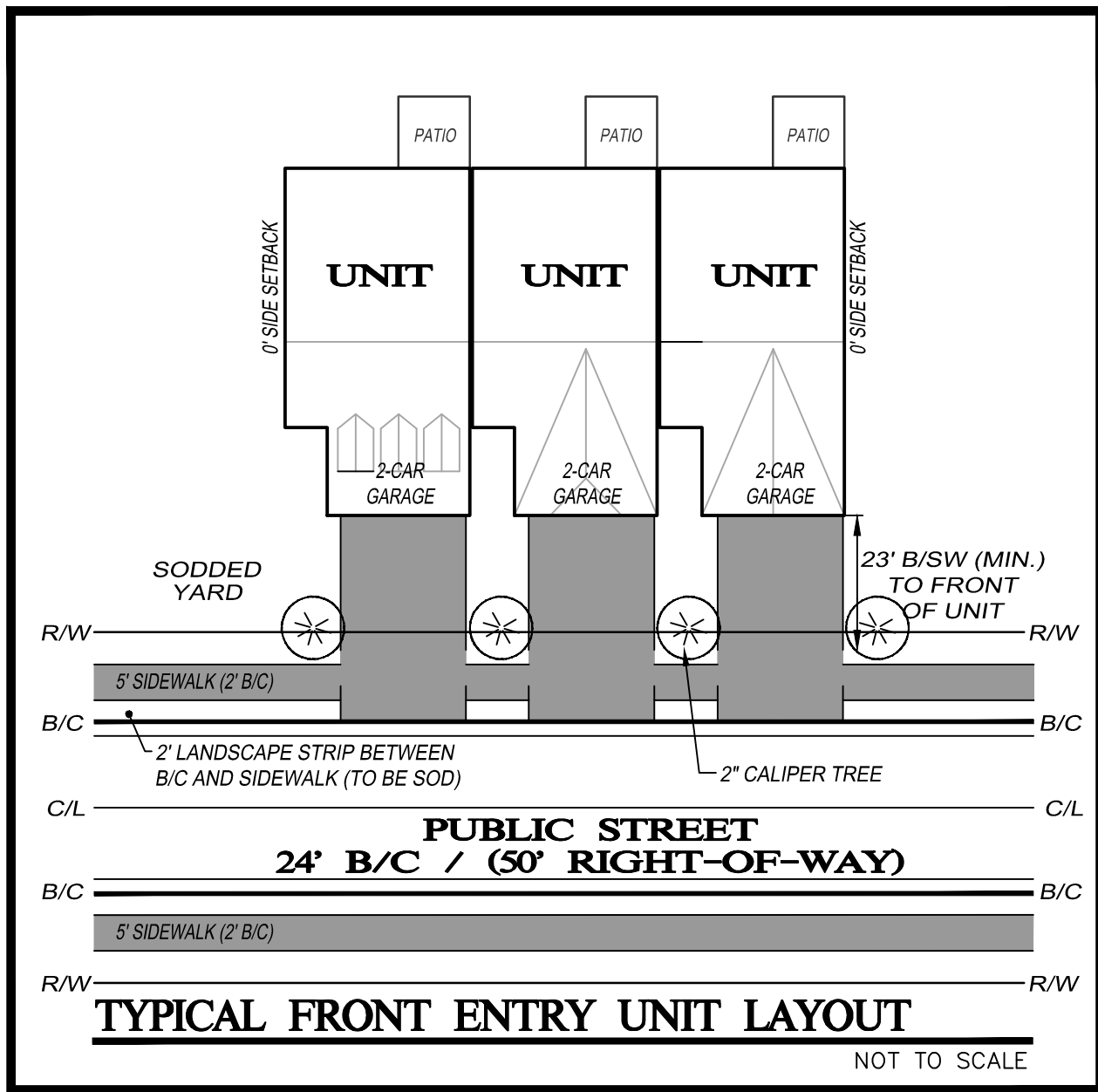
COVERED
PORCH



For more information on the Oakley please visit www.BowenHomes.com or call 770-271-4414

DEVELOPMENT SUMMARY

- EXISTING BOUNDARY ACREAGE: ±117.962 ACRES
- TAX PARCEL: 08117 002008A, 08117 002016D, 08117 002016B, 08117 002061, 08117 002001 and 08134 000006
- EXISTING ZONING: M1
- PROPOSED ZONING: R3
- PHASE 1 DEVELOPMENT SUMMARY:
BOUNDARY ACREAGE: ±48.156 ACRES
TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 55
TOTAL No. PROPOSED TOWNHOME UNITS: 140
GROSS DENSITY: 4.05 LOTS/ACRE
NET DENSITY: 4.33 LOTS/ACRE (±6.17 AC. FLOODPLAIN)
OPEN SPACE/Common Area PROVIDED = ±19 AC. (39%)
TOTAL LENGTH OF STREETS: ±5,850 L.F.
- PHASE 2 DEVELOPMENT SUMMARY:
BOUNDARY ACREAGE: ±69.806 ACRES
TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 144 (LOT #'S 100-243)
GROSS/NET DENSITY: 2.06 LOTS/ACRE
OPEN SPACE/Common Area PROVIDED = ±32 AC. (46%)
TOTAL LENGTH OF STREETS: ±7,125 L.F.
- MINIMUM SINGLE-FAMILY DETACHED LOT SIZE: (SEE TYPICAL LOT DETAIL)
- PROPOSED SETBACKS SINGLE-FAMILY DETACHED:
FRONT - 20'
REAR - 25'
SIDE - 5'
- BOUNDARY INFORMATION BASED ON SURVEY PROVIDED BY CLIENT.
- A PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN A FLOOD HAZARD AREA AS PER CITY OF FLOWERY BRANCH F.I.R.M. COMMUNITY PANEL NO. 13139C0291G, DATED APRIL 4, 2018.
- TOPOGRAPHIC AND UTILITY INFORMATION BASED ON HALL COUNTY GIS. DATUM IS MEAN SEA LEVEL.
- WATER AND SANITARY SEWER SERVICE TO BE PROVIDED BY THE CITY OF FLOWERY BRANCH.
- ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.
- SITE PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE BASED ON ACTUAL FIELD CONDITIONS.



PHASE 1 DEVELOPMENT

PROPOSED REAR ENTRY UNIT
22' x 55' FOOTPRINT

PROPOSED PHASE II SEWER ACCESS

PROPOSED FRONT ENTRY UNIT
24' x 50' FOOTPRINT

PHASE 2 DEVELOPMENT

COMPASS POINT PHASE 2-C
COMMON AREA

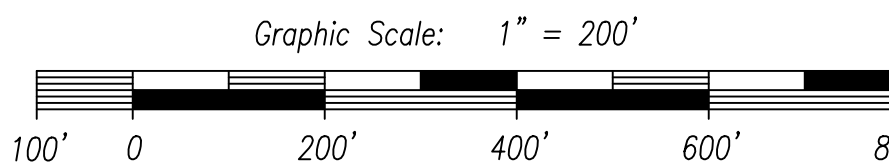
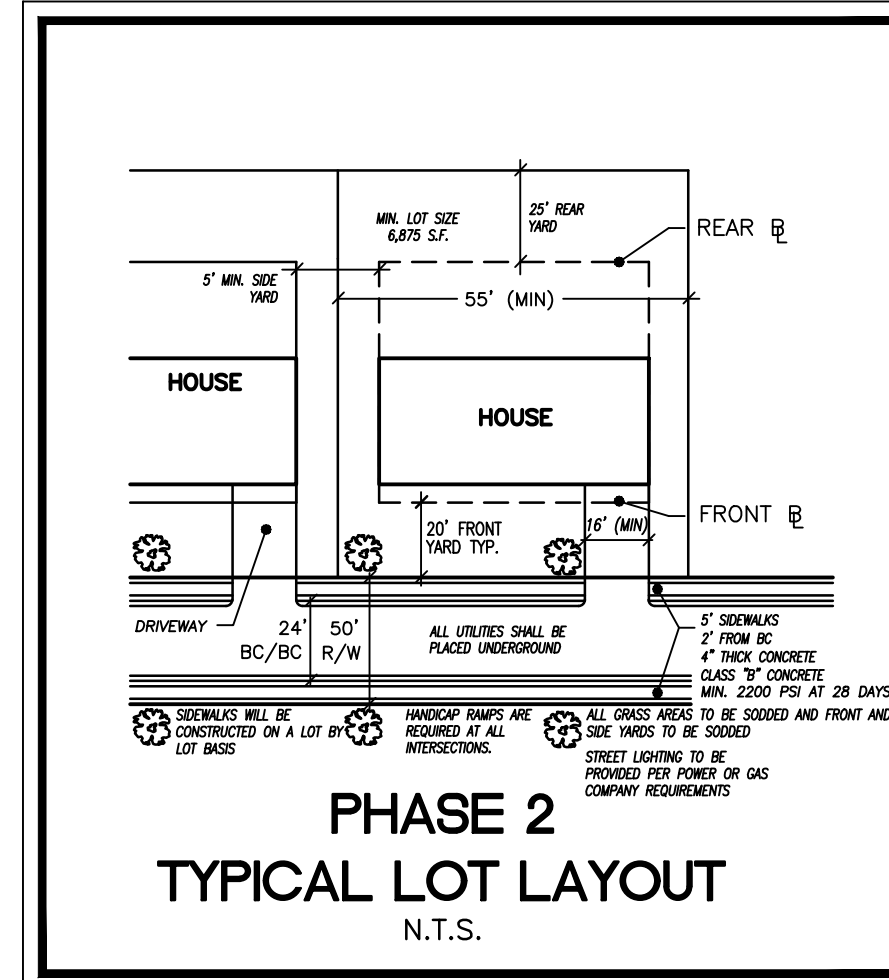
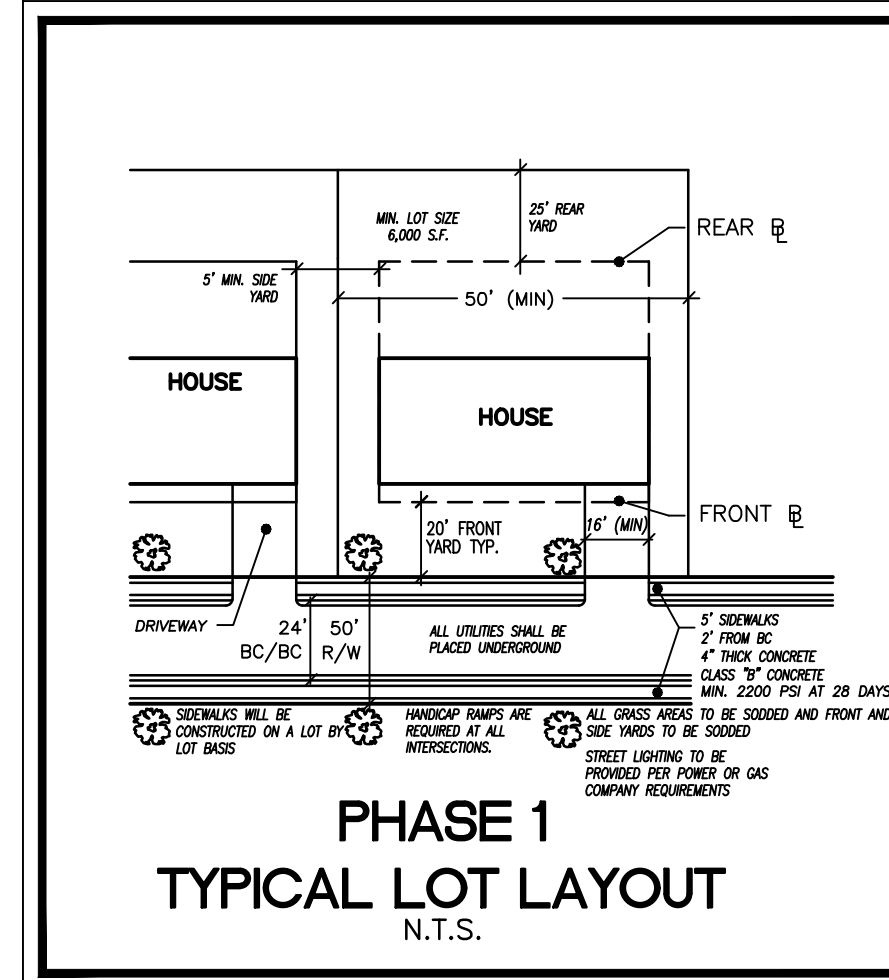
COMPASS POINT PHASE 3

R-3 BUFFER REDUCTIONS:

- REMOVE 40' NATURAL BUFFER ADJACENT TO PARCEL'S 08117 002016E, 08117 002050, 08117 002051, 08117 002052, 08117 002053.

R-3 VARIANCE REQUESTED:

- BUILDING SETBACKS PER TYPICAL SINGLE-FAMILY DETACHED LOT LAYOUTS.
- NO MINIMUM SETBACKS REQUIRED FOR TOWNHOMES. TOWNHOMES PER TYPICAL LAYOUT DETAIL PROVIDED.



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PREPARED FOR:

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3719 WINDER HWY.
FLOWERY BRANCH
GEORGIA 30542

PROJECT NAME:

MULBERRY STREET

TASK:

CONCEPTUAL LAND PLAN

PROJECT INFORMATION:

MULBERRY STREET
Project Name
20-085
Project Number
MULBERRY STREET
Project Address
116 AND 117
Land Lot No.(s)

District
CITY OF FLOWERY BRANCH
HALL COUNTY, GA
County, State

DATE					
REVISION					
No.	1	2	3	4	5

DESIGN AS SHOWN SCALE
KWB DRAWN
1 of 1
CHECKED SHEET
12/02/20 DATE
20-085 PROJECT No.

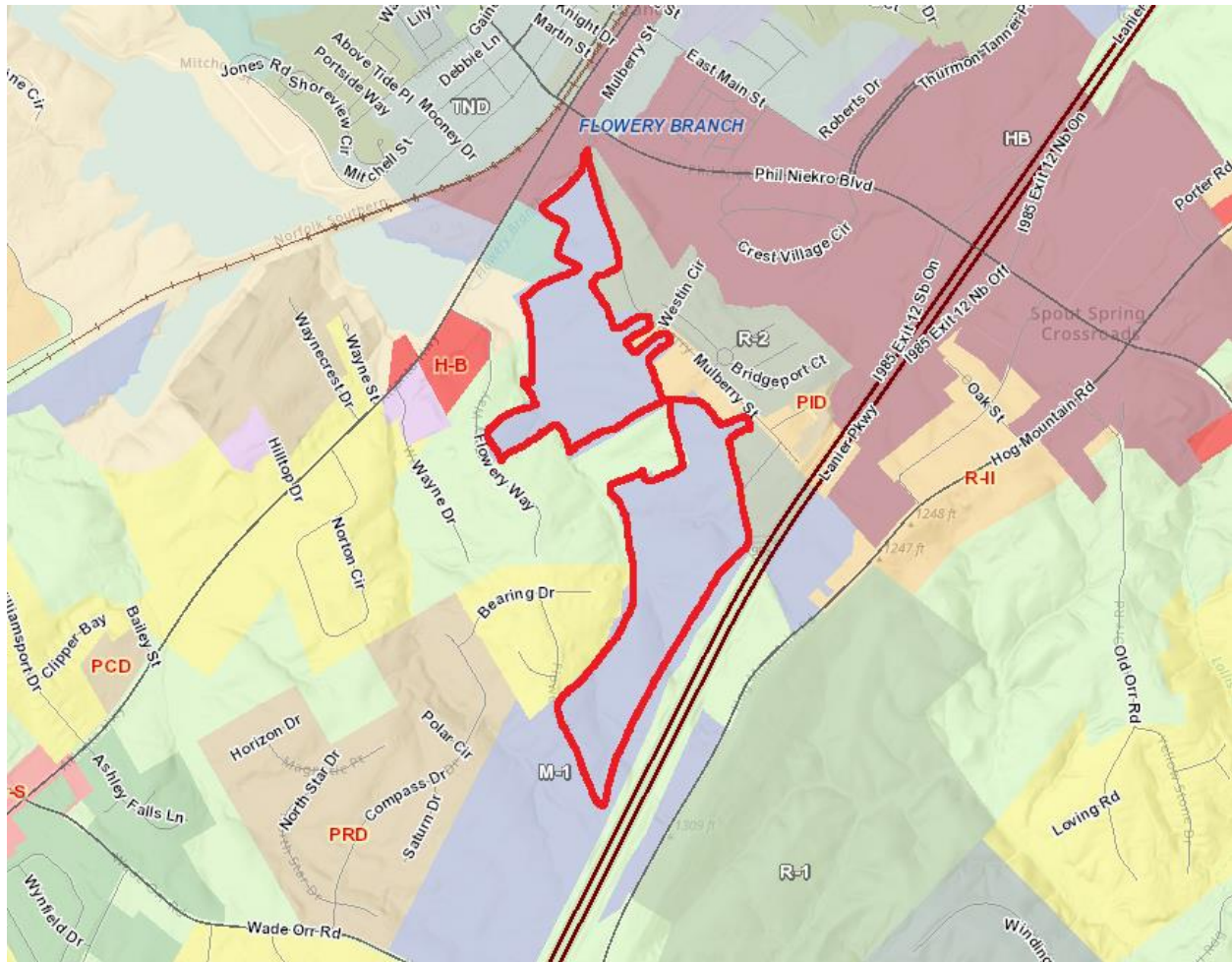


Staff Report
Stark Land Development Rezoning Request(s)
Ordinances 625-630

Request

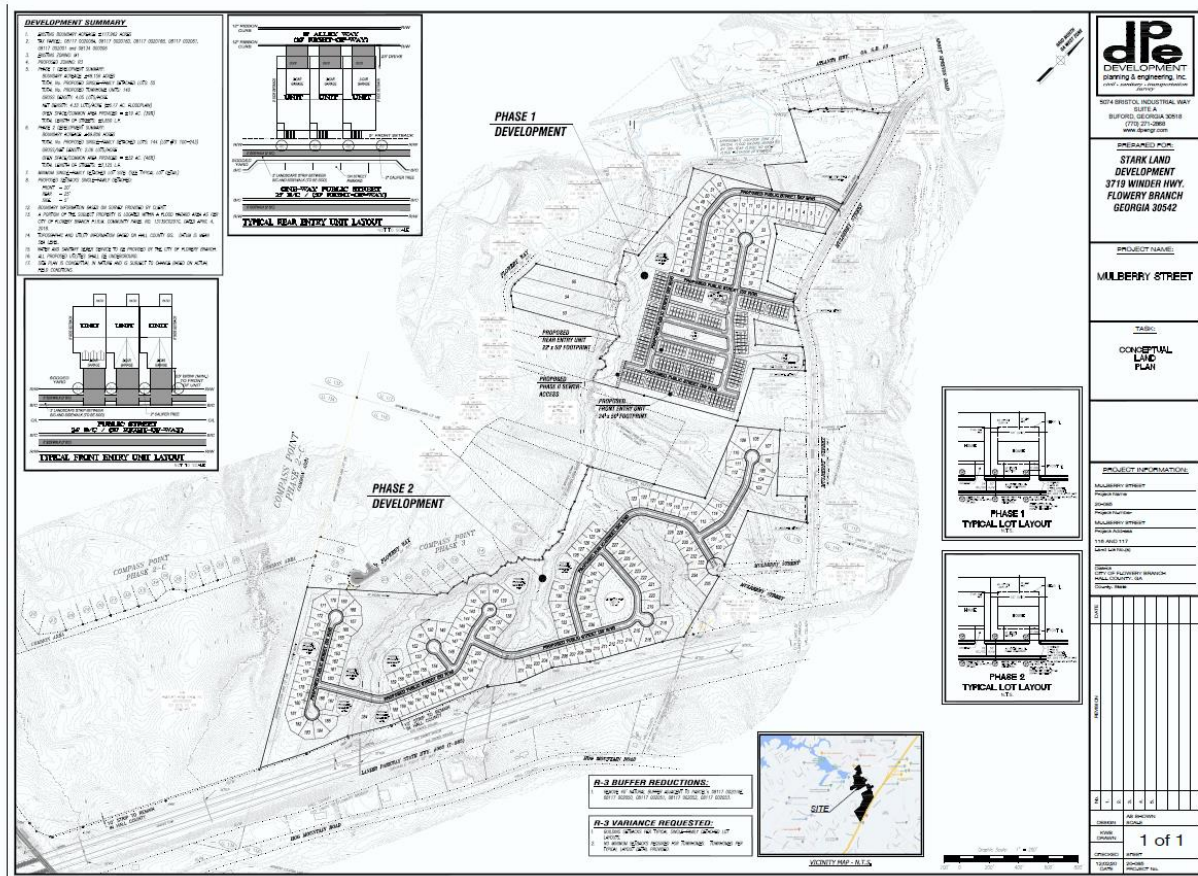
A request from Stark Land Development for the rezoning of six (6) parcels of land totaling 118 +/- acres of land from M-1 (Light Industrial) to R3 (Residential Multi-Family). The parcels for consideration are identified as follows: 08117 002008A, 08117 002014D, 08117 002014B, 08117 002061, 08117 002001, & 08134 000006.

Approximate location of all six parcels:





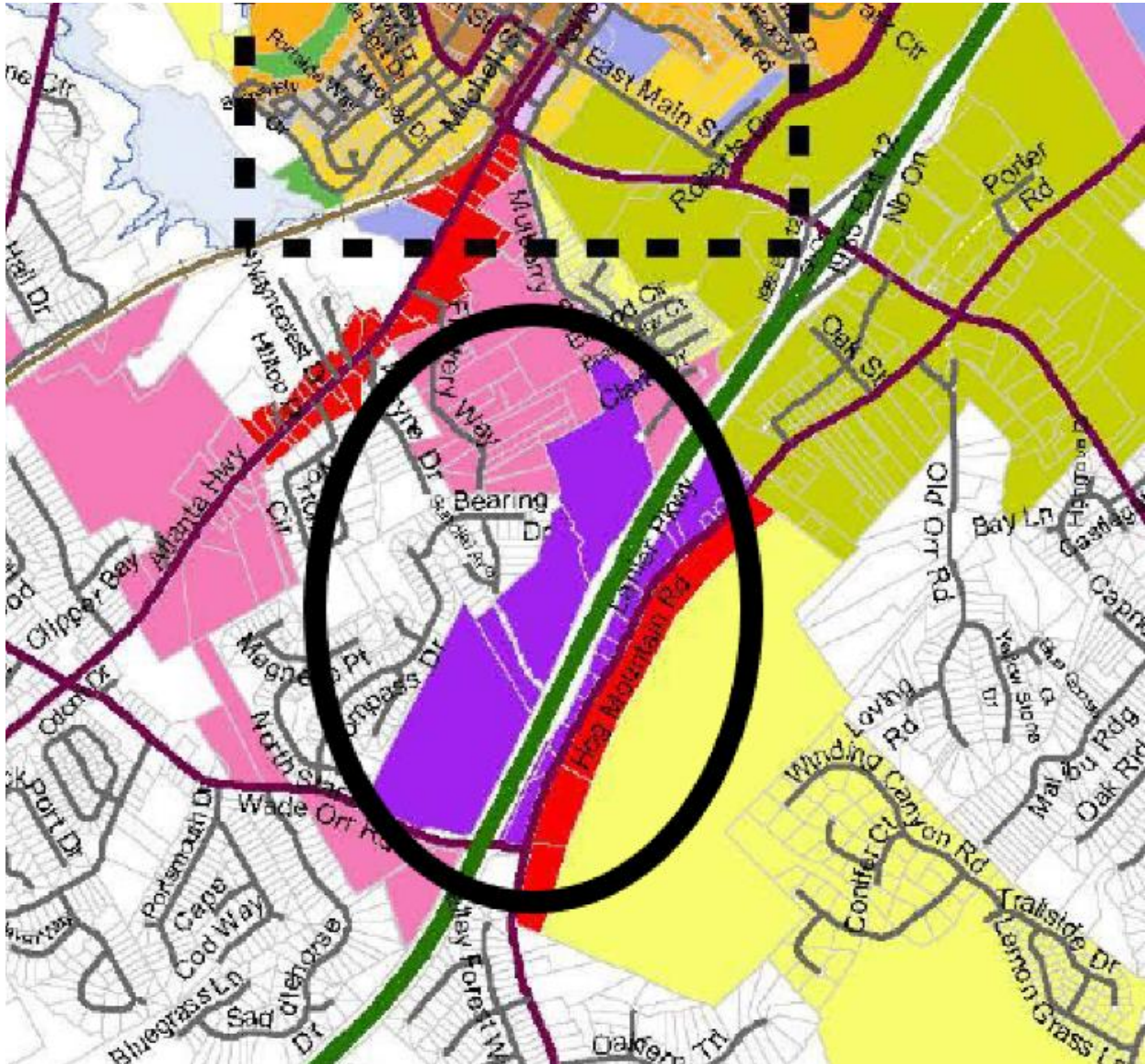
The request is to rezone all six parcels from M-1 (Light Industrial) to R3 (Residential Multi-Family) with the intent to construct a single family detached and townhome subdivision in two phases. The original plan as submitted by the applicant:



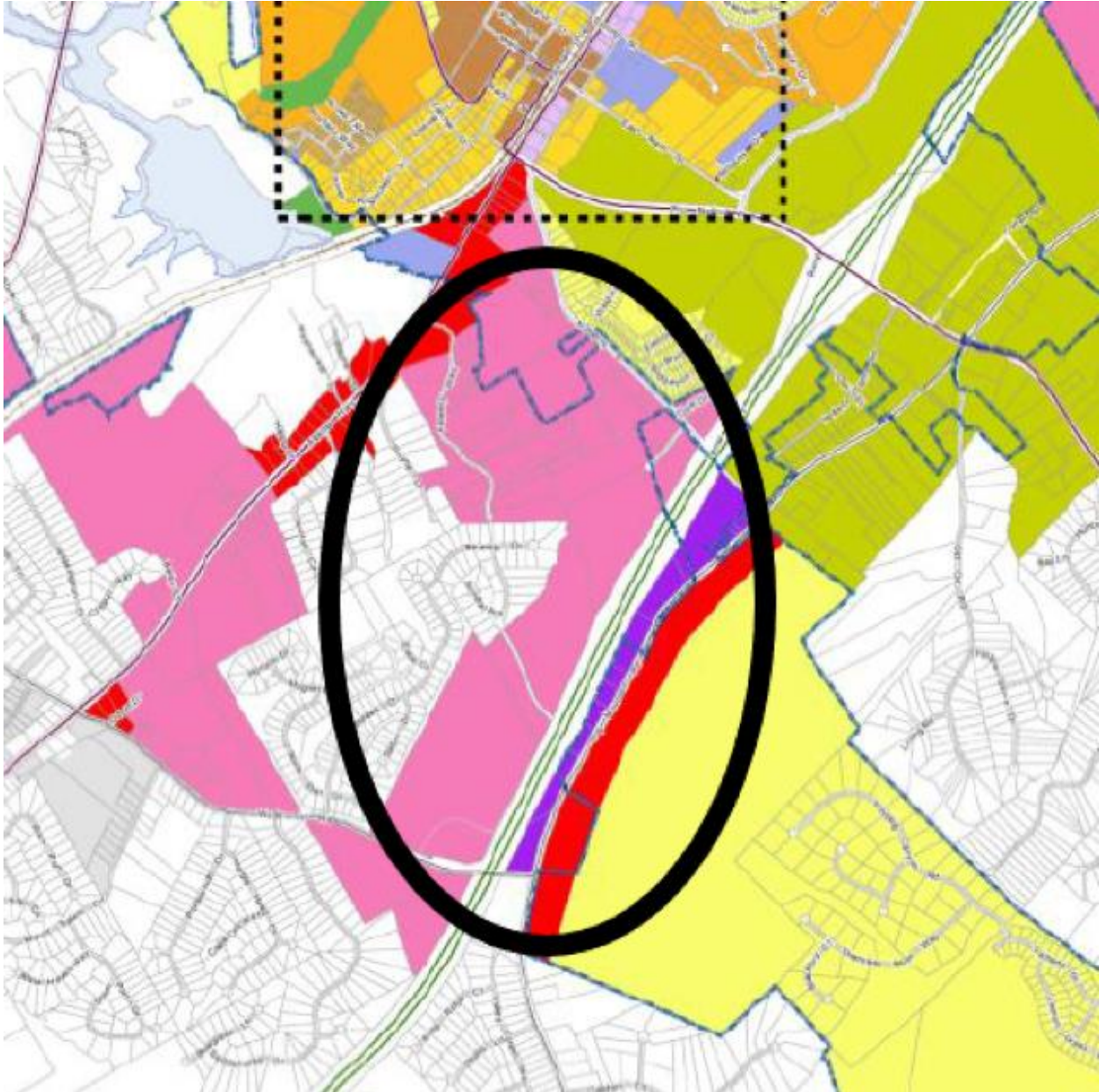
Staff is working with the applicant to revise and update the site plan with the intent to improve layout and design.



Comprehensive Plan



Currently, the parcels in question are designated as part of the “Industrial Employment” character area by the comprehensive plan. However, prior to these parcels being annexed and rezoned from R-2, A, and AR III to their current M-1 designation in 2014, the comprehensive plan labeled this area as “Mixed-Use”.



The “mixed-use” designation is more in-line with the City’s vision of an active, vibrant downtown supported by nearby residential. As the City has done on past projects, this proposed residential use, with its close proximity to downtown, can be viewed holistically as a large mixed-use project. The downtown as the commercial/retail component served by the developments on East Main, the TRG apartments, and Summit Lake creating a multi-faceted, cohesive, walkable, large scale mixed-use area.



If the project is approved, staff recommends updating the (or reverting) the character area to mixed-use.

Analysis

Flowerly Branch Zoning Ordinance Article 37 Rezoning and Conditional Use Applications

Sec. 34.7. - Analysis Requirements.

Applications to amend the official zoning map and applications for conditional uses shall provide a written analysis comparing the proposed action with the criteria in this Section. A zoning map amendment or conditional use application may be justified only if it bears a reasonable relationship to the public health, safety, morality, or general welfare, and after consideration of the analysis requirements which may in individual cases be considered criteria relevant to Zoning Administrator in making recommendations and by the Governing Body in the decision-making process.

Staff Response:

- (a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. *Yes, a residential use is appropriate for this site and the surrounding area. It will help serve the downtown commercial/retail area.*
- (b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. *The development will not adversely affect the area and will in fact enhance it.*
- (c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. *Yes, current zoning of M-1 (Light Industrial) was previously (in 2014) deemed appropriate. However, the land has sat vacant since the rezoning occurred and may be challenged for M-1 use due to streams on the property and lack of large vehicular traffic.*
- (d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. *It is staff's opinion that the use will not create any unnecessary burdens.*
- (e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. *Currently, the Comprehensive Plan denotes this area as part of the "Industrial Employment" character area. However, prior to the 2014 annexation/rezoning, the area was designated as "Mixed-Use" and staff feels this is the proper designation and, if this project is approved, the "Mixed-Use" designation should be reinstated.*
- (f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal.

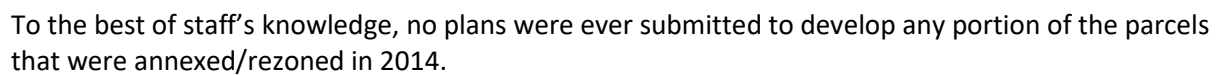
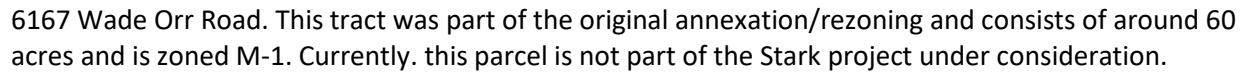


The number of streams and lack of large vehicular entrance capabilities may be harmful to the current M-1 zoning district designation.

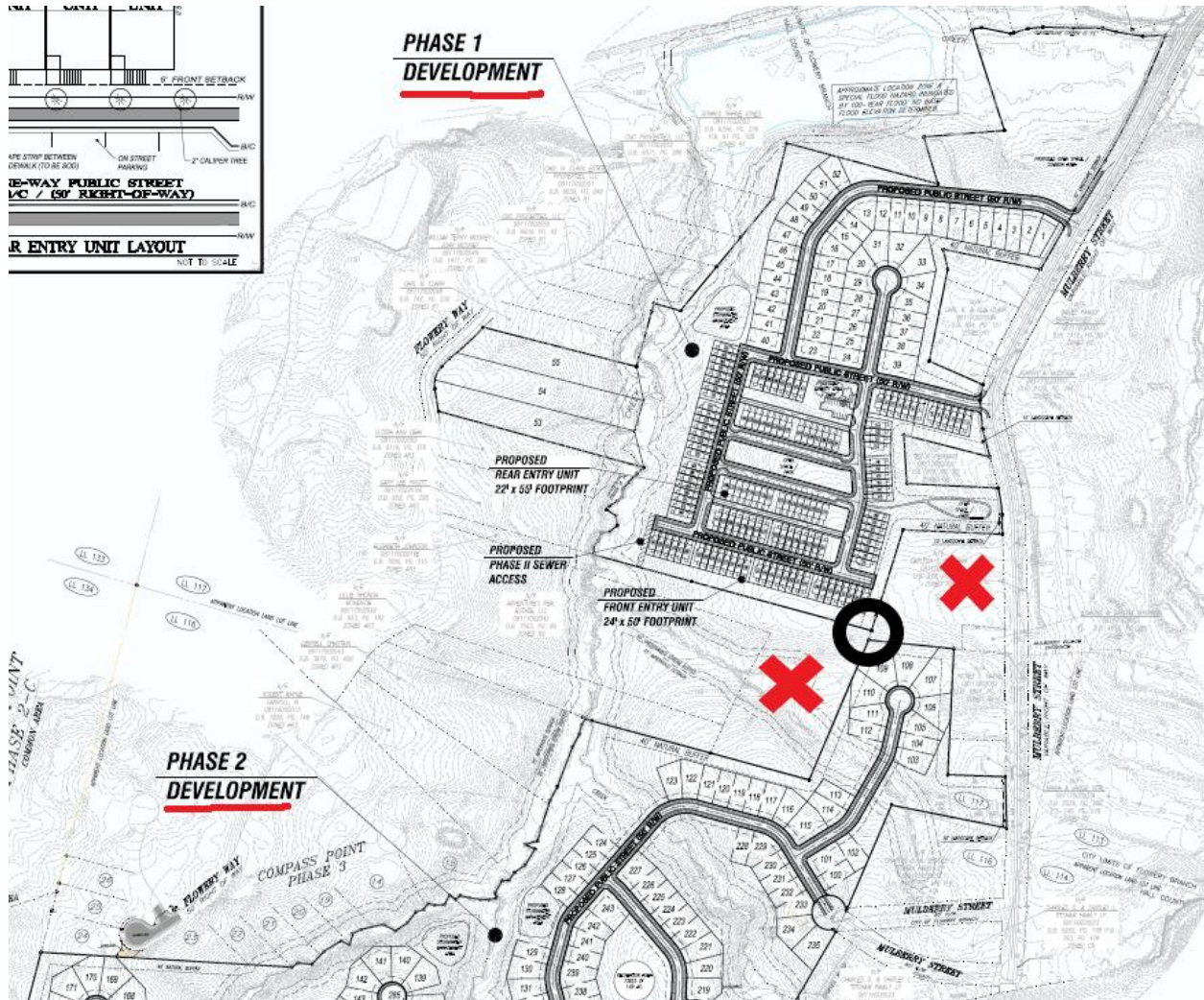
- (g) Existing use(s) and zoning of the subject property and nearby properties. *Currently vacant, the proposed use will fit in with, and enhance, the Mulberry/Phil Niekro corridor leading into downtown Flowery Branch.*
- (h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under the existing zoning district classification. *Staff does not have a specific number regarding property value, but the current zoning classification of Light Industrial has not warranted any proposed development on the site(s) since its annexation/rezoning in 2014.*
- (i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. *Staff does not feel that the proposed will be a deterrent but rather an enhancement to the surrounding area and a positive impact for downtown.*
- (j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. *N/A*
- (k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. *The proposed use will enhance the character of the existing district and surrounding area in staff's opinion.*
- (l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. *The development, if approved, will need to go through all the required development reviews to ensure all applicable codes and requirements are met.*
- (m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. *The proposed development will enhance the surrounding area and meet the intent of the Zoning Ordinance.*

History

In 2014, the parcels in question were annexed and/or rezoned from multiple zoning (A, A III, R2) to M-1. There was no specific site plan associated with this project. However, a large industrial park was envisioned and recently Rochester Engineering provided a potential site plan for the area. This plan would require the City or developer to provide new public infrastructure. Additionally, this plan includes



In reviewing the initial submittal Staff had concerns regarding the lack of connectivity between the two phases. Applicant would need to acquire additional land (possibly one or both parcels marked with a red X) in order to connect the phases.



The applicant needs to have the entirety of the six parcels properly zoned for a higher density single family detached/townhome subdivision (R3) as part of the purchase agreement. The applicant is hesitant to acquire more land without having the proper zoning designation in place. In order to achieve this goal, and still meet the City's desire for a cohesive two-phase development, staff recommends rezoning all six parcels to the requested R3 zoning. but restricting phase two (parcels 08117 002001 & 08134 000006) as follows:

1. No permits shall be issued unless connectivity with phase one is achieved in a manner satisfactory to Flowery Branch Mayor and Council.
2. A revised site plan shall be submitted to Mayor and Council for approval prior to the issuance of any permits.



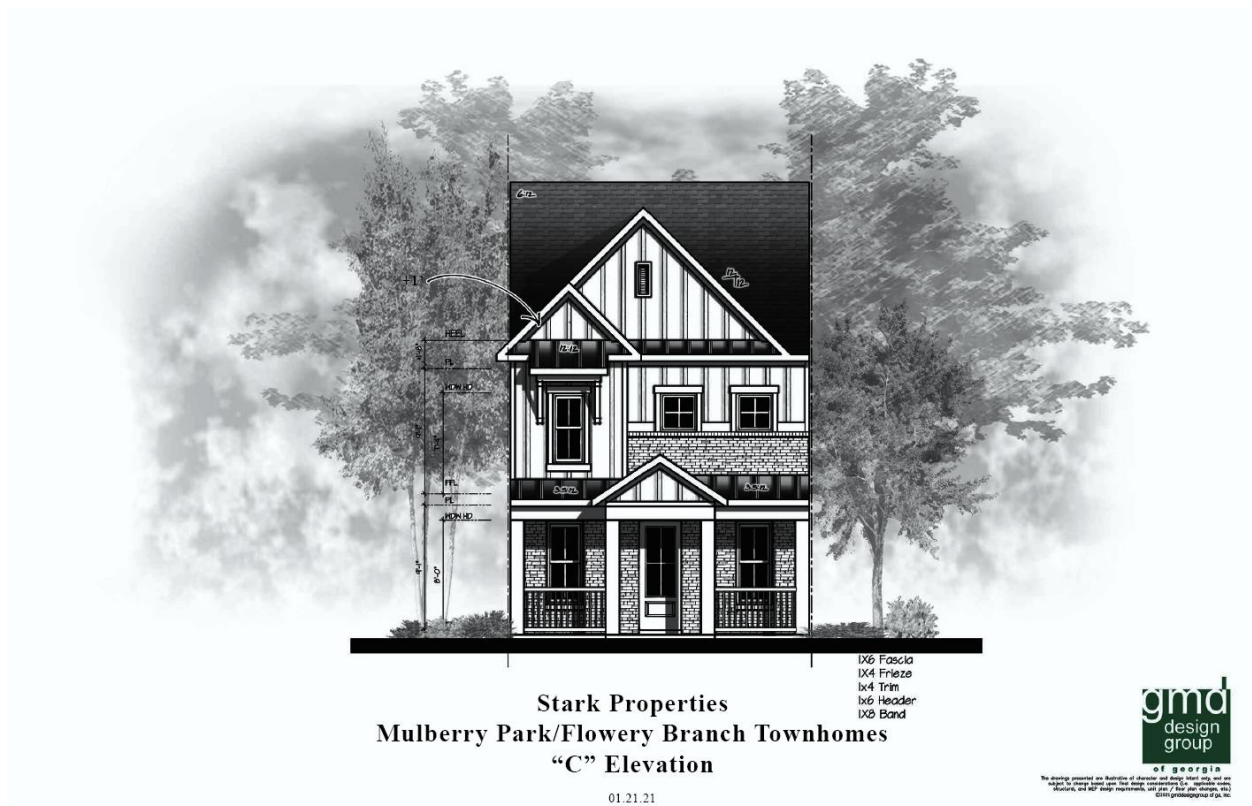
3. Elevations shall be submitted and approved by Mayor and Council prior to the issuance of any permits.
4. Ordinances 629 and 630 shall be amended to reflect the approved site plan, approved elevations, and all conditions as set forth by Mayor and Council.

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

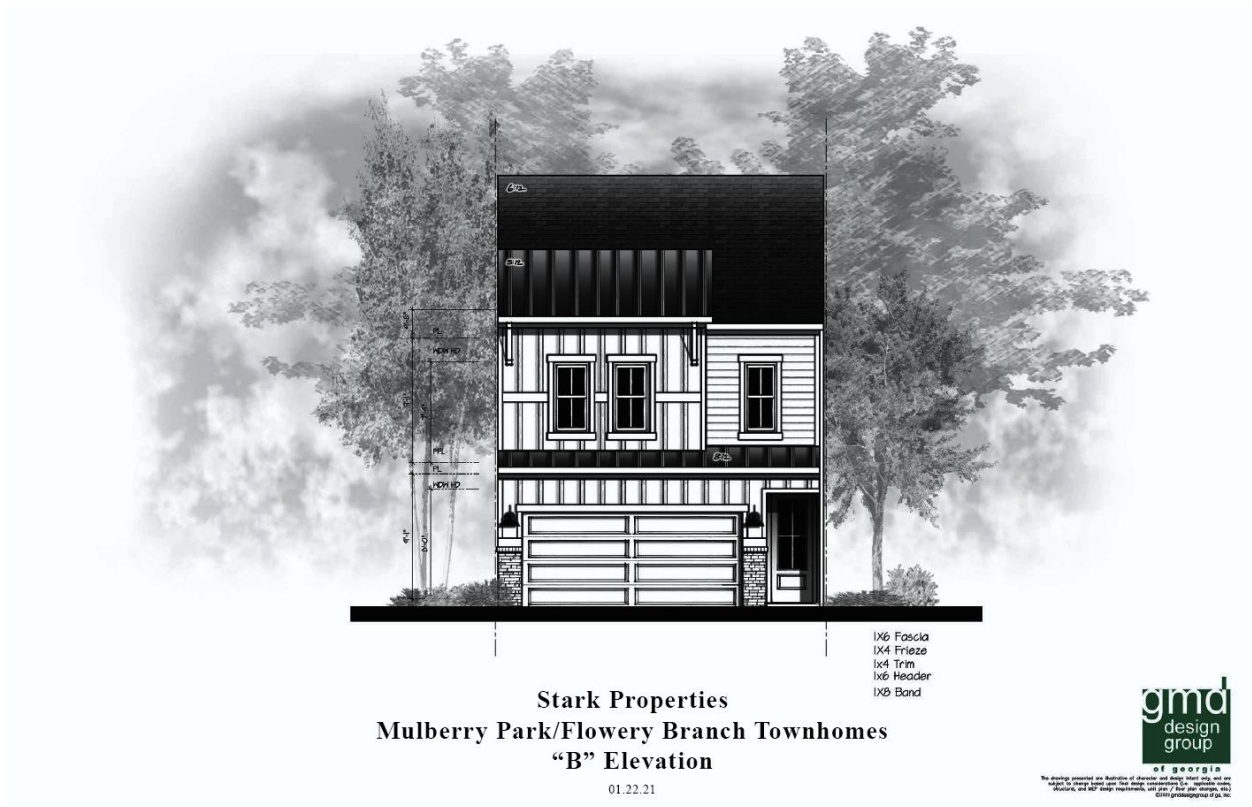
1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:

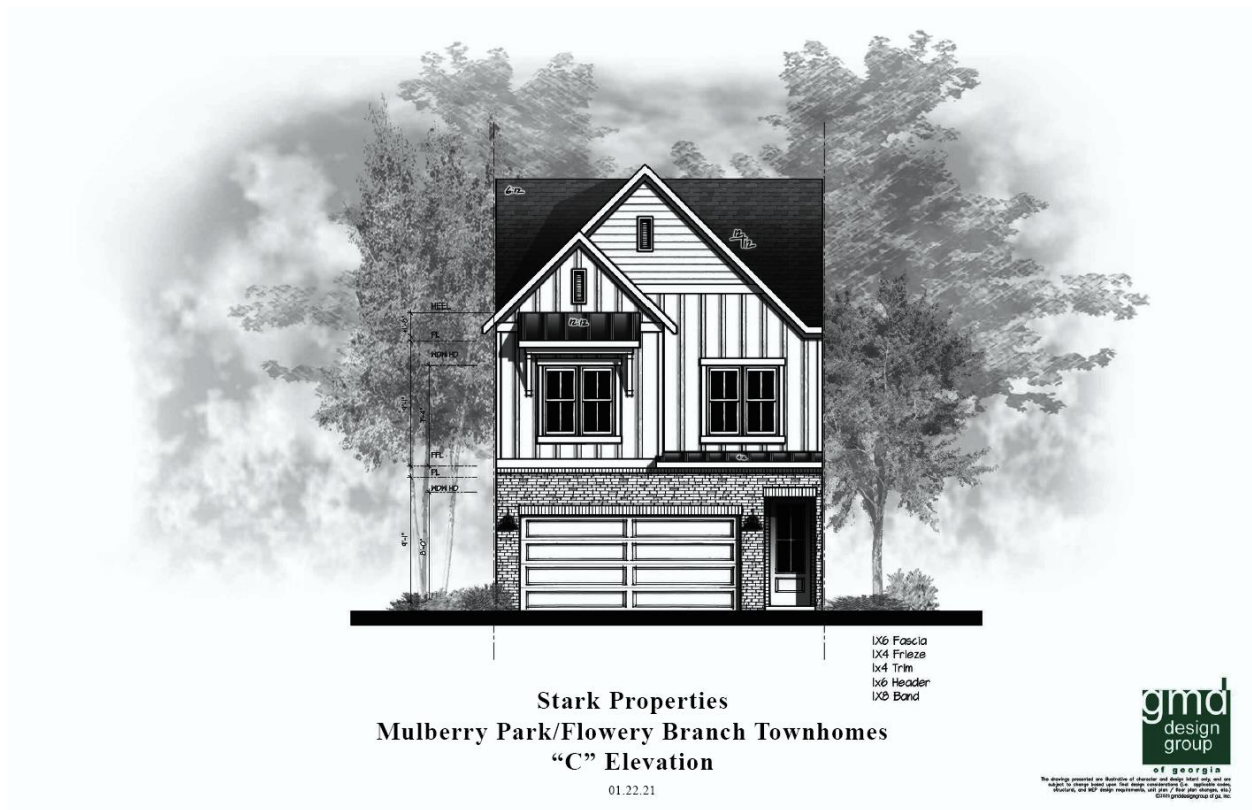














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the MADDOX





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the MILLER "B"





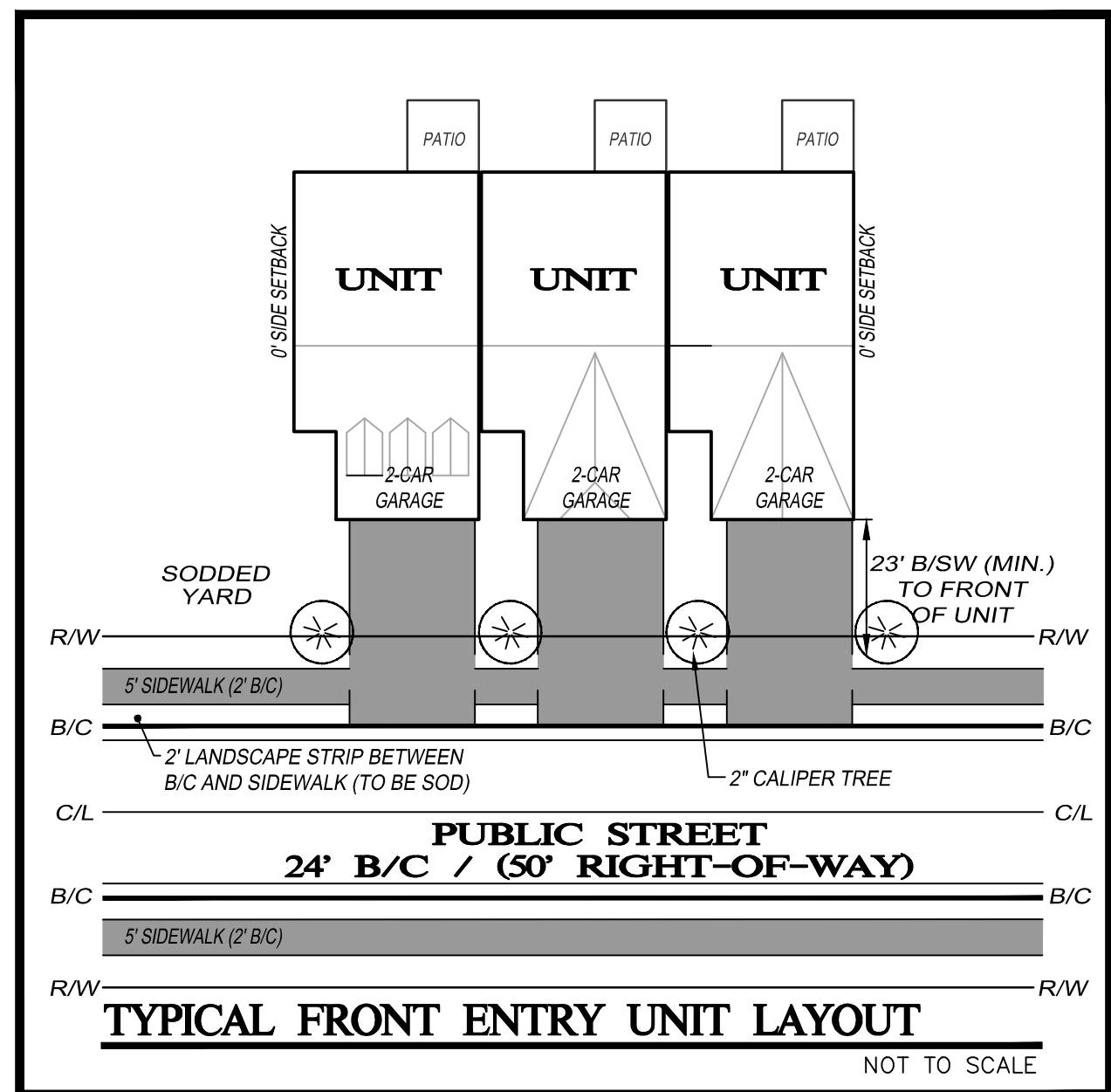
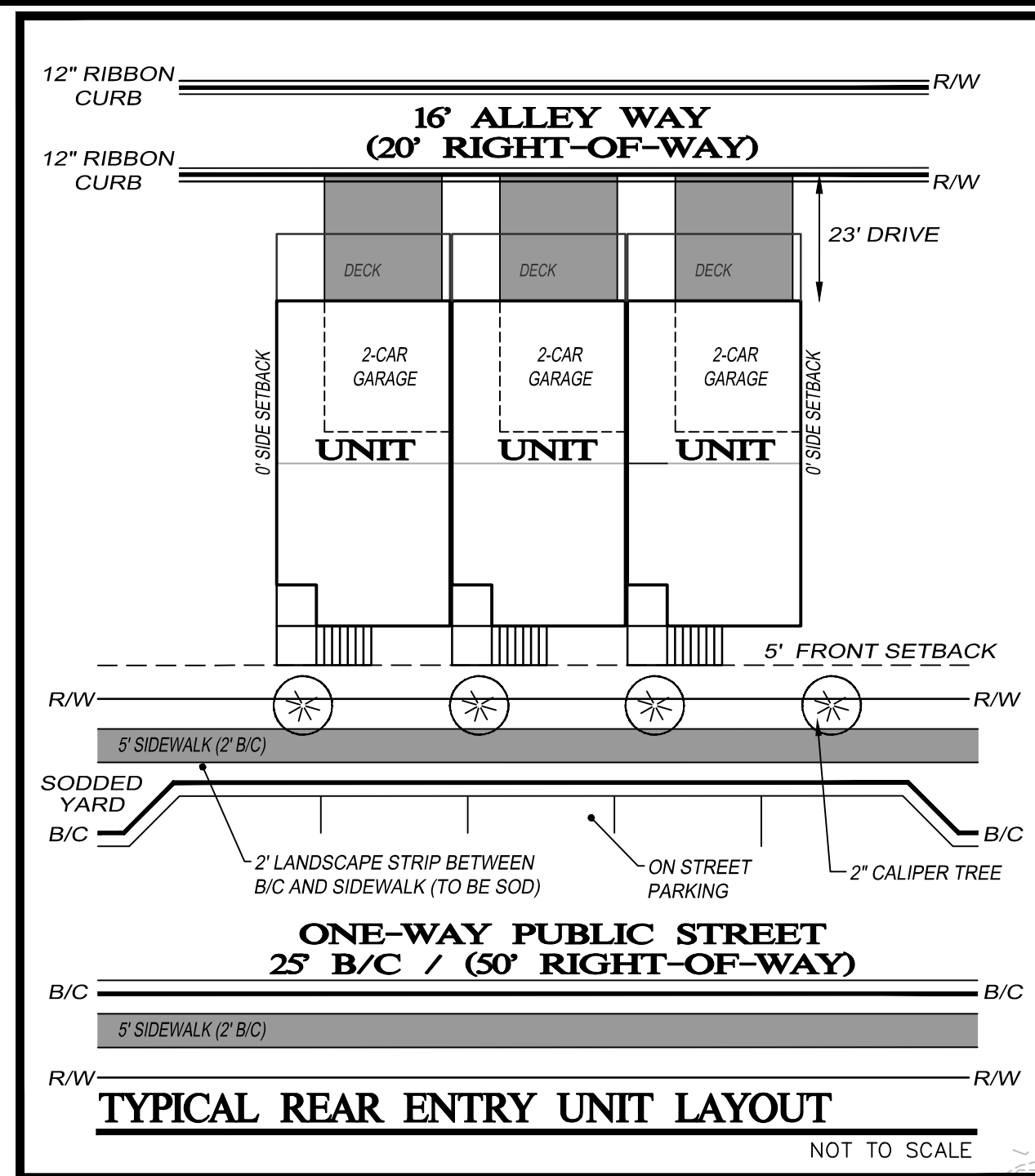
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the OAKLEY

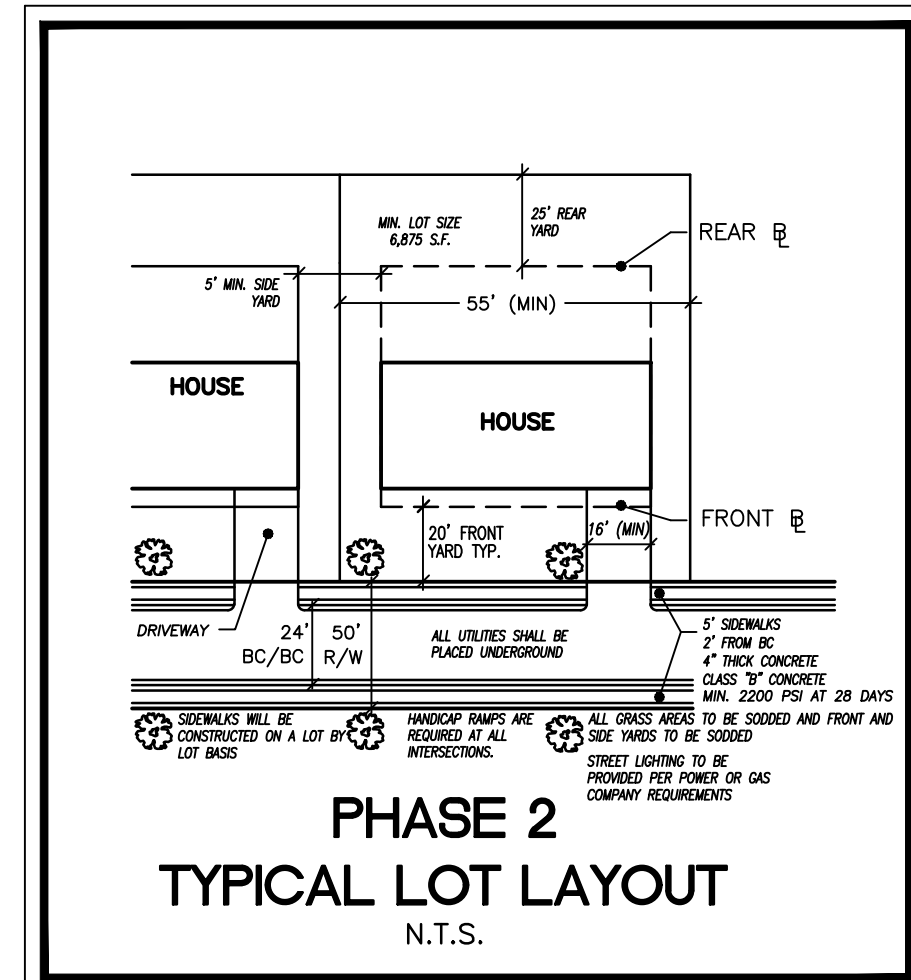
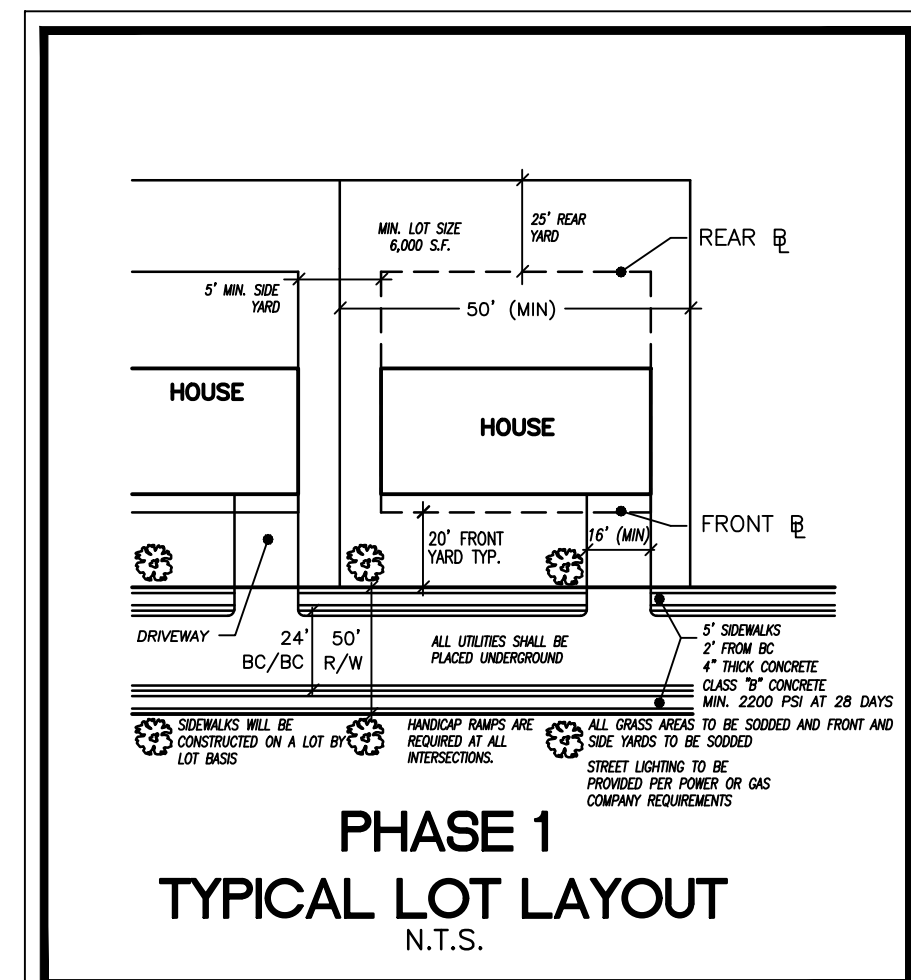
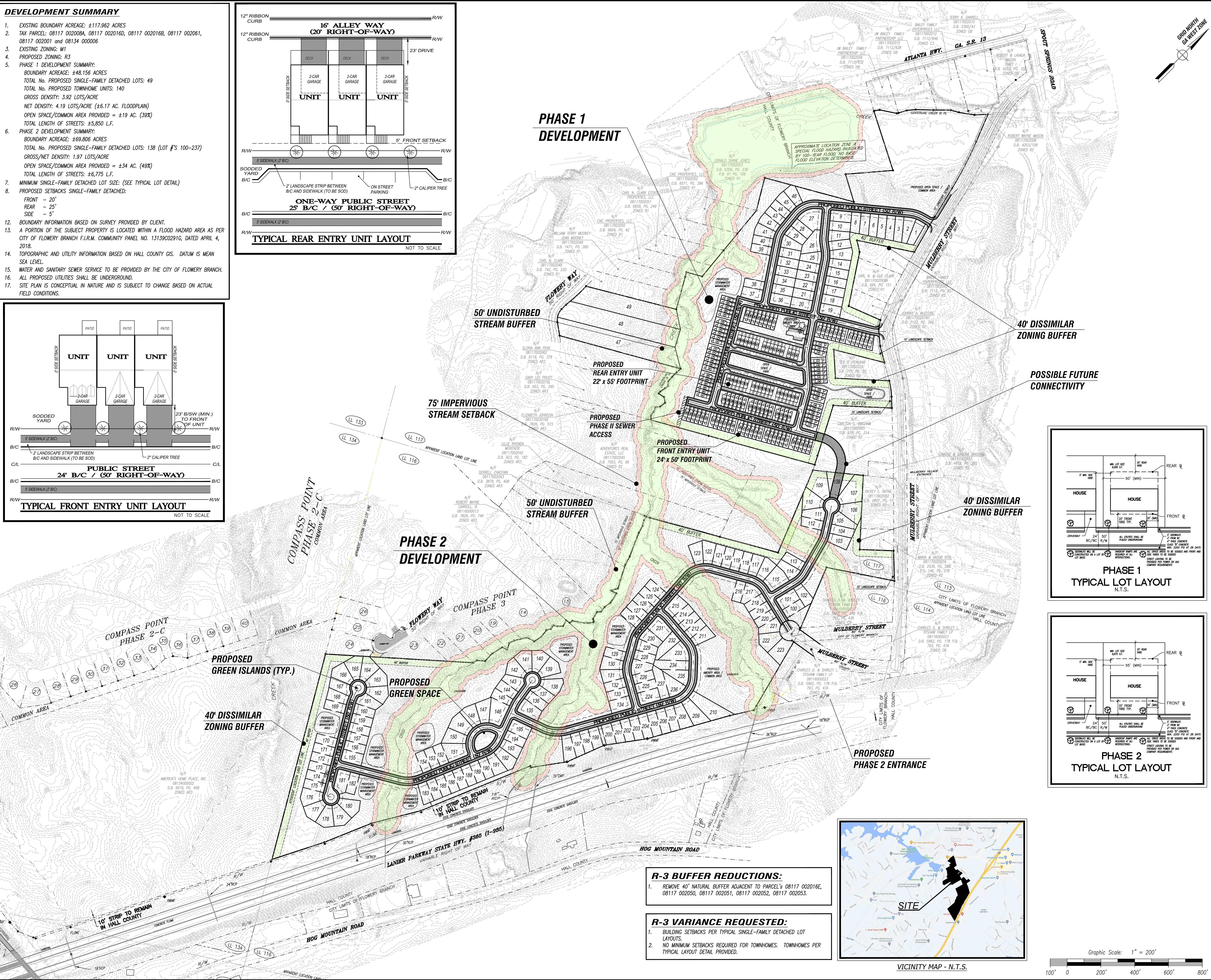


DEVELOPMENT SUMMARY

- EXISTING BOUNDARY ACREAGE: ±117,962 ACRES
3. TAX PARCEL: 0817 002008A, 08117 002016D, 08117 002016B, 08117 002061, 08117 002001 and 08134 000006
4. EXISTING ZONING: M1
5. PROPOSED ZONING: R3
6. PHASE 1 DEVELOPMENT SUMMARY:
 - BOUNDARY ACREAGE: ±48.156 ACRES
 - TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 49
 - TOTAL No. PROPOSED TOWNHOME UNITS: 140
 - GROSS DENSITY: 3.92 LOTS/ACRE
 - NET DENSITY: 4.19 LOTS/ACRE (±6.17 AC. FLOODPLAIN)
 - OPEN SPACE/Common Area PROVIDED = ±19 AC. (39%)
 - TOTAL LENGTH OF STREETS: ±5,850 L.F.
7. PHASE 2 DEVELOPMENT SUMMARY:
 - BOUNDARY ACREAGE: ±69.806 ACRES
 - TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 138 (LOT #'S 100-237)
 - GROSS/NET DENSITY: 1.97 LOTS/ACRE
 - OPEN SPACE/Common Area PROVIDED = ±34 AC. (49%)
 - TOTAL LENGTH OF STREETS: ±6,775 L.F.
8. MINIMUM SINGLE-FAMILY DETACHED LOT SIZE: (SEE TYPICAL LOT DETAIL)
9. PROPOSED SETBACKS SINGLE-FAMILY DETACHED:
 - FRONT - 20'
 - REAR - 25'
 - SIDE - 5'
10. BOUNDARY INFORMATION BASED ON SURVEY PROVIDED BY CLIENT.
11. A PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN A FLOOD HAZARD AREA AS PER CITY OF FLOWERY BRANCH F.I.R.M. COMMUNITY PANEL NO. 131.39C0291G, DATED APRIL 4, 2018.
12. TOPOGRAPHIC AND UTILITY INFORMATION BASED ON HALL COUNTY GIS. DATUM IS MEAN SEA LEVEL.
13. WATER AND SANITARY SEWER SERVICE TO BE PROVIDED BY THE CITY OF FLOWERY BRANCH.
14. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.
15. SITE PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE BASED ON ACTUAL FIELD CONDITIONS.



PHASE 1 DEVELOPMENT



VICINITY MAP - N.T.S

Graphic Scale: 1" = 200'



100' 0 200' 400' 600' 800'



5074 BRISTOL INDUSTRIAL WAY
SUITE A
BUFORD, GEORGIA 30518
(770) 271-2868
www.dpengr.com

PREPARED FOR:
**STARK LAND
DEVELOPMENT
3719 WINDER HWY.
FLOWERY BRANCH
GEORGIA 30542**

PROJECT NAME:
MULBERRY STREET

TASK:

CONCEPTUAL
LAND
PLAN

PROJECT INFORMATION:

MULBERRY STREET

Project Name

20-085

Project Number

MULBERRY STREET

Project Address

116 AND 117

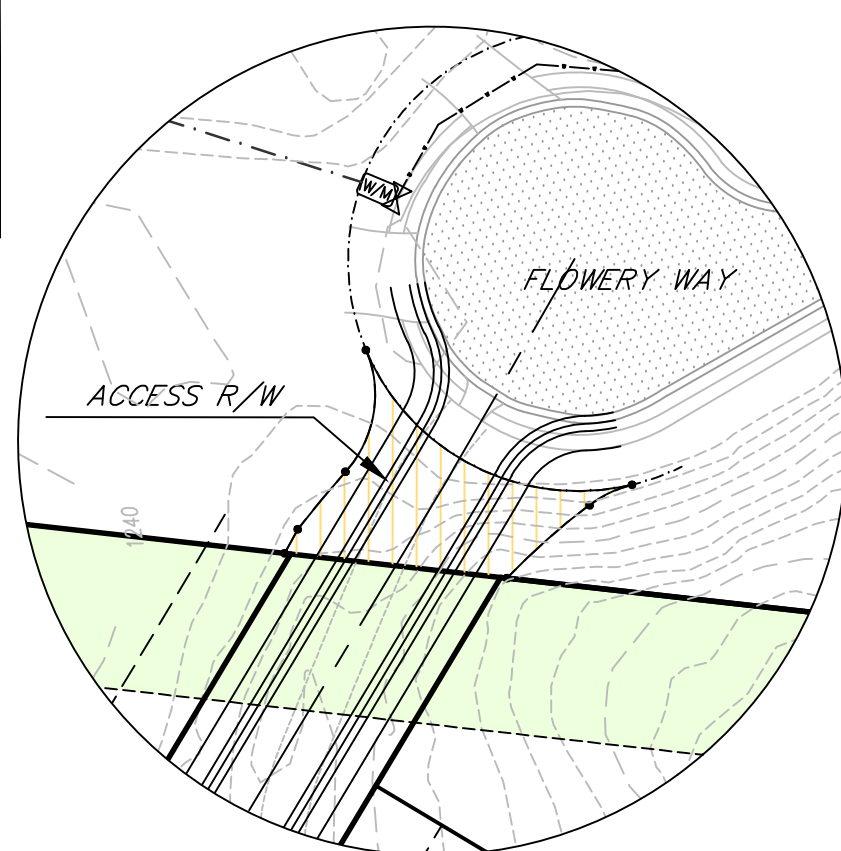
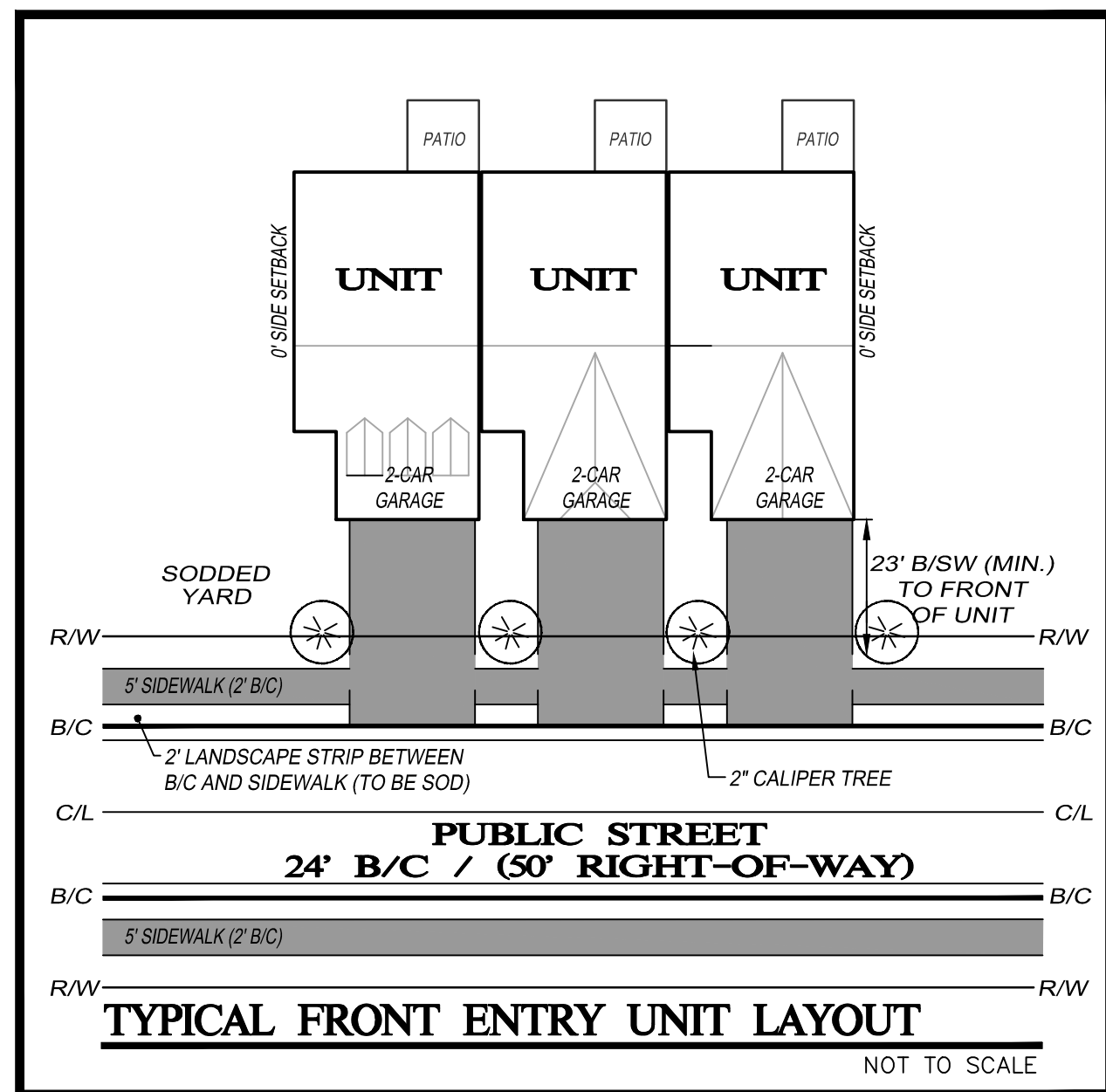
Land Lot No.(s)

District
CITY OF FLOWERY BRANCH
HALL COUNTY, GA
County, State

DATE		02/09/2021									
REVISION		Address Conceptual Land Plan Comments									
No.											
1.											
2.											
3.											
4.											
5.											
DESIGN				AS SHOWN							
KWB DRAWN				SCALE							
CHECKED				SHEET							
12/02/20 DATE				20-085 PROJECT No.							

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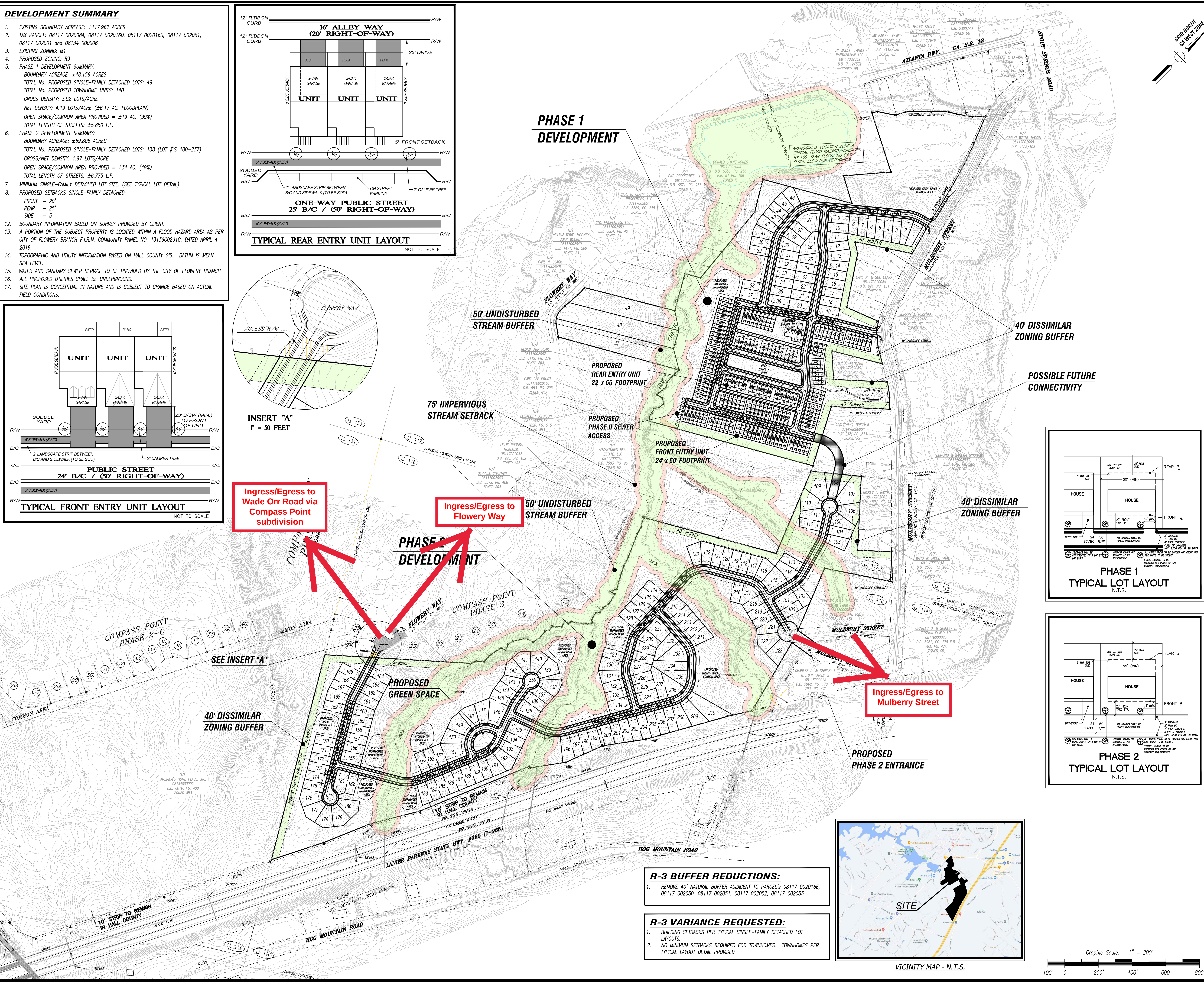


Ingress/Egress to
Wade Or Road via
Compass Point
subdivision

Ingress/Egress to
Flowery Way

Ingress/Egress to
Mulberry Street

PHASE 1 DEVELOPMENT



R-3 BUFFER REDUCTIONS:

- REMOVE 40' NATURAL BUFFER ADJACENT TO PARCEL'S 08117 002016E, 08117 002050, 08117 002051, 08117 002052, 08117 002053.

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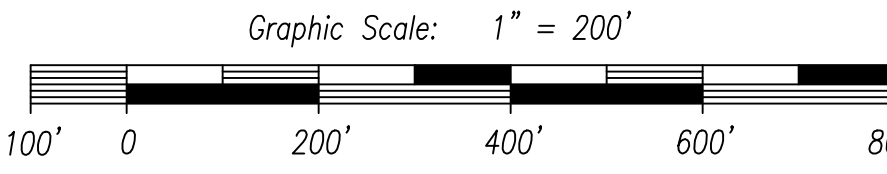
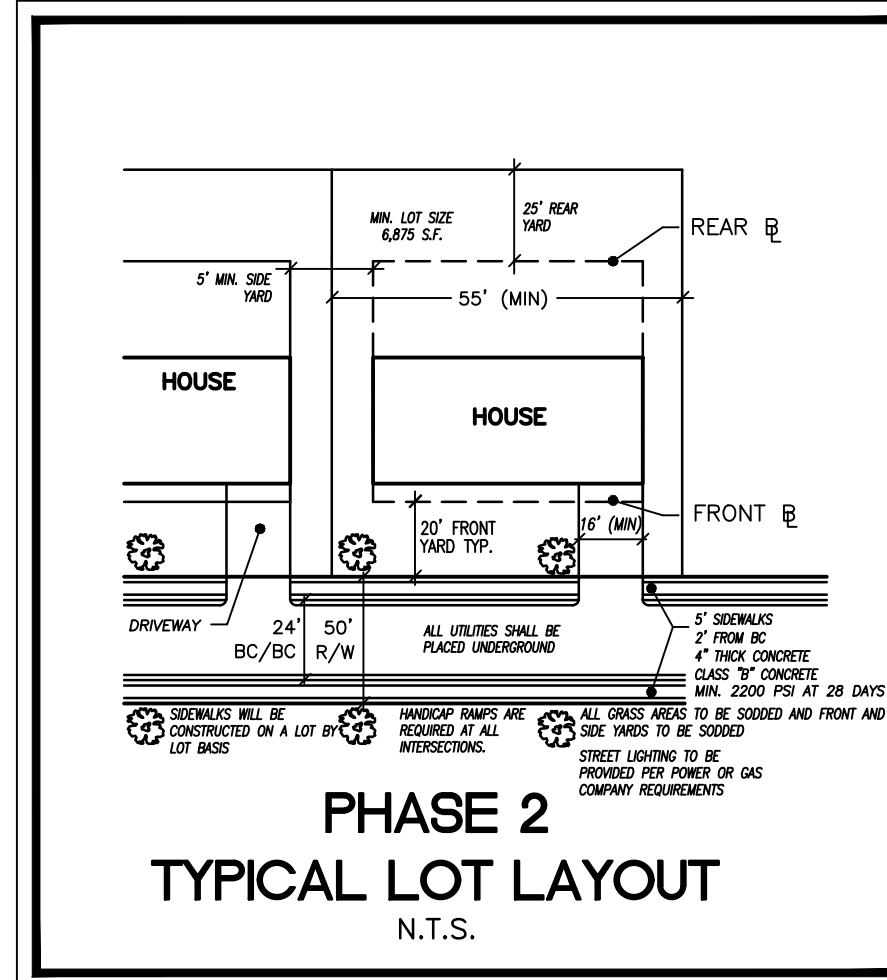
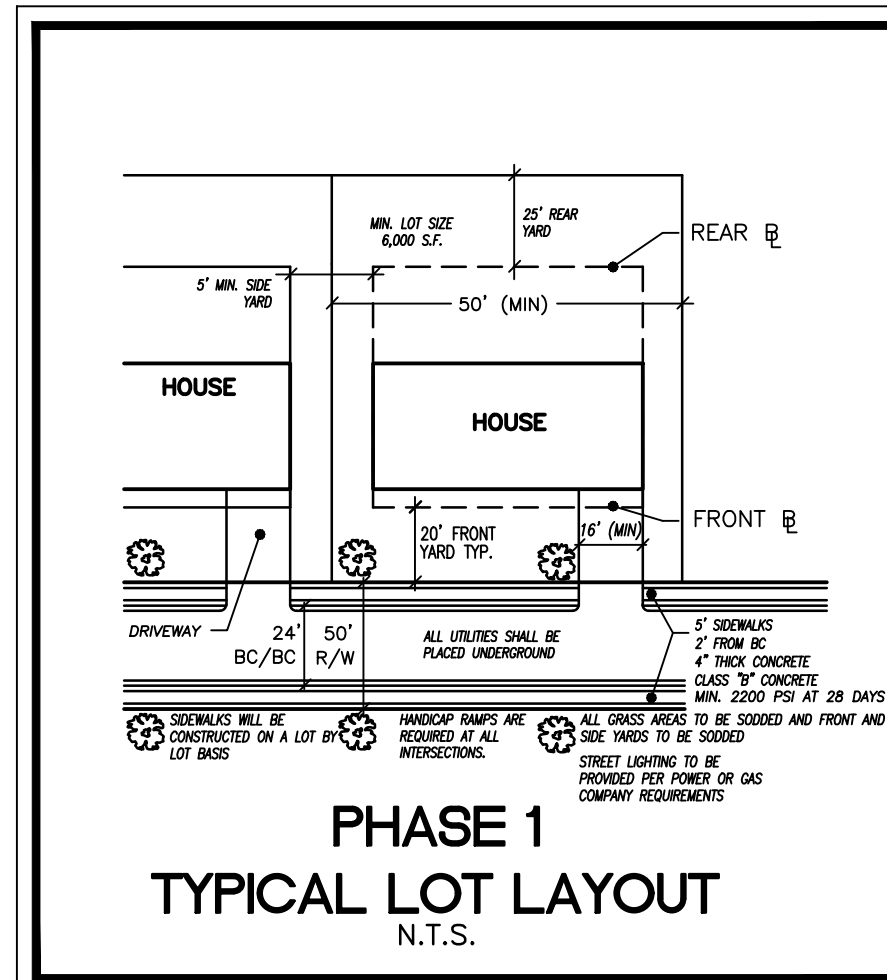
**CONCEPTUAL
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Project Address
116 AND 117
Land Lot No.(s)

District
CITY OF FLOWERY BRANCH
HALL COUNTY, GA
County, State

DATE	REVISION	Address Conceptual Land Plan Comments	Revised Phase 2 Access as requested by Client
02/09/2021			
03/29/2021			
No.	1.	2.	3.
DESIGN	AS SHOWN		
KWB	SCALE		
DRAWN	1 of 1		
CHECKED	SHEET		
12/02/20	20-085		
DATE	PROJECT No.		



Traffic Impact Study

Proposed Mulberry Street Residential Subdivision
City of Flowery Branch, Georgia

May 7, 2021

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING



Traffic Impact Study

Proposed Mulberry Street Residential Subdivision
City of Flowery Branch, Georgia

study prepared for:

Pine Grove Partners, LLC
3325 Mathieson Drive, NE
Atlanta, Georgia 30305

May 7, 2021



MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING

858 Myrtle Street, NE
Atlanta, Georgia 30308

phone: (678) 637-1763
e-mail: acamporatraffic@comcast.net

Contents

INTRODUCTION1

EXISTING TRAFFIC CONDITIONS2

 DESCRIPTION OF EXISTING ROADWAYS2

 PEDESTRIAN, BICYCLE, AND TRANSIT ACCESSIBILITY3

 EXISTING TRAFFIC VOLUMES7

 EXISTING INTERSECTION OPERATIONS9

FUTURE NO-BUILD TRAFFIC CONDITIONS12

 PROGRAMMED TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS12

 NO-BUILD INTERSECTION OPERATIONS13

PROJECT TRAFFIC CHARACTERISTICS14

 PROJECT DESCRIPTION14

 TRIP GENERATION15

 TRIP DISTRIBUTION AND ASSIGNMENT16

FUTURE TRAFFIC CONDITIONS18

 FUTURE INTERSECTION OPERATIONS19

CONCLUSIONS AND RECOMMENDATIONS21

APPENDIX

Tables

TABLE 1 – HISTORIC GEORGIA DOT TRAFFIC VOLUME COUNTS AND ANNUAL GROWTH RATES8

TABLE 2 – EXISTING INTERSECTION OPERATIONS10

TABLE 3 – NO-BUILD INTERSECTION OPERATIONS13

TABLE 4 – MULBERRY STREET SUBDIVISION TRIP GENERATION.....15

TABLE 5 – FUTURE INTERSECTION OPERATIONS, PHASE I AND FULL BUILD-OUT20

Figures

FIGURE 1 – SITE LOCATION MAP1

FIGURE 2 – ADJUSTED EXISTING WEEKDAY A.M. AND P.M. PEAK HOUR TRAFFIC VOLUMES.....9

FIGURE 3 – SITE PLAN14

FIGURE 4 – WEEKDAY A.M. AND P.M. PEAK HOUR PROJECT TRIPS AND TRIP DISTRIBUTION PERCENTAGES – PHASE I16

FIGURE 5 – WEEKDAY A.M. AND P.M. PEAK HOUR PROJECT TRIPS AND TRIP DISTRIBUTION PERCENTAGES – FULL BUILD-OUT17

FIGURE 6 – FUTURE WEEKDAY A.M. AND P.M. PEAK HOUR VOLUMES – PHASE I.....18

FIGURE 7 – FUTURE WEEKDAY A.M. AND P.M. PEAK HOUR VOLUMES – FULL BUILD-OUT.....19

Photographs

PHOTOGRAPH 1 – MULBERRY STREET FACING NORTH FROM VICINITY OF PROPOSED SUBDIVISION NORTH ACCESS3

PHOTOGRAPH 2 – MULBERRY STREET FACING SOUTH FROM VICINITY OF PROPOSED SUBDIVISION NORTH ACCESS4

PHOTOGRAPH 3 – SPEED BUMP ON MULBERRY STREET4

PHOTOGRAPH 4 – PHIL NIEKRO BOULEVARD FACING WEST AT MULBERRY STREET, THEN ATLANTA HIGHWAY.....5

PHOTOGRAPH 5 – QUEUES ON WESTBOUND PHIL NIEKRO BOULEVARD FROM ATLANTA HIGHWAY PASSING MULBERRY STREET5

PHOTOGRAPH 6 – NORTHBOUND ATLANTA HIGHWAY AT PHIL NIEKRO BOULEVARD6

PHOTOGRAPH 7 – VIEW TO NORTH ON ATLANTA HIGHWAY FROM FLOWERY WAY6

PHOTOGRAPH 8 – VIEW TO EAST ON WADE ORR ROAD AT COMPASS DRIVE.....7

Introduction

This study assesses the traffic impact of a proposed residential subdivision in the City of Flowery Branch, Georgia. The site is located along the southwest side of Mulberry Street, south of Phil Niekro Boulevard, as shown in the location map in Figure 1. The proposed subdivision will be developed in two phases. Phase I will consist of 49 single family homes and 140 attached townhomes. Vehicular access will be provided at two locations along the west side of Mulberry Street. Phase II will consist of 138 single family homes. Phase II will be connected to Phase I, with additional vehicular accesses provided at the south end of Mulberry Street, and through the adjacent Compass Pointe subdivision, with connections to Flowery Way (which connects to Atlanta Road) and Compass Drive (which connects to Wade Orr Road).

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed residential 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 subdivision were assessed. The following is a description of existing transportation facilities, traffic volumes, and intersection operations.

Description of Existing Roadways

Mulberry Street is a local two-lane residential street that begins near Interstate 985, passes the subject site, has a side street stop sign controlled intersection with Phil Niekro Boulevard, then parallels the east side of Atlanta Highway to Spring Street. Mulberry Street south of Phil Niekro Boulevard provides access to a residential subdivision, a few low-density single family homes, and undeveloped land. The terrain is gently rolling and the posted speed limit is 25 mph. In 2019 (the latest year that data was available) the Georgia DOT recorded an Annual Average Daily Traffic (AADT) volume of 590 vehicles per day (vpd) on Mulberry Street midway between Phil Niekro Boulevard and its southern terminus. A 24-hour bi-directional traffic volume count was collected on Mulberry Street at the location of the Georgia DOT count station for this study on Wednesday, April 21, 2021 and recorded a northbound volume of 567 vehicles and a southbound volume of 569 vehicles for a two-way 24-hour volume of 1,136 vehicles.

Phil Niekro Boulevard is an urban minor arterial that begins at a signalized intersection at Atlanta Highway (west of which it is called Snelling Avenue) has an interchange with Interstate 985, then changes names to Spout Springs Road and continues to the southeast. The land along Phil Niekro Boulevard has a small retail node between Mulberry Street and Atlanta Highway, then includes undeveloped land or land being developed with residential subdivisions, with a small retail node at the I-985 interchange. The road has one through travel lane per direction with exclusive turn lanes at most intersections. The terrain is gently rolling and the posted speed limit is 35 mph, increasing to 45 mph east of Mulberry Street. In 2019 the Georgia DOT recorded an AADT volume of 8,220 vpd on Phil Niekro Boulevard west of Thurmon Tanner Parkway.

Atlanta Highway (Georgia State Route 13) is a north/south urban minor arterial that provides regional mobility through this area. The road has one through travel lane per direction with exclusive left turn lanes at its signalized intersection with Phil Niekro Boulevard / Snelling Avenue. There is an at-grade railroad crossing on Snelling Avenue immediately west of that intersection. The terrain is level to very gently rolling and the posted speed limit is 45 mph. In 2019 the Georgia DOT recorded an AADT volume of 9,060 vpd on Atlanta Highway south of Phil Niekro Boulevard. A 24-hour bi-directional traffic volume count was collected for this study on Wednesday, April 21, 2021 on Atlanta Highway at the location of the Georgia DOT count station and recorded a 24-hour volume of 8,946 vehicles.

Wade Orr Road is a two lane urban minor collector that begins at Atlanta Highway (west of which it is named Gaines Ferry Road), crosses Interstate 985 with no interchange, and terminates at Hog Mountain Road. The road provides access to residential subdivisions and undeveloped land. The road is winding with gently rolling terrain and the posted speed limit is 40 mph. In 2019 the Georgia DOT recorded an AADT volume of 4,610 vpd on Wade Orr Road west of Saddlehorse Drive. A 24-hour bi-directional traffic volume count was collected for this study on

Wednesday, April 21, 2021 on Wade Orr Road at the location of the Georgia DOT count station and recorded a 24-hour volume of 5,115 vehicles.

Flowery Way is a two lane local street that intersects with Atlanta Highway at a side street stop sign. The terrain is rolling and the posted speed limit is 30 mph. Compass Drive is a subdivision street that intersects with Wade Orr Road at a side street stop sign. The terrain is rolling and the posted speed limit is 25 mph.

Pedestrian, Bicycle, and Transit Accessibility

There is a sidewalk / path along the east side of Mulberry Street near the proposed subdivision access, for a short distance. However, most of Mulberry Street has no sidewalks. There is no sidewalk on Phil Niekro Boulevard near Mulberry Street, but there is sidewalk along the east side of Atlanta Highway north of Phil Niekro Boulevard and along the streets west of the railroad tracks, and there are crosswalks and pedestrian signals at the signalized intersection of Atlanta Highway at Phil Niekro Boulevard. There are no dedicated bicycle lanes near the proposed development. There is no regularly-scheduled mass transit service in the vicinity of the site.

Photographs 1 through 8 show the roadway conditions in the vicinity of the subject site.



Photograph 1 – Mulberry Street Facing North from Vicinity of Proposed Subdivision North Access



Photograph 2 – Mulberry Street Facing South from Vicinity of Proposed Subdivision North Access



Photograph 3 – Speed Bump on Mulberry Street



Photograph 4 – Phil Niekro Boulevard Facing West at Mulberry Street, then Atlanta Highway



Photograph 5 – Queues on Westbound Phil Niekro Boulevard from Atlanta Highway Passing Mulberry Street



Photograph 6 – Northbound Atlanta Highway at Phil Niekro Boulevard



Photograph 7 – View to North on Atlanta Highway from Flowery Way



Photograph 8 – View to East on Wade Orr Road at Compass Drive

Existing Traffic Volumes

Full turning movement traffic volume counts were collected for this study at the following intersections in the vicinity of the proposed development:

1. Phil Niekro Boulevard at Mulberry Street
2. Atlanta Highway at Phil Niekro Boulevard / Snelling Avenue
3. Atlanta Highway at Flowery Way
4. Wade Orr Road at Compass Drive

The counts were collected on Wednesday, April 21, 2021, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Area schools were in session on the day on which the counts were recorded, but this included some schooling from home due to the COVID-19 pandemic, addressed below.

In addition to the intersection turning movement counts, 24-hour bi-directional counts were collected on Mulberry Street at the location of Georgia DOT Count Station 139-8173, on Atlanta Highway west of Phil Niekro Boulevard at Georgia DOT Count Station 139-0169, and on Wade Orr Road west of Saddlehorse Drive at Georgia DOT Count Station 039-7381.

In order to account for decreased volumes due to the pandemic, an adjustment factor was developed to be applied to the counted volumes. The 2019 (latest year of data) Georgia DOT AADT volumes at the three count stations listed above were extrapolated to 2021 using the average annual growth rate at each location. This produces the “expected” 2021 AADT, without the influence of the COVID-19 pandemic. These were then compared to the 24-hour counts collected at each location for this study. Table 1 summarizes the historic counts and the current counts, including the annual growth between each count and the percent difference between the “expected” 2021 AADT and the current counts collected for this study.

Table 1 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates

Year	Mulberry St midway	Annual Growth	Atlanta Hwy W of Phil Niekro	Annual Growth	Phil Niekro N of Thurmon Tanner	Annual Growth	Wade Orr W of Saddlehorse	Annual Growth
Station ID	139-8173		139-0169		139-0445		139-7381	
2015	550		8,300		7,930		4,260	
2016	560	1.8%	8,540	2.9%	8,160	2.9%	4,360	2.3%
2017	570	1.8%	8,600	0.7%	8,220	0.7%	4,450	2.1%
2018	580	1.8%	8,530	-0.8%	8,160	-0.7%	4,520	1.6%
2019	590	1.7%	9,060	6.2%	8,220	0.7%	4,610	2.0%
<i>avg growth</i>		1.8%		2.2%		0.9%		2.0%
Expected 2021 AADT	611		10,221		8,341		4,795	
24-Hour 4/21/21	1,136		8,946				5,115	
<i>% Difference</i>	+85.9%		-12.5%				+6.7%	

The 24 hour volumes counted for this study were 85.9% higher than the “expected” 2021 AADT on Mulberry Street and 6.7% higher on Wade Orr Road, while they were 12.5% lower on Atlanta Highway. However, a closer review of the Georgia DOT data reveals that at the Mulberry Street and Wade Orr count stations, the Georgia DOT estimated ALL of the counts. It is unlikely that there has been almost 86% growth on Mulberry Street, and instead, more likely that Georgia DOT underestimated the counts. The counted volume on Mulberry Street for this study is consistent with the number of homes served by that street. At the Atlanta Highway count station, the 2016, 2017, and 2018 counts were also estimated but the 2015 and 2019 counts were actual. Therefore, the annual average growth from 2015 to 2019 at that count station, of 2.2%, is growth based on actual data and the -12.5% from the “expected” 2021 AADT to the counted data is considered the most reliable measure of actual conditions.

Based on the above discussion, all counted volumes for this study were increased by 10% to account for the effects of the pandemic. The full 12.5% difference was not applied because the pandemic is likely to have long-term effects on travel patterns and traffic volumes due to changes in behavior, such as increased working from home, so that the current counts may be as representative of “normal” conditions as would result from calibration back to 2019 conditions.

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 were adjusted by the 10% pandemic adjustment discussed above to produce the adjusted existing weekday a.m. and p.m. peak hour traffic volumes at each intersection, as shown in Figure 2. The raw count data is found in Appendix A.

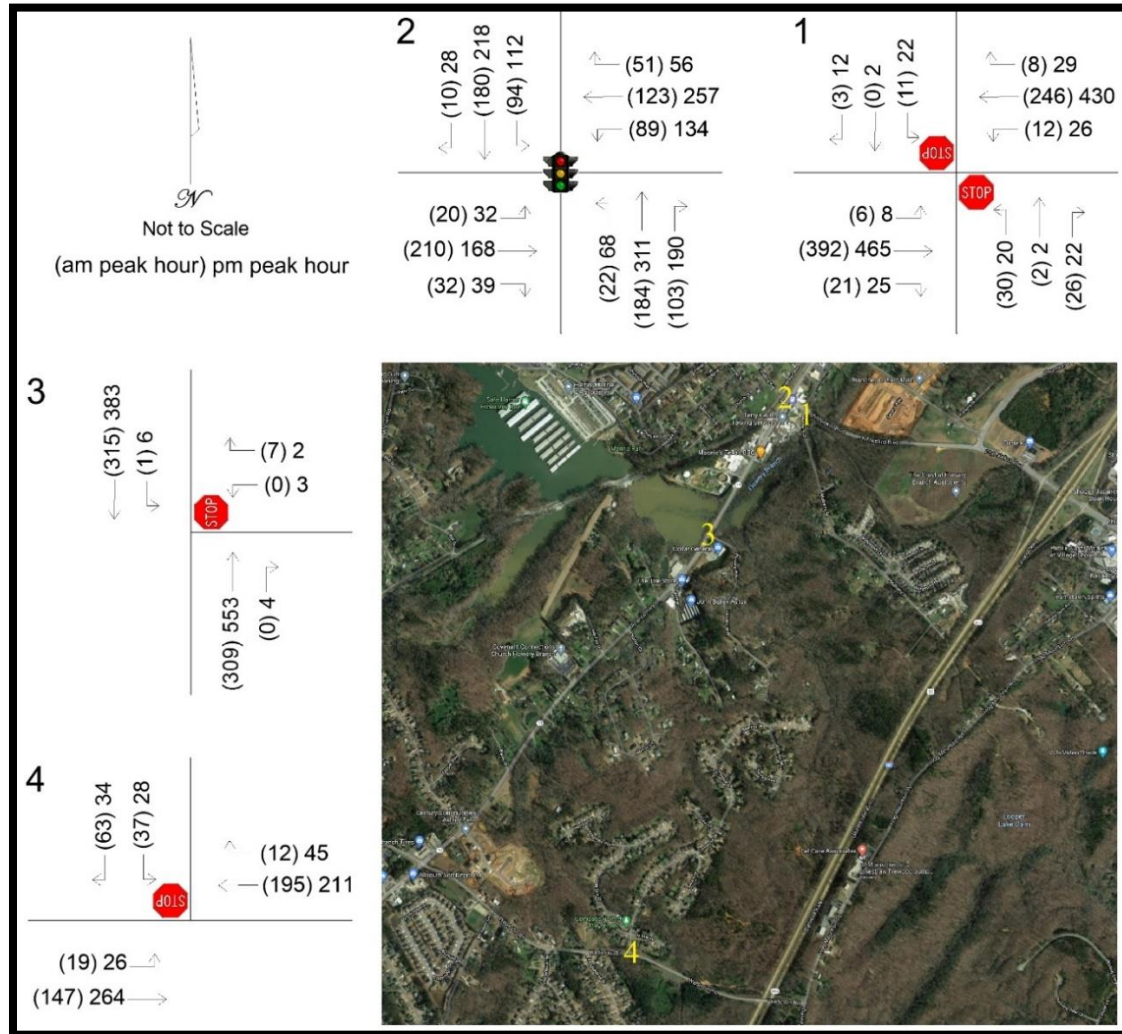


Figure 2 – Adjusted Existing Weekday A.M. and P.M. Peak Hour Traffic Volumes

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 2. 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 2 – Existing Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Phil Niekro Boulevard at Mulberry Street	A	2.1	A	2.0
northbound approach	C	15.3	C	19.3
southbound left/through	C	17.5	D	27.2
southbound right	A	9.8	B	11.2
eastbound left turn	A	7.8	A	8.3
westbound left turn	A	8.2	A	8.5
2. Atlanta Highway at Phil Niekro Boulevard / Snelling Avenue	C	24.7	C	31.2
northbound approach	B	15.2	C	20.6
southbound approach	B	11.6	B	14.9
eastbound approach	D	42.7	D	48.5
westbound approach	C	33.0	D	46.3
3. Atlanta Highway at Flowery Way	A	0.1	A	0.2
southbound left turn	A	8.0	A	8.7
westbound approach	B	10.2	C	16.4
4. Wade Orr Road at Compass Drive	A	3.1	A	1.6
southbound approach	B	11.5	B	12.1
eastbound left turn	A	7.8	A	7.9

The existing analysis reveals acceptable traffic operations at all study intersections. Therefore, no mitigation is identified for the existing condition based on capacity or delays. However, three observed field conditions are noted here.

First, due to the proximity of Atlanta Highway to Mulberry Street, queueing on westbound Phil Niekro Boulevard was observed to extend from the signal at Atlanta Highway past Mulberry Street. It is recommended that a “Do Not Block the Box” be implemented at the Phil Niekro / Mulberry intersection. This would include striping out a box on the pavement which vehicles should not block while queued waiting for the signal, and accompanying signage.

Second, westbound Phil Niekro Boulevard begins to widen east of Mulberry Street to transition from one westbound lane to two westbound lanes at Atlanta Highway. Currently, westbound left turners into Mulberry Street can “hug” the centerline and allow westbound through traffic to get around them, but that does not always necessarily happen and westbound through vehicles can either opt to drive onto the unpaved shoulder or wait behind the left turn vehicle. The westbound left turn volume, while moderate, is sufficient to justify creating a separate westbound left turn lane and it is recommended that this lane be added.

Third, there is a speed bump on Mulberry Street, signed as a speed hump. Speed bumps are smaller, more abrupt speed control devices, typically used in parking lots. These are generally not preferred on public roadways because 1) they tend to be so jarring that, if not seen, could damage a vehicle and/or cause it to lose control and 2) are typically not preferred by emergency services. It is recommended that the bump be replaced by a speed hump.

The three improvements recommended above are system improvements, that should be made independent of the proposed subdivision, whether or not the proposed subdivision is developed.

Future No-Build Traffic Conditions

Two future no-build conditions were developed, five years and ten years into the future. These represent the traffic conditions that would exist in the future at the completion of Phase I of the subdivision and at full build-out of the subdivision, but not including the proposed subdivision's trips. The purpose of the analysis of the no-build conditions 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 subdivision is under construction.

Table 1, presented previously, shows the Georgia DOT AADT volume counts and the annual growth rates between the counts on nearby roadways for the five years from 2015 to 2019 (the latest year for which counts are available). These counts were used to identify historic growth trends in volumes in the area. Based on a consideration of all the data, an annual growth factor of 2.0% per year was applied to the existing volumes when projecting the future no-build volumes. The growth factor was applied for five years, for a total of 10.4% growth, and ten years, for a total of 21.9% growth, that will occur while Phase I, and then full build-out, of the proposed subdivision is under construction.

Programmed Transportation Infrastructure Improvements

The Gainesville-Hall Metropolitan Planning Organization 2020 Regional Transportation Plan and the Georgia DOT Projects website were researched for planned (anticipated) or programmed (funded and scheduled) transportation improvement projects at the study intersections, the adjacent roadways, or which will affect traffic volumes and patterns at the study intersections within the buildout timeframe of the proposed subdivision. The following projects were identified:

GH-033 – GA 13 / Atlanta Highway widening from two to four lanes from Radford Road to south of GA 53. Long-term improvement anticipated after 2050.

GH-084 – McEver Road widening from two to four lanes from Lanier Islands Parkway to Gainesville Street. Mid-term improvement anticipated to be completed by 2034.

GH-129 – Capacity improvements to Thurmon Tanner Parkway at Interstate 985. Mid-term improvement anticipated to be completed by 2031.

These three projects are likely to improve capacity but are not located at any of the intersections evaluated in this study. It is possible that improvements to capacity in the area could influence volumes at the study intersections. Because these improvements are mid-to-long-term and not located at the study intersections, they were not modeled in the no-build or future analysis. The project information sheets can be found in Appendix F.

No-Build Intersection Operations

The no-build volumes were entered into the Synchro model and the 2026 and 2031 no-build traffic operations were analyzed at the study intersections using Synchro 10 software in accordance with the HCM 6 methodology. 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			
	Phase I		Full Build-Out		Phase I		Full Build-Out	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Phil Niekro Blvd at Mulberry St	A	2.2	A	2.5	A	2.3	A	2.9
northbound approach	C	16.8	C	19.2	C	22.6	D	27.9
southbound left/through	C	19.4	C	22.2	D	33.4	E	43.7
southbound right	A	10.0	B	10.2	B	11.6	B	12.1
eastbound left turn	A	7.9	A	8.0	A	8.5	A	8.7
westbound left turn	A	8.3	A	8.5	A	8.7	A	8.9
2. Atlanta Hwy at Phil Niekro Blvd / Snelling Ave	C	25.6	C	27.9	C	34.6	D	38.2
northbound approach	B	17.4	C	20.4	C	25.2	C	34.0
southbound approach	B	13.1	B	14.9	B	17.3	C	20.8
eastbound approach	D	42.4	D	46.4	D	50.4	D	50.6
westbound approach	C	32.4	C	32.7	D	49.8	D	49.4
3. Atlanta Hwy at Flowery Way	A	0.1	A	0.1	A	0.3	A	0.3
southbound left turn	A	8.1	A	8.2	A	8.9	A	9.2
westbound approach	B	10.5	B	10.8	C	18.7	C	20.0
4. Wade Orr Rd at Compass Dr	A	3.2	A	3.4	A	1.6	A	1.7
southbound approach	B	12.0	B	12.8	B	12.7	B	13.6
eastbound left turn	A	7.8	A	7.9	A	8.0	A	8.1

In the future no-build condition, the study intersections will continue to generally operate acceptably. Only one location will drop to LOS E in the ten year / full build-out no-build condition – the southbound left/through from Mulberry Street at Phil Niekro Boulevard. Higher delays on side street stop sign controlled approaches at busy thoroughfares such as Phil Niekro Boulevard are not unusual. Mitigation would require a change in control to a signal or a roundabout. Given that the high delay is for just one approach, during one time period, ten years into the future, a change in control is not recommended at this time and the side street volumes do not appear to be sufficient to warrant signalization. Therefore, there is no recommended mitigation for the no-build condition.

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 proposed subdivision was calculated using the equations in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition with Supplement* (the current edition). ITE Land Use 210 – Single-Family Detached Housing was chosen for the single-family homes and ITE Land Use 220 – Multifamily Housing (Low-Rise) was chosen as representative of the townhomes. The trip generation for the project is presented in Table 4. Also presented in Table 4, for comparison purposes, is the trip generation if the site were to be alternatively developed with an industrial park according to a previous plan for the site.

Table 4 – Mulberry Street Subdivision Trip Generation

Land Use	ITE Code	Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Phase I											
Single Family	210	49 units	10	30	40	32	19	51	270	270	540
Townhomes	220	<u>140 units</u>	<u>15</u>	<u>51</u>	<u>66</u>	<u>50</u>	<u>30</u>	<u>80</u>	<u>509</u>	<u>509</u>	<u>1,018</u>
Total		189 units	25	81	106	82	49	131	779	779	1,558
Phase II											
Single Family	210	138 units	26	77	103	87	51	138	699	699	1,398
Total Trips Phase I + Phase II											
Residential		327 units	51	158	209	169	100	269	1,478	1,478	2,956
Alternative Potential Industrial Park Development											
Industrial Park	130	780,500 ft²	253	59	312	65	247	312	1,367	1,367	2,734
Difference to Proposed Subdivision			+202	-99	+103	-104	+147	+43	-111	-111	-222

Phase I of the proposed subdivision will generate 106 new trips in the a.m. peak hour, 131 new trips in the p.m. peak hour, and 1,558 new daily trips. At full build-out of both phases, the proposed subdivision will generate 209 new trips in the a.m. peak hour, 269 new trips in the p.m. peak hour, and 2,956 new daily trips.

If developed alternatively with an industrial park, the industrial park would generate 312 new trips in the a.m. peak hour (103 more trips than the proposed subdivision), 312 new trips in the p.m. peak hour (43 more trips than the proposed subdivision), and 2,734 new daily trips (222 less trips than the proposed subdivision). It is noted that industrial parks typically generate notable truck trips, whereas residential development do not. While truck volumes will vary significantly depending on the actual industrial use, the ITE trip Generation Manual suggests that some industrial uses generate 20% or more of their trips as trucks. These trucks would be

introduced to the currently-primarily-residential Mulberry Street and most would be making a left turn into Mulberry Street from Phil Niekro Boulevard and the tight right turn (for trucks) from Mulberry Street to Phil Niekro Boulevard, potentially encroaching into the opposing westbound lane on Phil Niekro Boulevard.

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 residential development were developed based on the locations and proximity of likely trip origins and destinations, such as employment centers, retail and offices, and schools in the area, and the routes of travel to those origins and destinations, including Interstate 985, Atlanta Highway, and Peachtree Industrial Boulevard / McEver 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 Phase I of the subdivision are shown in Figure 4 while Figure 5 shows the total trips for the full project build-out, which includes both Phase I and Phase II.

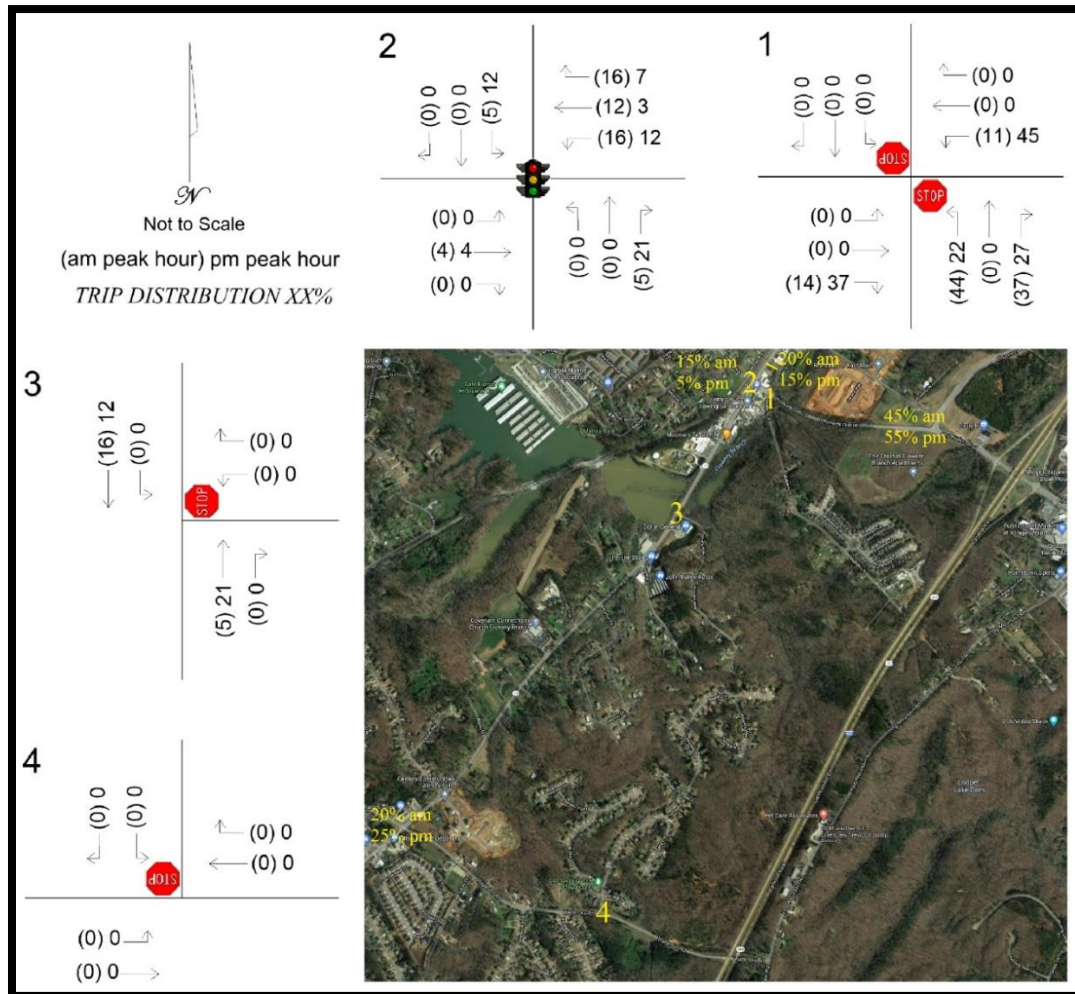


Figure 4 – Weekday A.M. and P.M. Peak Hour Project Trips and Trip Distribution Percentages – Phase I

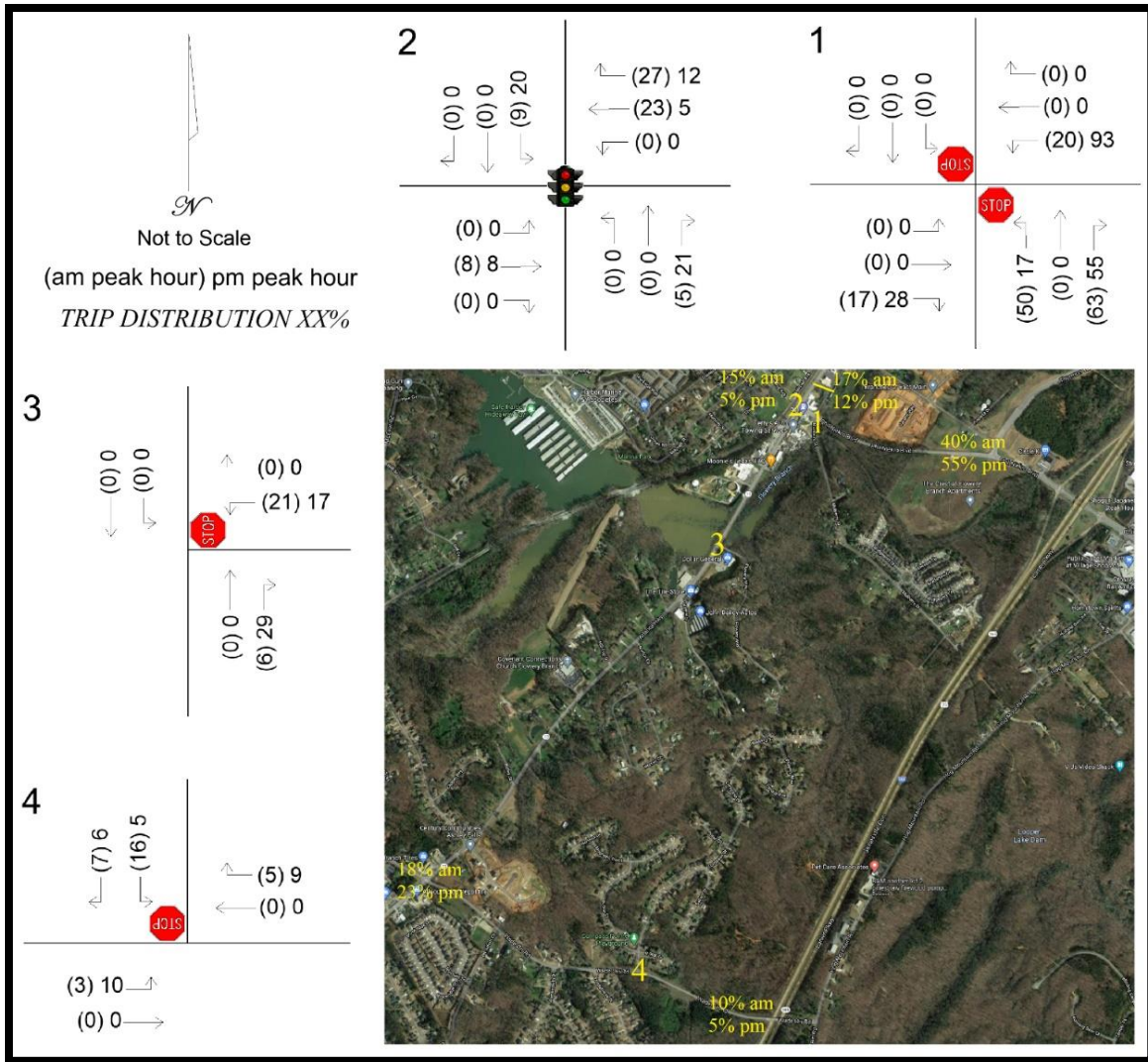
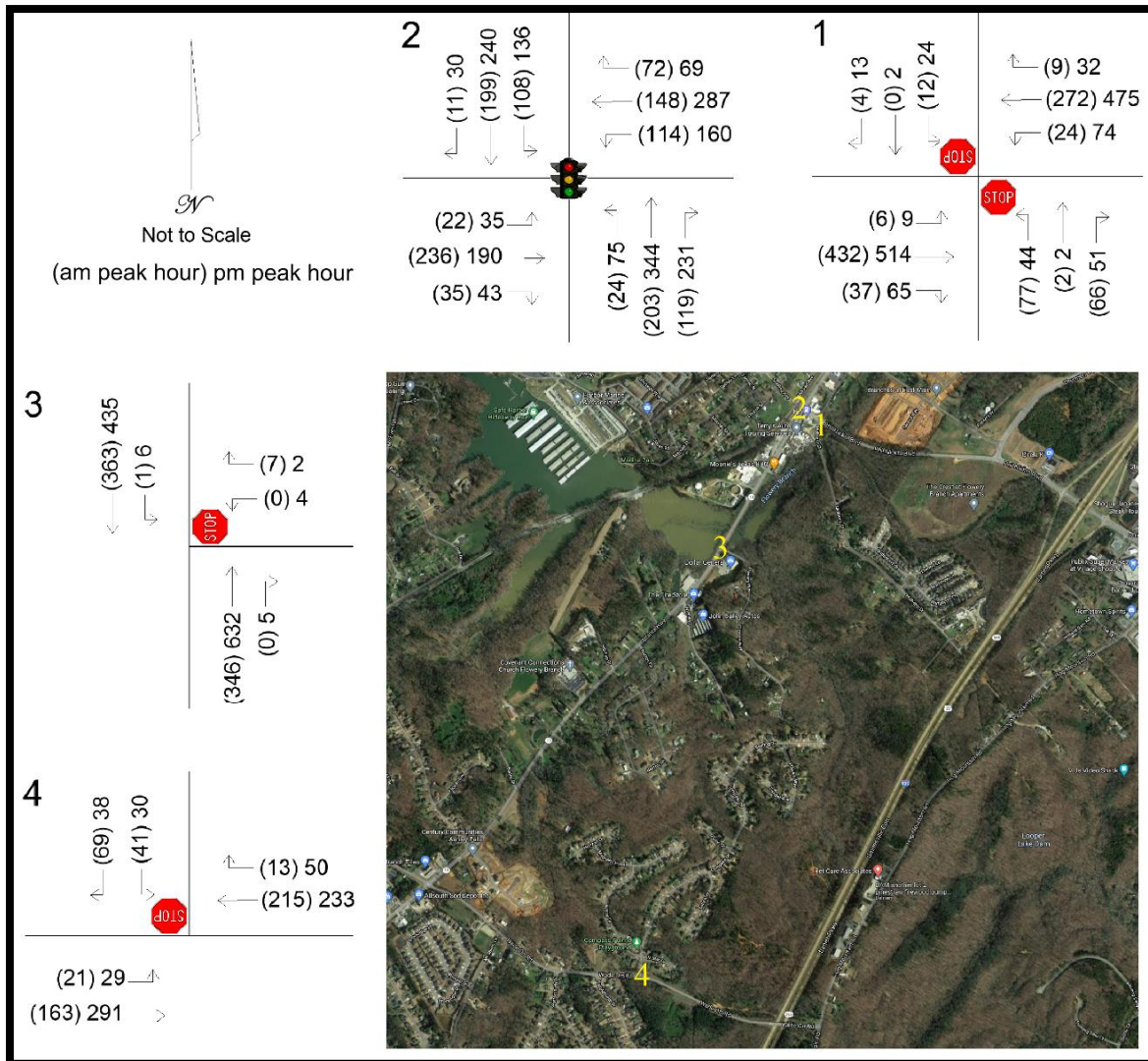


Figure 5 – Weekday A.M. and P.M. Peak Hour Project Trips and Trip Distribution Percentages – Full Build-Out

Future Traffic Conditions

The future build volumes consist of the no-build volumes plus the trips that will be generated by the proposed Mulberry Street subdivision. The Phase I volumes include the five year no-build volumes plus the Phase I development trips, as shown in Figure 6. The full build-out volumes include the ten year no-build volumes plus the trips from the full build-out of both Phase I and Phase II of the subdivision, as shown in Figure 7.



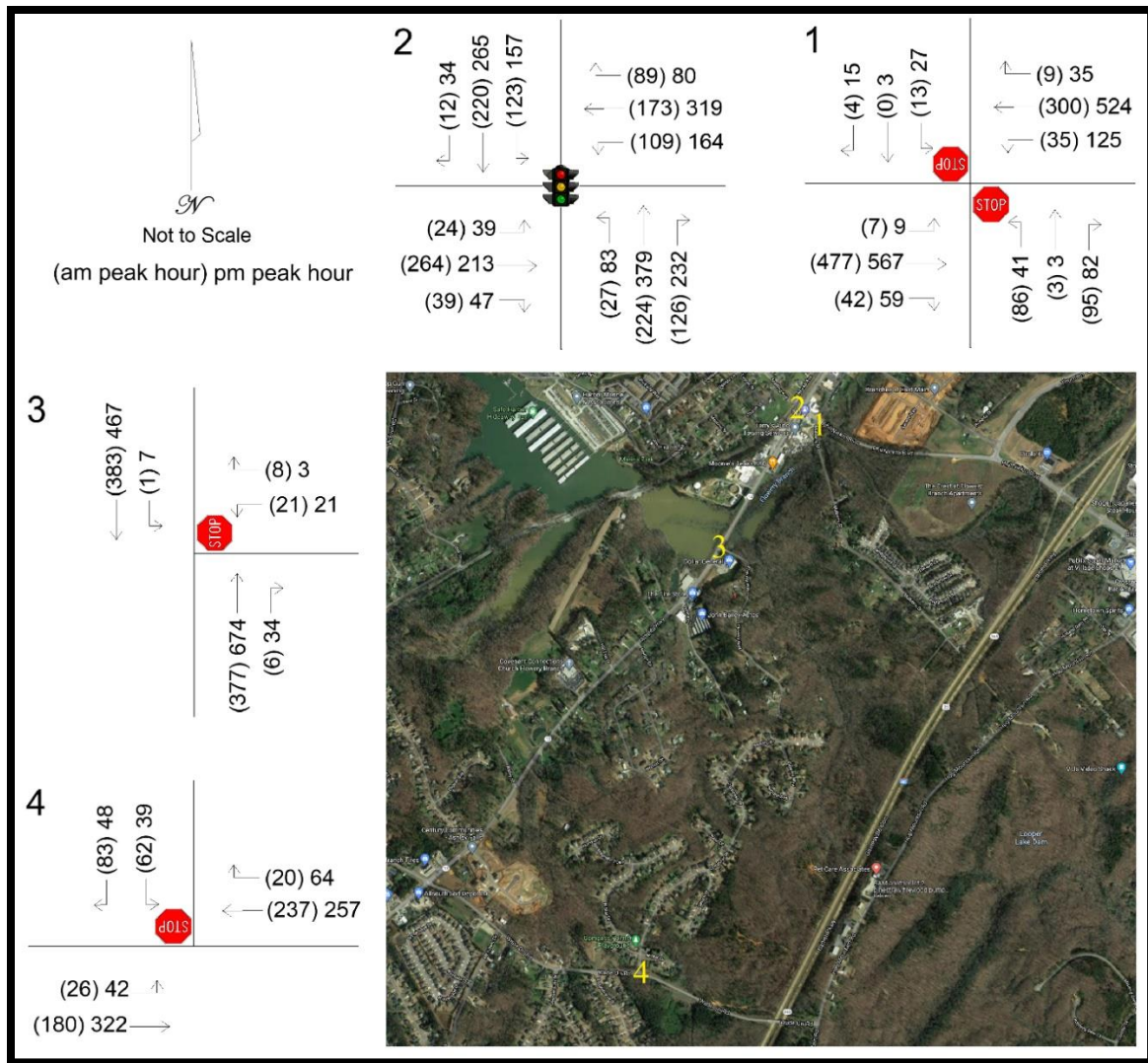


Figure 7 – Future Weekday A.M. and P.M. Peak Hour Volumes – Full Build-Out

Future Intersection Operations

An operational analysis was performed for the anticipated future project build-out, at the study intersections. 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 the 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, Phase I and Full Build-Out

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	Phase I		Full Build-Out		Phase I		Full Build-Out	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Phil Niekro Blvd at Mulberry St	A	4.5	A	6.4	A	4.3	A	7.6
northbound approach	C	22.3	D	30.6	D	32.0	E	49.4
southbound left/through	C	22.2	D	28.7	E	45.4	F	94.0
southbound right	A	10.0	B	10.2	B	11.5	B	12.0
eastbound left turn	A	7.9	A	8.0	A	8.5	A	8.6
westbound left turn	A	8.4	A	8.6	A	9.0	A	9.4
2. Atlanta Hwy at Phil Niekro Blvd / Snelling Ave	C	26.4	C	28.0	D	35.2	D	39.5
northbound approach	B	18.1	C	20.7	C	27.5	D	36.3
southbound approach	B	13.4	B	14.9	B	17.8	C	22.4
eastbound approach	D	43.8	D	45.2	D	50.8	D	49.9
westbound approach	C	32.9	C	33.5	D	48.6	D	50.5
3. Atlanta Hwy at Flowery Way	A	0.1	A	0.6	A	0.3	A	0.7
southbound left turn	A	8.1	A	8.2	A	9.0	A	9.3
westbound approach	B	10.5	B	15.3	C	19.4	D	25.7
4. Wade Orr Rd at Compass Dr	A	3.2	A	3.8	A	1.6	A	2.0
southbound approach	B	12.0	B	13.5	B	12.7	B	14.3
eastbound left turn	A	7.8	A	7.9	A	8.0	A	8.1

The future analysis reveals continued generally acceptable traffic operations at all study intersections. However, in the Phase I p.m. peak hour, the southbound left/through from Mulberry Street will operate at LOS E and both this movement and the northbound approach will operate unacceptably by full build-out of the proposed subdivision. As identified in the no-build analysis, high stop sign controlled side street approach delays are not unusual at busy thoroughfares such as Phil Niekro Boulevard and mitigating these delays would require a change in control to a signal or roundabout. A signal warrant study could be performed to determine if signalization of this intersection is justified. However, as with the no-build condition, the future volume projections on these side street approaches do not appear sufficient to satisfy the volume-based signal warrants. On the northbound approach, the addition of an exclusive right turn lane (so that the existing lane becomes a shared left/through) would prevent right turns from being blocked by the more challenging left turns. This lane would not completely mitigate the unacceptable delays on the northbound approach, but it would improve the heavy right turn delays to LOS B and, therefore, this right turn lane is recommended by the full build-out of the Mulberry Street subdivision.

The project civil engineer should comply with all applicable design standards at the proposed accesses on Mulberry Street, including those for sight distance, turn lane storage and taper lengths, turn radii, roadway width, and grades.

Conclusions and Recommendations

This study assesses the traffic impact of a proposed residential subdivision in the City of Flowery Branch. The proposed subdivision will be developed in two phases. Phase I will consist of 49 single family homes and 140 attached townhomes. Vehicular access will be provided at two locations along the west side of Mulberry Street. Phase II will consist of 138 single family homes. Phase II will be connected to Phase I, with additional vehicular accesses provided at the south end of Mulberry Street, and through the adjacent Compass Pointe subdivision, with connections to Flowery Way (which connects to Atlanta Road) and Compass Drive (which connects to Wade Orr Road). The following are the findings and recommendations of this study:

1. Existing operations at the intersections evaluated are acceptable. No mitigation is identified for the existing condition based on delays. However, three recommendations are made:

- a. Stripe a "Do Not Block the Box" on Phil Niekro Boulevard at Mulberry Street.
- b. Add a westbound left turn lane on Phil Niekro Boulevard at Mulberry Street.
- c. Change the speed bump on Mulberry Street to a speed hump.

The three improvements recommended above are system improvements, that should be made independent of the proposed subdivision, whether or not the proposed subdivision is developed.

2. Traffic volume growth in this area has been moderate and this is expected to continue into the future, including new developments occurring in the area on Phil Niekro Boulevard.
3. No-build operations at the intersections evaluated will continue to be acceptable, with just the southbound left/through turn from Mulberry Street at Phil Niekro Boulevard dropping to LOS E in the full build-out p.m. Potential mitigation includes signalization or a roundabout at this intersection, but no mitigation was recommended for the no-build condition.
4. Phase I of the proposed subdivision will generate 106 new trips in the a.m. peak hour, 131 new trips in the p.m. peak hour, and 1,558 new daily trips. At full build-out of both phases, the proposed subdivision will generate 209 new trips in the a.m. peak hour, 269 new trips in the p.m. peak hour, and 2,956 new daily trips.
5. If developed alternatively with an industrial park, as previously proposed, the industrial park would generate 312 new trips in the a.m. peak hour (103 more trips than the proposed subdivision), 312 new trips in the p.m. peak hour (43 more trips than the proposed subdivision), and 2,734 new daily trips (222 less trips than the proposed subdivision). Many of these trips will likely be truck trips added to Mulberry Street and primarily turning left into and right out-from Mulberry Street at Phil Niekro Boulevard.
6. With the addition of the project trips, the future operations will see minor increases in delays, but continued acceptable operations for most intersections/approach/movements. However, the side street approaches, on both northbound and southbound Mulberry Street at Phil Niekro Boulevard, will incur

unacceptable delays. As with the no-build analysis, the side street volumes do not appear sufficient to warrant signalization. However, the addition of a northbound exclusive right turn lane is recommended on Mulberry Street by full build-out of the proposed subdivision.

7. Each project access on Mulberry Street should include one entering and one exiting lane and the exiting approaches should be controlled by side street stop sign and accompanying stop bar.
8. The project civil engineer should comply with applicable access design standards at the accesses on Mulberry Street including sight distances, turn radii, roadway widths, and grades.

Appendix A

Traffic Count Data and Volume Worksheets

Mulberry Street Subdivision Traffic Impact Study

City of Flowery Branch, Georgia

May 2021

Intersection: 1. Phil Niekro Boulevard at Mulberry Street

Weekday A.M. Peak Hour	Northbound Mulberry Street				Southbound Mulberry Street				Eastbound Phil Niekro Boulevard				Westbound Phil Niekro Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 7:15-8:15)	27	2	24	53	10	0	3	13	5	356	19	380	11	224	7	242
COVID-19 adjustment	10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%	
Adjusted 2021 Volumes	30	2	26	58	11	0	3	14	6	392	21	418	12	246	8	266
Total Annual Background Growth - Phase I	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
No-Build Volumes - Phase I	33	2	29	64	12	0	4	16	6	432	23	461	13	272	9	294
No-Build Volumes - Phase II	36	3	32	71	13	0	4	17	7	477	25	510	15	300	9	324
Proposed Mulberry Street Subdivision Trips - Phase I	44	0	37	81	0	0	0	0	0	0	14	14	11	0	0	11
Proposed Mulberry Street Subdivision Trips - Phases I +II	50	0	63	113	0	0	0	0	0	0	17	17	20	0	0	20
Build Volumes - Phase I	77	2	66	145	12	0	4	16	6	432	37	475	24	272	9	305
Build Volumes - Phases I + II	86	3	95	184	13	0	4	17	7	477	42	527	35	300	9	344

Weekday P.M. Peak Hour	Northbound Mulberry Street				Southbound Mulberry Street				Eastbound Phil Niekro Boulevard				Westbound Phil Niekro Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 4:15-5:15)	18	2	20	40	20	2	11	33	7	423	23	453	24	391	26	441
COVID-19 adjustment	10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%	
Adjusted 2021 Volumes	20	2	22	44	22	2	12	36	8	465	25	498	26	430	29	485
Total Annual Background Growth - Phase I	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
No-Build Volumes - Phase I	22	2	24	49	24	2	13	40	9	514	28	550	29	475	32	536
No-Build Volumes - Phase II	24	3	27	54	27	3	15	44	9	567	31	607	32	524	35	591
Proposed Mulberry Street Subdivision Trips - Phase I	22	0	27	49	0	0	0	0	0	0	37	37	45	0	0	45
Proposed Mulberry Street Subdivision Trips - Phases I +II	17	0	55	72	0	0	0	0	0	0	28	28	93	0	0	93
Build Volumes - Phase I	44	2	51	98	24	2	13	40	9	514	65	587	74	475	32	581
Build Volumes - Phases I + II	41	3	82	126	27	3	15	44	9	567	59	635	125	524	35	684

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Mulberry Street Subdivision Traffic Impact Study

City of Flowery Branch, Georgia

May 2021

Intersection: 2. Atlanta Highway at Phil Niekro Boulevard / Snelling Avenue

Weekday A.M. Peak Hour

	Northbound Atlanta Highway				Southbound Atlanta Highway				Eastbound Snelling Avenue				Westbound Phil Niekro Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 7:15-8:15)	20	167	94	281	85	164	9	258	18	191	29	238	81	112	46	239
COVID-19 adjustment	10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%	
Adjusted 2021 Volumes	22	184	103	309	94	180	10	284	20	210	32	262	89	123	51	263
Total Annual Background Growth - Phase I	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
No-Build Volumes - Phase I	24	203	114	341	103	199	11	313	22	232	35	289	98	136	56	290
No-Build Volumes - Phase II	27	224	126	377	114	220	12	346	24	256	39	319	109	150	62	320
Proposed Mulberry Street Subdivision Trips - Phase I	0	0	5	5	5	0	0	5	0	4	0	4	16	12	16	44
Proposed Mulberry Street Subdivision Trips - Phases I +II	0	0	0	0	9	0	0	9	0	8	0	8	0	23	27	50
Build Volumes - Phase I	24	203	119	346	108	199	11	318	22	236	35	293	114	148	72	334
Build Volumes - Phases I + II	27	224	126	377	123	220	12	355	24	264	39	327	109	173	89	370

Weekday P.M. Peak Hour

	Northbound Atlanta Highway				Southbound Atlanta Highway				Eastbound Snelling Avenue				Westbound Phil Niekro Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 4:45-5:45)	62	283	173	518	102	198	25	325	29	153	35	217	122	234	51	407
COVID-19 adjustment	10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%	
Adjusted 2021 Volumes	68	311	190	570	112	218	28	358	32	168	39	239	134	257	56	448
Total Annual Background Growth - Phase I	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
No-Build Volumes - Phase I	75	344	210	629	124	240	30	395	35	186	43	264	148	284	62	494
No-Build Volumes - Phase II	83	379	232	695	137	265	34	436	39	205	47	291	164	314	68	546
Proposed Mulberry Street Subdivision Trips - Phase I	0	0	21	21	12	0	0	12	0	4	0	4	12	3	7	22
Proposed Mulberry Street Subdivision Trips - Phases I +II	0	0	0	0	20	0	0	20	0	8	0	8	0	5	12	17
Build Volumes - Phase I	75	344	231	650	136	240	30	407	35	190	43	268	160	287	69	516
Build Volumes - Phases I + II	83	379	232	695	157	265	34	456	39	213	47	299	164	319	80	563

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Mulberry Street Subdivision Traffic Impact Study

City of Flowery Branch, Georgia

May 2021

Intersection: 3. Atlanta Highway at Flowery Way

Weekday A.M. Peak Hour

	Northbound Atlanta Highway			Southbound Atlanta Highway				Westbound Flowery Way		
	T	R	Tot	L	T	Tot		L	R	Tot
Counted Volumes (Wednesday, April 21, 2021 7:15-8:15)	281	0	281	1	286	287		0	6	6
COVID-19 adjustment	10.0%	10.0%		10.0%	10.0%			10.0%	10.0%	
Adjusted 2021 Volumes	309	0	309	1	315	316		0	7	7
Total Annual Background Growth - Phase I	10.4%	10.4%		10.4%	10.4%			10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%		21.9%	21.9%			21.9%	21.9%	
No-Build Volumes - Phase I	341	0	341	1	347	349		0	7	7
No-Build Volumes - Phase II	377	0	377	1	383	385		0	8	8
Proposed Mulberry Street Subdivision Trips - Phase I	5	0	5	0	16	16		0	0	0
Proposed Mulberry Street Subdivision Trips - Phases I +II	0	6	6	0	0	0		21	0	21
Build Volumes - Phase I	346	0	346	1	363	365		0	7	7
Build Volumes - Phases I + II	377	6	383	1	383	385		21	8	29

Weekday P.M. Peak Hour

	Northbound Atlanta Highway			Southbound Atlanta Highway				Westbound Flowery Way		
	T	R	Tot	L	T	Tot		L	R	Tot
Counted Volumes (Wednesday, April 21, 2021 4:45-5:45)	503	4	507	5	348	353		3	2	5
COVID-19 adjustment	10.0%	10.0%		10.0%	10.0%			10.0%	10.0%	
Adjusted 2021 Volumes	553	4	558	6	383	388		3	2	6
Total Annual Background Growth - Phase I	10.4%	10.4%		10.4%	10.4%			10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%		21.9%	21.9%			21.9%	21.9%	
No-Build Volumes - Phase I	611	5	616	6	423	429		4	2	6
No-Build Volumes - Phase II	674	5	680	7	467	473		4	3	7
Proposed Mulberry Street Subdivision Trips - Phase I	21	0	21	0	12	12		0	0	0
Proposed Mulberry Street Subdivision Trips - Phases I +II	0	29	29	0	0	0		17	0	17
Build Volumes - Phase I	632	5	637	6	435	441		4	2	6
Build Volumes - Phases I + II	674	34	709	7	467	473		21	3	24

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Mulberry Street Subdivision Traffic Impact Study

City of Flowery Branch, Georgia

May 2021

Intersection: 4. Wade Orr Road at Compass Drive

Weekday A.M. Peak Hour		Southbound Compass Drive			Eastbound Wade Orr Road			Westbound Wade Orr Road		
		L	R	Tot	L	T	Tot	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 7:15-8:15)		34	57	91	17	134	151	177	11	188
COVID-19 adjustment		10.0%	10.0%		10.0%	10.0%		10.0%	10.0%	
Adjusted 2021 Volumes		37	63	100	19	147	166	195	12	207
Total Annual Background Growth - Phase I		10.4%	10.4%		10.4%	10.4%		10.4%	10.4%	
Total Annual Background Growth - Phase I		21.9%	21.9%		21.9%	21.9%		21.9%	21.9%	
No-Build Volumes - Phase I		41	69	111	21	163	183	215	13	228
No-Build Volumes - Phase II		46	76	122	23	180	202	237	15	252
Proposed Mulberry Street Subdivision Trips - Phase I		0	0	0	0	0	0	0	0	0
Proposed Mulberry Street Subdivision Trips - Phases I +II		16	7	23	3	0	3	0	5	5
Build Volumes - Phase I		41	69	111	21	163	183	215	13	228
Build Volumes - Phases I + II		62	83		26	180		237	20	

Weekday P.M. Peak Hour		Southbound Compass Drive			Eastbound Wade Orr Road			Westbound Wade Orr Road		
		L	R	Tot	L	T	Tot	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 4:15-5:15)		25	31	56	24	240	264	192	41	233
COVID-19 adjustment		10.0%	10.0%		10.0%	10.0%		10.0%	10.0%	
Adjusted 2021 Volumes		28	34	62	26	264	290	211	45	256
Total Annual Background Growth - Phase I		10.4%	10.4%		10.4%	10.4%		10.4%	10.4%	
Total Annual Background Growth - Phase I		21.9%	21.9%		21.9%	21.9%		21.9%	21.9%	
No-Build Volumes - Phase I		30	38	68	29	291	321	233	50	283
No-Build Volumes - Phase II		34	42	75	32	322	354	257	55	312
Proposed Mulberry Street Subdivision Trips - Phase I		0	0	0	0	0	0	0	0	0
Proposed Mulberry Street Subdivision Trips - Phases I +II		5	6	11	10	0	10	0	9	9
Build Volumes - Phase I		30	38	68	29	291	321	233	50	283
Build Volumes - Phases I + II		39	48		42	322		257	64	

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TMC Data
Phil Niekro Blvd @ Mulberry St
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790002
Site Code : 44790002
Start Date : 4/21/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Mulberry St Northbound					Mulberry St Southbound					Phil Niekro Blvd Eastbound					Phil Niekro Blvd 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	5	0	7	0	12	3	0	2	0	5	1	56	1	0	58	0	42	1	0	43	118
07:15 AM	11	0	7	0	18	1	0	0	0	1	0	94	2	0	96	2	51	1	0	54	169
07:30 AM	8	1	4	0	13	3	0	1	0	4	2	91	5	0	98	3	57	2	0	62	177
07:45 AM	3	0	9	0	12	3	0	2	0	5	2	87	8	0	97	2	62	3	0	67	181
Total	27	1	27	0	55	10	0	5	0	15	5	328	16	0	349	7	212	7	0	226	645
08:00 AM	5	1	4	0	10	3	0	0	0	3	1	84	4	0	89	4	54	1	0	59	161
08:15 AM	1	0	5	0	6	0	0	0	0	0	0	65	2	0	67	0	60	2	0	62	135
08:30 AM	1	0	11	0	12	2	0	3	0	5	1	62	1	0	64	4	65	0	0	69	150
08:45 AM	2	3	3	0	8	3	1	0	0	4	0	76	2	0	78	0	62	1	0	63	153
Total	9	4	23	0	36	8	1	3	0	12	2	287	9	0	298	8	241	4	0	253	599
*** BREAK ***																					
04:00 PM	3	0	7	0	10	6	0	4	0	10	0	102	4	0	106	5	97	2	0	104	230
04:15 PM	6	0	5	0	11	6	1	4	0	11	1	109	6	0	116	6	101	8	0	115	253
04:30 PM	5	1	4	0	10	5	0	1	0	6	3	106	5	0	114	5	99	7	0	111	241
04:45 PM	2	1	5	0	8	2	1	3	0	6	1	101	3	0	105	6	95	9	0	110	229
Total	16	2	21	0	39	19	2	12	0	33	5	418	18	0	441	22	392	26	0	440	953
05:00 PM	5	0	6	0	11	7	0	3	0	10	2	107	9	0	118	7	96	2	0	105	244
05:15 PM	2	0	9	0	11	4	0	3	0	7	0	104	3	0	107	10	92	8	0	110	235
05:30 PM	0	0	5	0	5	4	0	2	0	6	1	107	4	0	112	10	115	3	0	128	251
05:45 PM	0	0	3	0	3	7	0	2	0	9	0	105	3	0	108	8	98	7	0	113	233
Total	7	0	23	0	30	22	0	10	0	32	3	423	19	0	445	35	401	20	0	456	963
Grand Total	59	7	94	0	160	59	3	30	0	92	15	1456	62	0	1533	72	1246	57	0	1375	3160
Apprch %	36.9	4.4	58.8	0		64.1	3.3	32.6	0		1	95	4	0		5.2	90.6	4.1	0		
Total %	1.9	0.2	3	0	5.1	1.9	0.1	0.9	0	2.9	0.5	46.1	2	0	48.5	2.3	39.4	1.8	0	43.5	

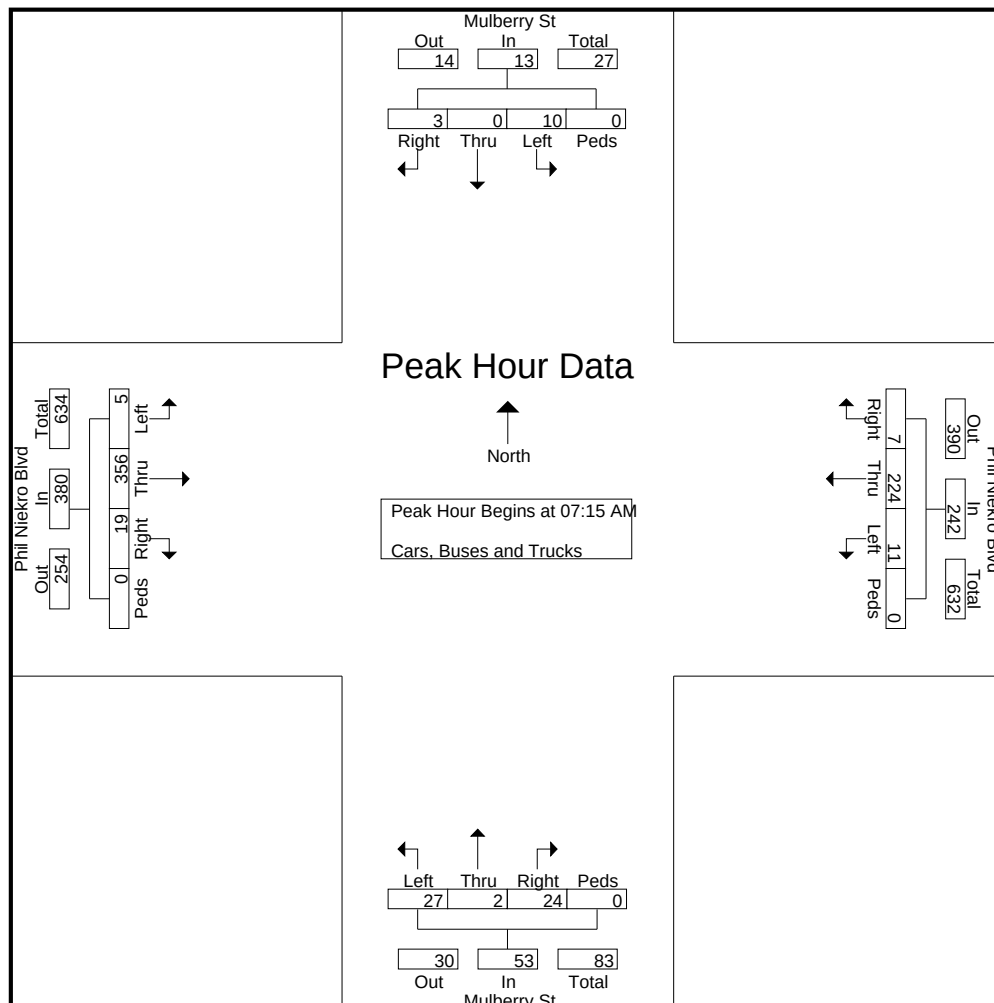
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TMC Data
Phil Niekro Blvd @ Mulberry St
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790002
Site Code : 44790002
Start Date : 4/21/2021
Page No : 2

	Mulberry St Northbound					Mulberry St Southbound					Phil Niekro Blvd Eastbound					Phil Niekro Blvd 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 07:15 AM																					
07:15 AM	11	0	7	0	18	1	0	0	0	1	0	94	2	0	96	2	51	1	0	54	169
07:30 AM	8	1	4	0	13	3	0	1	0	4	2	91	5	0	98	3	57	2	0	62	177
07:45 AM	3	0	9	0	12	3	0	2	0	5	2	87	8	0	97	2	62	3	0	67	181
08:00 AM	5	1	4	0	10	3	0	0	0	3	1	84	4	0	89	4	54	1	0	59	161
Total Volume	27	2	24	0	53	10	0	3	0	13	5	356	19	0	380	11	224	7	0	242	688
% App. Total	50.9		45.3			76.9		23.1			93.7					92.6					
PHF	.614	.500	.667	.000	.736	.833	.000	.375	.000	.650	.625	.947	.594	.000	.969	.688	.903	.583	.000	.903	.950



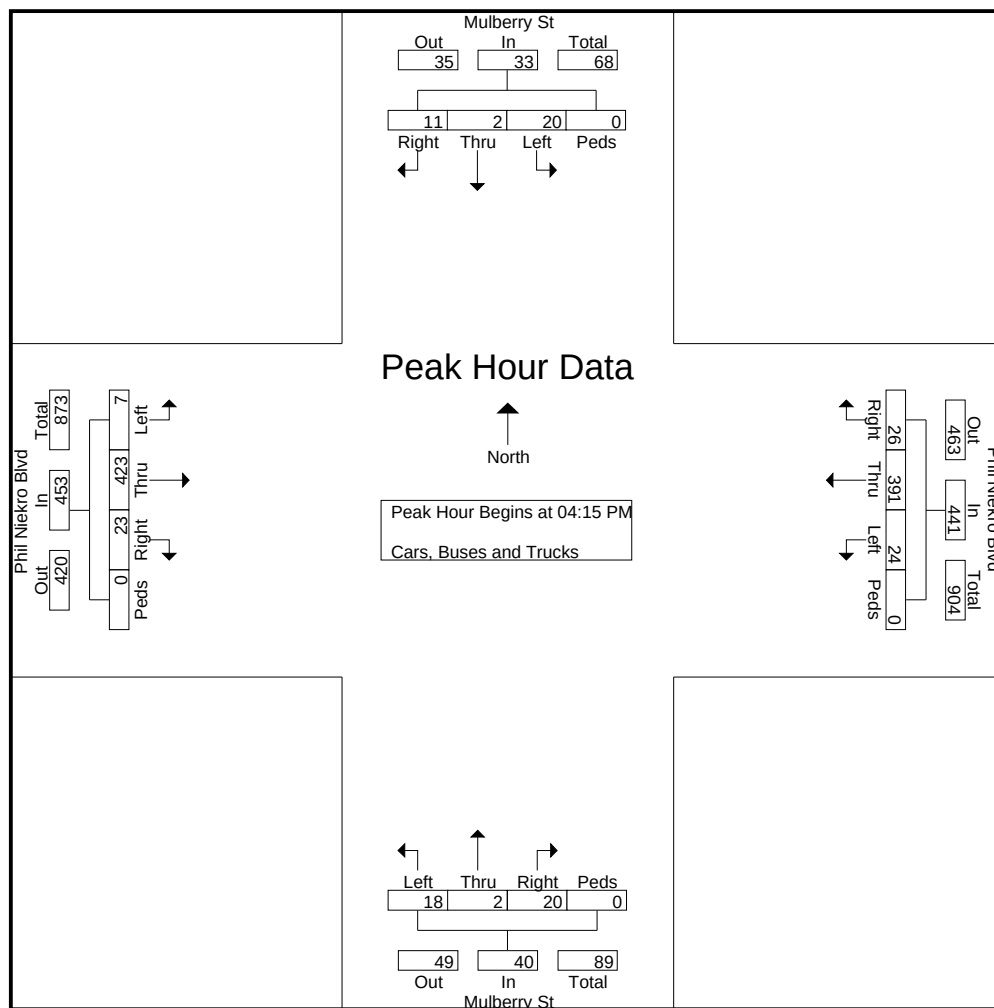
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TMC Data
Phil Niekro Blvd @ Mulberry St
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790002
Site Code : 44790002
Start Date : 4/21/2021
Page No : 3

	Mulberry St Northbound					Mulberry St Southbound					Phil Niekro Blvd Eastbound					Phil Niekro Blvd 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 04:15 PM																					
04:15 PM	6	0	5	0	11	6	1	4	0	11	1	109	6	0	116	6	101	8	0	115	253
04:30 PM	5	1	4	0	10	5	0	1	0	6	3	106	5	0	114	5	99	7	0	111	241
04:45 PM	2	1	5	0	8	2	1	3	0	6	1	101	3	0	105	6	95	9	0	110	229
05:00 PM	5	0	6	0	11	7	0	3	0	10	2	107	9	0	118	7	96	2	0	105	244
Total Volume	18	2	20	0	40	20	2	11	0	33	7	423	23	0	453	24	391	26	0	441	967
% App. Total						60.6		33.3				93.4				88.7					
PHF	.750	.500	.833	.000	.909	.714	.500	.688	.000	.750	.583	.970	.639	.000	.960	.857	.968	.722	.000	.959	.956



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TMC Data
Atlanta Hwy @ Phil Niekro Blvd/
Snelling Ave, Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790001
Site Code : 44790001
Start Date : 4/21/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Snelling Ave Eastbound					Phil Niekro Blvd 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	6	28	19	0	53	10	31	0	0	41	5	39	9	0	53	15	20	11	0	46	193
07:15 AM	4	25	16	0	45	18	39	1	0	58	4	59	6	0	69	19	27	12	0	58	230
07:30 AM	6	51	33	0	90	14	38	5	0	57	5	54	8	0	67	24	31	12	0	67	281
07:45 AM	2	46	21	0	69	27	43	2	0	72	5	43	9	0	57	22	30	8	0	60	258
Total	18	150	89	0	257	69	151	8	0	228	19	195	32	0	246	80	108	43	0	231	962
08:00 AM	8	45	24	0	77	26	44	1	0	71	4	35	6	0	45	16	24	14	0	54	247
08:15 AM	8	30	15	0	53	16	30	2	0	48	3	34	10	0	47	29	26	9	0	64	212
08:30 AM	3	29	13	0	45	12	34	2	0	48	4	39	13	0	56	23	32	11	0	66	215
08:45 AM	7	36	17	0	60	17	27	2	0	46	1	41	1	0	43	13	40	6	0	59	208
Total	26	140	69	0	235	71	135	7	0	213	12	149	30	0	191	81	122	40	0	243	882
*** BREAK ***																					
04:00 PM	10	55	28	0	93	24	59	10	0	93	7	53	7	0	67	20	69	12	0	101	354
04:15 PM	9	63	41	0	113	36	54	6	0	96	4	41	6	0	51	36	56	15	0	107	367
04:30 PM	14	82	36	0	132	24	41	8	0	73	4	46	6	0	56	31	56	15	0	102	363
04:45 PM	12	57	32	0	101	29	56	6	0	91	6	39	8	0	53	25	65	10	0	100	345
Total	45	257	137	0	439	113	210	30	0	353	21	179	27	0	227	112	246	52	0	410	1429
05:00 PM	11	75	51	0	137	24	45	7	0	76	13	25	10	0	48	35	48	12	0	95	356
05:15 PM	17	78	47	0	142	25	55	4	0	84	5	38	5	0	48	28	48	15	0	91	365
05:30 PM	22	73	43	0	138	24	42	8	0	74	5	51	12	0	68	34	73	14	0	121	401
05:45 PM	14	54	41	0	109	26	48	2	0	76	4	38	8	0	50	33	61	9	0	103	338
Total	64	280	182	0	526	99	190	21	0	310	27	152	35	0	214	130	230	50	0	410	1460
Grand Total	153	827	477	0	1457	352	686	66	0	1104	79	675	124	0	878	403	706	185	0	1294	4733
Apprch %	10.5	56.8	32.7	0		31.9	62.1	6	0		9	76.9	14.1	0		31.1	54.6	14.3	0		
Total %	3.2	17.5	10.1	0	30.8	7.4	14.5	1.4	0	23.3	1.7	14.3	2.6	0	18.6	8.5	14.9	3.9	0	27.3	

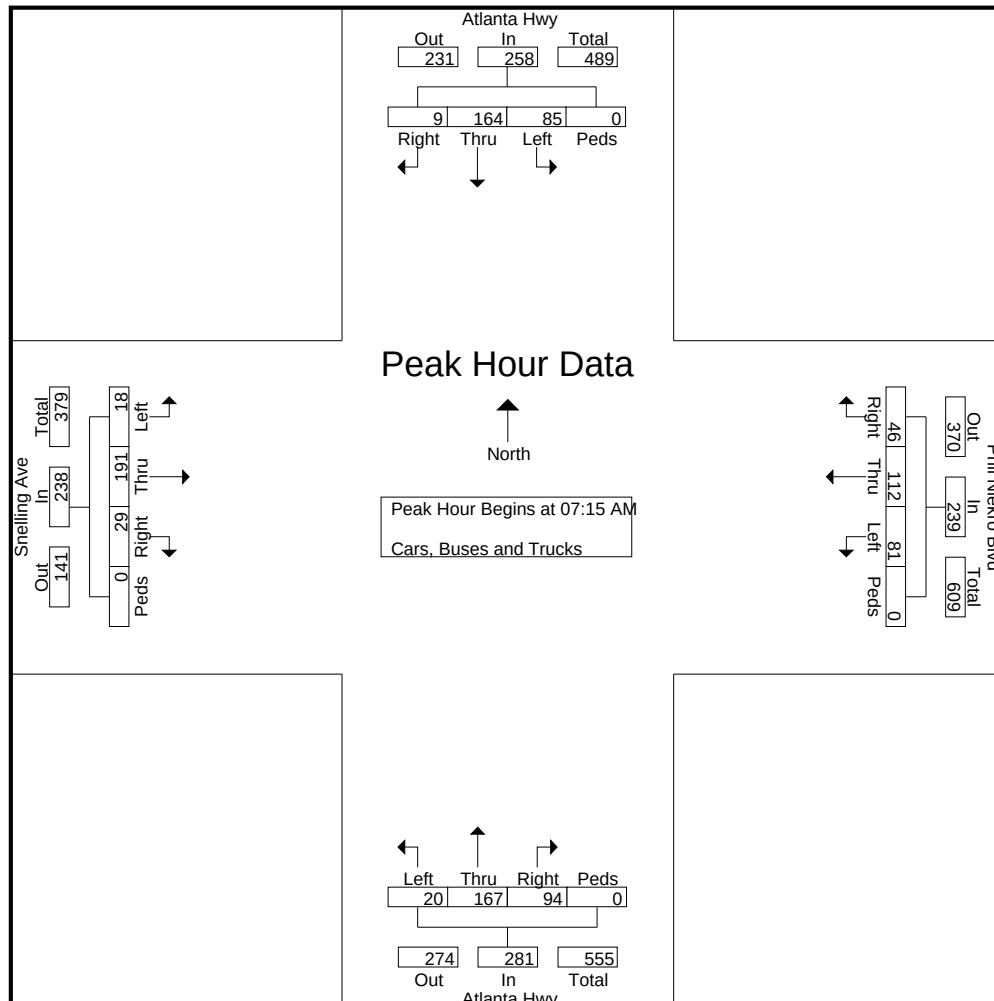
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TMC Data
Atlanta Hwy @ Phil Niekro Blvd/
Snelling Ave, Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790001
Site Code : 44790001
Start Date : 4/21/2021
Page No : 2

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Snelling Ave Eastbound					Phil Niekro Blvd 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 07:15 AM																					
07:15 AM	4	25	16	0	45	18	39	1	0	58	4	59	6	0	69	19	27	12	0	58	230
07:30 AM	6	51	33	0	90	14	38	5	0	57	5	54	8	0	67	24	31	12	0	67	281
07:45 AM	2	46	21	0	69	27	43	2	0	72	5	43	9	0	57	22	30	8	0	60	258
08:00 AM	8	45	24	0	77	26	44	1	0	71	4	35	6	0	45	16	24	14	0	54	247
Total Volume	20	167	94	0	281	85	164	9	0	258	18	191	29	0	238	81	112	46	0	239	1016
% App. Total		59.4	33.5			32.9	63.6				80.3	12.2				33.9	46.9	19.2			
PHF	.625	.819	.712	.000	.781	.787	.932	.450	.000	.896	.900	.809	.806	.000	.862	.844	.903	.821	.000	.892	.904



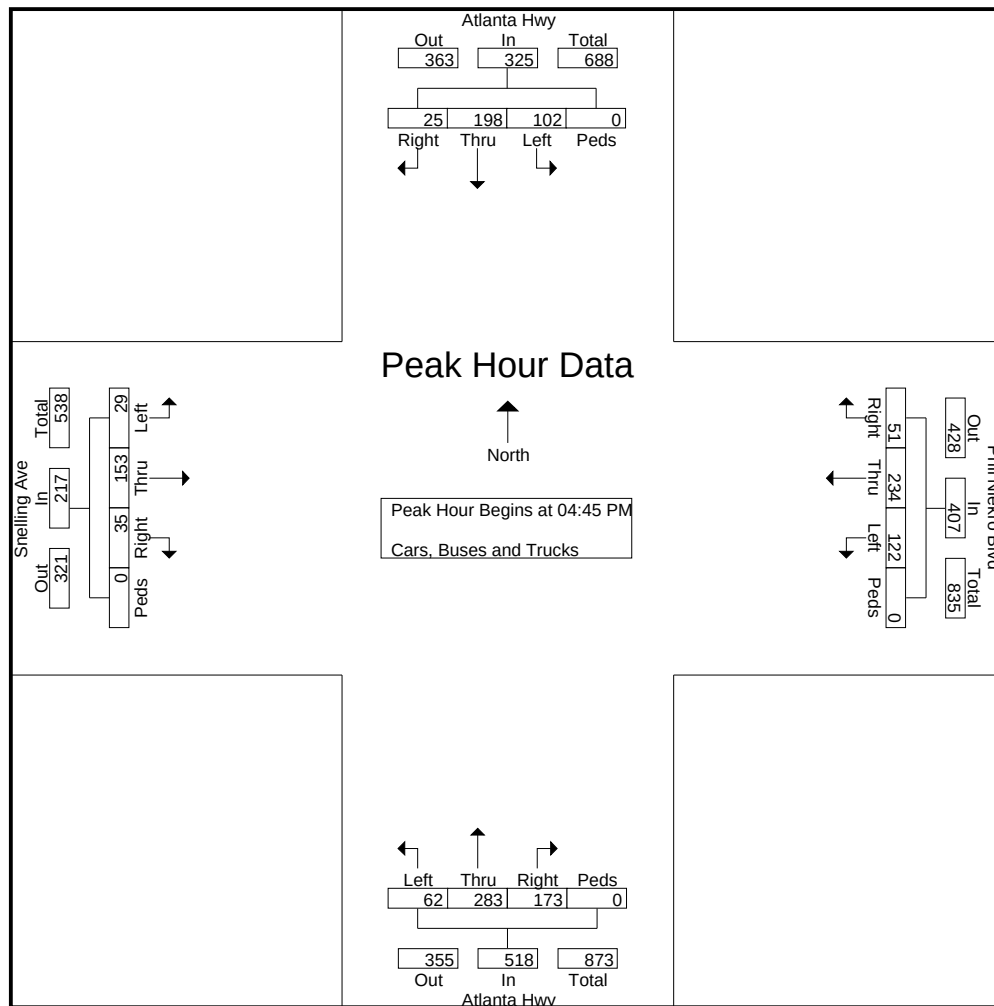
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TMC Data
Atlanta Hwy @ Phil Niekro Blvd/
Snelling Ave, Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790001
Site Code : 44790001
Start Date : 4/21/2021
Page No : 3

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Snelling Ave Eastbound					Phil Niekro Blvd 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 04:45 PM																					
04:45 PM	12	57	32	0	101	29	56	6	0	91	6	39	8	0	53	25	65	10	0	100	345
05:00 PM	11	75	51	0	137	24	45	7	0	76	13	25	10	0	48	35	48	12	0	95	356
05:15 PM	17	78	47	0	142	25	55	4	0	84	5	38	5	0	48	28	48	15	0	91	365
05:30 PM	22	73	43	0	138	24	42	8	0	74	5	51	12	0	68	34	73	14	0	121	401
Total Volume	62	283	173	0	518	102	198	25	0	325	29	153	35	0	217	122	234	51	0	407	1467
% App. Total		54.6	33.4			31.4	60.9				13.4	70.5	16.1			57.5	12.5				
PHF	.705	.907	.848	.000	.912	.879	.884	.781	.000	.893	.558	.750	.729	.000	.798	.871	.801	.850	.000	.841	.915



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TMC Data
Atlanta Hwy @ Flowery Way
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790003
Site Code : 44790003
Start Date : 4/21/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Eastbound					Flowery Way 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	45	0	0	45	1	53	0	0	54	0	0	0	0	0	0	0	3	0	3	102
07:15 AM	0	66	0	0	66	1	67	0	0	68	0	0	0	0	0	0	0	2	0	2	136
07:30 AM	0	70	0	0	70	0	74	0	0	74	0	0	0	0	0	0	0	2	0	2	146
07:45 AM	0	78	0	0	78	0	78	0	0	78	0	0	0	0	0	0	0	1	0	1	157
Total	0	259	0	0	259	2	272	0	0	274	0	0	0	0	0	0	0	8	0	8	541
08:00 AM	0	67	0	0	67	0	67	0	0	67	0	0	0	0	0	0	0	1	0	1	135
08:15 AM	0	64	1	0	65	1	65	0	0	66	0	0	0	0	0	0	0	1	0	1	132
08:30 AM	0	60	0	0	60	1	62	0	0	63	0	0	0	0	0	1	0	1	0	2	125
08:45 AM	0	47	2	0	49	0	53	0	0	53	0	0	0	0	0	0	0	0	0	0	102
Total	0	238	3	0	241	2	247	0	0	249	0	0	0	0	0	1	0	3	0	4	494
*** BREAK ***																					
04:00 PM	0	99	0	0	99	1	95	0	0	96	0	0	0	0	0	0	0	2	0	2	197
04:15 PM	0	102	0	0	102	0	79	0	0	79	0	0	0	0	0	0	0	0	0	0	181
04:30 PM	0	108	0	0	108	0	74	0	0	74	0	0	0	0	0	0	0	1	0	1	183
04:45 PM	0	115	0	0	115	1	85	0	0	86	0	0	0	0	0	0	0	1	0	1	202
Total	0	424	0	0	424	2	333	0	0	335	0	0	0	0	0	0	0	4	0	4	763
05:00 PM	0	124	1	0	125	0	91	0	0	91	0	0	0	0	0	0	0	0	0	0	216
05:15 PM	0	136	0	0	136	2	88	0	0	90	0	0	0	0	0	1	0	0	0	1	227
05:30 PM	0	128	3	0	131	2	84	0	0	86	0	0	0	0	0	2	0	1	0	3	220
05:45 PM	0	120	0	0	120	5	67	0	0	72	0	0	0	0	0	0	0	0	0	0	192
Total	0	508	4	0	512	9	330	0	0	339	0	0	0	0	0	3	0	1	0	4	855
Grand Total	0	1429	7	0	1436	15	1182	0	0	1197	0	0	0	0	0	4	0	16	0	20	2653
Apprch %	0	99.5	0.5	0		1.3	98.7	0	0		0	0	0	0		20	0	80	0		
Total %	0	53.9	0.3	0	54.1	0.6	44.6	0	0	45.1	0	0	0	0	0	0.2	0	0.6	0	0.8	

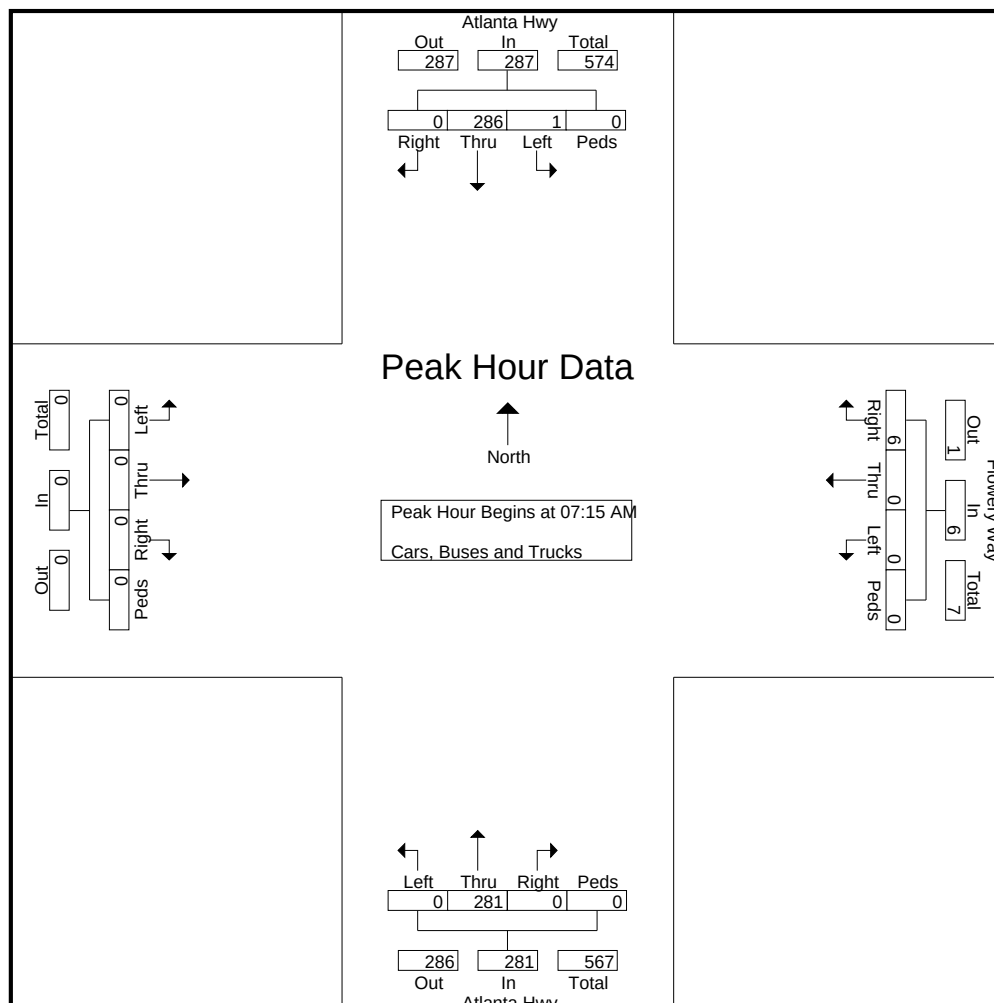
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TMC Data
Atlanta Hwy @ Flowery Way
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790003
Site Code : 44790003
Start Date : 4/21/2021
Page No : 2

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Eastbound					Flowery Way 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 07:15 AM																					
07:15 AM	0	66	0	0	66	1	67	0	0	68	0	0	0	0	0	0	0	2	0	2	136
07:30 AM	0	70	0	0	70	0	74	0	0	74	0	0	0	0	0	0	0	2	0	2	146
07:45 AM	0	78	0	0	78	0	78	0	0	78	0	0	0	0	0	0	0	1	0	1	157
08:00 AM	0	67	0	0	67	0	67	0	0	67	0	0	0	0	0	0	0	1	0	1	135
Total Volume	0	281	0	0	281	1	286	0	0	287	0	0	0	0	0	0	0	6	0	6	574
% App. Total							99.7											.750	.000	.750	
PHF	.000	.901	.000	.000	.901	.250	.917	.000	.000	.920	.000	.000	.000	.000	.000	.000	.000	.750	.000	.750	.914



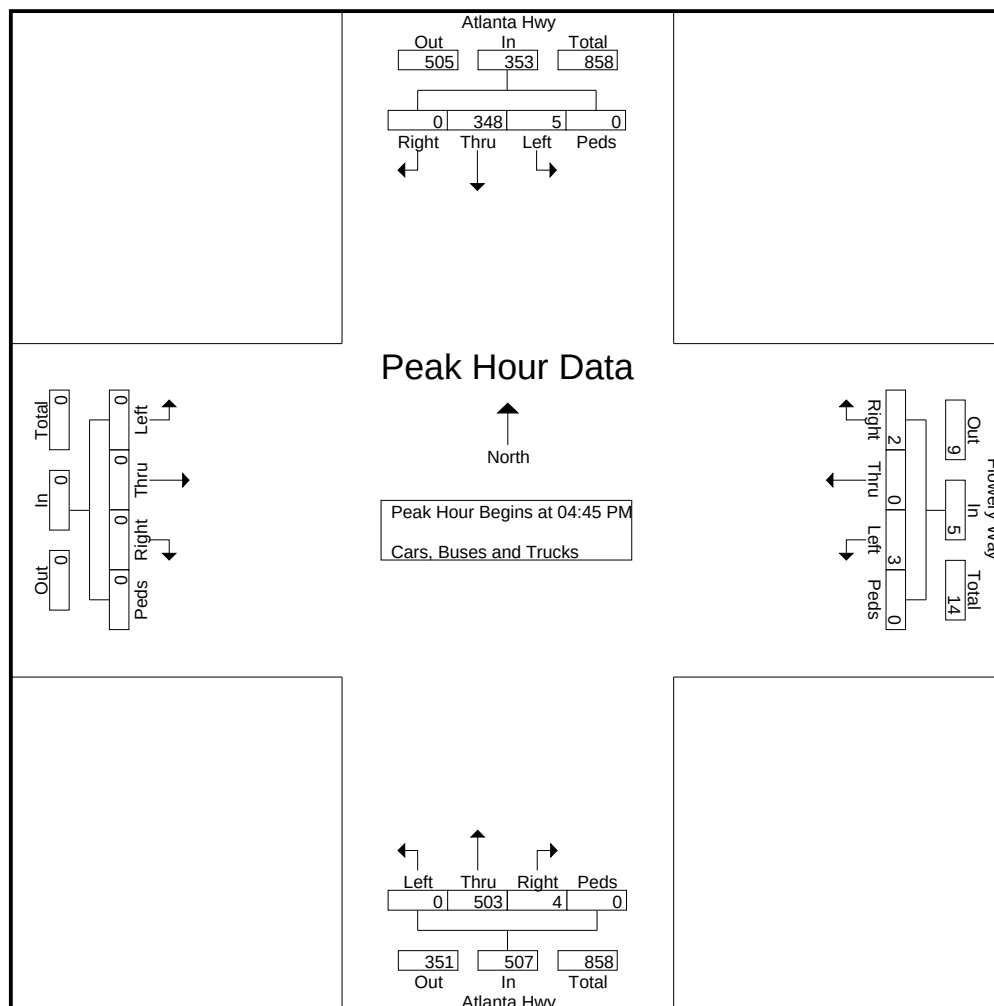
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TMC Data
Atlanta Hwy @ Flowery Way
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790003
Site Code : 44790003
Start Date : 4/21/2021
Page No : 3

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Eastbound					Flowery Way 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 04:45 PM																					
04:45 PM	0	115	0	0	115	1	85	0	0	86	0	0	0	0	0	0	0	1	0	1	202
05:00 PM	0	124	1	0	125	0	91	0	0	91	0	0	0	0	0	0	0	0	0	0	216
05:15 PM	0	136	0	0	136	2	88	0	0	90	0	0	0	0	0	1	0	0	0	1	227
05:30 PM	0	128	3	0	131	2	84	0	0	86	0	0	0	0	0	2	0	1	0	3	220
Total Volume	0	503	4	0	507	5	348	0	0	353	0	0	0	0	0	3	0	2	0	5	865
% App. Total		99.2					98.6									.375	.000	.500	.000	.417	.953
PHF	.000	.925	.333	.000	.932	.625	.956	.000	.000	.970	.000	.000	.000	.000	.000	.375	.000	.500	.000	.417	.953



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TMC Data
Wade Orr Rd @ Compass Dr
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790004
Site Code : 44790004
Start Date : 4/21/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Northbound					Compass Dr Southbound					Wade Orr Rd Eastbound					Wade Orr 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	0	0	0	0	9	0	9	0	18	3	25	0	0	28	0	33	4	0	37	83
07:15 AM	0	0	0	0	0	8	0	13	0	21	5	30	0	0	35	0	38	1	0	39	95
07:30 AM	0	0	0	0	0	9	0	23	0	32	5	32	0	0	37	0	51	6	0	57	126
07:45 AM	0	0	0	0	0	7	0	11	0	18	4	35	0	0	39	0	49	3	0	52	109
Total	0	0	0	0	0	33	0	56	0	89	17	122	0	0	139	0	171	14	0	185	413
08:00 AM	0	0	0	0	0	10	0	10	0	20	3	37	0	0	40	0	39	1	0	40	100
08:15 AM	0	0	0	0	0	9	0	1	0	10	5	34	0	0	39	0	36	0	0	36	85
08:30 AM	0	0	0	0	0	5	0	1	0	6	3	29	0	0	32	0	35	3	0	38	76
08:45 AM	0	0	0	0	0	9	0	4	0	13	3	26	0	0	29	0	32	4	0	36	78
Total	0	0	0	0	0	33	0	16	0	49	14	126	0	0	140	0	142	8	0	150	339
*** BREAK ***																					
04:00 PM	0	0	0	0	0	5	0	3	0	8	7	51	0	0	58	0	45	14	0	59	125
04:15 PM	0	0	0	0	0	4	0	7	0	11	6	58	0	0	64	0	43	8	0	51	126
04:30 PM	0	0	0	0	0	8	0	5	0	13	4	55	0	0	59	0	51	12	0	63	135
04:45 PM	0	0	0	0	0	6	0	10	0	16	3	62	0	0	65	0	54	10	0	64	145
Total	0	0	0	0	0	23	0	25	0	48	20	226	0	0	246	0	193	44	0	237	531
05:00 PM	0	0	0	0	0	7	0	9	0	16	11	65	0	0	76	0	44	11	0	55	147
05:15 PM	0	0	0	0	0	3	0	3	0	6	8	62	0	0	70	0	37	8	0	45	121
05:30 PM	0	0	0	0	0	9	0	3	0	12	6	59	0	0	65	0	30	7	0	37	114
05:45 PM	0	0	0	0	0	6	0	6	0	12	10	57	0	0	67	0	35	9	0	44	123
Total	0	0	0	0	0	25	0	21	0	46	35	243	0	0	278	0	146	35	0	181	505
Grand Total	0	0	0	0	0	114	0	118	0	232	86	717	0	0	803	0	652	101	0	753	1788
Apprch %	0	0	0	0		49.1	0	50.9	0		10.7	89.3	0	0		0	86.6	13.4	0		
Total %	0	0	0	0	0	6.4	0	6.6	0	13	4.8	40.1	0	0	44.9	0	36.5	5.6	0	42.1	

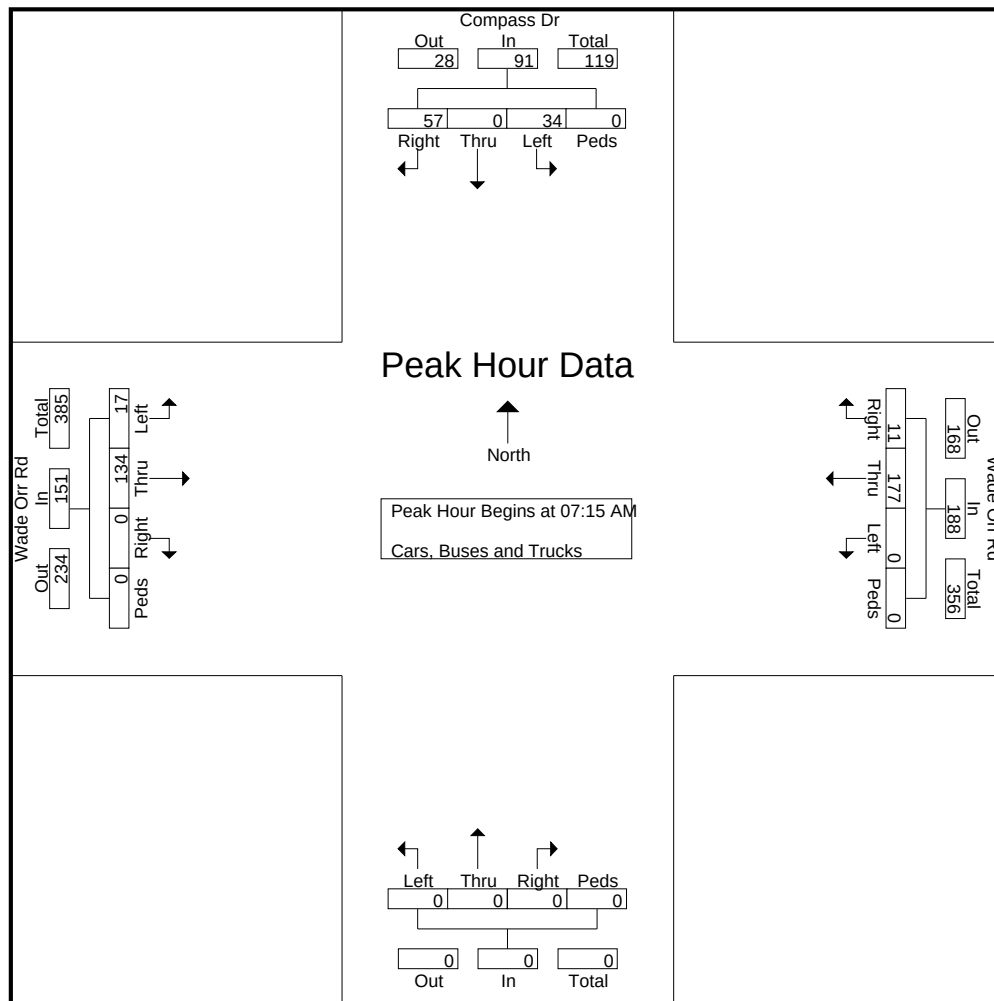
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TMC Data
Wade Orr Rd @ Compass Dr
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790004
Site Code : 44790004
Start Date : 4/21/2021
Page No : 2

	Northbound					Compass Dr Southbound					Wade Orr Rd Eastbound					Wade Orr 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 07:15 AM																					
07:15 AM	0	0	0	0	0	8	0	13	0	21	5	30	0	0	35	0	38	1	0	39	95
07:30 AM	0	0	0	0	0	9	0	23	0	32	5	32	0	0	37	0	51	6	0	57	126
07:45 AM	0	0	0	0	0	7	0	11	0	18	4	35	0	0	39	0	49	3	0	52	109
08:00 AM	0	0	0	0	0	10	0	10	0	20	3	37	0	0	40	0	39	1	0	40	100
Total Volume	0	0	0	0	0	34	0	57	0	91	17	134	0	0	151	0	177	11	0	188	430
% App. Total						37.4		62.6			11.3	88.7					94.1				
PHF	.000	.000	.000	.000	.000	.850	.000	.620	.000	.711	.850	.905	.000	.000	.944	.000	.868	.458	.000	.825	.853



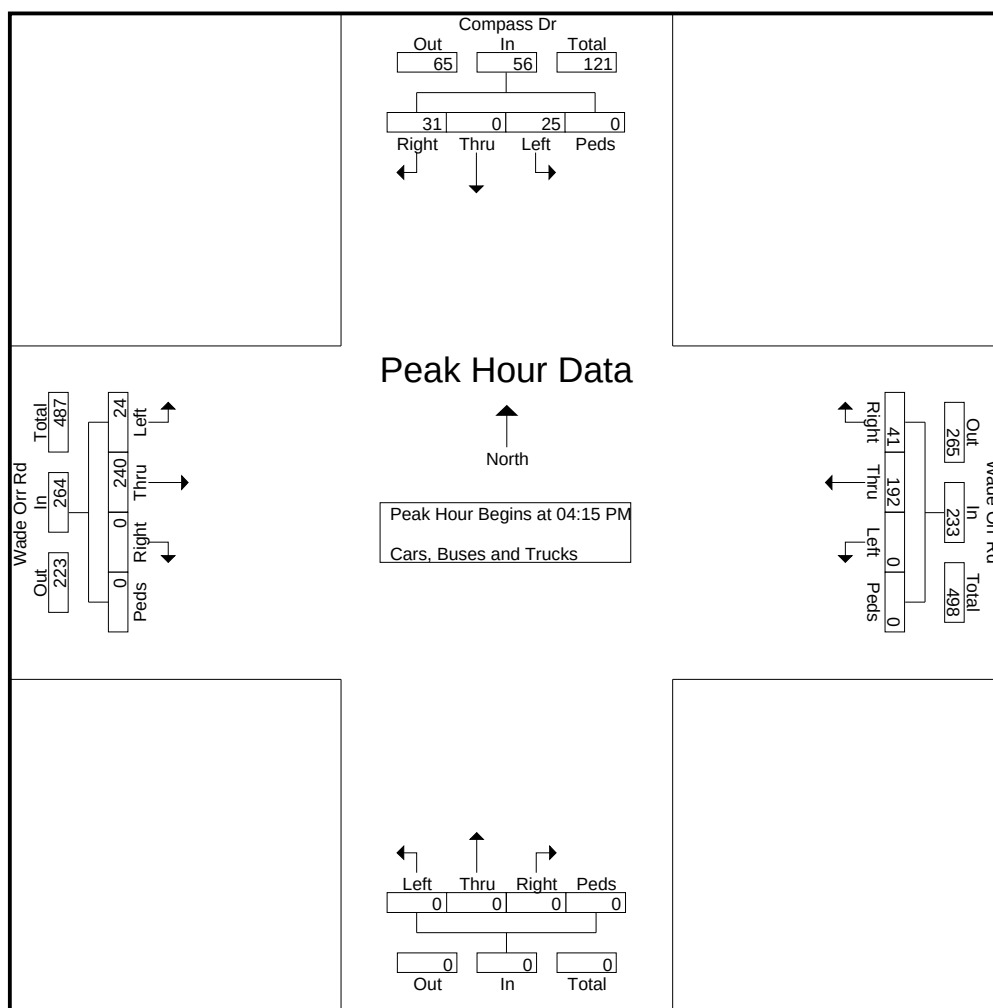
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TMC Data
Wade Orr Rd @ Compass Dr
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790004
Site Code : 44790004
Start Date : 4/21/2021
Page No : 3

	Northbound					Compass Dr Southbound					Wade Orr Rd Eastbound					Wade Orr 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 04:15 PM																					
04:15 PM	0	0	0	0	0	4	0	7	0	11	6	58	0	0	64	0	43	8	0	51	126
04:30 PM	0	0	0	0	0	8	0	5	0	13	4	55	0	0	59	0	51	12	0	63	135
04:45 PM	0	0	0	0	0	6	0	10	0	16	3	62	0	0	65	0	54	10	0	64	145
05:00 PM	0	0	0	0	0	7	0	9	0	16	11	65	0	0	76	0	44	11	0	55	147
Total Volume	0	0	0	0	0	25	0	31	0	56	24	240	0	0	264	0	192	41	0	233	553
% App. Total						44.6		55.4			90.9					82.4	17.6				
PHF	.000	.000	.000	.000	.000	.781	.000	.775	.000	.875	.545	.923	.000	.000	.868	.000	.889	.854	.000	.910	.940



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Page 1

ADT Data

Site Code: 44790101
Atlanta Hwy South of Phil Niekro Blvd
Flowery Branch, GA

Start Time	21-Apr-21 Wed	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		8	48			3	69				
12:15		13	80			4	70				
12:30		5	88			5	64				
12:45		2	89	28	305	4	62	16	265	44	570
01:00		2	70			1	69				
01:15		2	69			3	73				
01:30		5	88			5	71				
01:45		2	71	11	298	0	85	9	298	20	596
02:00		4	82			3	68				
02:15		2	73			2	54				
02:30		0	80			0	77				
02:45		2	87	8	322	1	67	6	266	14	588
03:00		1	92			1	96				
03:15		1	78			1	76				
03:30		1	86			2	84				
03:45		3	114	6	370	0	99	4	355	10	725
04:00		3	109			3	98				
04:15		4	94			11	78				
04:30		9	107			6	76				
04:45		2	113	18	423	9	84	29	336	47	759
05:00		6	122			12	99				
05:15		10	139			21	84				
05:30		16	136			29	85				
05:45		19	112	51	509	26	63	88	331	139	840
06:00		18	100			31	82				
06:15		31	101			50	77				
06:30		29	86			62	63				
06:45		48	80	126	367	59	49	202	271	328	638
07:00		47	57			56	57				
07:15		68	50			66	66				
07:30		71	53			75	57				
07:45		80	63	266	223	80	36	277	216	543	439
08:00		64	52			64	48				
08:15		66	51			62	40				
08:30		61	37			65	27				
08:45		45	36	236	176	49	45	240	160	476	336
09:00		54	31			63	34				
09:15		74	30			49	29				
09:30		45	24			49	25				
09:45		71	19	244	104	57	10	218	98	462	202
10:00		65	20			45	14				
10:15		67	12			47	18				
10:30		45	13			60	16				
10:45		55	14	232	59	58	10	210	58	442	117
11:00		57	8			65	8				
11:15		84	10			56	7				
11:30		75	11			65	6				
11:45		89	6	305	35	61	3	247	24	552	59
Total		1531	3191			1546	2678			3077	5869
Percent		32.4%	67.6%			36.6%	63.4%			34.4%	65.6%
Grand Total		1531	3191			1546	2678			3077	5869
Percent		32.4%	67.6%			36.6%	63.4%			34.4%	65.6%
ADT		ADT 8,946		AADT 8,946							

Reliable Traffic Data Services

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Page 1

ADT Data

Site Code: 44790102
Mulberry St South of Phil Niekro Blvd
Flowery Branch, GA

Start Time	21-Apr-21 Wed	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	7			1	11				
12:15		1	14			1	10				
12:30		1	4			5	10				
12:45		1	12	3	37	1	6	8	37	11	74
01:00		1	7			1	7				
01:15		2	10			3	7				
01:30		1	10			4	6				
01:45		0	3	4	30	2	6	10	26	14	56
02:00		1	8			0	7				
02:15		0	11			2	6				
02:30		1	6			0	15				
02:45		0	8	2	33	1	7	3	35	5	68
03:00		0	12			0	13				
03:15		0	14			1	13				
03:30		1	10			0	14				
03:45		0	3	1	39	0	9	1	49	2	88
04:00		0	10			1	8				
04:15		1	10			0	14				
04:30		1	9			0	10				
04:45		1	6	3	35	0	11	1	43	4	78
05:00		5	12			0	15				
05:15		1	11			1	18				
05:30		8	5			2	14				
05:45		9	4	23	32	0	13	3	60	26	92
06:00		8	9			2	18				
06:15		8	6			1	16				
06:30		12	17			2	10				
06:45		15	4	43	36	2	15	7	59	50	95
07:00		15	5			4	11				
07:15		18	5			4	9				
07:30		15	5			9	10				
07:45		10	4	58	19	10	9	27	39	85	58
08:00		11	5			8	8				
08:15		5	3			2	7				
08:30		10	5			5	7				
08:45		8	1	34	14	3	4	18	26	52	40
09:00		9	1			3	8				
09:15		8	4			4	7				
09:30		14	4			4	4				
09:45		5	4	36	13	3	3	14	22	50	35
10:00		10	3			4	3				
10:15		7	4			3	8				
10:30		6	4			4	9				
10:45		6	1	29	12	11	2	22	22	51	34
11:00		8	0			7	3				
11:15		4	0			7	5				
11:30		8	2			6	0				
11:45		9	0	29	2	9	0	29	8	58	10
Total		265	302			143	426			408	728
Percent		46.7%	53.3%			25.1%	74.9%			35.9%	64.1%
Grand Total		265	302			143	426			408	728
Percent		46.7%	53.3%			25.1%	74.9%			35.9%	64.1%
ADT		ADT 1,136	AADT 1,136								

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Page 1

ADT Data

Site Code: 44790102
Mulberry St South of Phil Niekro Blvd
Flowery Branch, GA

Start Time	21-Apr-21 Wed	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	7			1	11				
12:15		1	14			1	10				
12:30		1	4			5	10				
12:45		1	12	3	37	1	6	8	37	11	74
01:00		1	7			1	7				
01:15		2	10			3	7				
01:30		1	10			4	6				
01:45		0	3	4	30	2	6	10	26	14	56
02:00		1	8			0	7				
02:15		0	11			2	6				
02:30		1	6			0	15				
02:45		0	8	2	33	1	7	3	35	5	68
03:00		0	12			0	13				
03:15		0	14			1	13				
03:30		1	10			0	14				
03:45		0	3	1	39	0	9	1	49	2	88
04:00		0	10			1	8				
04:15		1	10			0	14				
04:30		1	9			0	10				
04:45		1	6	3	35	0	11	1	43	4	78
05:00		5	12			0	15				
05:15		1	11			1	18				
05:30		8	5			2	14				
05:45		9	4	23	32	0	13	3	60	26	92
06:00		8	9			2	18				
06:15		8	6			1	16				
06:30		12	17			2	10				
06:45		15	4	43	36	2	15	7	59	50	95
07:00		15	5			4	11				
07:15		18	5			4	9				
07:30		15	5			9	10				
07:45		10	4	58	19	10	9	27	39	85	58
08:00		11	5			8	8				
08:15		5	3			2	7				
08:30		10	5			5	7				
08:45		8	1	34	14	3	4	18	26	52	40
09:00		9	1			3	8				
09:15		8	4			4	7				
09:30		14	4			4	4				
09:45		5	4	36	13	3	3	14	22	50	35
10:00		10	3			4	3				
10:15		7	4			3	8				
10:30		6	4			4	9				
10:45		6	1	29	12	11	2	22	22	51	34
11:00		8	0			7	3				
11:15		4	0			7	5				
11:30		8	2			6	0				
11:45		9	0	29	2	9	0	29	8	58	10
Total		265	302			143	426			408	728
Percent		46.7%	53.3%			25.1%	74.9%			35.9%	64.1%
Grand Total		265	302			143	426			408	728
Percent		46.7%	53.3%			25.1%	74.9%			35.9%	64.1%
ADT		ADT 1,136	AADT 1,136								

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

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

existing a.m.

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱			↰			↰	↱
Traffic Vol, veh/h	6	392	21	12	246	8	30	2	26	11	0	3
Future Vol, veh/h	6	392	21	12	246	8	30	2	26	11	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	74	74	74	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	6	404	22	13	273	9	41	3	35	17	0	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	282	0	0	426	0	0	722	724	404	750	742	278
Stage 1	-	-	-	-	-	-	416	416	-	304	304	-
Stage 2	-	-	-	-	-	-	306	308	-	446	438	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1280	-	-	1133	-	-	342	352	647	328	344	761
Stage 1	-	-	-	-	-	-	614	592	-	705	663	-
Stage 2	-	-	-	-	-	-	704	660	-	591	579	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1280	-	-	1133	-	-	336	346	647	304	338	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	336	346	-	304	338	-
Stage 1	-	-	-	-	-	-	610	588	-	701	656	-
Stage 2	-	-	-	-	-	-	692	653	-	553	576	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			15.3			15.8		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	429	1280	-	-	1133	-	-	304	761			
HCM Lane V/C Ratio	0.183	0.005	-	-	0.012	-	-	0.056	0.006			
HCM Control Delay (s)	15.3	7.8	0	-	8.2	-	-	17.5	9.8			
HCM Lane LOS	C	A	A	-	A	-	-	C	A			
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.2	0			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

existing a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	210	32	89	123	51	22	184	103	94	180	10
Future Volume (veh/h)	20	210	32	89	123	51	22	184	103	94	180	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	23	244	37	100	138	57	28	236	132	104	200	11
Peak Hour Factor	0.86	0.86	0.86	0.89	0.89	0.89	0.78	0.78	0.78	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	267	292	44	221	279	115	686	577	323	549	935	51
Arrive On Green	0.02	0.18	0.18	0.06	0.22	0.22	0.03	0.52	0.52	0.05	0.54	0.54
Sat Flow, veh/h	1781	1586	241	1753	1257	519	1781	1109	620	1753	1729	95
Grp Volume(v), veh/h	23	0	281	100	0	195	28	0	368	104	0	211
Grp Sat Flow(s),veh/h/ln	1781	0	1827	1753	0	1777	1781	0	1729	1753	0	1824
Q Serve(g_s), s	1.0	0.0	14.4	4.4	0.0	9.3	0.7	0.0	12.6	2.6	0.0	5.8
Cycle Q Clear(g_c), s	1.0	0.0	14.4	4.4	0.0	9.3	0.7	0.0	12.6	2.6	0.0	5.8
Prop In Lane	1.00		0.13	1.00		0.29	1.00		0.36	1.00		0.05
Lane Grp Cap(c), veh/h	267	0	337	221	0	395	686	0	899	549	0	987
V/C Ratio(X)	0.09	0.00	0.83	0.45	0.00	0.49	0.04	0.00	0.41	0.19	0.00	0.21
Avail Cap(c_a), veh/h	325	0	631	303	0	705	738	0	899	617	0	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.0	0.0	38.1	29.7	0.0	33.0	10.2	0.0	14.2	10.5	0.0	11.5
Incr Delay (d2), s/veh	0.1	0.0	5.4	1.4	0.0	1.0	0.0	0.0	1.4	0.2	0.0	0.5
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	0.0	6.9	1.9	0.0	4.1	0.3	0.0	5.0	1.0	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	0.0	43.6	31.1	0.0	33.9	10.2	0.0	15.6	10.7	0.0	12.0
LnGrp LOS	C	A	D	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		304			295			396			315	
Approach Delay, s/veh		42.7			33.0			15.2			11.6	
Approach LOS		D			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	55.0	10.5	22.4	7.1	57.0	6.8	26.1				
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	8.5	49.5	10.5	33.5	5.5	52.5	5.5	38.5				
Max Q Clear Time (g_c+I1), s	4.6	14.6	6.4	16.4	2.7	7.8	3.0	11.3				
Green Ext Time (p_c), s	0.1	2.6	0.1	1.5	0.0	1.3	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			24.7									
HCM 6th LOS			C									

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

existing a.m.

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	309	0	1	315
Future Vol, veh/h	0	7	309	0	1	315
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	9	343	0	1	342
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	687	343	0	0	343	0
Stage 1	343	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	413	700	-	-	1216	-
Stage 1	719	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	413	700	-	-	1216	-
Mov Cap-2 Maneuver	413	-	-	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.2	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	700	1216	-	
HCM Lane V/C Ratio	-	-	0.013	0.001	-	
HCM Control Delay (s)	-	-	10.2	8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

existing a.m.

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	147	195	12	37	63
Future Vol, veh/h	19	147	195	12	37	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	71	71
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	20	156	235	14	52	89
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	249	0	-	0	438	242
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	196	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1317	-	-	-	576	797
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	837	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1317	-	-	-	566	797
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	837	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		11.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1317	-	-	-	692	
HCM Lane V/C Ratio	0.015	-	-	-	0.204	
HCM Control Delay (s)	7.8	0	-	-	11.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.8	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

existing p.m.

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	465	25	26	430	29	20	2	22	22	2	12
Future Vol, veh/h	8	465	25	26	430	29	20	2	22	22	2	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	91	91	91	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	8	484	26	27	448	30	22	2	24	29	3	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	478	0	0	510	0	0	1027	1032	484	1043	1043	463
Stage 1	-	-	-	-	-	-	500	500	-	517	517	-
Stage 2	-	-	-	-	-	-	527	532	-	526	526	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1084	-	-	1055	-	-	213	233	583	207	229	599
Stage 1	-	-	-	-	-	-	553	543	-	541	534	-
Stage 2	-	-	-	-	-	-	535	526	-	535	529	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1084	-	-	1055	-	-	200	225	583	192	221	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	200	225	-	192	221	-
Stage 1	-	-	-	-	-	-	547	538	-	536	520	-
Stage 2	-	-	-	-	-	-	505	512	-	506	524	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			19.3			21.9		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	300	1084	-	-	1055	-	-	194	599
HCM Lane V/C Ratio	0.161	0.008	-	-	0.026	-	-	0.165	0.027
HCM Control Delay (s)	19.3	8.3	0	-	8.5	-	-	27.2	11.2
HCM Lane LOS	C	A	A	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.6	0.1

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

existing p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	168	39	134	257	56	68	311	190	112	218	28
Future Volume (veh/h)	32	168	39	134	257	56	68	311	190	112	218	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	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	40	210	49	160	306	67	75	342	209	126	245	31
Peak Hour Factor	0.80	0.80	0.80	0.84	0.84	0.84	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	159	257	60	267	347	76	626	552	337	400	842	107
Arrive On Green	0.03	0.17	0.17	0.09	0.23	0.23	0.04	0.52	0.52	0.05	0.53	0.53
Sat Flow, veh/h	1781	1467	342	1753	1486	325	1781	1069	654	1753	1602	203
Grp Volume(v), veh/h	40	0	259	160	0	373	75	0	551	126	0	276
Grp Sat Flow(s),veh/h/ln	1781	0	1809	1753	0	1812	1781	0	1723	1753	0	1804
Q Serve(g_s), s	2.0	0.0	14.9	7.8	0.0	21.4	2.1	0.0	24.5	3.6	0.0	9.2
Cycle Q Clear(g_c), s	2.0	0.0	14.9	7.8	0.0	21.4	2.1	0.0	24.5	3.6	0.0	9.2
Prop In Lane	1.00		0.19	1.00		0.18	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	159	0	316	267	0	423	626	0	889	400	0	949
V/C Ratio(X)	0.25	0.00	0.82	0.60	0.00	0.88	0.12	0.00	0.62	0.31	0.00	0.29
Avail Cap(c_a), veh/h	189	0	458	311	0	580	643	0	889	448	0	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.8	0.0	42.8	31.9	0.0	39.9	11.4	0.0	18.6	14.1	0.0	14.3
Incr Delay (d2), s/veh	0.8	0.0	7.5	2.4	0.0	11.6	0.1	0.0	3.2	0.4	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	7.3	3.4	0.0	10.8	0.8	0.0	10.2	1.4	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	0.0	50.3	34.3	0.0	51.5	11.4	0.0	21.8	14.6	0.0	15.1
LnGrp LOS	D	A	D	C	A	D	B	A	C	B	A	B
Approach Vol, veh/h		299			533			626			402	
Approach Delay, s/veh		48.5			46.3			20.6			14.9	
Approach LOS		D			D			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	60.1	14.3	23.4	9.0	61.2	8.0	29.6				
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	8.5	53.7	12.5	27.3	5.5	56.7	5.3	34.5				
Max Q Clear Time (g_c+I1), s	5.6	26.5	9.8	16.9	4.1	11.2	4.0	23.4				
Green Ext Time (p_c), s	0.1	4.1	0.1	1.0	0.0	1.8	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay			31.2									
HCM 6th LOS			C									

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

existing p.m.

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	2	553	4	6	383
Future Vol, veh/h	3	2	553	4	6	383
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	7	5	595	4	6	395
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1004	597	0	0	599	0
Stage 1	597	-	-	-	-	-
Stage 2	407	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	268	503	-	-	978	-
Stage 1	550	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	266	503	-	-	978	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	16.4	0		0.1		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	328	978	-	
HCM Lane V/C Ratio	-	-	0.036	0.006	-	
HCM Control Delay (s)	-	-	16.4	8.7	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

existing p.m.

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	264	211	45	28	34
Future Vol, veh/h	26	264	211	45	28	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	88	88
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	30	303	232	49	32	39
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	281	0	-	0	620	257
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	363	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1282	-	-	-	452	782
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	704	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1282	-	-	-	439	782
Mov Cap-2 Maneuver	-	-	-	-	439	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	704	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		12.1		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1282	-	-	-	578	
HCM Lane V/C Ratio	0.023	-	-	-	0.122	
HCM Control Delay (s)	7.9	0	-	-	12.1	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	

Appendix D

No-Build Intersection Operational Analysis

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

no-build a.m. - phase I

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	432	23	13	272	9	33	2	29	12	0	4
Future Vol, veh/h	6	432	23	13	272	9	33	2	29	12	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	76	76	76	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	6	445	24	14	302	10	43	3	38	18	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	469	0	0	795	797	445	825	816	307
Stage 1	-	-	-	-	-	-	457	457	-	335	335	-
Stage 2	-	-	-	-	-	-	338	340	-	490	481	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1248	-	-	1093	-	-	305	319	613	292	311	733
Stage 1	-	-	-	-	-	-	583	568	-	679	643	-
Stage 2	-	-	-	-	-	-	676	639	-	560	554	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1248	-	-	1093	-	-	298	313	613	268	305	733
Mov Cap-2 Maneuver	-	-	-	-	-	-	298	313	-	268	305	-
Stage 1	-	-	-	-	-	-	579	564	-	674	635	-
Stage 2	-	-	-	-	-	-	662	631	-	519	550	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			16.8			17		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	389	1248	-	-	1093	-	-	268	733
HCM Lane V/C Ratio	0.216	0.005	-	-	0.013	-	-	0.069	0.008
HCM Control Delay (s)	16.8	7.9	0	-	8.3	-	-	19.4	10
HCM Lane LOS	C	A	A	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.2	0

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

no-build a.m. - phase I

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	232	35	98	136	56	24	203	114	103	199	11
Future Volume (veh/h)	22	232	35	98	136	56	24	203	114	103	199	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	26	270	41	110	153	63	31	260	146	114	221	12
Peak Hour Factor	0.86	0.86	0.86	0.89	0.89	0.89	0.78	0.78	0.78	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	277	319	48	227	303	125	643	554	311	496	903	49
Arrive On Green	0.03	0.20	0.20	0.07	0.24	0.24	0.03	0.50	0.50	0.05	0.52	0.52
Sat Flow, veh/h	1781	1586	241	1753	1259	518	1781	1107	622	1753	1730	94
Grp Volume(v), veh/h	26	0	311	110	0	216	31	0	406	114	0	233
Grp Sat Flow(s),veh/h/ln	1781	0	1827	1753	0	1777	1781	0	1729	1753	0	1824
Q Serve(g_s), s	1.1	0.0	16.2	4.7	0.0	10.4	0.8	0.0	15.1	3.1	0.0	6.9
Cycle Q Clear(g_c), s	1.1	0.0	16.2	4.7	0.0	10.4	0.8	0.0	15.1	3.1	0.0	6.9
Prop In Lane	1.00		0.13	1.00		0.29	1.00		0.36	1.00		0.05
Lane Grp Cap(c), veh/h	277	0	367	227	0	428	643	0	866	496	0	952
V/C Ratio(X)	0.09	0.00	0.85	0.48	0.00	0.50	0.05	0.00	0.47	0.23	0.00	0.24
Avail Cap(c_a), veh/h	331	0	639	298	0	711	691	0	866	577	0	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	38.0	28.9	0.0	32.4	11.2	0.0	16.1	12.0	0.0	12.9
Incr Delay (d2), s/veh	0.1	0.0	5.4	1.6	0.0	0.9	0.0	0.0	1.8	0.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	7.7	2.1	0.0	4.5	0.3	0.0	6.2	1.2	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	43.4	30.5	0.0	33.3	11.3	0.0	17.9	12.2	0.0	13.5
LnGrp LOS	C	A	D	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		337			326			437			347	
Approach Delay, s/veh		42.4			32.4			17.4			13.1	
Approach LOS		D			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	53.9	11.0	24.3	7.4	56.0	7.0	28.3				
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	9.5	47.5	10.5	34.5	5.5	51.5	5.5	39.5				
Max Q Clear Time (g_c+I1), s	5.1	17.1	6.7	18.2	2.8	8.9	3.1	12.4				
Green Ext Time (p_c), s	0.1	2.8	0.1	1.6	0.0	1.5	0.0	1.3				
Intersection Summary												
HCM 6th Ctrl Delay			25.6									
HCM 6th LOS			C									

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

no-build a.m. - phase I

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	341	0	1	347
Future Vol, veh/h	0	7	341	0	1	347
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	9	379	0	1	377
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	758	379	0	0	379	0
Stage 1	379	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	375	668	-	-	1179	-
Stage 1	692	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	375	668	-	-	1179	-
Mov Cap-2 Maneuver	375	-	-	-	-	-
Stage 1	692	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.5	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	668	1179	-	
HCM Lane V/C Ratio	-	-	0.014	0.001	-	
HCM Control Delay (s)	-	-	10.5	8.1	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

no-build a.m. - phase I

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	163	215	13	41	69
Future Vol, veh/h	21	163	215	13	41	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	73	73
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	22	173	259	16	56	95
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	275	0	-	0	484	267
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	217	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1288	-	-	-	542	772
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	819	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1288	-	-	-	532	772
Mov Cap-2 Maneuver	-	-	-	-	532	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	819	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		12		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1288	-	-	-	661	
HCM Lane V/C Ratio	0.017	-	-	-	0.228	
HCM Control Delay (s)	7.8	0	-	-	12	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

no-build p.m. - phase I

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	514	28	29	475	32	22	2	24	24	2	13
Future Vol, veh/h	9	514	28	29	475	32	22	2	24	24	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	91	91	91	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	535	29	30	495	33	24	2	26	32	3	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	528	0	0	564	0	0	1135	1141	535	1154	1154	512
Stage 1	-	-	-	-	-	-	553	553	-	572	572	-
Stage 2	-	-	-	-	-	-	582	588	-	582	582	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1039	-	-	1008	-	-	179	201	545	174	197	562
Stage 1	-	-	-	-	-	-	517	514	-	505	504	-
Stage 2	-	-	-	-	-	-	499	496	-	499	499	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1039	-	-	1008	-	-	166	192	545	159	189	562
Mov Cap-2 Maneuver	-	-	-	-	-	-	166	192	-	159	189	-
Stage 1	-	-	-	-	-	-	510	507	-	498	489	-
Stage 2	-	-	-	-	-	-	467	481	-	467	493	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			22.6			26.1		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	257	1039	-	-	1008	-	-	161	562
HCM Lane V/C Ratio	0.205	0.009	-	-	0.03	-	-	0.215	0.031
HCM Control Delay (s)	22.6	8.5	0	-	8.7	-	-	33.4	11.6
HCM Lane LOS	C	A	A	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	0.8	0.1

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

no-build p.m. - phase I

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	186	43	148	284	62	75	344	210	124	240	30
Future Volume (veh/h)	35	186	43	148	284	62	75	344	210	124	240	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	44	232	54	176	338	74	82	378	231	139	270	34
Peak Hour Factor	0.80	0.80	0.80	0.84	0.84	0.84	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	156	279	65	274	375	82	581	530	324	339	818	103
Arrive On Green	0.03	0.19	0.19	0.10	0.25	0.25	0.04	0.50	0.50	0.06	0.51	0.51
Sat Flow, veh/h	1781	1467	342	1753	1486	325	1781	1069	654	1753	1603	202
Grp Volume(v), veh/h	44	0	286	176	0	412	82	0	609	139	0	304
Grp Sat Flow(s),veh/h/ln	1781	0	1809	1753	0	1812	1781	0	1723	1753	0	1804
Q Serve(g_s), s	2.2	0.0	16.9	8.6	0.0	24.4	2.5	0.0	30.6	4.3	0.0	11.0
Cycle Q Clear(g_c), s	2.2	0.0	16.9	8.6	0.0	24.4	2.5	0.0	30.6	4.3	0.0	11.0
Prop In Lane	1.00		0.19	1.00		0.18	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	156	0	344	274	0	457	581	0	854	339	0	921
V/C Ratio(X)	0.28	0.00	0.83	0.64	0.00	0.90	0.14	0.00	0.71	0.41	0.00	0.33
Avail Cap(c_a), veh/h	181	0	461	287	0	563	596	0	854	375	0	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.8	0.0	43.2	31.8	0.0	40.2	12.9	0.0	21.8	17.2	0.0	16.0
Incr Delay (d2), s/veh	1.0	0.0	9.3	4.5	0.0	15.4	0.1	0.0	5.0	0.8	0.0	1.0
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	0.0	8.4	4.0	0.0	12.7	1.0	0.0	13.1	1.7	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.7	0.0	52.5	36.4	0.0	55.6	13.0	0.0	26.9	18.0	0.0	16.9
LnGrp LOS	D	A	D	D	A	E	B	A	C	B	A	B
Approach Vol, veh/h	330			588			691			443		
Approach Delay, s/veh	50.4			49.8			25.2			17.3		
Approach LOS	D			D			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	59.5	15.1	25.6	9.1	61.2	8.2	32.5				
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	8.5	53.7	11.5	28.3	5.5	56.7	5.3	34.5				
Max Q Clear Time (g_c+I1), s	6.3	32.6	10.6	18.9	4.5	13.0	4.2	26.4				
Green Ext Time (p_c), s	0.1	4.4	0.0	1.1	0.0	2.0	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay	34.6											
HCM 6th LOS	C											

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

no-build p.m. - phase I

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	2	611	5	6	423
Future Vol, veh/h	4	2	611	5	6	423
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	45	45	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	9	4	657	5	6	436
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1108	660	0	0	662	0
Stage 1	660	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	232	463	-	-	927	-
Stage 1	514	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	231	463	-	-	927	-
Mov Cap-2 Maneuver	231	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	18.7	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	277	927	-	
HCM Lane V/C Ratio	-	-	0.048	0.007	-	
HCM Control Delay (s)	-	-	18.7	8.9	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

no-build p.m. - phase I

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	291	233	50	30	38
Future Vol, veh/h	29	291	233	50	30	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	90	90
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	33	334	256	55	33	42
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	311	0	-	0	684	284
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1249	-	-	-	414	755
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1249	-	-	-	401	755
Mov Cap-2 Maneuver	-	-	-	-	401	-
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	677	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		12.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1249	-	-	-	543	
HCM Lane V/C Ratio	0.027	-	-	-	0.139	
HCM Control Delay (s)	8	0	-	-	12.7	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

no-build a.m. - full build-out

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	7	477	25	15	300	9	36	3	32	13	0	4
Future Vol, veh/h	7	477	25	15	300	9	36	3	32	13	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	76	76	76	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	7	492	26	17	333	10	47	4	42	20	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	343	0	0	518	0	0	881	883	492	914	904	338
Stage 1	-	-	-	-	-	-	506	506	-	372	372	-
Stage 2	-	-	-	-	-	-	375	377	-	542	532	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1216	-	-	1048	-	-	267	285	577	254	277	704
Stage 1	-	-	-	-	-	-	549	540	-	648	619	-
Stage 2	-	-	-	-	-	-	646	616	-	525	526	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1216	-	-	1048	-	-	260	278	577	229	270	704
Mov Cap-2 Maneuver	-	-	-	-	-	-	260	278	-	229	270	-
Stage 1	-	-	-	-	-	-	545	536	-	643	609	-
Stage 2	-	-	-	-	-	-	630	606	-	479	522	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			19.2			19.4		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	347	1216	-	-	1048	-	-	229	704
HCM Lane V/C Ratio	0.269	0.006	-	-	0.016	-	-	0.087	0.009
HCM Control Delay (s)	19.2	8	0	-	8.5	-	-	22.2	10.2
HCM Lane LOS	C	A	A	-	A	-	-	C	B
HCM 95th %tile Q(veh)	1.1	0	-	-	0	-	-	0.3	0

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

no-build a.m. - full build-out

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	256	39	109	150	62	27	224	126	114	220	12
Future Volume (veh/h)	24	256	39	109	150	62	27	224	126	114	220	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	28	298	45	122	169	70	35	287	162	127	244	13
Peak Hour Factor	0.86	0.86	0.86	0.89	0.89	0.89	0.78	0.78	0.78	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	282	344	52	229	326	135	605	535	302	447	881	47
Arrive On Green	0.03	0.22	0.22	0.07	0.26	0.26	0.03	0.48	0.48	0.05	0.51	0.51
Sat Flow, veh/h	1781	1587	240	1753	1256	520	1781	1105	624	1753	1732	92
Grp Volume(v), veh/h	28	0	343	122	0	239	35	0	449	127	0	257
Grp Sat Flow(s),veh/h/ln	1781	0	1827	1753	0	1777	1781	0	1728	1753	0	1824
Q Serve(g_s), s	1.2	0.0	18.7	5.4	0.0	11.9	1.0	0.0	18.7	3.7	0.0	8.3
Cycle Q Clear(g_c), s	1.2	0.0	18.7	5.4	0.0	11.9	1.0	0.0	18.7	3.7	0.0	8.3
Prop In Lane	1.00		0.13	1.00		0.29	1.00		0.36	1.00		0.05
Lane Grp Cap(c), veh/h	282	0	396	229	0	461	605	0	837	447	0	928
V/C Ratio(X)	0.10	0.00	0.87	0.53	0.00	0.52	0.06	0.00	0.54	0.28	0.00	0.28
Avail Cap(c_a), veh/h	323	0	595	286	0	673	642	0	837	522	0	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.3	0.0	39.0	29.1	0.0	32.7	12.6	0.0	18.6	13.8	0.0	14.5
Incr Delay (d2), s/veh	0.2	0.0	8.7	1.9	0.0	0.9	0.0	0.0	2.5	0.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	9.2	2.3	0.0	5.2	0.4	0.0	7.8	1.5	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	47.7	31.0	0.0	33.6	12.6	0.0	21.0	14.1	0.0	15.3
LnGrp LOS	C	A	D	C	A	C	B	A	C	B	A	B
Approach Vol, veh/h	371			361			484			384		
Approach Delay, s/veh	46.4			32.7			20.4			14.9		
Approach LOS	D			C			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.2	54.5	11.7	26.9	7.7	57.0	7.3	31.3				
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	10.1	47.7	10.6	33.6	5.3	52.5	5.1	39.1				
Max Q Clear Time (g_c+I1), s	5.7	20.7	7.4	20.7	3.0	10.3	3.2	13.9				
Green Ext Time (p_c), s	0.1	3.2	0.1	1.7	0.0	1.7	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay	27.9											
HCM 6th LOS	C											

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

no-build a.m. - full build-out

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	8	377	0	1	383
Future Vol, veh/h	0	8	377	0	1	383
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	11	419	0	1	416
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	837	419	0	0	419	0
Stage 1	419	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	337	634	-	-	1140	-
Stage 1	664	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	337	634	-	-	1140	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.8	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	634	1140	-	
HCM Lane V/C Ratio	-	-	0.017	0.001	-	
HCM Control Delay (s)	-	-	10.8	8.2	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

no-build a.m. - full build-out

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	180	237	15	46	76
Future Vol, veh/h	23	180	237	15	46	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	73	73
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	24	191	286	18	63	104
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	304	0	-	0	534	295
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	239	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1257	-	-	-	507	744
Stage 1	-	-	-	-	755	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1257	-	-	-	496	744
Mov Cap-2 Maneuver	-	-	-	-	496	-
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	801	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		12.8		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1257	-	-	-	626	
HCM Lane V/C Ratio	0.019	-	-	-	0.267	
HCM Control Delay (s)	7.9	0	-	-	12.8	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

no-build p.m. - full build-out

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱			↰			↰	↱
Traffic Vol, veh/h	9	567	31	32	524	35	24	3	27	27	3	15
Future Vol, veh/h	9	567	31	32	524	35	24	3	27	27	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	91	91	91	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	591	32	33	546	36	26	3	30	36	4	20
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	582	0	0	623	0	0	1251	1257	591	1272	1271	564
Stage 1	-	-	-	-	-	-	609	609	-	630	630	-
Stage 2	-	-	-	-	-	-	642	648	-	642	641	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	992	-	-	958	-	-	149	171	507	144	168	525
Stage 1	-	-	-	-	-	-	482	485	-	470	475	-
Stage 2	-	-	-	-	-	-	463	466	-	463	469	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	992	-	-	958	-	-	135	163	507	129	160	525
Mov Cap-2 Maneuver	-	-	-	-	-	-	135	163	-	129	160	-
Stage 1	-	-	-	-	-	-	475	478	-	463	459	-
Stage 2	-	-	-	-	-	-	426	450	-	427	462	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			27.9			33.2		
HCM LOS							D			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	216	992	-	-	958	-	-	132	525			
HCM Lane V/C Ratio	0.275	0.009	-	-	0.035	-	-	0.303	0.038			
HCM Control Delay (s)	27.9	8.7	0	-	8.9	-	-	43.7	12.1			
HCM Lane LOS	D	A	A	-	A	-	-	E	B			
HCM 95th %tile Q(veh)	1.1	0	-	-	0.1	-	-	1.2	0.1			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

no-build p.m. - full build-out

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	205	47	164	314	68	83	379	232	137	265	34
Future Volume (veh/h)	39	205	47	164	314	68	83	379	232	137	265	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	49	256	59	195	374	81	91	416	255	154	298	38
Peak Hour Factor	0.80	0.80	0.80	0.84	0.84	0.84	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	158	306	71	288	411	89	524	495	304	268	777	99
Arrive On Green	0.04	0.21	0.21	0.10	0.28	0.28	0.04	0.46	0.46	0.06	0.49	0.49
Sat Flow, veh/h	1781	1470	339	1753	1490	323	1781	1068	655	1753	1600	204
Grp Volume(v), veh/h	49	0	315	195	0	455	91	0	671	154	0	336
Grp Sat Flow(s),veh/h/ln	1781	0	1809	1753	0	1812	1781	0	1723	1753	0	1804
Q Serve(g_s), s	2.4	0.0	18.6	9.4	0.0	27.1	3.0	0.0	38.1	5.1	0.0	13.1
Cycle Q Clear(g_c), s	2.4	0.0	18.6	9.4	0.0	27.1	3.0	0.0	38.1	5.1	0.0	13.1
Prop In Lane	1.00		0.19	1.00		0.18	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	158	0	377	288	0	500	524	0	799	268	0	876
V/C Ratio(X)	0.31	0.00	0.84	0.68	0.00	0.91	0.17	0.00	0.84	0.57	0.00	0.38
Avail Cap(c_a), veh/h	184	0	463	320	0	593	543	0	799	306	0	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	42.3	30.6	0.0	39.0	14.9	0.0	26.2	21.8	0.0	18.1
Incr Delay (d2), s/veh	1.1	0.0	10.6	4.9	0.0	16.4	0.2	0.0	10.3	2.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	9.4	4.3	0.0	14.2	1.2	0.0	17.4	2.1	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	0.0	52.9	35.5	0.0	55.4	15.1	0.0	36.6	23.8	0.0	19.4
LnGrp LOS	D	A	D	D	A	E	B	A	D	C	A	B
Approach Vol, veh/h	364			650			762			490		
Approach Delay, s/veh	50.6			49.4			34.0			20.8		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	56.2	15.9	27.7	9.2	58.6	8.4	35.3				
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	9.5	50.5	13.5	28.5	5.9	54.1	5.5	36.5				
Max Q Clear Time (g_c+l1), s	7.1	40.1	11.4	20.6	5.0	15.1	4.4	29.1				
Green Ext Time (p_c), s	0.1	3.5	0.1	1.1	0.0	2.3	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay	38.2											
HCM 6th LOS	D											

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

no-build p.m. - full build-out

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	3	674	5	7	467
Future Vol, veh/h	4	3	674	5	7	467
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	45	45	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	9	7	725	5	7	481
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1223	728	0	0	730	0
Stage 1	728	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	198	423	-	-	874	-
Stage 1	478	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	196	423	-	-	874	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	20	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	255	874	-	
HCM Lane V/C Ratio	-	-	0.061	0.008	-	
HCM Control Delay (s)	-	-	20	9.2	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

no-build p.m. - full build-out

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	322	257	55	34	42
Future Vol, veh/h	32	322	257	55	34	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	90	90
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	37	370	282	60	38	47
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	342	0	-	0	756	312
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	444	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1217	-	-	-	376	728
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	646	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1217	-	-	-	362	728
Mov Cap-2 Maneuver	-	-	-	-	362	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	646	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		13.6		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1217	-	-	-	501	
HCM Lane V/C Ratio	0.03	-	-	-	0.169	
HCM Control Delay (s)	8.1	0	-	-	13.6	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6	

Appendix E

Future Intersection Operational Analysis

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future phase I a.m.

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱			↰			↰	↱
Traffic Vol, veh/h	6	432	37	24	272	9	77	2	66	12	0	4
Future Vol, veh/h	6	432	37	24	272	9	77	2	66	12	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	85	85	85	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	6	445	38	27	302	10	91	2	78	18	0	6
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	483	0	0	821	823	445	877	856	307
Stage 1	-	-	-	-	-	-	457	457	-	361	361	-
Stage 2	-	-	-	-	-	-	364	366	-	516	495	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1248	-	-	1080	-	-	293	309	613	269	295	733
Stage 1	-	-	-	-	-	-	583	568	-	657	626	-
Stage 2	-	-	-	-	-	-	655	623	-	542	546	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1248	-	-	1080	-	-	284	299	613	228	286	733
Mov Cap-2 Maneuver	-	-	-	-	-	-	284	299	-	228	286	-
Stage 1	-	-	-	-	-	-	579	564	-	652	610	-
Stage 2	-	-	-	-	-	-	633	607	-	468	542	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.7			22.3			19.2		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	376	1248	-	-	1080	-	-	228	733			
HCM Lane V/C Ratio	0.454	0.005	-	-	0.025	-	-	0.081	0.008			
HCM Control Delay (s)	22.3	7.9	0	-	8.4	-	-	22.2	10			
HCM Lane LOS	C	A	A	-	A	-	-	C	B			
HCM 95th %tile Q(veh)	2.3	0	-	-	0.1	-	-	0.3	0			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

future phase I a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	236	35	114	148	72	24	203	119	108	199	11
Future Volume (veh/h)	22	236	35	114	148	72	24	203	119	108	199	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	25	271	40	124	161	78	30	257	151	120	221	12
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.79	0.79	0.79	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	264	318	47	236	294	142	639	540	317	491	901	49
Arrive On Green	0.02	0.20	0.20	0.07	0.25	0.25	0.03	0.50	0.50	0.05	0.52	0.52
Sat Flow, veh/h	1781	1593	235	1753	1190	577	1781	1087	639	1753	1730	94
Grp Volume(v), veh/h	25	0	311	124	0	239	30	0	408	120	0	233
Grp Sat Flow(s),veh/h/ln	1781	0	1828	1753	0	1767	1781	0	1726	1753	0	1824
Q Serve(g_s), s	1.1	0.0	16.5	5.4	0.0	11.8	0.8	0.0	15.7	3.3	0.0	7.1
Cycle Q Clear(g_c), s	1.1	0.0	16.5	5.4	0.0	11.8	0.8	0.0	15.7	3.3	0.0	7.1
Prop In Lane	1.00		0.13	1.00		0.33	1.00		0.37	1.00		0.05
Lane Grp Cap(c), veh/h	264	0	365	236	0	436	639	0	857	491	0	949
V/C Ratio(X)	0.09	0.00	0.85	0.53	0.00	0.55	0.05	0.00	0.48	0.24	0.00	0.25
Avail Cap(c_a), veh/h	317	0	610	296	0	680	686	0	857	569	0	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	38.8	29.0	0.0	32.9	11.6	0.0	16.7	12.4	0.0	13.2
Incr Delay (d2), s/veh	0.2	0.0	6.0	1.8	0.0	1.1	0.0	0.0	1.9	0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	7.9	2.4	0.0	5.1	0.3	0.0	6.4	1.3	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	44.8	30.8	0.0	34.0	11.7	0.0	18.6	12.6	0.0	13.9
LnGrp LOS	C	A	D	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h	336			363			438			353		
Approach Delay, s/veh	43.8			32.9			18.1			13.4		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	54.4	11.8	24.6	7.3	56.8	7.0	29.3				
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	9.7	48.1	10.7	33.5	5.5	52.3	5.5	38.7				
Max Q Clear Time (g_c+I1), s	5.3	17.7	7.4	18.5	2.8	9.1	3.1	13.8				
Green Ext Time (p_c), s	0.1	2.9	0.1	1.6	0.0	1.5	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay				26.4								
HCM 6th LOS				C								

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

future phase I a.m.

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	346	0	1	363
Future Vol, veh/h	0	7	346	0	1	363
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	9	384	0	1	395
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	781	384	0	0	384	0
Stage 1	384	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	363	664	-	-	1174	-
Stage 1	688	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	363	664	-	-	1174	-
Mov Cap-2 Maneuver	363	-	-	-	-	-
Stage 1	688	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.5	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	664	1174	-	
HCM Lane V/C Ratio	-	-	0.014	0.001	-	
HCM Control Delay (s)	-	-	10.5	8.1	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

future phase I a.m.

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	163	215	13	41	69
Future Vol, veh/h	21	163	215	13	41	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	73	73
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	22	173	259	16	56	95
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	275	0	-	0	484	267
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	217	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1288	-	-	-	542	772
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	819	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1288	-	-	-	532	772
Mov Cap-2 Maneuver	-	-	-	-	532	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	819	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		12		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1288	-	-	-	661	
HCM Lane V/C Ratio	0.017	-	-	-	0.228	
HCM Control Delay (s)	7.8	0	-	-	12	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future phase I p.m.

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	514	65	74	475	32	44	2	51	24	2	13
Future Vol, veh/h	9	514	65	74	475	32	44	2	51	24	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	98	98	98	94	94	94	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	530	67	76	485	33	47	2	54	32	3	17
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	518	0	0	597	0	0	1212	1218	530	1264	1269	502
Stage 1	-	-	-	-	-	-	548	548	-	654	654	-
Stage 2	-	-	-	-	-	-	664	670	-	610	615	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1048	-	-	980	-	-	159	181	549	146	168	569
Stage 1	-	-	-	-	-	-	521	517	-	456	463	-
Stage 2	-	-	-	-	-	-	450	455	-	482	482	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1048	-	-	980	-	-	142	165	549	121	153	569
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	165	-	121	153	-
Stage 1	-	-	-	-	-	-	514	510	-	450	427	-
Stage 2	-	-	-	-	-	-	400	420	-	427	476	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.1			32			34.1		
HCM LOS							D			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	234	1048	-	-	980	-	-	123	569			
HCM Lane V/C Ratio	0.441	0.009	-	-	0.077	-	-	0.282	0.03			
HCM Control Delay (s)	32	8.5	0	-	9	-	-	45.4	11.5			
HCM Lane LOS	D	A	A	-	A	-	-	E	B			
HCM 95th %tile Q(veh)	2.1	0	-	-	0.2	-	-	1.1	0.1			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

future phase I p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	190	43	160	287	69	75	344	231	136	240	30
Future Volume (veh/h)	35	190	43	160	287	69	75	344	231	136	240	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	44	238	54	186	334	80	82	378	254	151	267	33
Peak Hour Factor	0.80	0.80	0.80	0.86	0.86	0.86	0.91	0.91	0.91	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	159	277	63	277	372	89	578	497	334	318	809	100
Arrive On Green	0.03	0.19	0.19	0.10	0.25	0.25	0.04	0.48	0.48	0.06	0.50	0.50
Sat Flow, veh/h	1781	1475	335	1753	1458	349	1781	1027	690	1753	1606	199
Grp Volume(v), veh/h	44	0	292	186	0	414	82	0	632	151	0	300
Grp Sat Flow(s),veh/h/ln	1781	0	1810	1753	0	1807	1781	0	1717	1753	0	1805
Q Serve(g_s), s	2.1	0.0	17.0	8.9	0.0	24.1	2.5	0.0	32.7	4.7	0.0	10.8
Cycle Q Clear(g_c), s	2.1	0.0	17.0	8.9	0.0	24.1	2.5	0.0	32.7	4.7	0.0	10.8
Prop In Lane	1.00		0.18	1.00		0.19	1.00		0.40	1.00		0.11
Lane Grp Cap(c), veh/h	159	0	340	277	0	461	578	0	832	318	0	909
V/C Ratio(X)	0.28	0.00	0.86	0.67	0.00	0.90	0.14	0.00	0.76	0.48	0.00	0.33
Avail Cap(c_a), veh/h	222	0	489	301	0	572	590	0	832	365	0	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	42.8	31.2	0.0	39.2	13.2	0.0	22.9	18.4	0.0	16.1
Incr Delay (d2), s/veh	0.9	0.0	10.3	5.2	0.0	14.9	0.1	0.0	6.5	1.1	0.0	1.0
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	0.0	8.5	4.1	0.0	12.4	1.0	0.0	14.2	1.9	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	0.0	53.1	36.4	0.0	54.0	13.3	0.0	29.4	19.5	0.0	17.0
LnGrp LOS	D	A	D	D	A	D	B	A	C	B	A	B
Approach Vol, veh/h	336			600			714			451		
Approach Delay, s/veh	50.8			48.6			27.5			17.8		
Approach LOS	D			D			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	57.2	15.5	24.9	9.1	59.3	8.2	32.2				
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	9.6	50.5	12.5	29.4	5.3	54.8	7.5	34.4				
Max Q Clear Time (g_c+I1), s	6.7	34.7	10.9	19.0	4.5	12.8	4.1	26.1				
Green Ext Time (p_c), s	0.1	4.1	0.1	1.2	0.0	2.0	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay	35.2											
HCM 6th LOS	D											

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

future phase I p.m.

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	2	632	5	6	435
Future Vol, veh/h	4	2	632	5	6	435
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	45	45	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	9	4	680	5	6	448
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1143	683	0	0	685	0
Stage 1	683	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	221	449	-	-	908	-
Stage 1	502	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	219	449	-	-	908	-
Mov Cap-2 Maneuver	219	-	-	-	-	-
Stage 1	502	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	19.4	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	264	908	-	
HCM Lane V/C Ratio	-	-	0.051	0.007	-	
HCM Control Delay (s)	-	-	19.4	9	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

future phase I p.m.

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	291	233	50	30	38
Future Vol, veh/h	29	291	233	50	30	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	90	90
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	33	334	256	55	33	42
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	311	0	-	0	684	284
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1249	-	-	-	414	755
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1249	-	-	-	401	755
Mov Cap-2 Maneuver	-	-	-	-	401	-
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	677	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		12.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1249	-	-	-	543	
HCM Lane V/C Ratio	0.027	-	-	-	0.139	
HCM Control Delay (s)	8	0	-	-	12.7	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future full build-out a.m.

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	477	42	35	300	9	86	3	95	13	0	4
Future Vol, veh/h	7	477	42	35	300	9	86	3	95	13	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	88	88	88	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	7	492	43	39	333	10	98	3	108	20	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	343	0	0	535	0	0	925	927	492	999	965	338
Stage 1	-	-	-	-	-	-	506	506	-	416	416	-
Stage 2	-	-	-	-	-	-	419	421	-	583	549	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1216	-	-	1033	-	-	250	268	577	222	255	704
Stage 1	-	-	-	-	-	-	549	540	-	614	592	-
Stage 2	-	-	-	-	-	-	612	589	-	498	516	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1216	-	-	1033	-	-	239	256	577	172	243	704
Mov Cap-2 Maneuver	-	-	-	-	-	-	239	256	-	172	243	-
Stage 1	-	-	-	-	-	-	545	536	-	609	570	-
Stage 2	-	-	-	-	-	-	584	567	-	399	512	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.9			30.6			24.3		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	343	1216	-	-	1033	-	-	172	704
HCM Lane V/C Ratio	0.61	0.006	-	-	0.038	-	-	0.116	0.009
HCM Control Delay (s)	30.6	8	0	-	8.6	-	-	28.7	10.2
HCM Lane LOS	D	A	A	-	A	-	-	D	B
HCM 95th %tile Q(veh)	3.8	0	-	-	0.1	-	-	0.4	0

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

future full build-out a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	264	39	109	173	89	27	224	126	123	220	12
Future Volume (veh/h)	24	264	39	109	173	89	27	224	126	123	220	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	28	303	45	118	188	97	34	284	159	137	244	13
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.79	0.79	0.79	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	248	350	52	227	304	157	601	529	296	450	876	47
Arrive On Green	0.03	0.22	0.22	0.07	0.26	0.26	0.03	0.48	0.48	0.06	0.51	0.51
Sat Flow, veh/h	1781	1591	236	1753	1163	600	1781	1108	621	1753	1732	92
Grp Volume(v), veh/h	28	0	348	118	0	285	34	0	443	137	0	257
Grp Sat Flow(s),veh/h/ln	1781	0	1828	1753	0	1762	1781	0	1729	1753	0	1824
Q Serve(g_s), s	1.2	0.0	18.8	5.1	0.0	14.6	1.0	0.0	18.4	4.0	0.0	8.3
Cycle Q Clear(g_c), s	1.2	0.0	18.8	5.1	0.0	14.6	1.0	0.0	18.4	4.0	0.0	8.3
Prop In Lane	1.00		0.13	1.00		0.34	1.00		0.36	1.00		0.05
Lane Grp Cap(c), veh/h	248	0	402	227	0	460	601	0	825	450	0	922
V/C Ratio(X)	0.11	0.00	0.87	0.52	0.00	0.62	0.06	0.00	0.54	0.30	0.00	0.28
Avail Cap(c_a), veh/h	289	0	617	288	0	688	639	0	825	536	0	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	38.4	28.8	0.0	33.3	12.8	0.0	18.8	13.8	0.0	14.5
Incr Delay (d2), s/veh	0.2	0.0	8.0	1.8	0.0	1.4	0.0	0.0	2.5	0.4	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	9.2	2.2	0.0	6.3	0.4	0.0	7.7	1.6	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	0.0	46.4	30.6	0.0	34.6	12.8	0.0	21.3	14.2	0.0	15.3
LnGrp LOS	C	A	D	C	A	C	B	A	C	B	A	B
Approach Vol, veh/h	376			403			477			394		
Approach Delay, s/veh	45.2			33.5			20.7			14.9		
Approach LOS	D			C			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	53.3	11.5	27.0	7.6	56.2	7.2	31.2				
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	11.0	46.0	10.5	34.5	5.3	51.7	5.1	39.9				
Max Q Clear Time (g_c+I1), s	6.0	20.4	7.1	20.8	3.0	10.3	3.2	16.6				
Green Ext Time (p_c), s	0.1	3.1	0.1	1.8	0.0	1.7	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay	28.0											
HCM 6th LOS	C											

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

future full build-out a.m.

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	8	377	6	1	383
Future Vol, veh/h	21	8	377	6	1	383
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	26	10	419	7	1	416
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	841	423	0	0	426	0
Stage 1	423	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	335	631	-	-	1133	-
Stage 1	661	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	335	631	-	-	1133	-
Mov Cap-2 Maneuver	335	-	-	-	-	-
Stage 1	661	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	15.3	0	0			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	385	1133	-	
HCM Lane V/C Ratio	-	-	0.094	0.001	-	
HCM Control Delay (s)	-	-	15.3	8.2	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

future full build-out a.m.

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	180	237	20	62	83
Future Vol, veh/h	26	180	237	20	62	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	80	80
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	28	191	286	24	78	104
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	310	0	-	0	545	298
Stage 1	-	-	-	-	298	-
Stage 2	-	-	-	-	247	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1250	-	-	-	499	741
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	794	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1250	-	-	-	487	741
Mov Cap-2 Maneuver	-	-	-	-	487	-
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	794	-
Approach	EB	WB		SB		
HCM Control Delay, s	1	0		13.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1250	-	-	-	606	
HCM Lane V/C Ratio	0.022	-	-	-	0.299	
HCM Control Delay (s)	7.9	0	-	-	13.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future full build-out p.m.

Intersection												
Int Delay, s/veh	7.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	567	59	125	524	35	41	3	82	27	3	15
Future Vol, veh/h	9	567	59	125	524	35	41	3	82	27	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	99	99	99	96	96	96	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	585	61	126	529	35	43	3	85	36	4	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	564	0	0	646	0	0	1414	1419	585	1477	1463	547
Stage 1	-	-	-	-	-	-	603	603	-	799	799	-
Stage 2	-	-	-	-	-	-	811	816	-	678	664	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1008	-	-	939	-	-	115	137	511	104	129	537
Stage 1	-	-	-	-	-	-	486	488	-	379	398	-
Stage 2	-	-	-	-	-	-	373	391	-	442	458	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1008	-	-	939	-	-	96	117	511	75	110	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	117	-	75	110	-
Stage 1	-	-	-	-	-	-	479	481	-	374	345	-
Stage 2	-	-	-	-	-	-	307	339	-	361	452	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.7			49.4			66.7		
HCM LOS							E			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	205	1008	-	-	939	-	-	77	537
HCM Lane V/C Ratio	0.64	0.009	-	-	0.134	-	-	0.519	0.037
HCM Control Delay (s)	49.4	8.6	0	-	9.4	-	-	94	12
HCM Lane LOS	E	A	A	-	A	-	-	F	B
HCM 95th %tile Q(veh)	3.8	0	-	-	0.5	-	-	2.2	0.1

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future full build-out p.m. with mitigation

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱			↰	↱		↰	↱
Traffic Vol, veh/h	9	567	59	125	524	35	41	3	82	27	3	15
Future Vol, veh/h	9	567	59	125	524	35	41	3	82	27	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	100	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	99	99	99	96	96	96	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	585	61	126	529	35	43	3	85	36	4	20
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	564	0	0	646	0	0	1414	1419	585	1477	1463	547
Stage 1	-	-	-	-	-	-	603	603	-	799	799	-
Stage 2	-	-	-	-	-	-	811	816	-	678	664	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1008	-	-	939	-	-	115	137	511	104	129	537
Stage 1	-	-	-	-	-	-	486	488	-	379	398	-
Stage 2	-	-	-	-	-	-	373	391	-	442	458	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1008	-	-	939	-	-	96	117	511	75	110	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	117	-	75	110	-
Stage 1	-	-	-	-	-	-	479	481	-	374	345	-
Stage 2	-	-	-	-	-	-	307	339	-	361	452	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.7			33.8			66.7		
HCM LOS							D			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	97	511	1008	-	-	939	-	-	77	537		
HCM Lane V/C Ratio	0.473	0.167	0.009	-	-	0.134	-	-	0.519	0.037		
HCM Control Delay (s)	71.7	13.5	8.6	0	-	9.4	-	-	94	12		
HCM Lane LOS	F	B	A	A	-	A	-	-	F	B		
HCM 95th %tile Q(veh)	2	0.6	0	-	-	0.5	-	-	2.2	0.1		

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

future full build-out p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	213	47	164	319	80	83	379	232	157	265	34
Future Volume (veh/h)	39	213	47	164	319	80	83	379	232	157	265	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	49	266	59	191	371	93	91	416	255	174	294	38
Peak Hour Factor	0.80	0.80	0.80	0.86	0.86	0.86	0.91	0.91	0.91	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	156	320	71	285	405	102	522	485	297	267	769	99
Arrive On Green	0.03	0.22	0.22	0.10	0.28	0.28	0.04	0.45	0.45	0.07	0.48	0.48
Sat Flow, veh/h	1781	1482	329	1753	1443	362	1781	1068	655	1753	1597	206
Grp Volume(v), veh/h	49	0	325	191	0	464	91	0	671	174	0	332
Grp Sat Flow(s),veh/h/ln	1781	0	1811	1753	0	1805	1781	0	1723	1753	0	1804
Q Serve(g_s), s	2.4	0.0	19.3	9.2	0.0	27.9	3.0	0.0	39.1	5.8	0.0	13.1
Cycle Q Clear(g_c), s	2.4	0.0	19.3	9.2	0.0	27.9	3.0	0.0	39.1	5.8	0.0	13.1
Prop In Lane	1.00		0.18	1.00		0.20	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	156	0	391	285	0	507	522	0	782	267	0	869
V/C Ratio(X)	0.31	0.00	0.83	0.67	0.00	0.92	0.17	0.00	0.86	0.65	0.00	0.38
Avail Cap(c_a), veh/h	181	0	476	305	0	587	540	0	782	292	0	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	42.1	30.5	0.0	39.1	15.5	0.0	27.4	22.9	0.0	18.5
Incr Delay (d2), s/veh	1.1	0.0	10.0	5.1	0.0	17.6	0.2	0.0	11.7	4.5	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	9.6	4.2	0.0	14.7	1.2	0.0	18.1	2.6	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.6	0.0	52.1	35.6	0.0	56.7	15.7	0.0	39.2	27.5	0.0	19.8
LnGrp LOS	D	A	D	D	A	E	B	A	D	C	A	B
Approach Vol, veh/h	374			655			762			506		
Approach Delay, s/veh	49.9			50.5			36.3			22.4		
Approach LOS	D			D			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	55.5	15.7	28.8	9.3	58.6	8.4	36.0				
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	9.5	50.5	12.5	29.5	5.9	54.1	5.5	36.5				
Max Q Clear Time (g_c+I1), s	7.8	41.1	11.2	21.3	5.0	15.1	4.4	29.9				
Green Ext Time (p_c), s	0.1	3.3	0.1	1.2	0.0	2.2	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay	39.5											
HCM 6th LOS	D											

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

future full build-out p.m.

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	3	674	34	7	467
Future Vol, veh/h	21	3	674	34	7	467
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	28	4	725	37	7	481
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1239	744	0	0	762	0
Stage 1	744	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	194	415	-	-	850	-
Stage 1	470	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	192	415	-	-	850	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	470	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	25.7	0	0.1			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	206	850	-	
HCM Lane V/C Ratio	-	-	0.155	0.008	-	
HCM Control Delay (s)	-	-	25.7	9.3	-	
HCM Lane LOS	-	-	D	A	-	
HCM 95th %tile Q(veh)	-	-	0.5	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

future full build-out p.m.

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	322	257	64	39	48
Future Vol, veh/h	42	322	257	64	39	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	91	91
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	48	370	282	70	43	53
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	352	0	-	0	783	317
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1207	-	-	-	362	724
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	632	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1207	-	-	-	344	724
Mov Cap-2 Maneuver	-	-	-	-	344	-
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	632	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		14.3		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1207	-	-	-	484	
HCM Lane V/C Ratio	0.04	-	-	-	0.198	
HCM Control Delay (s)	8.1	0	-	-	14.3	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7	

Appendix F

Programmed System Improvement Information Sheets

2050 Regional Transportation Plan 2020 Update

Project Name SR 13 From Radford road to South of SR 53	GHMPO No. GH-033	GDOT No. 0001822
	County Hall	City Oakwood/Flowery Bra
Local Rd. Name Falcon Pkwy	GDOT District 1	Cong. District 9
US/State Rd. Name SR 13	Map ID 33	RC GMRC

Project Description

The widening from two to four lanes of SR 13/ Falcon Parkway (Atlanta Highway) from Radford Road to south of SR 53/Winder Highway.

Improvement Type Widening **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

To improve mobility and decrease congestion along this important north/south link in the southwestern section of Hall County.

Project Termini	From Radford Road	Length (miles) 4.0	
	To SR 53/Winder Highway	Exist. Lanes 2	Future Lanes 4
Bike / Ped. Sidewalks, bike lanes on State Bike Route 55		Exist. Vol. 5,500 (2015)	Design Vol. 9,280 (2050)
Connectivity I-985			
Network Year 2050+	LRTP Project Tier: Project Band 4 - Unfunded		Open to Traffic Date 2050+

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	OTHER	TOTAL
Precons	Pre-Engineering	L200		\$1,098,873	\$4,395,493	\$0	
Precons	Right-of-Way	L200	\$0	\$4,664,340	\$18,657,362	\$0	\$23,321,702
Precons	Construction	L200	\$0	\$13,735,915	\$54,943,660	\$0	\$68,679,575
Precons	Utilities	L1C0	\$0	\$1,774,964	\$7,099,857	\$0	\$8,874,821
		TOTAL	\$0	\$21,274,092	\$85,096,372	\$0	\$100,876,098



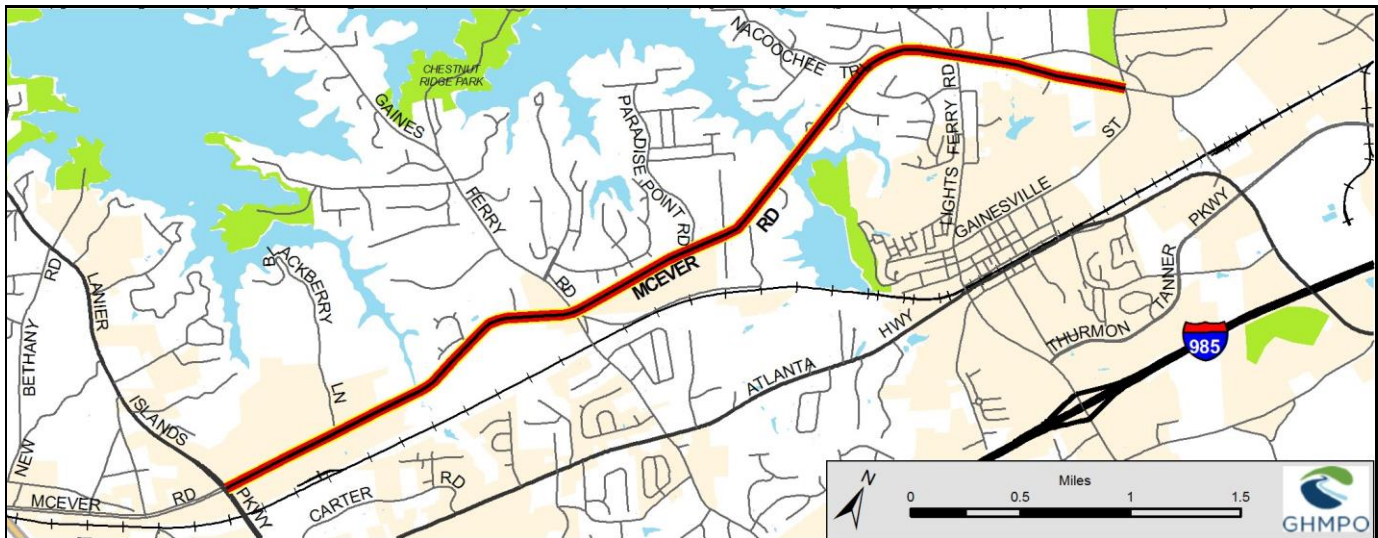
2050 Regional Transportation Plan 2020 Update

Project Name McEver Road From SR 347/Lanier Islands Parkway To CS 537/Gainesville Street	GHMPO No. GH-084	GDOT No. 0001821
	County Hall	City Buford, Flowery Branch
Local Rd. Name McEver Rd	GDOT District 1	Cong. District 9
US/State Rd. Name N/A	Map ID 84	RC GMRC

Project Description McEver Road from SR 347/Lanier Islands Parkway to CS 537/Gainesville Street			
Improvement Type Widening	Regionally Significant Yes	Capacity Adding Yes	Funding Source Split
Project Intent Improve access to a rapidly growing area in Hall County.			

Project Termini From Lanier islands pkwy To Gainesville St	Length (miles) 5.1	
	Exist. Lanes 2	Future Lanes 4
Bike / Ped. Sidewalks, bike lanes recommended	Exist. Vol. 3,560 (2015)	Design Vol. 9,530 (2050)
Connectivity SR 347/Lanier Islands Pkwy		
Network Year 2040	LRTP Project Tier: Project band 3 (2031-2040)	Open to Traffic Date 2034

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	OTHER	TOTAL
2019	Pre-Engineering	LOCAL	\$2,753,516	\$671,304	\$2,685,216	\$0	\$6,110,036
LR	Right-of-Way	LOCAL	\$2,880,888	\$0	\$0	\$0	\$2,880,888
LR	Construction	State/Federal	\$0	\$10,855,041	\$43,420,166	\$0	\$54,275,207
LR	Utilities	LOCAL	\$15,505,732	\$0	\$0	\$0	\$15,505,732
		TOTAL	\$21,140,136	\$11,526,345	\$46,105,382	\$0	\$78,771,863



2050 Regional Transportation Plan 2020 Update

Project Name SR 13 at I-985 & At cr 527/Thurmon Tanner Pkwy	GHMPO No. GH-129	GDOT No. 0016616
	County Hall	City Flowery Branch
Local Rd. Name Atlanta Hwy, Falcon Pkwy	GDOT District 1	Cong. District 9
US/State Rd. Name SR 13	Map ID	RC GMRC

Project Description

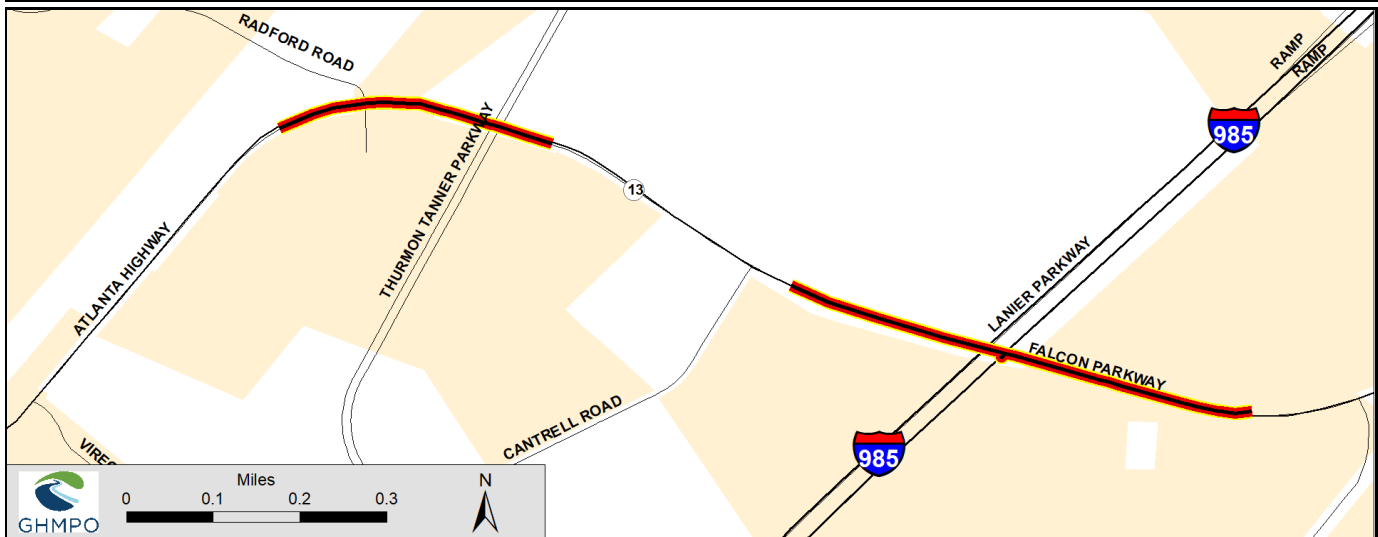
This project will add turning capacity to Thurmon Tanner Pkwy by converting the existing thru lane into a thru-right lane on I-985 Off-ramp by shifting and narrowing the median. These changes will increase capacity.

Improvement Type Operations **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

Project Termini	From Just West of Radford Road	Length (miles) .8	
	To Just East of I-985	Exist. Lanes N/A	Future Lanes N/A
Bike / Ped.		Exist. Vol. 4,605 (2015)	Design Vol. 8,000 (2050)
Connectivity I-985			
Network Year 2040	LRTP Project Tier: Project Band 3 (2031-2040)	Open to Traffic Date (2031-	

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	OTHER	TOTAL
2021	Utilities	HB 170	\$0	\$86,364	\$0	\$0	\$86,364
2021	Construction	HB 170	\$0	\$719,701	\$0	\$0	\$719,701
Auth.	Pre-Engineering		\$0	\$0	\$0	\$0	\$0
Auth.	Right-of-Way		\$0	\$0	\$0	\$0	\$0
TOTAL			\$0	\$806,065	\$0	\$0	\$806,065



Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

ORDINANCE 625

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 9.8+/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 5558 MULBERRY STREET, IDENTIFIED AS TAX PARCEL 08117 002008A AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 9.8. +/- acre tract of land identified as tax parcel 08117 002008A; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.
2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

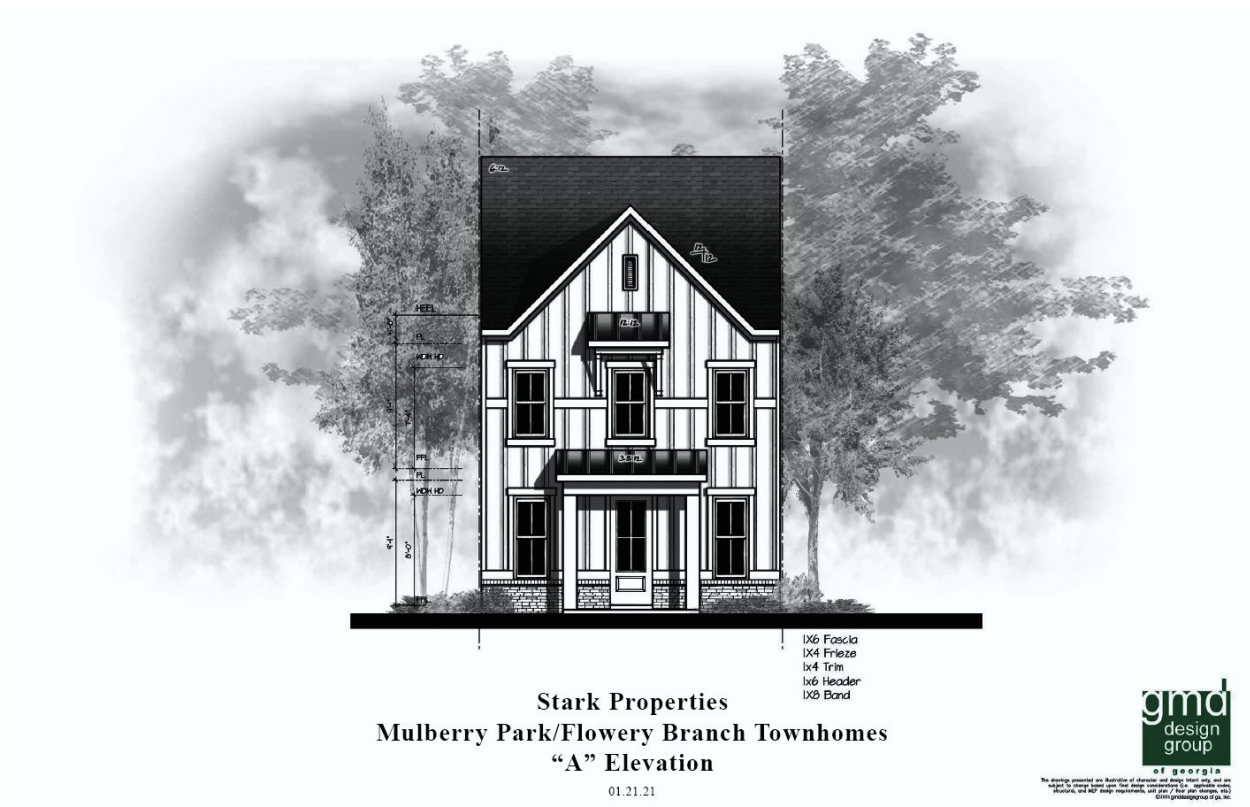
Exhibit “A”

Exhibit “B”

Exhibit “C”

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:





The drawings presented are illustration of character and design intent only, and subject to change based upon final design considerations (i.e. applicable code-structure), and MEP design requirements, wall plan / floor plan changes, or







01.22.21



The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e., applicable code, structural, and MEP design requirements, wall plan / floor plan changes, etc.).

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Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

ORDINANCE 626

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 28.54+/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 0 MULBERRY STREET, IDENTIFIED AS TAX PARCEL 08117 002016D AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 28.54. +/- acre tract of land identified as tax parcel 08117 002016D; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.
2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

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The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

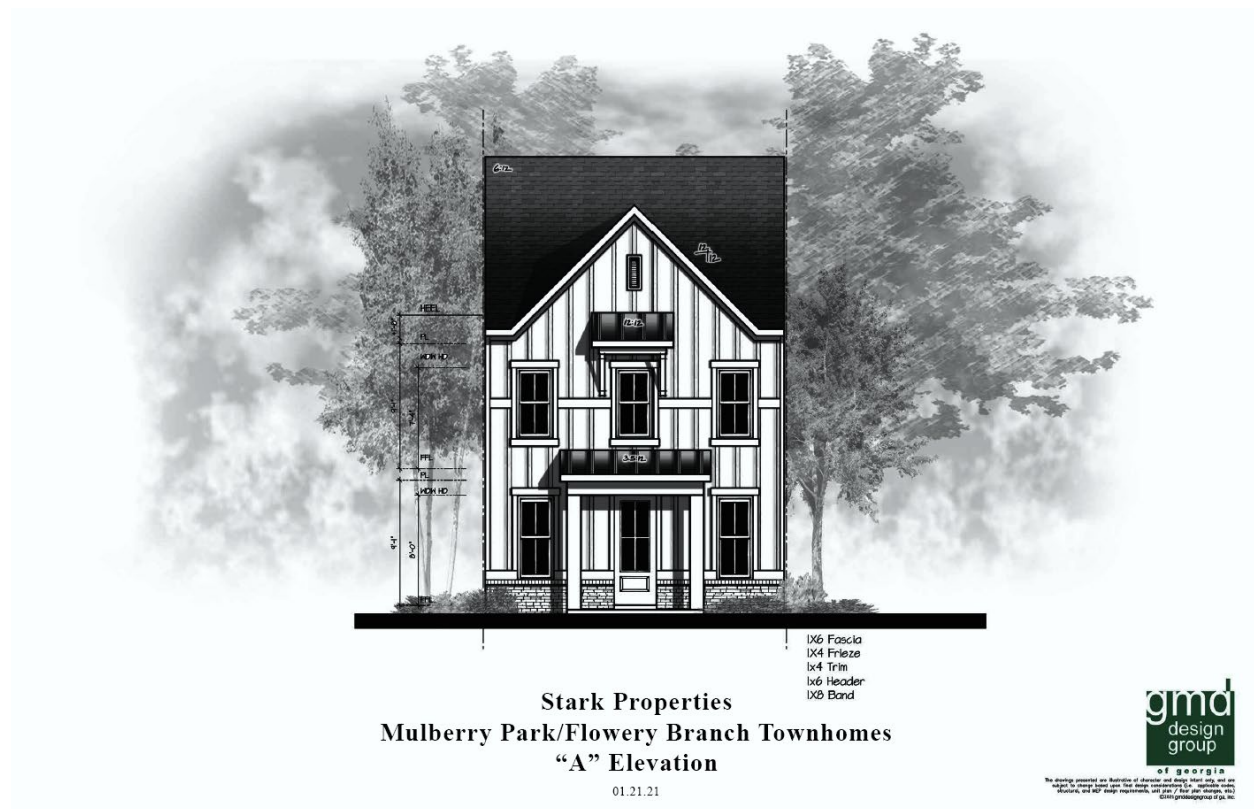
Exhibit “A”

Exhibit “B”

Exhibit “C”

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:





01.21.21

IX6 Fascia
IX4 Frieze
IX4 Trim
IX6 Header
IX6 Band



The drawings presented are illustrative of character and design intent only, and subject to change based upon final design considerations (i.e. applicable code structure, and MEP design requirements, wall plan / floor plan changes, etc.)





Stark Properties
Mulberry Park/Flowery Branch Townhomes
"B" Elevation

01.22.21

1x6 Fascia
 1x4 Frieze
 1x4 Trim
 1x6 Header
 1x8 Band



The drawings presented are a representation of the design and design team's work and are subject to change without notice. This drawing is not to be used for construction, site, material, finish, structure, and all other design requirements. © 2021 gmd design group, LLC. All rights reserved.



01.22.21



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the OAKLEY



Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

ORDINANCE 627

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 7.63+/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 5675 FLOWERY WAY, IDENTIFIED AS TAX PARCEL 08117 002016B AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 7.63+/- acre tract of land identified as tax parcel 08117 002016B; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

Exhibit "A"

Exhibit "B"

01/13/2021
03/04/2021

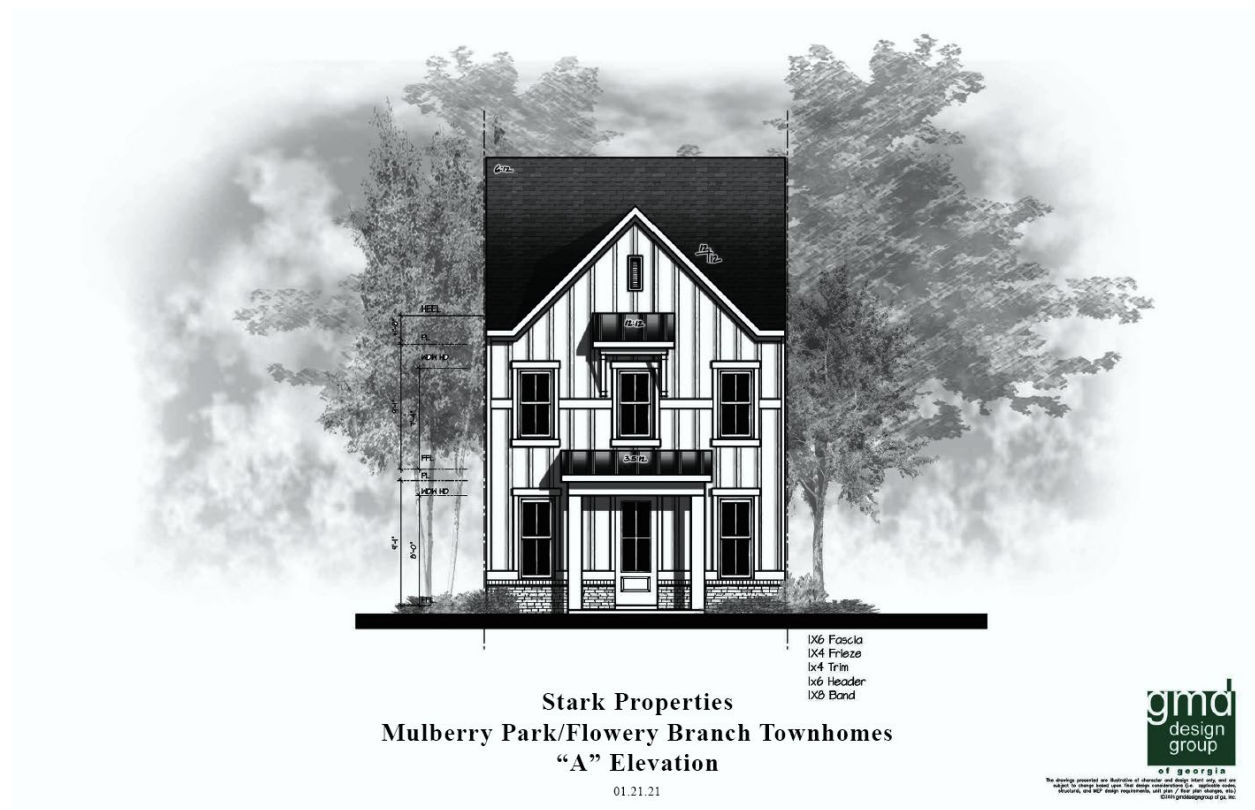
First Reading
Adopted

04/15/2021
05/20/2021

Exhibit "C"

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:



Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

First Reading
Adopted

04/15/2021
05/20/2021

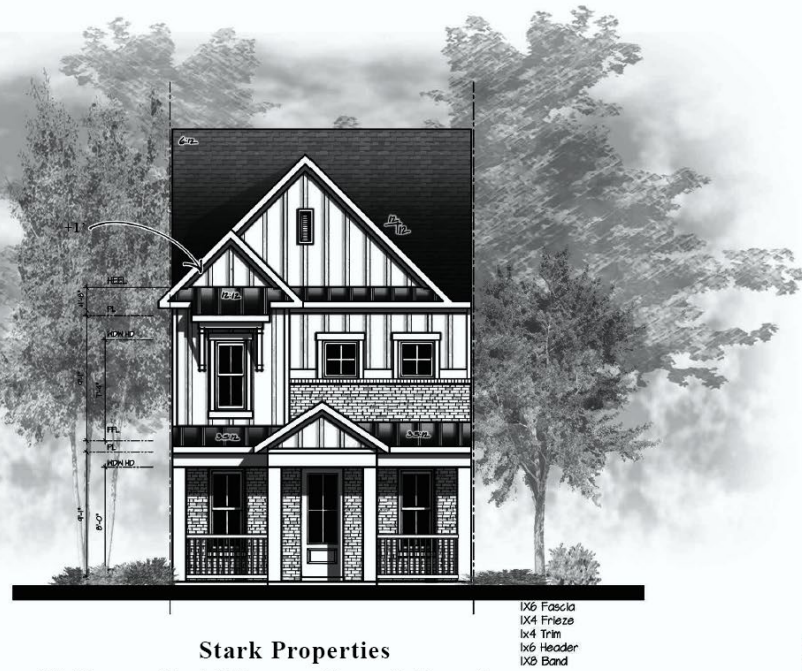


Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

First Reading
Adopted

04/15/2021
05/20/2021



Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation

01.21.21



The drawings presented are a representation of the design and design intent only and are subject to change without notice. This design is intended for informational purposes only and is not a contract. All dimensions, materials, and colors are subject to change without notice. ©2021 gmd design group, LLC.

Public Hearing Published
Public Hearing

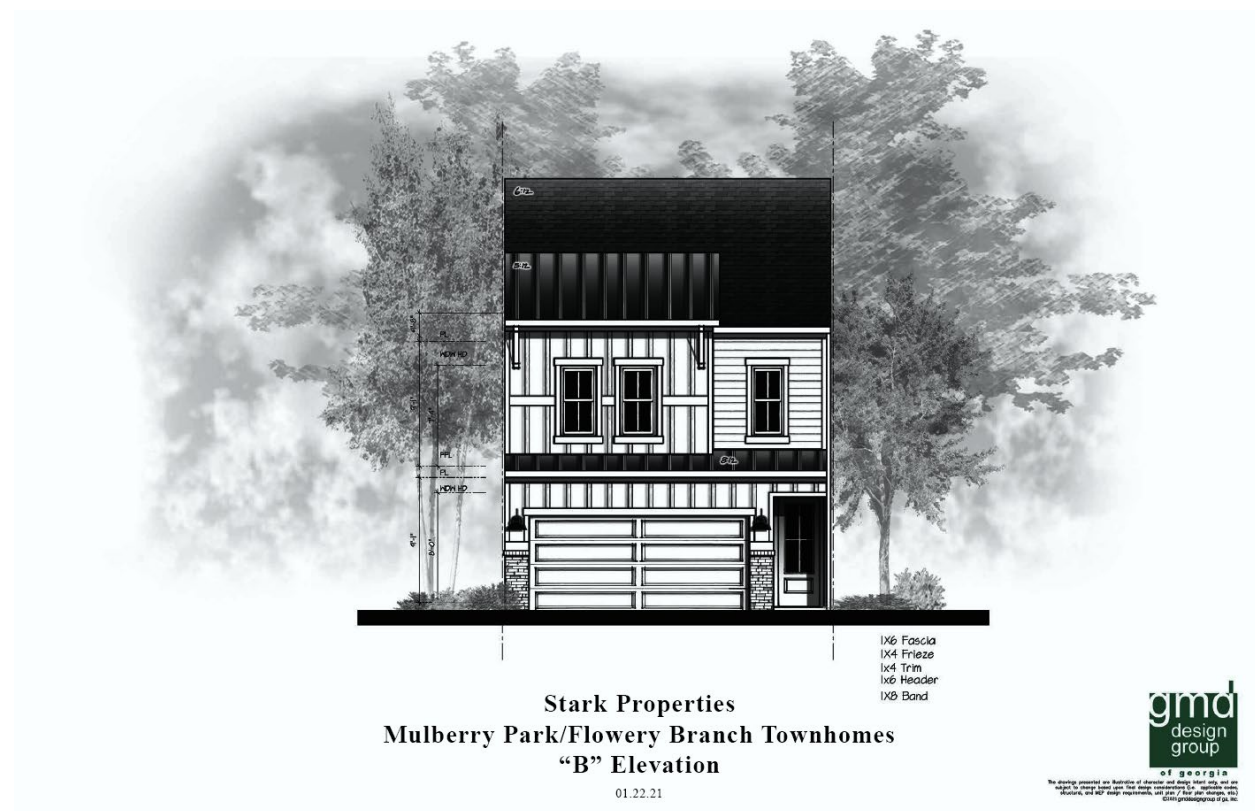
01/13/2021
03/04/2021

First Reading
Adopted

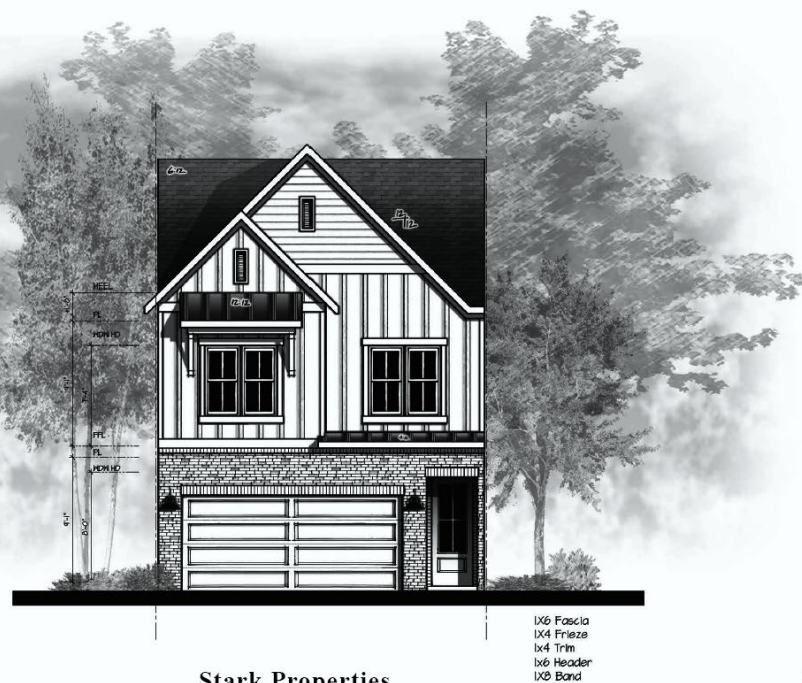
04/15/2021
05/20/2021



04/15/2021
05/20/2021



04/15/2021
05/20/2021



Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation

01.22.21

IX6 Fascia
IX4 Frieze
IX4 Trim
IX6 Header
IX8 Band



The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e., applicable code, structural, and MEP design requirements, wall plan / floor plan changes, etc.)

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

Bowen & Bowen
HOMEBUILDERS
www.bowehomes.com

the MADDUX



Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

Bowen & Bowen
HOMEBUILDERS
www.bowehomes.com

the MILLER "B"



ORDINANCE 628

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 2.52 +/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 0 FLOWERY WAY, IDENTIFIED AS TAX PARCEL 08117 002061 AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 2.52+/- acre tract of land identified as tax parcel 08117 002016; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

Exhibit "A"

Exhibit "B"

Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

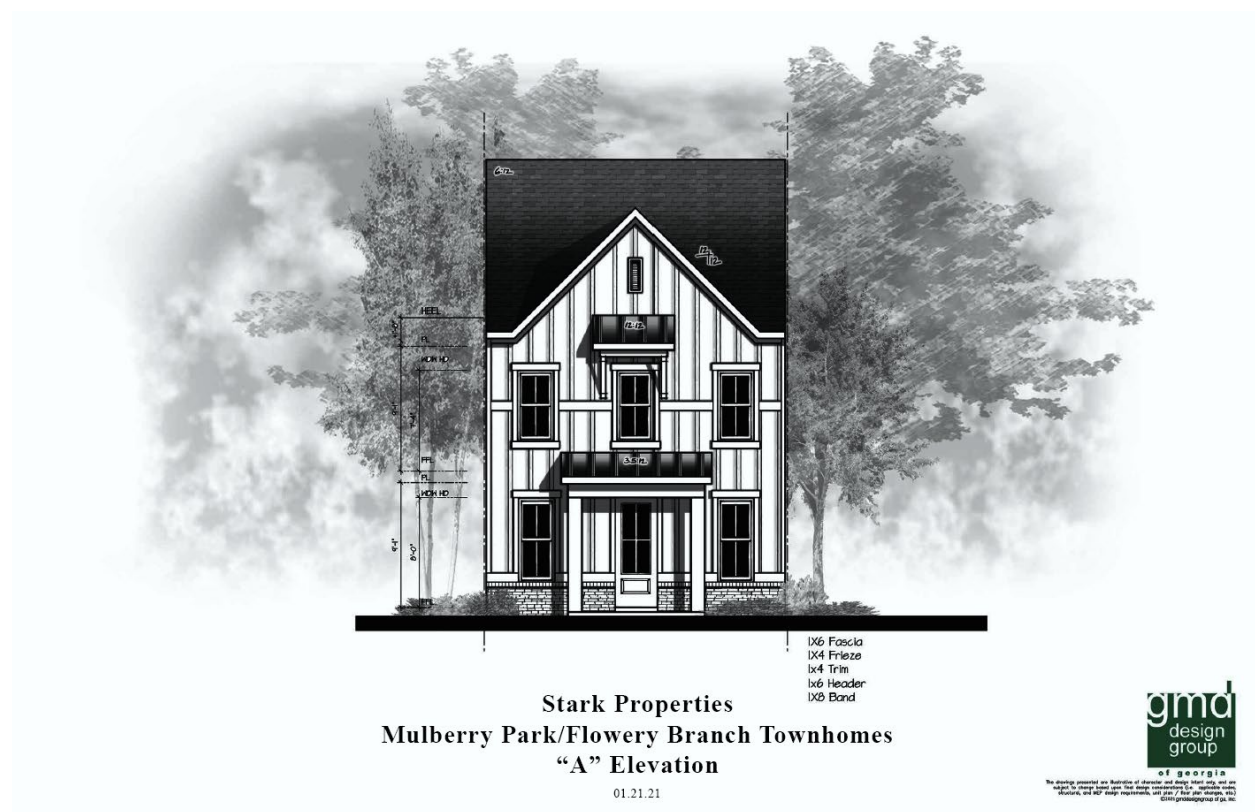
First Reading
Adopted

04/15/2021
05/20/2021

Exhibit "C"

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:



Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

First Reading
Adopted

04/15/2021
05/20/2021

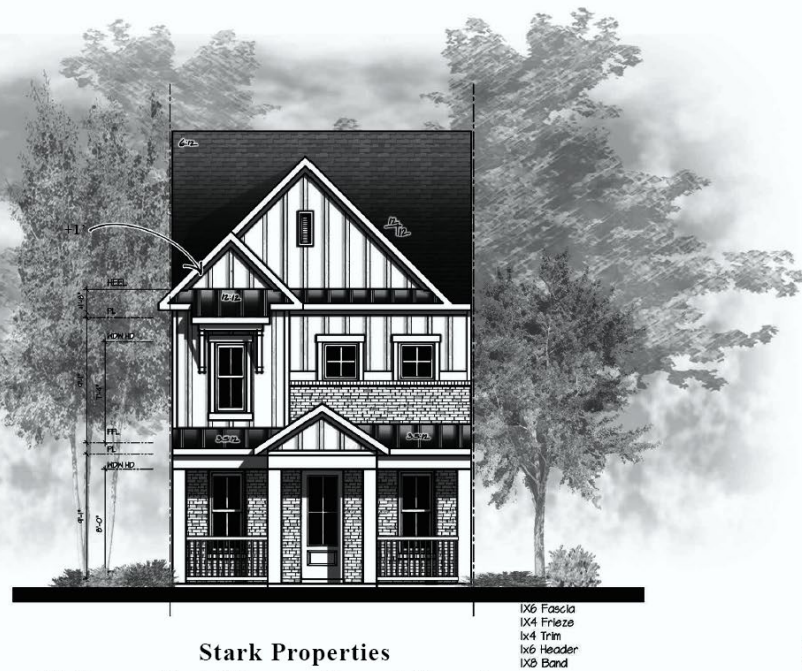


Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

First Reading
Adopted

04/15/2021
05/20/2021



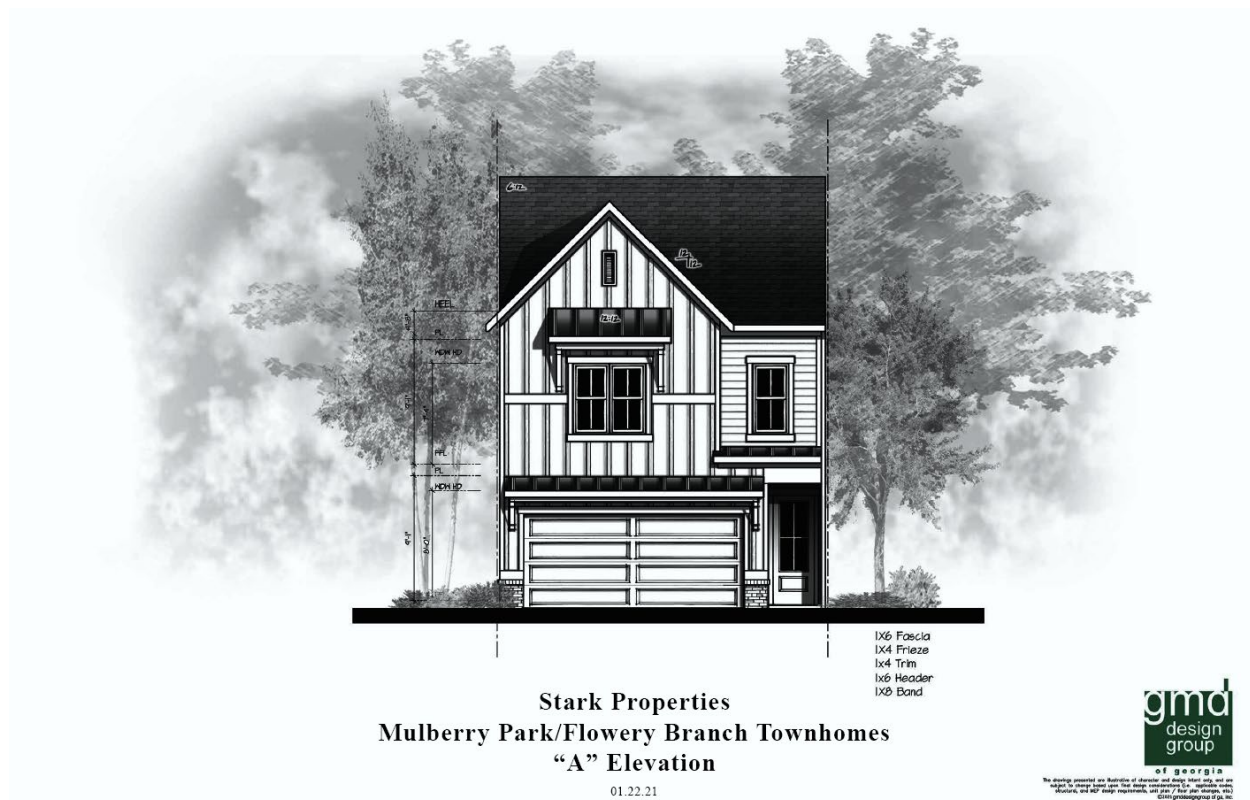
Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation

01.21.21



The drawings presented are a reproduction of drawings and designs created and are subject to change without notice. This drawing is not to be used for construction, site, landscape, or other purposes without the written approval of the design firm.

04/15/2021
05/20/2021

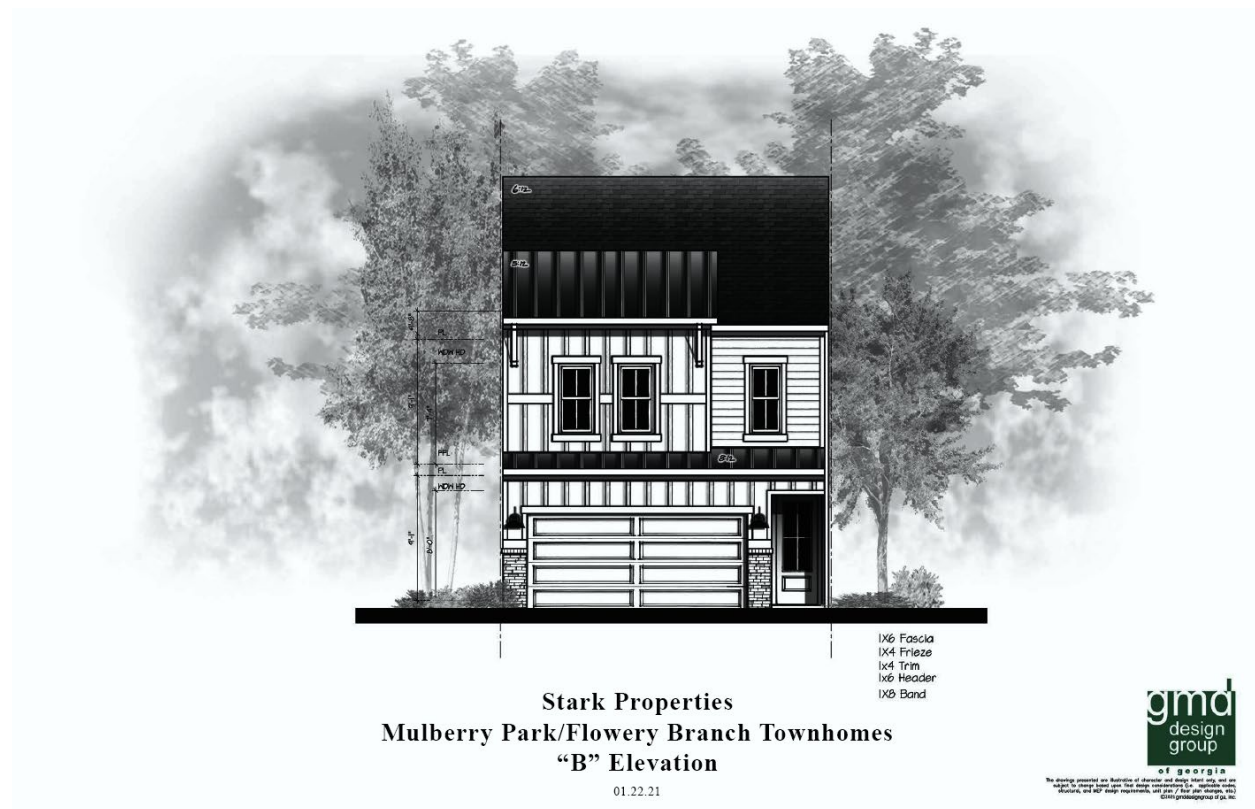


Public Hearing Published
Public Hearing

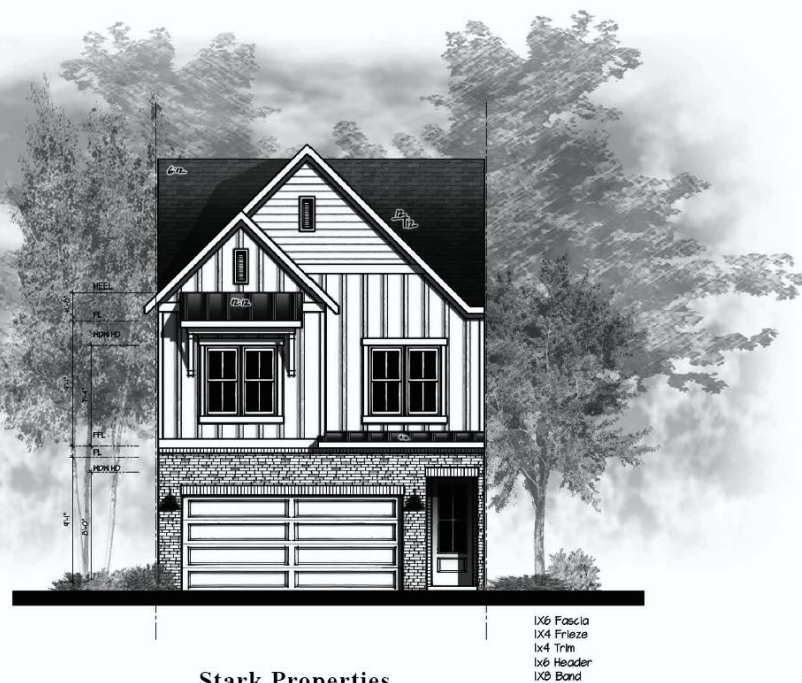
01/13/2021
03/04/2021

First Reading
Adopted

04/15/2021
05/20/2021



04/15/2021
05/20/2021



Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation

01.22.21

IX6 Fascia
IX4 Frieze
IX4 Trim
IX6 Header
IX8 Band



The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e. applicable code, structural, and MEP design requirements, wall plan / floor plan changes, etc.)

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

Bowen & Bowen
HOMEBUILDERS
www.bowehomes.com

the MADDUX



Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

ORDINANCE 629

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 38.84 +/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 5692 MULBERRY STREET, IDENTIFIED AS TAX PARCEL 08117 002001 AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 38.84+/- acre tract of land identified as tax parcel 08117 002001; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

Exhibit "A"

Exhibit "B"

Exhibit "C"

1. No permits shall be issued unless connectivity with phase one is achieved in a manner satisfactory to Flowery Branch Mayor and Council.
2. A revised site plan shall be submitted to Mayor and Council for approval prior to the issuance of any permits.
3. Elevations shall be submitted and approved by Mayor and Council prior to the issuance of any permits.
4. Ordinances 629 and 630 shall be amended to reflect the approved site plan, approved elevations, and all conditions as set forth by Mayor and Council.

ORDINANCE 630

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 33.15 +/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 0 FLOWERY WAY, IDENTIFIED AS TAX PARCEL 08117 000006 AS SHOWN ON ATTACHED EXHIBIT “A”, AS DESCRIBED ON EXHIBIT “B”, FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT “C”; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 33.15+/- acre tract of land identified as tax parcel 08117 00006; shown on Exhibit “A”; and legally described on Exhibit “B”; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit “C”; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

Exhibit “A”

Exhibit “B”

Exhibit “C”

1. No permits shall be issued unless connectivity with phase one is achieved in a manner satisfactory to Flowery Branch Mayor and Council.
2. A revised site plan shall be submitted to Mayor and Council for approval prior to the issuance of any permits.
3. Elevations shall be submitted and approved by Mayor and Council prior to the issuance of any permits.
4. Ordinances 629 and 630 shall be amended to reflect the approved site plan, approved elevations, and all conditions as set forth by Mayor and Council.



FLOWERY BRANCH CITY COUNCIL

EXECUTIVE SUMMARY



SUBJECT: Resolution 21-004: 5318 Railroad Ave and The Depot Repairs Budget Adjustment Request

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

N/A

FACTS AND ISSUES:

5318 Railroad Avenue is a rental property and needs windows and exterior repairs. The Depot restrooms need repairs and upgrades for public use.

This request is not an adjustment from the fund balance. It is a request to move funds between two departments.

OPTIONS:

Approve budget adjustment as presented or not approve.

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

No

AMOUNT AND SOURCE OF FUNDS:

\$31,300 transfer from Public Works budget to City Hall Buildings Budget

RECOMMENDATION:

To approve a budget adjustment to move \$31,300 from the Public Works Department budget to City Hall/Buildings – Repairs & Maintenance to complete repairs at 5318 Railroad Avenue and The Depot.

SAMPLE MOTION:

I make a motion to approve Resolution 21-004 as presented.

COLLABORATING DEPARTMENT:

Public Works

DEPARTMENT: Finance

Prepared by: Vickie Short

ATTACHMENTS

- [EXECUTIVE SUMMARY - 5318 Railroad Ave and Depot Repairs Budget Adjustment.pdf](#)
- [Resolution 21-004.pdf](#)

- Attachment A - Resolution 21-004 Budget Adjustment Form.pdf
- Attachment B - Quotes.pdf

FLOWERY BRANCH CITY COUNCIL
EXECUTIVE SUMMARY

SUBJECT: Resolution 21-004: 5318 Railroad Ave and The Depot Repairs Budget Adjustment Request

DATE: May 17, 2021

(X) RECOMMENDATION

() POLICY DISCUSSION

BUDGET INFORMATION:

() STATUS REPORT

ANNUAL-

() OTHER

CAPITAL-

COMMISSION ACTION REQUESTED ON: May 20, 2021

PURPOSE: To approve a budget adjustment to move \$31,300 from the Public Works Department budget to City Hall/Buildings – Repairs & Maintenance to complete repairs at 5318 Railroad Avenue and The Depot.

HISTORY: N/A

FACTS AND ISSUES: 5318 Railroad Avenue is a rental property and needs windows and exterior repairs. The Depot restrooms need repairs and upgrades for public use.

This request is not an adjustment from the fund balance. It is a request to move funds between two departments.

OPTIONS: Approve budget adjustment as presented or not approve.

RECOMMENDED SAMPLE MOTION: I make a motion to approve Resolution 21-004, the repairs budget adjustment, as presented, effective May 20, 2021.

DEPARTMENT: Finance

Prepared by: Alisha Gamble

RESOLUTION NO.: 21-004

**TO AMEND THE BUDGET FOR FISCAL YEAR 2021 AS PREVIOUSLY ADOPTED ON
JUNE 25, 2020.**

WHEREAS, the City Council approved a budget for fiscal year 2021 for the City of Flowery Branch on June 25, 2020 by Resolution 20-018; and

WHEREAS, the budget is a dynamic rather than static revenue and spending plan which requires adjustment from time to time as circumstances change; and

WHEREAS, these adjustments maintain a balanced budget for all funds.

NOW, THEREFORE, BE IT RESOLVED THAT the governing body for the City of Flowery Branch hereby adopts the adjustments to the budget listed on “Attachment A” and “Attachment B” attached hereto and made a part of the Resolution.

RESOLVED this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

**City of Flowery Branch
Request For Budget Adjustment**



Fund/Department: 100

Effective Date: 5/20/2020

Account Number	Account Name	Current Budget	Debit (Credit)	Revised Budget
				-
100-4210-522250	PWs / Roads - Repairs & Maintenance	80,000	(31,300)	48,700
100-1565-522200	City Hall & Bldg's / Repairs & Maintenance	27,885	31,300	59,185
				-
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<u>Totals</u>		\$ 107,885	\$ -	\$ 107,885

Justification: RESOLUTION 21-004: BUDGET AMENDMENT TO FY2021 APPROVED BUDGET FROM JUNE 25, 2020.
(See Attachment A and Attachment B for Details)

Approvals: Finance Director: *Olivia L Gamble* Date: 5/17/2021
City Manager: *Vickie Short* Date: 5/17/2021
Mayor: _____ Date: _____

<i>Finance Department Use</i>	
Posted By: _____	Date Posted: _____
Council Action Required: Yes _____ No _____	Budget Adjust. #: _____



Gwinnett Window & Door Inc.

PO Box 2346
2941 Buford Hwy
Buford, Ga. 30515
770-945-3253
Fax 770-945-7228

Bid Details

Flowery Branch
Windows
, Ga.

Aluminum Framed Storefront Glass & Glazing

BID DOCUMENTS:

Architect:
Date:
Plans Date:
Project No#

Replace 2 twin windows in front
Replace door sidelite
Clear the 2 exterior door
Repair wood trim on 3 windows 2front, 1 Side
Paint trim on windows and doors

This pricing is based on estimator's best interpretation of specs and drawings.
Any changes will require a change in the quoted amount.

Quote: \$ 6,400.00

Bid Notes:

Material Lead Time:	10-11 Weeks
Shop Drawings:	Not Included
PE Calcs:	Not Included
Engineer Stamped Drawing:	Not Included
Field Testing:	Not Included
As Builts:	Not Included

Break Metal:	Not Included		
Tax:	Not Included		
Certain Materials In this Bid May Not Fully Comply with The Plans or Specification			

Price Subject to change
no Responsibility from errors resulting from the use of Drawings provided.
ation and alignment as shown on the architect's drawings,It is the responsibility of the customer to verified rough openings are correct

Special Charges

- All materials must be ordered at the same time or additional freight and/or setup charges may apply.
Releasing or producing the order in phases may result in a higher price from
changes in material needs due to differences in optimization.
- This was quote using weekday (Normal Hours) labor rates. After hours and weekend rates add upcharges

Warranty

Unless otherwise noted, standard warranty applies



Gwinnett Window & Door Inc.

PO Box 2346
2941 Buford Hwy
Buford, Ga. 30515
770-945-3253
Fax 770-945-7228

Bid Details

Train Depot Bathrooms

, Ga.

Aluminum Framed Storefront Glass & Glazing

BID DOCUMENTS:

Architect:

Date:

Plans Date:

Project No#

Tile Install & Demo	\$720 tile allotment
Remove Toilets	
Remove Partitions	
New Partitions	
Vanities plumbing	
Vanities Demo	
Vanities Build	with Corian
Mirror Demo	
Mirror Install	
Remove Toilets	
Install Toilets	Existing
Install Bead board	
stain Bead Board	
Paint wall above bead board	
restroom accessories	
Install trim	Base board, Chair rail.
Install existing hand rails	

This pricing is based on estimator's best interpretation of specs and drawings.
Any changes will require a change in the quoted amount.

Quote: \$ 24,900.00

Bid Notes:

Material Lead Time:	5-6 Weeks
Shop Drawings:	Not Included
PE Calcs:	Not Included
Engineer Stamped Drawing:	Not Included
Field Testing:	Not Included
As Builts:	Not Included
Break Metal:	Not Included
Tax:	Not Included

Certain Materials In this Bid May Not Fully Comply with The Plans or Specification

Price Subject to change

no Responsibility from errors resulting from the use of Drawings provided.

ation and alignment as shown on the architect's drawings,It is the responsibility of the customer to verified rough openings are correct

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changes in material needs due to differences in optimization.

This was quote using weekday (Normal Hours) labor rates. After hours and weekend rates add upcharges

Warranty

Unless otherwise noted, standard warranty applies

Tile

Bead Board Example

Corian Color Choices

Solid Plastic (HDPE) Color Selection Guide



White
9201



Cream
9235



Ivory Essence
Speckle 9500*



Caramel
9658



Mocha
9212



Metallic Bronze
9513



Olive
9223



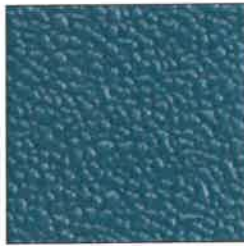
Moss
9233



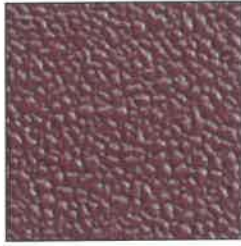
Hunter Green
9508



Azure
9231



Blue
9509



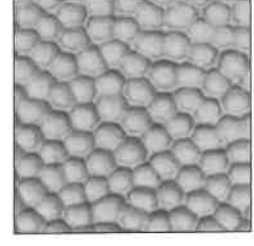
Burgundy
9211



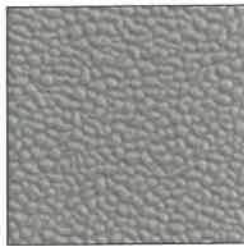
Folkstone Gray
9400*



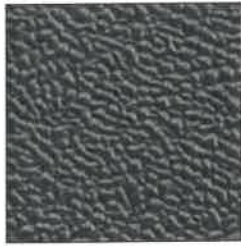
Gray
9200



Metallic Silver
9511



Charcoal
9237



Black
9205



Black Confetti
9217*



FLOWERY BRANCH CITY COUNCIL

EXECUTIVE SUMMARY



SUBJECT: Consider April 15, 2021 Meeting Minutes

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

FACTS AND ISSUES:

OPTIONS:

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

Yes

AMOUNT AND SOURCE OF FUNDS:

RECOMMENDATION:

Approve

SAMPLE MOTION:

COLLABORATING DEPARTMENT:

DEPARTMENT: Administration

Prepared by: Vickie Short

ATTACHMENTS

- [April 15, 2021 Meeting Minutes.pdf](#)



**City of Flowery Branch
City Council Meeting
Thursday, April 15, 2021, 6:00 PM
City of Flowery Branch City Hall
5410 Pine Street, Flowery Branch, GA 30542**



CALL WORK SESSION TO ORDER:

Mayor Miller called the work session to order at 6:03 pm.

PRESENT: Mayor Mike Miller and Councilmembers Chris Mundy, Ed Asbridge, Leslie Jarchow and Joe Anglin.

Also present were Bill Andrew, City Manager, Vickie Short, City Clerk, Ron Bennett, City Attorney, Alisha Gamble, Finance Director, Rich Atkinson, Planner, Chris Hulsey, Interim Police Chief, Bill Whidden, Public Works Director and Virgil Welch, Assistant WWTP Director.

PLEDGE OF ALLEGIANCE:

Mayor Miller led the Pledge of Allegiance.

GREATER HALL CHAMBER OF COMMERCE BUDGET UPDATE:

Tim Evans, Vice President of Economic Development, gave an update on the Flowery Branch growth in population and overall employment statistics for Hall County.

LAKE LANIER CONVENTION & VISITORS BUREAU UPDATE:

Stacey Dickson, President gave an update on the Lake Lanier Convention & Visitors Bureau 2021 Tourism projections, impact of the pandemic and the Flowery Branch Farmer's Market.

PUBLIC HEARING:

Mayor Miller opened the Public Hearing at 6:34 pm.

Second Public Hearing for the Comprehensive Plan

Ms. Paige Hatley with Hatley Plans, LLC gave a brief update on the Comprehensive Plan.

There were no questions.

Mayor Miller closed the Public Hearing at 6:36 pm.

UNFINISHED BUSINESS - WORK SESSION:

Consider a rezoning request submitted by Mr. Bill Stark. Request is to rezone six parcels totaling 118 +/- acres from M-1 (Light Industrial) to R-3 (Multi-Family) with the intention to construct a residential community consisting of single family detached homes and townhomes. The request includes six (6) parcels and therefore requires six (6) corresponding ordinances. The ordinances are 625, 626, 627, 628 (encompassing phase one), and 629, 630 (encompassing phase two).

Mr. Atkinson stated the applicant wants to table the request until a first vote on May 20th followed by a second vote on June 3rd.

NEW BUSINESS -WORK SESSION:

Request Award of Contract for City-Wide Sign Project

Mr. Andrew presented the details of the City-Wide Project Award of Contract.

FACTS AND ISSUES:

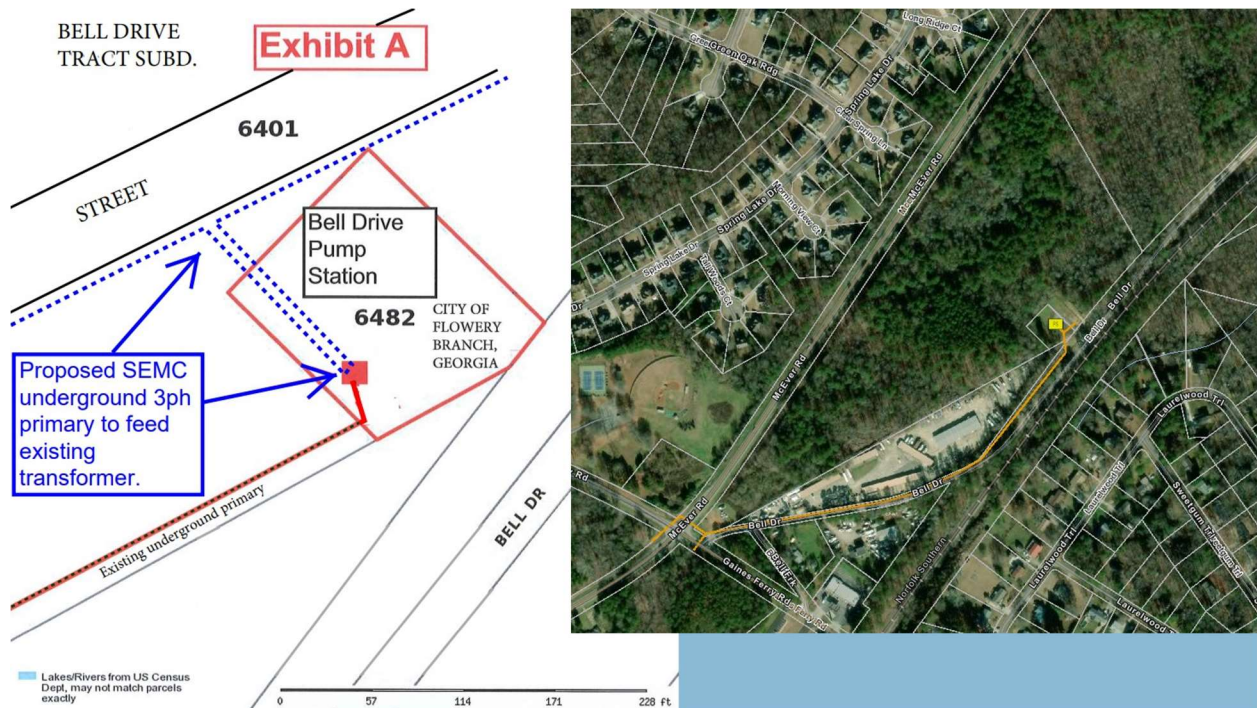
- Wednesday, March 24, 2021, the city opened all bids.
- Clark, Patterson, Lee (CPL) assisted with preparing bid documents and was present for the bid opening.
- There were a total of 9 bidders ranging in price from \$94,625.00 to \$249,679.79
- CPL recommends going with the lowest bidder, Signs, Etc. for \$94,625.00
- CPL has reviewed Signs, Etc. bid documents, spoke with references, and discussed the bid with them.
- Summary of all bids submitted as follows:

<u>No.</u>	<u>Bidder Name</u>	<u>Bid Amount</u>
1	Signs Etc.	\$ 94,625.00
2	Rite Light Signs, Inc.	\$ 126,467.00
3	Custom Sign Factory	\$ 132,703.06
4	Image Manufacturing Group	\$ 148,533.71
5	Graphic House National Sign Firm	\$ 176,895.00
6	Knight Sign Industries, Inc.	\$ 181,022.00
7	Pinnacle Custom Signs	\$ 209,695.50
8	Capital Signs and Awnings	\$ 226,780.00
9	Signal Signs	\$ 249,679.79

In addition, Mr. Andrew provided samples of the signs as well a map of sign placement.

Consider Bell Drive sewer easement for Mayor's signature.

Mr. Andrew presented details of the Bell Drive Sewer Easement request.



License Agreement for Temporary Sewer Construction

Mr. Andrew discussed the License Agreement for Temporary Sewer Construction. This agreement is necessary because the developer, Scannell, will be tying into the sewer easement we have with the Hall Co. Board of Education to the Pump Station at Martin Road Elementary.

FB Partners Development Agreement

Mr. Andrew provided a detailed history of the FB Partners Development Agreement.

On April 19, 2018, the City rezoned approximately 109 acres for 325 single family units now known as Summit Lake residential subdivision.

Flowery Branch Partners, LLC ("FB Partners") made application for \$2,550,000 in TAD proceeds to pay costs for various Summit Lake development costs including dam work, lake restoration, multi-use trail connection, sewer outfall improvements, sidewalks, pump station, force main and improvements to McEver Road. After considering FB Partners' application, the TAD Advisory Committee ("TADAC") recommended approval of TAD funding in the amount of \$750,000. The City Council followed the TADAC's recommendation and approved \$750,000 of TAD proceeds to pay for certain Summit Lake development costs.

The basic terms of the Development Agreement are that after the City pays itself and its obligations under The Residential Group Development Agreement, the City will pay FB Partners annual payments beginning April 30, 2021 for a period of 15 years (unless the total \$750,000 commitment is paid earlier) from TAD funds generated by the increment created by the development of the Summit Lake subdivision according to a formula set forth in the agreement.

Due to an issue with the Hall County Tax Assessor, it is not expected that Summit Lake development will generate sufficient tax increment to result in an annual payment in 2021.

Request Award of Contract for the Large Meter Replacement Project

Mr. Andrew detailed the award of contract for the Large Meter Replacement Project. When the City switched over from 3/4" residential manual water meters to electronic water meters, the contract did not include the replacement of the larger manual meters, which tended to serve institutional or commercial customers.

The City recently scheduled replacement of sixteen locations where large meters (1.5" & 2") are located and hired CPL to prepare bid documents for this activity with the City providing the meters for each location. Many of these larger meters are located in areas which will require cutting of concrete and or asphalt and will take some staffing, equipment, and time the City does not readily possess.

CPL was tasked to evaluate the meters for appropriate sizes. Fire hydrant flow testing was conducted in general areas of the pressure zones under consideration along with fixture unit counts to assist in this exercise.

While some customers wanted to have smaller meters due to low usage, the size of the meter is based on the potential for use and not the actual use. The meter size must have the capacity for adequately serving the number of fixtures that could be used in a facility in order to conform to the building codes.

DEPARTMENT REPORTS:

Each of the below departments provided an update to Mayor and Council.

Finance Monthly Department Report

Planning and Development Monthly Department Report

Police Monthly Department Report

Public Works Monthly Department Report

Water/Wastewater Monthly Department Report

ADJOURNMENT WORK SESSION:

Mayor Miller adjourned the work session at 7:41 pm.

VOTING SESSION AGENDA

CALL VOTING SESSION TO ORDER:

Mayor Miller called the voting session to order at 7:41 pm.

PUBLIC COMMENTS: There were no public comments.

CONSENT AGENDA:

Consider March 18, 2021 Meeting Minutes
License Agreement for Temporary Sewer Construction

There was a motion made to approve the Consent Agenda.

MOTION: Leslie Jarchow
SECOND: Chris Mundy
AYES: Ed Asbridge, Joe Anglin, Amy Farah, Chris Mundy, Leslie Jarchow
NAYS: None
Motion carried

UNFINISHED BUSINESS - VOTING SESSION:

Consider a rezoning request submitted by Mr. Bill Stark. Request is to rezone six parcels totaling 118 +/- acres from M-1 (Light Industrial) to R-3 (Multi-Family) with the intention to construct a residential community consisting of single family detached homes and townhomes. The request includes six (6) parcels and therefore requires six (6) corresponding ordinances. The ordinances are 625, 626, 627, 628 (encompassing phase one), and 629, 630 (encompassing phase two).

There was a motion made to table the rezoning request submitted by Mr. Bill Stark until the first vote on May 20th followed by a second vote on June 3rd.

MOTION: Amy Farah
SECOND: Ed Asbridge
AYES: Ed Asbridge, Joe Anglin, Amy Farah, Chris Mundy, Leslie Jarchow
NAYS: None
Motion carried

NEW BUSINESS - VOTING SESSION:

Request Award of Contract for City-Wide Sign Project

There was a motion made to approve award the contract for the City-wide Signs Project to Signs. Etc. for \$94,625.00.

MOTION: Joe Anglin
SECOND: Amy Farah
AYES: Ed Asbridge, Joe Anglin, Amy Farah, Chris Mundy, Leslie Jarchow
NAYS: None
Motion carried

Consider Bell Drive sewer easement for Mayor's signature.

There was a motion made to approve the Mayor's signature on the Bell Drive sewer easement.

MOTION: Amy Farah
SECOND: Chris Mundy
AYES: Ed Asbridge, Joe Anglin, Amy Farah, Chris Mundy, Leslie Jarchow
NAYS: None
Motion carried

FB Partners Development Agreement

There was a motion made to approve the Mayor's signature on the FB Partners Development Agreement.

MOTION: Amy Farah
SECOND: Joe Anglin
AYES: Ed Asbridge, Joe Anglin, Amy Farah, Chris Mundy, Leslie Jarchow
NAYS: None
Motion carried

Request Award of Contract for the Large Meter Replacement Project

There was a motion made to approve the award of contract for the Large Meter Replacement Project to The Dickerson Group for \$49,600.00.

MOTION: Amy Farah
SECOND: Leslie Jarchow
AYES: Ed Asbridge, Joe Anglin, Amy Farah, Chris Mundy, Leslie Jarchow
NAYS: None
Motion carried

EXECUTIVE SESSION: There was no executive session.

ADJOURNMENT:

There was a motion made to adjourn at 7:45 pm.

MOTION: Chris Mundy
SECOND: Leslie Jarchow
AYES: Ed Asbridge, Joe Anglin, Amy Farah, Chris Mundy, Leslie Jarchow
NAYS: None
Motion carried

Mayor – Mike Miller

Date

City Clerk – Vickie Short



FLOWERY BRANCH CITY COUNCIL

EXECUTIVE SUMMARY



SUBJECT: Consider Mayor Mike Miller Per Diem

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

FACTS AND ISSUES:

OPTIONS:

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

Yes

AMOUNT AND SOURCE OF FUNDS:

RECOMMENDATION:

Approve

SAMPLE MOTION:

COLLABORATING DEPARTMENT:

DEPARTMENT: Administration

Prepared by: Vickie Short

ATTACHMENTS

- [Mayor Miller Per Diem.pdf](#)



**CITY OF FLOWERY BRANCH
MAYOR & COUNCIL ATTENDANCE SHEET
PER DIEM PAY**

NAME Mike Miller

MONTH/YEAR May 2021

	MEETING DATE	DESCRIPTION OF MEETING
1	5/7/2021	EDC
2	5/11/2021	MPO
3		
4		
5		

My signature certifies that I am eligible to be paid for 2 meeting dates, maximum 5 per month, in accordance with per diem pay as described in Ordinance No. 477. Total \$100.00 (\$50.00 per mtg)

Signature



FLOWERY BRANCH CITY COUNCIL

EXECUTIVE SUMMARY



SUBJECT: First Read of the rezoning application submitted by NNP-Looper Lake, LLC. to rezone tax parcel 15047 000885 from Planned Unit Development (PUD) to Planned Unit Development (PUD) with modified conditions.

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

This is a proposal to alter an approved PUD zoned project (Sterling on the Lake) by rezoning said project from PUD to PUD with modified conditions of zoning. The ordinances were originally approved as 239 and 240. Each additional request to alter the original approval retains the original ordinance number adding letters alphabetically to ease in the tracking of this project and its many changes over the years. The ordinances will be 239-L & 240-L.

FACTS AND ISSUES:

This is a proposal to alter the approved Sterling on the Lake subdivision by rezoning said project from PUD to PUD with modified conditions of zoning. The proposed modification would decrease the size of the current commercial/retail portion from 12+/- acres to 4 +/- acres allowing for the construction of 65 townhomes on the approximate 8 acre tract. Applicant has provided additional information for Council review and discussion. Please see attached documents regarding marketing statistics and amenities.

OPTIONS:

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

No

AMOUNT AND SOURCE OF FUNDS:

RECOMMENDATION:

First vote. Staff recommends approval.

SAMPLE MOTION:

No vote at this time.

COLLABORATING DEPARTMENT:

DEPARTMENT: Planning

Prepared by: Vickie Short

ATTACHMENTS

- [submittal binder 030421.pdf](#)
- [Renderings.pdf](#)
- [Staff Report SOTL.pdf](#)
- [Sterling Commercial Marketing 2002-2021.pdf](#)
- [Pool Comparison Amenity Overview.pdf](#)
- [Ordinance SOTL Town.pdf](#)



REZONING APPLICATION

Date: February 26, 2021

Address of Request:

Capitola Farm Road & Spout Springs Road, Flowery Branch, GA 30542

Tax Map # p/o 15047 000885 **Current Zoning:** PUD

Is this site located within the boundaries of the historic district? NO

Currently a conforming use? N/A

Any conditions of zoning, CUP's, etc.? All other conditions of zoning not deleted or revised by this application shall remain in full force and effect

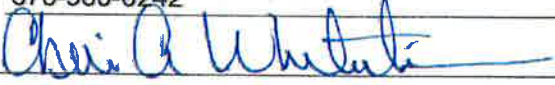
Applicant Information

Name: NNP - Looper Lake, LLC

Address: 7004 Lake Sterling Blvd. Flowery Branch, GA 30542

E-mail address: cwhittaker@newlandco.com

Phone number: 678-960-0242

Signature: 

Notary: 





Property owner information (if different than the applicant)

Property owner (please print): SAME

Signature of property owner: Chris White VP Operations

Notary:



La Beaver

Property Information

Tax Map Number: 15047 000885

Current Zoning: PUD Total Acres: 7.95

Is this property located within the city-limits of Flowery Branch? YES

Proposed City of Flowery Branch Zoning: PUD

Current Use: undeveloped

Please review the Flowery Branch Code of Ordinances, Appendix C, "Zoning Ordinance", Article 34, for complete requirements.

Please provide the following at time of submittal in (one hard copy and digitally):

- Legal description
- Current survey of property



- Site plan shall meet the requirements of the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.5
- Development statistics per the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.6
- Analysis requirements per the Flowery Branch Code of Ordinances; Appendix C, "Zoning Ordinance", Article 34 sections 34.7
- Detailed description of request
- Conflict of interest disclosure (attached)
- Disclosure of campaign contributions (attached)
- Names and addresses of adjoining property owners
- Reasons for requesting rezoning
- Signed statement authorizing City of Flowery Branch staff and/or City Council to inspect the subject property

Conflict of Interest Disclosure

Identify all members of the City Council of the City of Flowery Branch and Employees of the City of Flowery Branch Community Development Department who

Have a property interest in the real property affected by this request

NONE

Have a financial interest (direct ownership interest) of the total assets or capital stock of a business entity where such ownership interest is more than 10% in any business entity which has a property interest in the real property affected by this request

NONE

Have a member of the family (spouse, mother, father, brother, sister, son or daughter) having a property financial interest as herein defined, in the real property affected by this request

NONE



Disclosure of Campaign Contributions

List below the names of local government officials of the City of Flowery Branch to whom campaign contributions were made, within two (2) years immediately preceding the filing of this application, which campaign contributions total \$250.00 or more or to whom gifts were made having a total value of \$250.00 or more.

Elected Officials Name

Amount of Description of Gift

NONE

CITY STAFF ONLY

Application Received By: _____

Date: _____ Total Fee: _____



Legal Description

All that tract or parcel of land lying and being in G.M.D. 1270, City of Flowery Branch, Hall County, Georgia and being more particularly described as follows:

BEGINNING at the intersection of the southwestern Right-of-Way of Spout Springs Road (R/W varies) and the southeastern Right-of-Way of Capitola Farm Road (60' R/W); thence continuing along the southwesterly Right-of-Way of said Spout Springs Road South 25°37'24" East, a distance of 663.05 feet to a point; thence leaving said Right-of-Way and into the property now or formerly of NNP-Looper Lake, LLC South 51°28'20" West, a distance of 108.90 feet to a point; thence South 42°12'06" West, a distance of 64.95 feet to a point; thence South 16°35'34" West, a distance of 130.73 feet to a point; thence South 09°33'49" West, a distance of 138.31 feet to a point; thence South 14°03'35" East, a distance of 40.07 feet to a point; thence South 50°05'27" East, a distance of 133.00 feet to a point; thence South 71°36'03" West, a distance of 118.77 feet to a point; thence along the property now or formerly of Sterling on the Lake, Pod O North 16°21'56" West, a distance of 153.60 feet to a point; thence along the property now of formerly of Sterling on the Lake, Pod Q, Phase 2, Pod P North 10°14'19" West, a distance of 148.44 feet to a point; thence North 09°13'44" West, a distance of 119.09 feet to a point; thence North 12°07'47" East, a distance of 26.45 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 01°27'17" East, a distance of 57.67 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 09°46'11" West, a distance of 63.59 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 21°32'36" West, a distance of 63.59 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence South 62°34'11" West, a distance of 95.00 feet to a point; thence 164.12 feet along an arc of a curve to the left having a radius of 215.00 feet and a chord bearing and distance of North 49°17'54" West, 160.16 feet to a point; thence North 71°09'59" West, a distance of 63.20 feet to a point; thence 223.30 feet along an arc of a curve to the left having a radius of 395.00 feet and a chord bearing and distance of North 87°21'42" West, 220.34 feet to a point; thence North 19°04'20" West, a distance of 87.48 feet to a point; thence North 31°15'55" West, a distance of 102.02 feet to a point on the southeastern Right-of-Way of said Capitola Farm Road; thence along said Right-of-Way 51.29 feet along an arc of a curve to the left having a radius of 733.26 feet and a chord bearing and distance of North 54°33'32" East, 51.28 feet to a point; thence North 52°33'19" East, a distance of 159.85 feet to a point; thence 63.52 feet along an arc of a curve to the right having a radius of 431.40 feet and a chord bearing and distance of North 56°46'25" East, 63.47 feet to a point; thence North 60°59'32" East, a distance of 33.91 feet to a point; thence 480.02 feet along an arc of a curve to the right having a radius of 268.83 feet and a chord bearing and distance of North 71°54'29" East, 47.96 feet to a point; thence North 77°01'33" East, a distance of 296.98 feet to the ***Point of Beginning***.

Said tract contains 8.150 Acres.

Project Summary

LOCATION – Spout Springs Road & Capitola Farm Road

ACREAGE – 8.15 acres +/-

APPLICANT – NNP - Looper Lake, LLC

Summary

The accompanying application seeks a change of use from commercial to single family attached within the current PUD for Sterling on The Lake. The site would be developed for up to 65 townhomes with rear entry garages from either a public street or private alleyway. The townhome units will be 3 stories with a mix of architectural materials. A passive park area will be located near the entrance and sidewalks will provide both internal and external connections. The location and point of access will not impact current traffic flow within the Sterling on The Lake community. Completion of development is anticipated by 2022.

Site Description

The site has approximately 575 feet of frontage along the western right-of-way of Spout Springs Road and 650 feet of frontage along the southern right-of-way of Capitola Farm Road. The site is rectangular in shape with the majority being previously cleared and graded. A jurisdictional stream is located on the southern side of the property. Domestic water provided by the City of Gainesville is located in the right-of-way of Capitola Farm Road. Hall County sanitary sewer is located near the sites southwestern boundary line. All other dry utilities are located within a reasonable distance for service extensions. There are no known impediments to its successful development for the purposes intended.

Access

A single point of access to the property is proposed from Capitola Farm Road, approximately 250 LF from its intersection with Spout Springs Road.

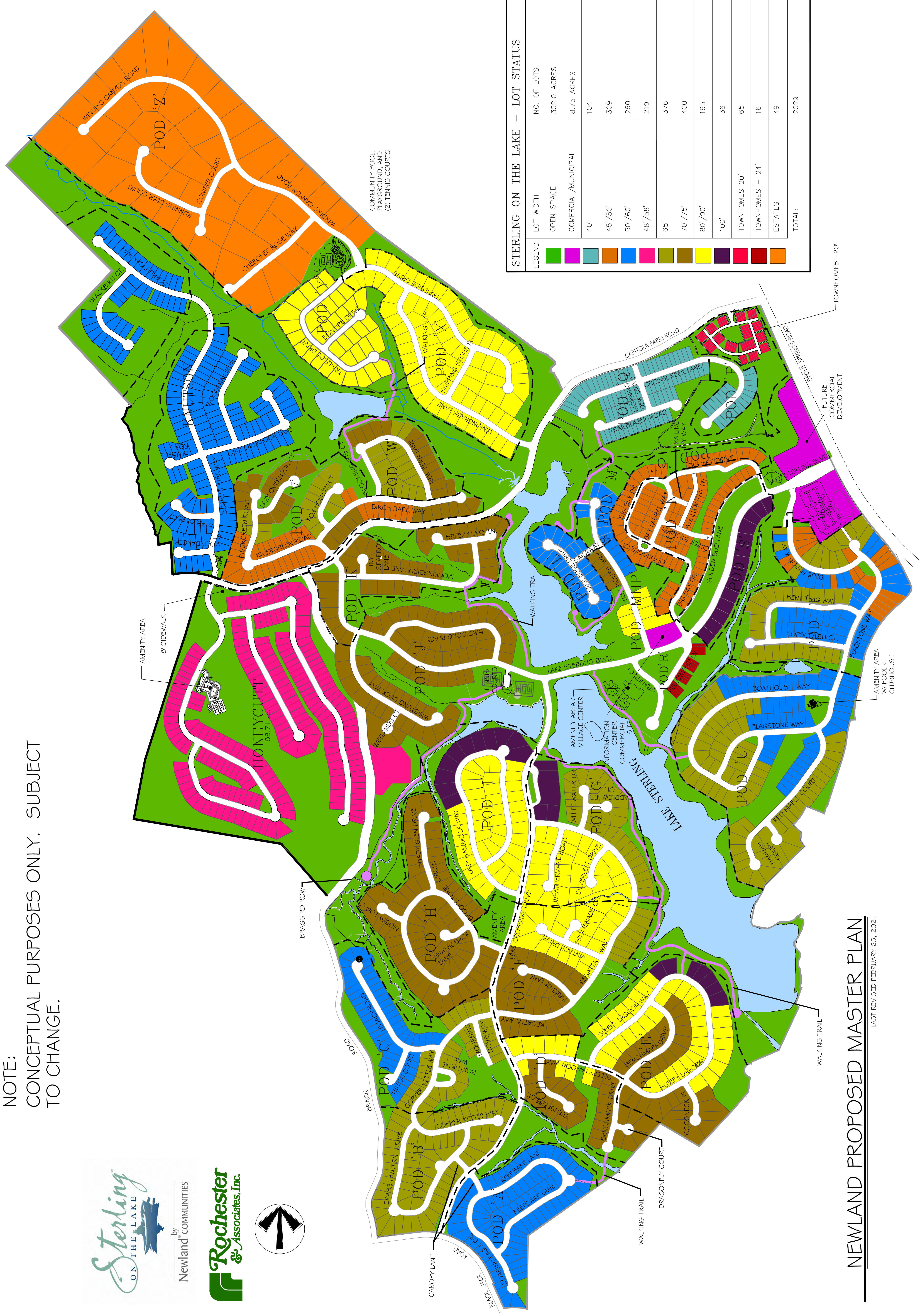
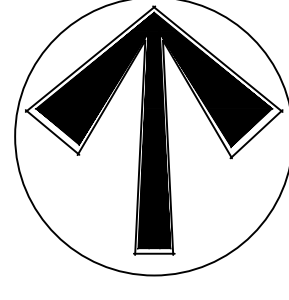
Development Strategy

The site has been previously marketed for commercial uses but has received only limited interest due to a lack of direct access to Spout Springs Road and the ongoing widening project. The proposed townhome product will fill a product type void that is not currently served in the Sterling on The Lake community. Two commercial tracts will remain at Spout Springs Road and Lake Sterling Boulevard.





_____ by _____
Newland® COMMUNITIES



STERLING ON THE LAKE – LOT STATUS		
LEGEND	LOT WIDTH	NO. OF LOTS
	OPEN SPACE	302.0 ACRES
	COMMERCIAL/MUNICIPAL	8.75 ACRES
	40'	104
	45'/50'	309
	50'/60'	260
	48'/58'	219
	65'	376
	70'/75'	400
	80'/90'	195
	100'	36
	TOWNHOMES 20'	65
	TOWNHOMES – 24'	16
	ESTATES	49
TOTAL:		2029

NEWLAND PROPOSED MASTER PLAN

LAST REVISED FEBRUARY 25, 2021

GENERAL NOTES:

- PARCEL SIZE - 8.15 AC.
- NUMBER OF LOTS - 65
- DENSITY 7.98 UNITS/AC.
- FRONT SETBACK - 10'
- PUBLIC STREET LOTS REAR SETBACK FROM BACK OF SIDEWALK - 20'
- ALLEY LOTS REAR SETBACK FROM BACK OF CURB - 20'
- SIDE SETBACK - 0'
- BUILDING SEPARATION - 20'

CAPITOLA FARM ROAD
60' R/W - 35 MPH

SPOUT SPRINGS ROAD
110' R/W - 45 MPH

MOSSY BOULDER
DRIVE

PASSIVE PARK
(OPEN SPACE)

ALLEY 2
(22' BC/BC)

ALLEY 1
(22' BC/BC)

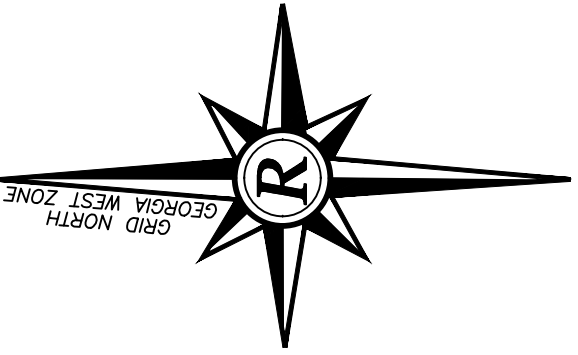
ROAD A
(50' R/W)

ROAD B
(50' R/W)

CROSSCREEK LANE
50' R/W

TYPICAL ALLEY
LOT

TYPICAL PUBLIC
LOT

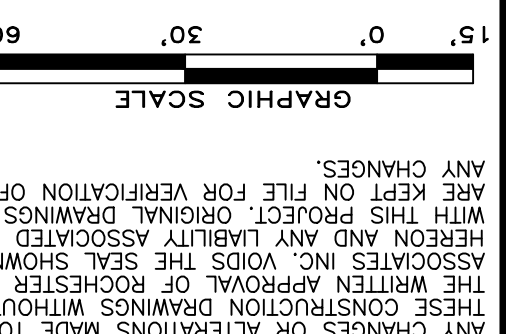


Rochester & Associates, Inc.

425 Oak Street N.W. • Gainesville, Georgia 30501
(770) 718.0600 (770) 718.9090 Fax • www.rochester-assoc.com

REZONING PLAN
FOR:
STERLING ON THE LAKE
TOWNHOME SITE
LOCATED IN:
G.M.D. 1270
CITY OF FLOWERY BRANCH
HALL COUNTY, GEORGIA

NO.	DATE	DESCRIPTION



SHEET	1
OF	1

DATE: 2/23/21
SCALE: 1"=30'
JOB NO. 0208033.PDO
DWG NO. 0208033.PDO
DRAWN BY: ARJ

Development Statistics for Townhome Tract Amendment Request

- (a) Maximum and proposed height of any structure; **35'**
- (b) Maximum and proposed gross square footage of the building area (nonresidential only); **N/A**
- (c) Color renderings of any proposed structures; **See attached**
- (d) Material list (with percentages) of any proposed structures;

All color schemes and exterior material selections must be submitted to the DRC for approval. A minimum of two exterior materials and a maximum of three exterior materials on each home is required.

- **Corner lots will be required to wrap the front elevation material around the side of the flanking street.**
 - **All homes with front elevations including masonry must wrap the same material around the corner of the home a minimum of 2 feet (with the exception of Pods A, B & C). Masonry materials and patterns must be submitted to the DRC for approval.**
- (e) Maximum and proposed number of dwelling units and minimum and proposed square footage of heated floor area for any dwelling unit (residential only); **65 units with a minimum heated floor area of 1400 SF**
 - (f) Maximum and proposed lot coverage of building area (square feet and percent); **1000 SF with a lot coverage of 65%.**
 - (g) Minimum and proposed square footage of landscaped area (square feet and percent); **15,000 SF in passive park area.**
 - (h) Minimum, maximum and proposed number of parking spaces; **one space per unit provided in paved driveway.**
 - (i) Other dimensional information as may be required by the Zoning Administrator. **TBD**

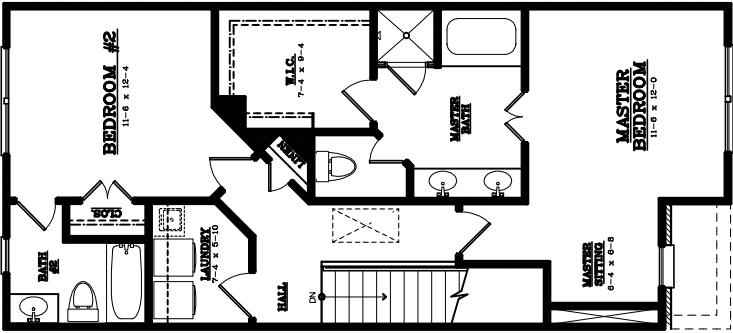
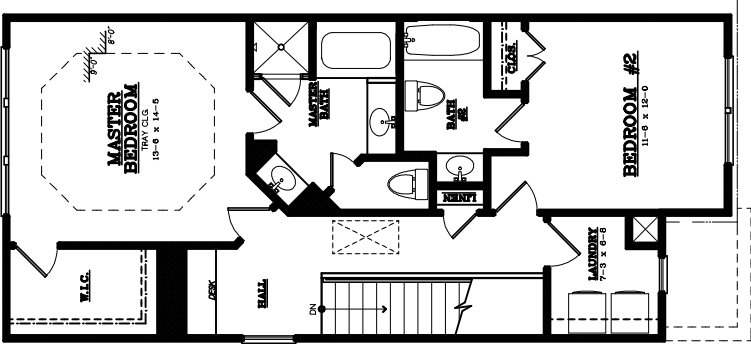
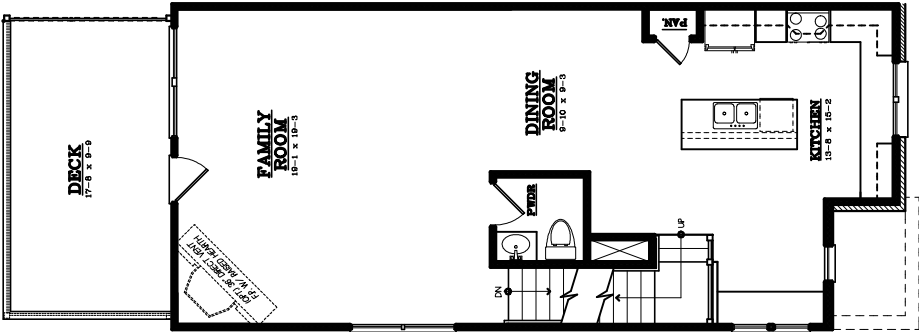
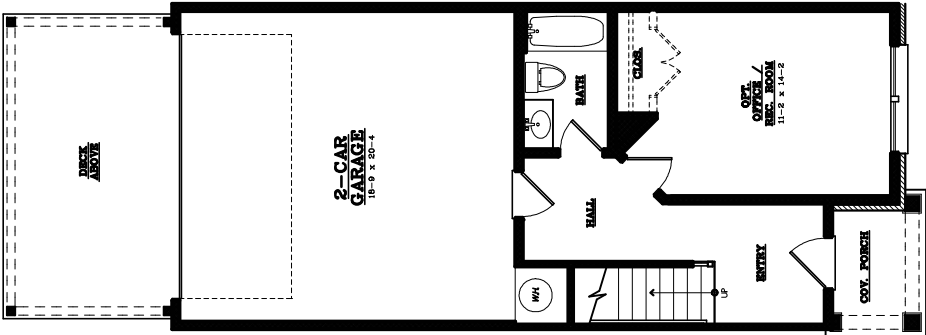
Townes at Sterling on the Lake

Capitola Farm Road Parcel



Townes at Sterling on the Lake

Capitola Farm Road Parcel



**City of Flowery Branch Rezoning Application
REQUEST FOR STATISTICAL INFORMATION
Sterling on the Lake – Townhome Tract**

1. Value of improvements at buildout:

- Development cost - \$ 30,000 per lot
- Vertical construction cost - \$ 120 per sf

2. Property tax revenue at buildout: (based on FMV of \$275,000)

- Hall County - \$ 196,110
- City of Flowery Branch - \$ 23,338

3. Schedule of construction;

- See below:

ITEM	START	FINISH
Design & Permitting	6/30/2021	8/29/2021
Land Development	9/3/2021	3/2/2022
Final Plat	3/12/2022	4/26/2022
Lot Sales	5/6/2022	5/31/2023
Residential CO's	7/20/2022	8/14/2023

4. Anticipated total square footage per unit:

- 1400 sf minimum

5. Total acreage to be developed:

- 7.95 acres in total

6. The Townhome Tract will contain approximately 0.25 acres in private rights-of-way.

7. The Townhome Tract will contain approximately 4.35 acres of open space/common area to be maintained by the existing HOA.

8. The Townhome Tract will contain approximately 1.05 acres of buffer and watershed protection.

A) The impervious buffer is applicable to the Townhome Tract.

B) No property lines may extend into the stream buffer.

C) The developer intends to dedicate street rights-of-way (where applicable) and storm sewer easements to the City of Flowery Branch.

9. Transportation alternatives:

- The Townhome Tract will have a pedestrian link along Spout Springs Road to the remainder of the community.

10. Amenities for Sterling on the Lake total more than 15 acres and (at buildout) will include the following:

- Lakes and Trails
- 3 Clubhouses
- 5 Pools
- 4 Children's Playgrounds
- Multiple pocket parks
- Children's Treehouse
- 12 Tennis Courts
- 2 Fire pits
- Lakeside pavilion with grill
- Boat dock and launch
- ¾ Basketball Court
- Picnic Island

11. A minimum of 9 street lights are planned for the Townhome Tract with a maximum spacing of 150 feet.

12. The Townhome Tract will include approximately 3,500 linear feet of sidewalk containing approximately 216 cubic yards of concrete.

13. Homes in the Townhome Tract will have access to high speed internet to the extent available from the service provider.

14. The Townhome Tract will contain areas for providing detention, water quality and stream protection.

15. An updated traffic study has not been completed for the Townhome Tract as the overall density will remain within previously studied and approved maximums.

16. There are no provisions for utilization and storage of reuse water in this plan.

17. The Townhome Tract, as proposed, will generate approximately 17,550 gallons per day of wastewater flow.

18. The maximum daily water consumption is approximately 17,550 gallons per day. Low flow fixtures are required by the development.

19. A preliminary design has been completed in order to evaluate the proposed density.

20. Public safety requirements related to life safety codes have been considered in the concept design.

21. The Hall County school system has been provided density and build out projections for the entirety of the community.

22. Copies of master covenants and guidelines have been previously filed and recorded.

Sterling on the Lake – Project Narrative

Applicant seeks to amend the conceptual site plan and conditions of approval relating to ordinance no. 239I & 240I, for the master planned community on 1007.91 ± acres generally known as “Sterling on the Lake” located in the PUD (Planned Unit Development) zoned district. The development is located adjacent to the intersection of Capitola Farm Road and Spout Springs Road. The amended property is described as: **(Townhome Tract)** - a 8.15 acre parcel of real property owned by NNP Looper Lake LLC, being known as the “Townhome” tract identified as a portion of tax identification number 15047-000885 located in GMD 1270 Flowery Branch District, Hall County, Georgia.

- The Sterling on the Lake Master Planned Development was originally approved (annexed and rezoned) by the Flowery Branch City Council on November 16, 2001, per Ordinances 239 and 240.
- On February 1, 2006, City Council approved a modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-A and 240-A.
- On September 9, 2006, City Council approved a second modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-B and 240-B.
- On August 15, 2007, City Council approved a third modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-C and 240-C.
- On November 25, 2008, City Council approved a fourth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-D and 240-D.
- On March 26, 2011, City Council approved a fifth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-E and 240-E.
- On March 15, 2012, City Council approved a sixth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-F and 240-F.
- On February 18, 2016, City Council approved a seventh modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-G and 240-G.
- On May 4, 2017, City Council approved an eight modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-H and 240-H.

- On March 15, 2018, City Council approved a ninth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-I and 240-I.
- On July 1, 2019, City Council approved a tenth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-J and 240-J.
- Per Article 8, Section 8.4 and Section 8.10 of the Flowery Branch Zoning Ordinance, the original PUD approval must be amended by the Governing Body in order to incorporate changes to the master plan approval and PUD conditional zoning.

APPLICANT’S REQUEST

Townhome Tract – The Applicant is requesting an amendment to the PUD master plan for Sterling on The Lake Master Planned Development.

- The development shall be substantially in accordance with the "Rezoning Plan" submitted as a part of the application.
- The plan will include both public right-of-way and private alleyways as depicted on the "Rezoning Plan". Private alleyways will be maintained solely by the Townhome sub-association.
- Each dwelling unit is required to provide a two car garage and space for two cars in the driveway.
- All requirements imposed under this Ordinance shall be the standards of the development regardless of any change in ownership.
- The elevations will be consistent with the attached exhibits. All elevations shall be reviewed and approved by the DRC Committee prior to submittal to the City.
- No fencing is permitted within the front setback areas.
- The residential development within the overall PUD shall be limited to a maximum of 2,029 housing units for the entire 1,007.91 ± acre PUD, within the City of Flowery Branch at the time of this approval, as approved under this ordinance. If additional land is approved for inclusion as residential development within the PUD, the number of housing units to be permitted and the gross density of residential development portions of the site (excluding commercial, institutional, recreational, and open space uses) shall be established in the subsequent approval as an amendment to the Sterling on the Lake Conceptual Master Plan.
- The PUD shall designate and maintain at least 302 acres of permanent open space, or thirty percent (30%) of the total land area

contained within the PUD, whichever is greater. For purposes of this zoning condition, permanent open space shall include lakes, buffers, and passive or active parks and recreation of the property, including those lands administered by a homeowners association; provided, however, that any buffer area counted as open space shall not be used for active recreational facilities. The open space shall be substantially in accordance with the areas colored green on the "Master Plan for Sterling on the Lake" (i.e., binding site plan) as determined by the Zoning Administrator.

STATEMENTS OF FACT

Pursuant to Article 34 of the Flowery Branch Zoning Ordinance this amendment to the conceptual master site plan and conditions of approval relating to Ordinance No. 239 and 240 (as amended most recently dated March 25, 2018), to add the Bragg tract to the master plan, submit the following Statements of Fact:

- (a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. **The requested use is for a residential use and is consistent with the surrounding uses.**
- (b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. **The proposed residential use of the property will not negatively impact any adjacent property as the both residential and commercial uses exist nearby.**
- (c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. **The property has been marketed for its current use for a number of years and has generated very little interest.**
- (d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. **The proposed residential use will not impact the existing infrastructure in comparison to the current use with the exception of schools where there could be a slight impact.**
- (e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. **The property is shown as Neighborhood Commercial on the character area map but is surrounded by Suburban Residential.**
- (f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal. **The demand for residential use is increasing while neighborhood commercial is declining in some areas. The lack of driveway from Spout Springs Road is challenging to the use of the property for commercial.**
- (g) Existing use(s) and zoning of the subject property and nearby properties. **Property to the east consists of a church campus, to the north a convenience store, to the west single family residential and to the south, undeveloped neighborhood commercial.**
- (h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under the existing zoning district classification. **The property has been marketed for its current use for a number of years and has generated very little interest. The lack of a driveway connection to Spout Springs is detrimental to its value for commercial development.**
- (i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. **The**

change of use is more compatible with the existing single family development to the west and will have no impact on the other adjacent uses.

(j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. The property is adjacent to an existing single family development and therefore would not create an isolated use.

(k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. The character of this area includes both residential and commercial use so there should be no impact on the general character of the district.

(l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Residential development is generally less intensive in its impact on the environmental issues mentioned.

(m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. This change of use will not be harmful to the overall zoning scheme as other residential uses currently exists adjacent to the property.

LEGAL DESCRIPTION

The modification of Ordinance No. 239 & 240 for a 1007± acre master planned development generally known as “Sterling on the Lake”, described on Exhibit A attached hereto.

Legal Description: (See Exhibit A)

The overall development is approximately 1007.91 +/- acres located adjacent to the intersection of Capitola Farm Road and Spout Springs Road. The property is described as: (**Townhome Tract**), approximately 8.15 ± acres known as the “Townhome” tract, identified as tax identification number 15047-000885, located in GMD 1270 Flowery Branch District, Hall County, Georgia.

Adjoining Property Owners

Parcel ID ↕	Owner ↕	Property Address ↕
15046 000017	UNITED FOOD AND GAS INC	6360 SPOUT SPRINGS RD
15046 000069	ARCHBISHOP WILTON D GREGORY ARCHBISHOP	6367 SPOUT SPRINGS RD
15046 000139	CONSTANTINO T GARCIA	6363 SPOUT SPRINGS RD
15047 000001	ARCHBISHOP WILTON D GREGORY ARCHBISHOP	6439 SPOUT SPRINGS RD
15047 000002A	SHIRLEY L MOORE	6495 SPOUT SPRINGS RD
15047 000665	HALL COUNTY	6488 SPOUT SPRINGS RD
15047 000684	GREGORY L WITKOWSKI WITKOWSKI, WHITNEY A.	6807 LAKE STERLING BLVD
15047 000701	STERLING ON THE LAKE COMMUNITY ASSOCIATI	6872 LAKE STERLING BLVD
15047 000711	CEMETERY - NNP-LOOPER LAKE, LLC	LAKE STERLING BLVD
15047 000742	ANDREA N BOWEN BOWEN ROBERT D	6714 BIG SKY DR
15047 000743	ERIC M. BOWMAN BOWMAN, LAUREN A.	6718 BIG SKY DR
15047 000885	NNP-LOOPER LAKE LLC c/o NEWLAND COMMUNITIES	BIG SKY DR
15047 000885A	STERLING ON THE LAKE COMMUNITY ASSOCIATI C/O COMMUNITY MANAGMENT ASSOCIATES INC	6796 LAKE STERLING BLVD
15047 000887	MARY BETH TURLEY	6804 GOLDEN BUD LN
15047 000953	STERLING ON THE LAKE COMMUNITY ASSOCIATI	CROSSCREEK LN
15047B000001	JOSHUA HARWARD HARWARD, LAUREN	6403 MOSSY BOULDER DR
15047B000075	JOHN RINDFUSZ RINDFUSZ DEENA	6414 MOSSY BOULDER DR
15047B000076	THOMAS A Klaput Klaput Patricia M	6408 MOSSY BOULDER DR
15047B000077	JOSHUA E THOMAS THOMAS JESSICA BOWLES	6402 MOSSY BOULDER DR
15047H000050	STERLING ON THE LAKE COMMUNITY ASSOCIATI	6782 BLUE HERON WAY
15047P000001	DALE MARIE GRANT	6393 CROSSCREEK LN
15047P000013	D. R. HORTON, INC.	6380 CROSSCREEK LN
15047P000014	MIRIAM A NICHOLAS	6384 CROSSCREEK LN
15047P000015	EVAN H DOWLING DOWLING MARIA LORELLE	6388 CROSSCREEK LN
15047P000016	D. R. HORTON, INC.	6392 CROSSCREEK LN
15047P000017	MICHAEL KEITH JOHNSON JOHNSON MELISSA DANIELLE	6396 CROSSCREEK LN
15047P000018	CHRISTINE R. BECK SINGLETON, KIMBERLY ERIN	6402 CROSSCREEK LN
15047P000019	RICHARD LEE LASHBROOK LASHBROOK, KRISTEN PALEN	6406 CROSSCREEK LN
15047P000020	D. R. HORTON, INC.	6410 CROSSCREEK LN
15047P000021	NICOLAS PEMBERTON PEMBERTON JUSTINE	6414 CROSSCREEK LN
15047P000022	D. R. HORTON, INC.	6418 CROSSCREEK LN
15047Q000064	STACEY A. BURSINGER	6465 CROSSCREEK LN
15047Q000065	MATEUSZ JERZY MUDY	6461 CROSSCREEK LN
15047Q000066	LINDA S. WILLIAMS	6457 CROSSCREEK LN
15047Q000067	LAUREN TAMPLIN TAMPLIN, KRISTOFER	6453 CROSSCREEK LN
15047Q000068	SIDNI BRAUTIGAN	6449 CROSSCREEK LN
15047Q000069	KAREN E. ZARCONI	6445 CROSSCREEK LN
15047Q000070	KEVIN ANTHONY JONES JONES, ASHLEIGH	6441 CROSSCREEK LN
15047Q000071	KENNY A. CUEVAS, SR	6452 CROSSCREEK LN
15047Q000072	KERRI LYNN PARKS PARKS, STEVAN RODNEY	6456 CROSSCREEK LN
15047Q000073	RALPH RODRIGUEZ	6460 CROSSCREEK LN
15047Q000074	TAYLOR HEINICKE	6464 CROSSCREEK LN
15047Q000075	ANAHIS LEON CARPIO BARRIOS MORA, DANIEL	6468 CROSSCREEK LN



BY
NEWLAND



DISCLAIMER: THESE DRAWINGS ARE CONCEPTUAL AND SUBJECT TO CHANGE, NOT INTENDED FOR CONSTRUCTION.





BY
NEWLAND



DISCLAIMER: THESE DRAWINGS ARE CONCEPTUAL AND SUBJECT TO CHANGE, NOT INTENDED FOR CONSTRUCTION.





Staff Report

An application to rezone a portion of a parcel of land from Planned Unit Development (PUD) to Planned Unit Development (PUD) with modified conditions was submitted by NNP-Looper Lake, LLC. The following property is being considered:

Tax Parcel ID # 15047 000885



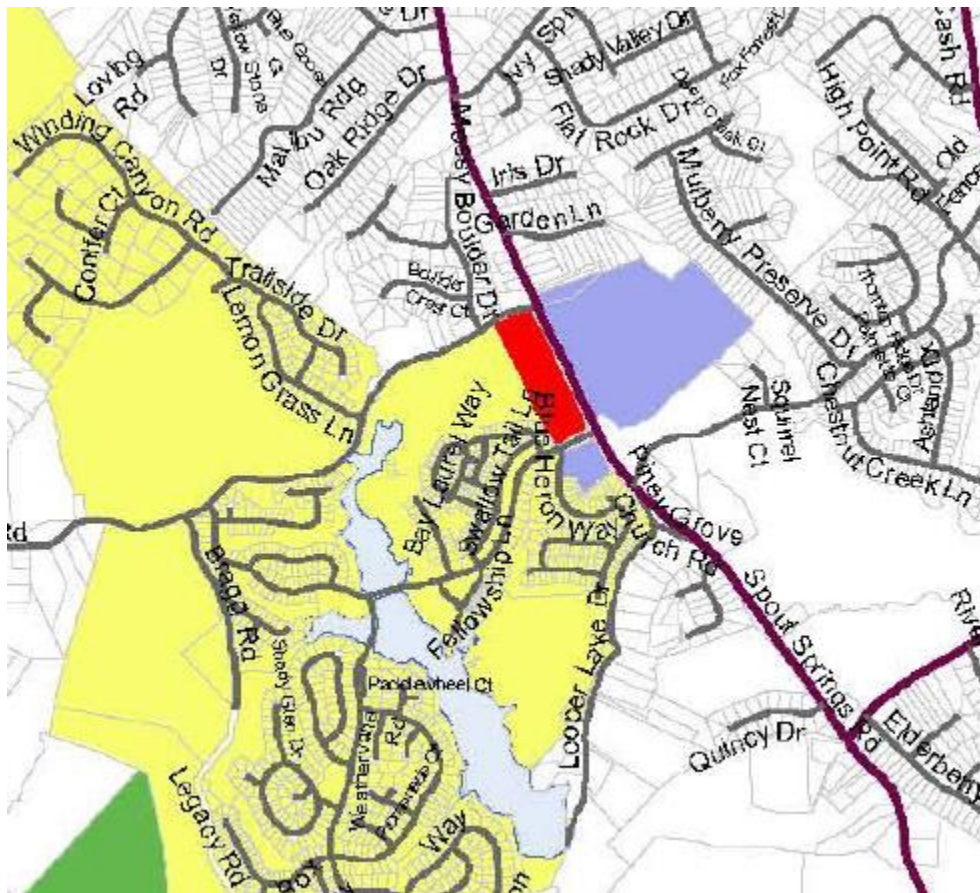
Currently, the entire parcel (12 +/- acres) is zoned PUD and is designated as for sale commercial/retail property. Applicant is requesting 8 +/- acres be removed from the commercial/retail development classification allowing for the construction of approximately 65 townhomes.



Comprehensive Plan

Designated as a “Neighborhood Commercial” character area.

Flowery Branch character area map:



The “Neighborhood Commercial” character area does not contemplate residential uses. Applicant proposes leaving 4 +/- acres as commercial. These parcels would keep the “Neighborhood Commercial” character area designation. The remaining land (8+/- acres) would not fit the “Suburban Neighborhood” character area designation that Sterling on the Lake currently holds, rather it would need to be reclassified as, “Urban Density Community”.



Neighborhood Commercial

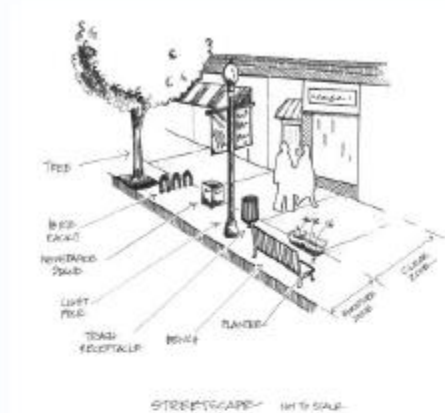
VISION: Attractive, non-auto related neighborhood businesses and services, with distinctive architectural features and a scale compatible with pedestrians and connected to adjacent residential neighborhoods.

USES AND INTENSITIES: Neighborhood-serving commercial intensities are within a range of approximately 10,000 to 15,000 square feet of building space per acre. Business establishments do not generally exceed 25,000 square feet in any one tenant space, to keep the bulk and intensity in scale with the needs of adjacent neighborhoods.

MAJOR FEATURES: Pedestrian accessibility is promoted via sidewalks connected to nearby neighborhoods, but uses are mostly reliant on the automobile for access. Nonetheless, buildings and developments are scaled to be compatible with and promote pedestrian activity. Open space is limited to suburban plazas or small open spaces. Three-story height limit. Entrances, frontages, and building façades are softened with landscaping and low-lying identification signs.

REGULATIONS: This character area will be implemented with a neighborhood commercial zoning district. Design guidelines will be provided, and neighborhood commercial projects will be required to complete design review. Minimum 15 percent of the lot is open space or landscaped.

QUALITY COMMUNITY OBJECTIVES IMPLEMENTED: Appropriate business, employment options, transportation alternatives, sense of place.



Jerry Weitz & Associates, Inc.
Planning & Development Consultants

Illustrative Pedestrian Features



Outdoor Seating and Attractive Lighting



Quality, Compatible Architectural Design Including Signage



Suburban Neighborhood

VISION: Conventional suburban subdivisions with larger lots (1/3 to 1 acre) that may have cul-de-sacs and curvilinear streets. Houses are set back from the road. Streets are built to relatively wide standard when compared with traditional neighborhoods.

USES AND DENSITIES: Acceptable uses are almost exclusively single-family residences, though some civic and recreational uses integrated into subdivision plans are acceptable. Duplexes, townhouses, multi-family, and accessory apartments are not permitted. Densities are in the range of 1-3 dwelling units per acre.

MAJOR FEATURES: Houses are setback from city streets. Diverse architectural designs are required. Garages may be located in the front but should not be the dominant feature of the home.

REGULATIONS: To be implemented with existing residential zoning districts.

QUALITY COMMUNITY OBJECTIVES IMPLEMENTED: Open space preservation, housing opportunities, infill development, suburban sense of place.



Typical Street Scene in a Suburban Neighborhood



Dwelling Setback from Street



CONVENTIONAL SUBURBAN SUBDIVISION

Jermy Weitz & Associates, Inc.
Planning & Development Consultants

Conventional Suburban Subdivision
With cul de sacs



Urban Density Community

VISION: Higher density, urban living environments.

USES AND DENSITIES: Acceptable uses include multi-family development (apartment complexes, townhouses, and manufactured home parks). Densities range from 6 to 12 units per acre.



Manufactured Home Park

MAJOR FEATURES: Master planned with high quality architecture, entrance landscaping, and recreational amenities.

REGULATIONS: To be implemented with existing multi-family residential zoning districts with design guidelines. Design review required.

QUALITY COMMUNITY OBJECTIVES IMPLEMENTED: Open space preservation, housing opportunities, infill development, urban sense of place.



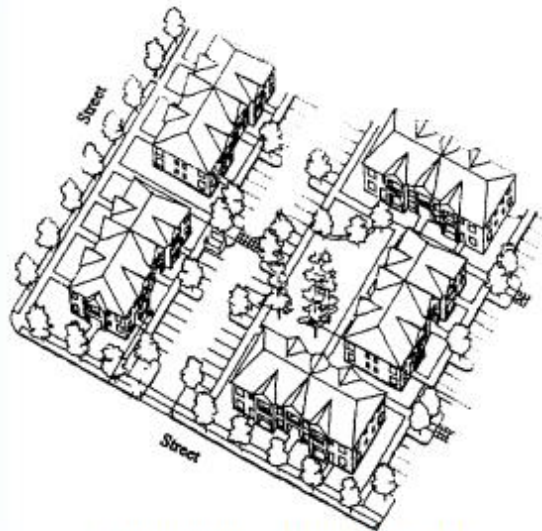
APARTMENT BUILDING



Typical Fee-Simple Townhouses



Apartments with Good Articulation of Buildings



Connectivity and Quality Design of Urban Density Communities



Proposal

Submitted by applicant:

Project Summary

LOCATION – Spout Springs Road & Capitola Farm Road

ACREAGE – 8.15 acres +/-

APPLICANT – NNP - Looper Lake, LLC

Summary

The accompanying application seeks a change of use from commercial to single family attached within the current PUD for Sterling on The Lake. The site would be developed for up to 65 townhomes with rear entry garages from either a public street or private alleyway. The townhome units will be 3 stories with a mix of architectural materials. A passive park area will be located near the entrance and sidewalks will provide both internal and external connections. The location and point of access will not impact current traffic flow within the Sterling on The Lake community. Completion of development is anticipated by 2022.

Site Description

The site has approximately 575 feet of frontage along the western right-of-way of Spout Springs Road and 650 feet of frontage along the southern right-of-way of Capitola Farm Road. The site is rectangular in shape with the majority being previously cleared and graded. A jurisdictional stream is located on the southern side of the property. Domestic water provided by the City of Gainesville is located in the right-of-way of Capitola Farm Road. Hall County sanitary sewer is located near the sites southwestern boundary line. All other dry utilities are located within a reasonable distance for service extensions. There are no known impediments to its successful development for the purposes intended.

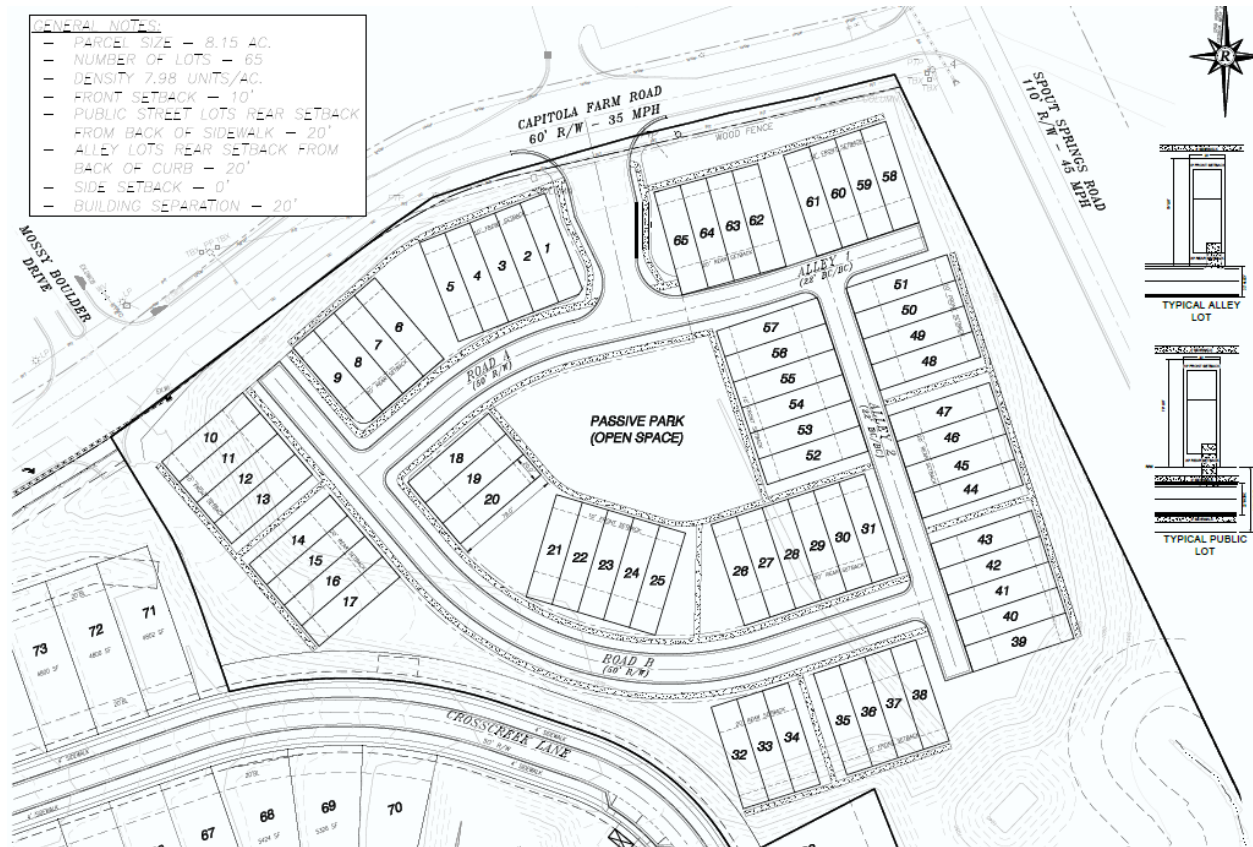
Access

A single point of access to the property is proposed from Capitola Farm Road, approximately 250 LF from its intersection with Spout Springs Road.

Development Strategy

The site has been previously marketed for commercial uses but has received only limited interest due to a lack of direct access to Spout Springs Road and the ongoing widening project. The proposed townhome product will fill a product type void that is not currently served in the Sterling on The Lake community. Two commercial tracts will remain at Spout Springs Road and Lake Sterling Boulevard.





GENERAL NOTES:

- PARCEL SIZE - 8.15 AC.
- NUMBER OF LOTS - 65
- DENSITY 7.98 UNITS/AC.
- FRONT SETBACK - 10'
- PUBLIC STREET LOTS REAR SETBACK FROM BACK OF SIDEWALK - 20'
- ALLEY LOTS REAR SETBACK FROM BACK OF CURB - 20'
- SIDE SETBACK - 0'
- BUILDING SEPARATION - 20'



Development Statistics for Townhome Tract Amendment Request

- (a) Maximum and proposed height of any structure; **35'**
- (b) Maximum and proposed gross square footage of the building area (nonresidential only); **N/A**
- (c) Color renderings of any proposed structures; **See attached**
- (d) Material list (with percentages) of any proposed structures;

All color schemes and exterior material selections must be submitted to the DRC for approval. A minimum of two exterior materials and a maximum of three exterior materials on each home is required.

 - Corner lots will be required to wrap the front elevation material around the side of the flanking street.
 - All homes with front elevations including masonry must wrap the same material around the corner of the home a minimum of 2 feet (with the exception of Pods A, B & C). Masonry materials and patterns must be submitted to the DRC for approval.
- (e) Maximum and proposed number of dwelling units and minimum and proposed square footage of heated floor area for any dwelling unit (residential only); **65 units with a minimum heated floor area of 1400 SF**
- (f) Maximum and proposed lot coverage of building area (square feet and percent); **1000 SF with a lot coverage of 65%.**
- (g) Minimum and proposed square footage of landscaped area (square feet and percent); **15,000 SF in passive park area.**
- (h) Minimum, maximum and proposed number of parking spaces; **one space per unit provided in paved driveway.**
- (i) Other dimensional information as may be required by the Zoning Administrator. **TBD**





Sterling[™]
ON THE LAKE
BY
NEWLAND





**City of Flowery Branch Rezoning Application
REQUEST FOR STATISTICAL INFORMATION
Sterling on the Lake – Townhome Tract**

1. Value of improvements at buildout:
 - Development cost - \$ 30,000 per lot
 - Vertical construction cost - \$ 120 per sf
2. Property tax revenue at buildout: (based on FMV of \$275,000)
 - Hall County - \$ 196,110
 - City of Flowery Branch - \$ 23,338

3. Schedule of construction;

- See below:

ITEM	START	FINISH
Design & Permitting	6/30/2021	8/29/2021
Land Development	9/3/2021	3/2/2022
Final Plat	3/12/2022	4/26/2022
Lot Sales	5/6/2022	5/31/2023
Residential CO's	7/20/2022	8/14/2023

4. Anticipated total square footage per unit:
 - 1400 sf minimum
5. Total acreage to be developed:
 - 7.95 acres in total
6. The Townhome Tract will contain approximately 0.25 acres in private rights-of-way.
7. The Townhome Tract will contain approximately 4.35 acres of open space/common area to be maintained by the existing HOA.
8. The Townhome Tract will contain approximately 1.05 acres of buffer and watershed protection.
 - A) The impervious buffer is applicable to the Townhome Tract.
 - B) No property lines may extend into the stream buffer.
 - C) The developer intends to dedicate street rights-of-way (where applicable) and storm sewer easements to the City of Flowery Branch.
9. Transportation alternatives:
 - The Townhome Tract will have a pedestrian link along Spout Springs Road to the remainder of the community.



10. Amenities for Sterling on the Lake total more than 15 acres and (at buildout) will include the following:
- Lakes and Trails
 - 3 Clubhouses
 - 5 Pools
 - 4 Children's Playgrounds
 - Multiple pocket parks
 - Children's Treehouse
 - 12 Tennis Courts
 - 2 Fire pits
 - Lakeside pavilion with grill
 - Boat dock and launch
 - ¾ Basketball Court
 - Picnic Island
11. A minimum of 9 street lights are planned for the Townhome Tract with a maximum spacing of 150 feet.
12. The Townhome Tract will include approximately 3,500 linear feet of sidewalk containing approximately 216 cubic yards of concrete.
13. Homes in the Townhome Tract will have access to high speed internet to the extent available from the service provider.
14. The Townhome Tract will contain areas for providing detention, water quality and stream protection.
15. An updated traffic study has not been completed for the Townhome Tract as the overall density will remain within previously studied and approved maximums.
16. There are no provisions for utilization and storage of reuse water in this plan.
17. The Townhome Tract, as proposed, will generate approximately 17,550 gallons per day of wastewater flow.
18. The maximum daily water consumption is approximately 17,550 gallons per day. Low flow fixtures are required by the development.
19. A preliminary design has been completed in order to evaluate the proposed density.
20. Public safety requirements related to life safety codes have been considered in the concept design.
21. The Hall County school system has been provided density and build out projections for the entirety of the community.
22. Copies of master covenants and guidelines have been previously filed and recorded.



Sterling on the Lake – Project Narrative

Applicant seeks to amend the conceptual site plan and conditions of approval relating to ordinance no. 239I & 240I, for the master planned community on 1007.91 ± acres generally known as “Sterling on the Lake” located in the PUD (Planned Unit Development) zoned district. The development is located adjacent to the intersection of Capitola Farm Road and Spout Springs Road. The amended property is described as: (Townhome Tract) - a 8.15 acre parcel of real property owned by NNP Looper Lake LLC, being known as the “Townhome” tract identified as a portion of tax identification number 15047-000885 located in GMD 1270 Flowery Branch District, Hall County, Georgia.

- The Sterling on the Lake Master Planned Development was originally approved (annexed and rezoned) by the Flowery Branch City Council on November 16, 2001, per Ordinances 239 and 240.
- On February 1, 2006, City Council approved a modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-A and 240-A.
- On September 9, 2006, City Council approved a second modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-B and 240-B.
- On August 15, 2007, City Council approved a third modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-C and 240-C.
- On November 25, 2008, City Council approved a fourth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-D and 240-D.
- On March 26, 2011, City Council approved a fifth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-E and 240-E.
- On March 15, 2012, City Council approved a sixth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-F and 240-F.
- On February 18, 2016, City Council approved a seventh modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-G and 240-G.
- On May 4, 2017, City Council approved an eight modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-H and 240-H.



- On March 15, 2018, City Council approved a ninth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-I and 240-I.
- On July 1, 2019, City Council approved a tenth modification to the original conditions of Ordinance 239 and 240, per Ordinances 239-J and 240-J.
- Per Article 8, Section 8.4 and Section 8.10 of the Flowery Branch Zoning Ordinance, the original PUD approval must be amended by the Governing Body in order to incorporate changes to the master plan approval and PUD conditional zoning.

APPLICANT'S REQUEST

Townhome Tract – The Applicant is requesting an amendment to the PUD master plan for Sterling on The Lake Master Planned Development.

- The development shall be substantially in accordance with the "Rezoning Plan" submitted as a part of the application.
- The plan will include both public right-of-way and private alleyways as depicted on the "Rezoning Plan". Private alleyways will be maintained solely by the Townhome sub-association.
- Each dwelling unit is required to provide a two car garage and space for two cars in the driveway.
- All requirements imposed under this Ordinance shall be the standards of the development regardless of any change in ownership.
- The elevations will be consistent with the attached exhibits. All elevations shall be reviewed and approved by the DRC Committee prior to submittal to the City.
- No fencing is permitted within the front setback areas.
- The residential development within the overall PUD shall be limited to a maximum of 2,029 housing units for the entire 1,007.91 ± acre PUD, within the City of Flowery Branch at the time of this approval, as approved under this ordinance. If additional land is approved for inclusion as residential development within the PUD, the number of housing units to be permitted and the gross density of residential development portions of the site (excluding commercial, institutional, recreational, and open space uses) shall be established in the subsequent approval as an amendment to the Sterling on the Lake Conceptual Master Plan.
- The PUD shall designate and maintain at least 302 acres of permanent open space, or thirty percent (30%) of the total land area



contained within the PUD, whichever is greater. For purposes of this zoning condition, permanent open space shall include lakes, buffers, and passive or active parks and recreation of the property, including those lands administered by a homeowners association; provided, however, that any buffer area counted as open space shall not be used for active recreational facilities. The open space shall be substantially in accordance with the areas colored green on the "Master Plan for Sterling on the Lake" (i.e., binding site plan) as determined by the Zoning Administrator.



STATEMENTS OF FACT

Pursuant to Article 34 of the Flowery Branch Zoning Ordinance this amendment to the conceptual master site plan and conditions of approval relating to Ordinance No. 239 and 240 (as amended most recently dated March 25, 2018), to add the Bragg tract to the master plan, submit the following Statements of Fact:

- (a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. *The requested use is for a residential use and is consistent with the surrounding uses.*
- (b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. *The proposed residential use of the property will not negatively impact any adjacent property as the both residential and commercial uses exist nearby.*
- (c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. *The property has been marketed for its current use for a number of years and has generated very little interest.*
- (d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. *The proposed residential use will not impact the existing infrastructure in comparison to the current use with the exception of schools where there could be a slight impact.*
- (e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. *The property is shown as Neighborhood Commercial on the character area map but is surrounded by Suburban Residential.*
- (f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal. *The demand for residential use is increasing while neighborhood commercial is declining in some areas. The lack of driveway from Spout Springs Road is challenging to the use of the property for commercial.*
- (g) Existing use(s) and zoning of the subject property and nearby properties. *Property to the east consists of a church campus, to the north a convenience store, to the west single family residential and to the south, undeveloped neighborhood commercial.*
- (h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under the existing zoning district classification. *The property has been marketed for its current use for a number of years and has generated very little interest. The lack of a driveway connection to Spout Springs is detrimental to its value for commercial development.*
- (i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. *The*



change of use is more compatible with the existing single family development to the west and will have no impact on the other adjacent uses.

(j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. The property is adjacent to an existing single family development and therefore would not create an isolated use.

(k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. The character of this area includes both residential and commercial use so there should be no impact on the general character of the district.

(l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Residential development is generally less intensive in its impact on the environmental issues mentioned.

(m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. This change of use will not be harmful to the overall zoning scheme as other residential uses currently exists adjacent to the property.

Staff Analysis

Flowerly Branch Zoning Ordinance Article 37 Rezoning and Conditional Use Applications

Sec. 34.7. - Analysis Requirements.

Applications to amend the official zoning map and applications for conditional uses shall provide a written analysis comparing the proposed action with the criteria in this Section. A zoning map amendment or conditional use application may be justified only if it bears a reasonable relationship to the public health, safety, morality, or general welfare, and after consideration of the analysis requirements which may in individual cases be considered criteria relevant to Zoning Administrator in making recommendations and by the Governing Body in the decision-making process.

Staff Response:

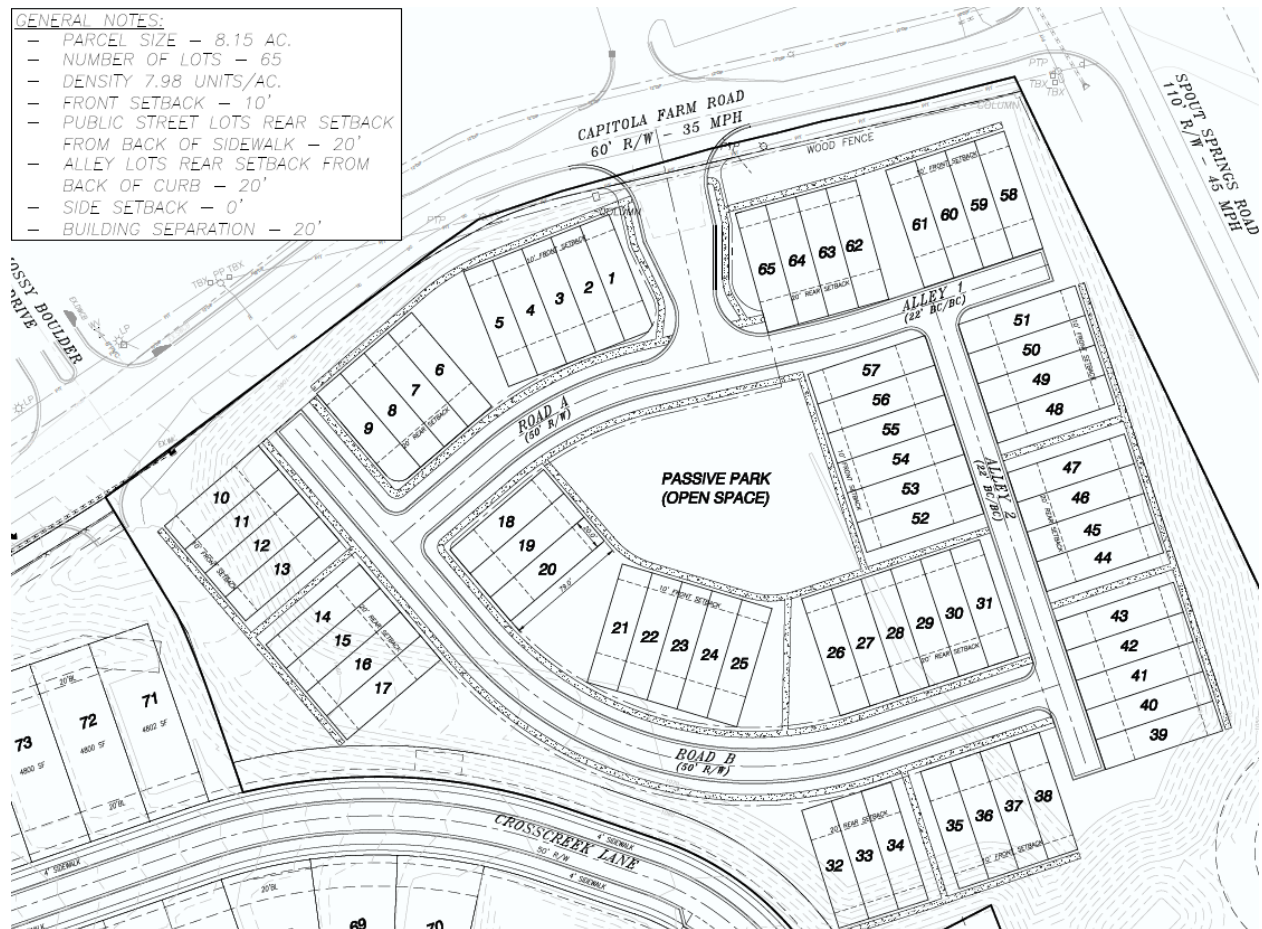
- (a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. Residential units are suitable as they are consistent with the surrounding area.
- (b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. The development will not adversely affect the area.
- (c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. Yes, current zoning and designation as commercial has a reasonable economic use although the land has been available for some time.



- (d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. *It is staff's opinion that the use will not create any unnecessary burdens.*
- (e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. *Currently, the Comprehensive Plan denotes this area as part of the "Neighborhood Commercial" character area. The proposed use (townhomes) does not meet the intent of the Comprehensive Plan (see previous comments regarding the Comprehensive Plan as part of this staff report). However, the proposed zoning change does not alter the entirety of the area designated "Neighborhood Commercial" and, if approved, would leave two outparcels to be developed as commercial according to guidelines and rules established by the Comprehensive Plan and City codes.*
- (f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal. *The demand for over 12 acres of commercial product at this location has not been high.*
- (g) Existing use(s) and zoning of the subject property and nearby properties. *Townhomes will become part of the Sterling on the Lake community.*
- (h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under the existing zoning district classification. *Staff does not have a specific number regarding property value, but the current zoning restrictions do not allow the proposed residential subdivision.*
- (i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. *Staff does not feel that the proposed will be a deterrent.*
- (j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. *N/A*
- (k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. *The proposed use will not be a detriment to the area and may help to make the commercial properties more viable.*
- (l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. *The development, if approved, will need to go through all the required development reviews to ensure all applicable codes and requirements are met.*
- (m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. *The proposed development will meet the intent of the Zoning Ordinance.*



Site Plan



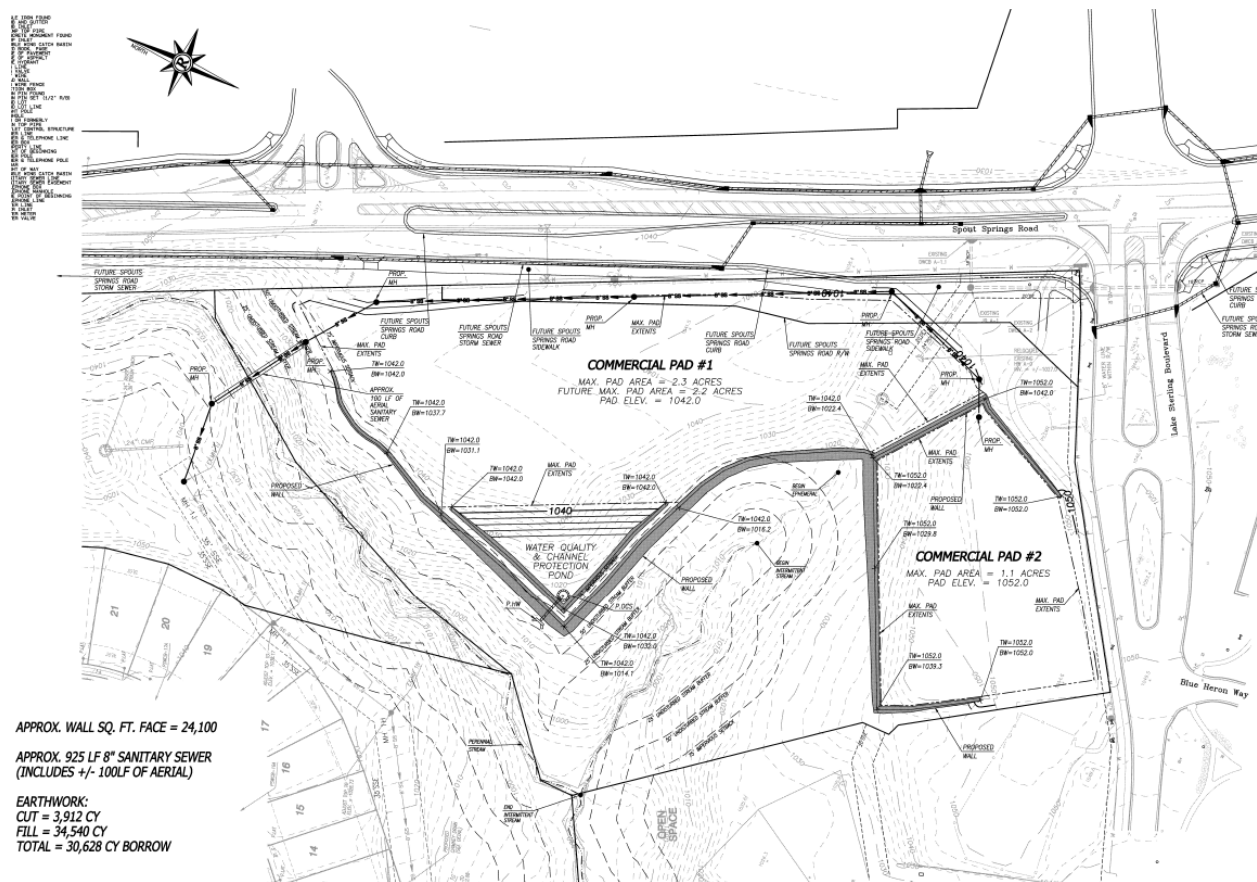
The site plan meets many of the standards the City looks for regarding layout and design. It contains sidewalks throughout, a central passive park, alley fed lots that face the street or the greenspace. The townhomes do not exceed the City desired runs of six and have two car garages. The only deficiency is a lack of extra parking for guests.



If approved, the commercial would be reduced to 4 +/- acres. Access to sites per applicant: When the commercial was discussed with GDOT they initially were ok with the plan to create (1) Right in/Right out on Spout Springs and potentially (1) right in only. The upper parcel would have a drive onto Lake Sterling Blvd. likely aligned with the breaks in the center islands to allow for left out egress from the site.

Site Concept plans will be submitted when the site is fully contracted, and a potential developer has completed site design.

GDOT was not comfortable with multiple Right in Right out entries on Spout Springs with the Church entry across the way and the traffic routing planned (Michigan Left) which has been a serious issue with the Capitola Farm Corner sites since the road improvements have been design and begun. Commercial and retail developers want direct access to Spout Springs, and the median and one-way directional limitations are a negative we have been unable to overcome.





A close-up of the area where the townhomes/reduced commercial would be located if approved.





The status of the overall development if the townhome project is approved. The original overall unit count is limited to 2,000. If approved, the townhome development would push that number to 2,018.

POD BREAKDOWN										1/14/2021
POD	40'	45/50	55/60	65	70/75	80/90	100	TH	ESTATE	TOTAL
MHP			5		5	7				17
A				85						85
B				69						69
C			48	37						85
D					30	9				39
E					32	39	7			78
F					31	20				51
G			6	32	24		6			68
H					76					76
I					43		9			52
J					75					75
K					45					45
L&M			38							38
N		74								74
O		44								44
P	22									22
Q	82									82
R								16		16
S							14			14
T		20	45	41						106
U			58	78						136
V&W		41		34	39					114
X						79				79
Y						36				36
Z									49	49
KNUTSON		108	35							143
POD Z12		22	20							42
HONEYCUT		178								178
BRAGG		36								36
J **						4				4
Capitola TH								65		65
TOTAL ALL	104	523	255	376	400	194	36	81	49	2018
Percent Total Lots	5%	26%	13%	19%	20%	10%	2%	4%	2%	Exceeds Zoning
									Difference	-18
							Zoning	2 units/acre		1007.91
							Zoned Units based upon 2/ace			2016



Traffic Impact Study

Staff has not requested a traffic study at this time due to the relatively small number of homes proposed. If Mayor and Council would like a study performed it is appropriate to make this request if it is done in a timely manner.

Staff Recommendation

Staff recommends approval with the following conditions:

1. All conditions of zoning as set forth in Ordinances 239 and 240 and all subsequent and relevant modifications shall apply to the development.
2. Townhomes shall be limited to runs of no more than six.
3. Development shall generally adhere to the site plan as submitted.
4. Driveways shall be 23' as measured from the back of curb.
5. Front entrance plans shall be submitted at the time of, or prior to, applications for monument signs. Said plans shall clearly describe and show the precise landscaping proposed.
6. Townhomes shall be constructed in a manner that significantly adheres to the elevations as submitted.
 - A. Material shall be limited to brick, stacked stone, cementitious fiber board, and board and batten.
 - B. Elevations shall be submitted for each townhome at the time of permit.
 - C. Architectural shingles shall be used throughout the development.



Commercial Parcels Marketing Timeline

June 2002:

NNP-Looper Lake, LLC (“NNP”) purchases the property that will become Sterling on the Lake

2003-2004:

NNP negotiates with Hall County for potential Library and YMCA locations

2005:

NNP enters into contract with Hall County for Library location

NNP establishes Commercial sales strategy for additional parcels

May 2006:

Commercial appraisals performed by:

- Carr, Lawson, Cantrell & Associates, Inc.
- Metro Appraisals, Inc.

Hall County Library parcel closes

2006-2012:

Commercial marketing paused due to economic conditions

May 2012:

NNP enters into Commercial Listing Agreement with Resource Real Estate Partners, LLC

- Agreement expires and is not extended due to minimal interest from potential purchasers

2013:

NNP engages Real Estate Economics to perform a Market Study, which determines that interest in commercial site is not sufficient to resume actively marketing the parcels

2016-2018:

NNP team resumes marketing the commercial parcels:

- Develops “Commercial Opportunities” brochure for potential buyers
- Places signs on the commercial parcels with contact information for NNP office
- Clears & grades sites
- Tracks interested end users / tenants and forwards details to potential commercial developers
- Engages The Nielson Company to provide Demographic Data reporting
- Engages HGOR to develop conceptual site plans
- Engages Hyatt & Stubblefield to develop governing documents for the Commercial Properties
- Collaborates with Newland’s Vice President of Commercial Real Estate to market the parcels to Newland’s commercial partners across the country

August 2018-Present:

NNP enters into Commercial Listing Agreement with The Norton Agency

- Norton aggressively markets the commercial tracts locally and nationally through advertising, signage, trade shows and networking and provides weekly status updates to NNP team

NNP continues to work with Newland’s Vice President of Commercial Real Estate to present the parcels to Newland’s commercial partners across the country



Community Pool Comparison and Amenity Overview

Community	# Units	Pools	Units per Pool
<i>Sterling on the Lake</i>	2018	5	404
Reunion	800	2	400
Villages at Deaton Creek	1150	2	575
Del Webb - Chateau Elan	850	2	425
Mundy Mill	1136	2	568
Cresswind Lanier	934	2	467
Twin Lakes - Hoschton	2100	3	700
Sterling Amenity Overview			
	ZONING	STERLING	
Open Space	20%	30%	
Walking Jogging Trail	Yes	Yes	3 miles +/-
Passive Parks	Yes	Yes	4 ac Linear Park, 6+ Pocket Parks
Lake Activities	Yes	Yes	Fishing, Boating
Recreation Centers	Yes	Yes	Main Clubhouse, The Lodge, The Retreat, Lakeside Pavillion
Lifestyles	Yes	Yes	
Interconnecting Sidewalks	Yes	Yes	
Neighborhood Connectivity	Yes	Yes	
Gate Option	Yes	Yes	The Retreat/Honeycutt
Pod X - Pool/Playground/Tennis	Yes	Yes	
Honeycutt - Tennis	Yes	Yes	
Lower Lake Available Recreation	Yes	Yes	Fishing, Boating
Lake Side Pavillion	NO	Yes	Large Pavillion with fireplace and benches
Fire Pit	NO	Yes	(1) Current, plus (1) new in the Retreat
Tennis Courts	4	12	
Playgrounds	NO	4	
Tree House	NO	Yes	(1) Custom built tree house
Private Gazebo	NO	Yes	(1) Pod X entry

Public Hearing Published 03/10/21
Public Hearing 04/01/21

First Reading 05/20/21
Adopted 06/17/21

ORDINANCE NO. 239-L & 240-L

AN ORDINANCE AMENDING THE CONCEPTUAL SITE PLAN AND CONDITIONS OF APPROVAL RELATING TO ORDINANCE NUMBERS 239 AND 240, FOR THE MASTER PLANNED COMMUNITY KNOWN AS “STERLING ON THE LAKE”. THE REQUEST IS TO AMMEND THE PUD ZONING ON AN 8+/- ACRE PORTION OF A PIECE OF REAL PROPERTY IDENTIFIED AS TAX PARCEL 15047 0000885. THE REQUEST IS TO ALTER THE APPROVED CONDITIONS BY ALLOWING A RESIDENTIAL USE ON THE SUBJECT PROPERTY. SUBJECT PROPERTY IS SHOWN ON ATTACHED EXHIBIT “A” AND LEGALLY DESCRIBED ON ATTACHED EXHIBIT “B” AND SHALL BE SUBJECT TO ALL CONDITIONS SET FORTH AND SHOWN ON ATTACHED EXHIBIT “C”; PROVIDING FOR FINDINGS, SEVERABILITY, REPEALING CONFLICTING ORDINANCES, AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, NNP-Looper Lake, LLC owns all that tracts or parcels of land totaling 8+/- acres identified as Parcel Tax Identification No.15047 000885. Parcels are shown on Exhibit “A”, and as legally described on Exhibit “B”; and

WHEREAS, specific conditions shall be placed on subject parcels as shown on attached exhibit “C”; and

WHEREAS, the City Council of the City of Flowery Branch has considered the application of NNP-Looper Lake, LLC in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, the City Council held a public hearing at the meeting of April 1, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed modified rezoning of the current PUD (Planned Unit Development) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property could be used in accordance with the existing regulations and has a reasonable economic use as currently zoned PUD.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current zoning as opposed to the modified PUD.
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the change in zoning district map, or change in use, on the character of a zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The rezoning of the subject parcel, as shown on Exhibit “A” and as legally described in Exhibit “B”, to a modified PUD (Planned Unit Development). Conditions as set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 17th day of June 2021.

James M. Miller, Mayor

ATTEST

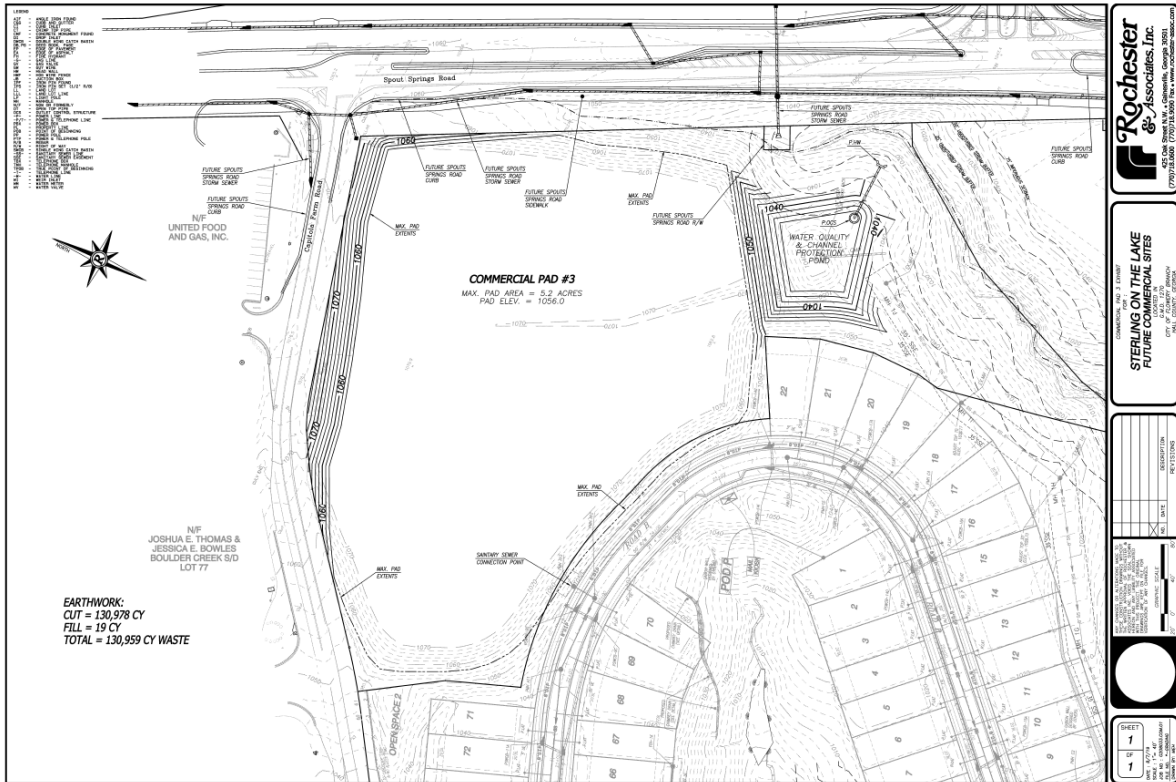
Vickie Short, City Clerk

APPROVED AS TO FORM

E. Ronald Bennett, Jr., City Attorney

Exhibit "A"

A.1



A.2

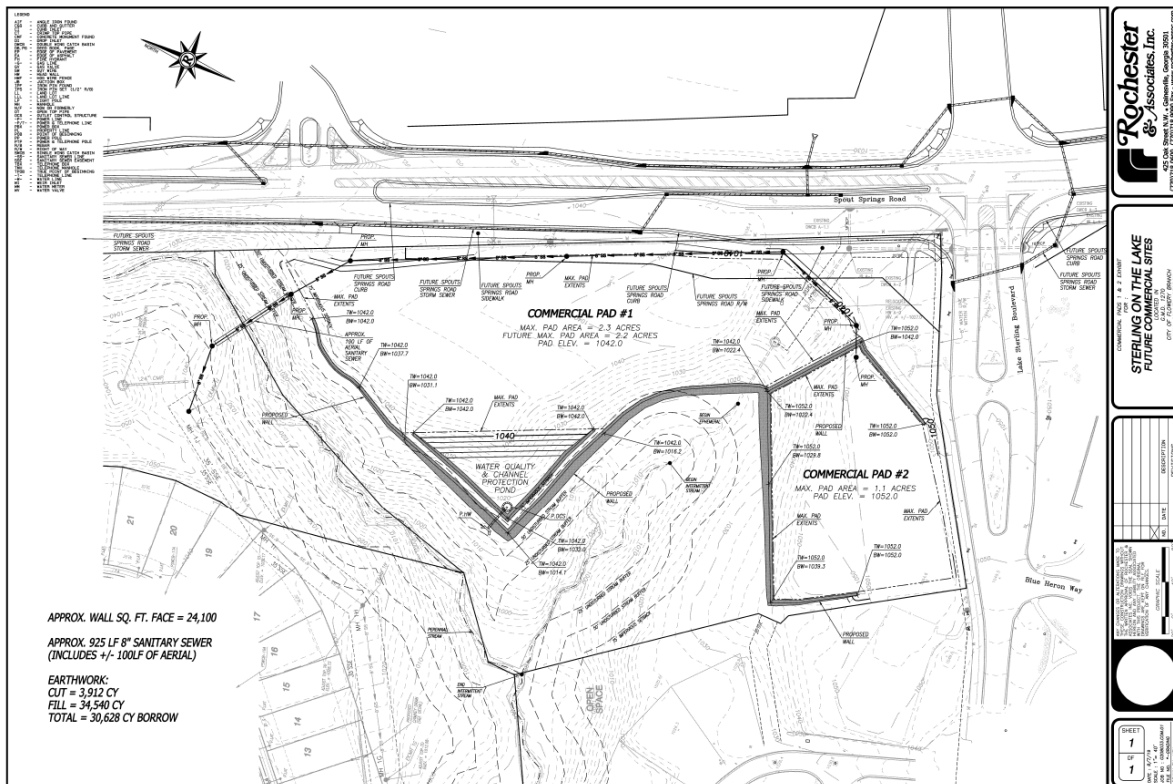


Exhibit "B"

Legal Description

All that tract or parcel of land lying and being in G.M.D. 1270, City of Flowery Branch, Hall County, Georgia and being more particularly described as follows:

BEGINNING at the intersection of the southwestern Right-of-Way of Spout Springs Road (R/W varies) and the southeastern Right-of-Way of Capitola Farm Road (60' R/W); thence continuing along the southwesterly Right-of-Way of said Spout Springs Road South 25°37'24" East, a distance of 663.05 feet to a point; thence leaving said Right-of-Way and into the property now or formerly of NNP-Looper Lake, LLC South 51°28'20" West, a distance of 108.90 feet to a point; thence South 42°12'06" West, a distance of 64.95 feet to a point; thence South 16°35'34" West, a distance of 130.73 feet to a point; thence South 09°33'49" West, a distance of 138.31 feet to a point; thence South 14°03'35" East, a distance of 40.07 feet to a point; thence South 50°05'27" East, a distance of 133.00 feet to a point; thence South 71°36'03" West, a distance of 118.77 feet to a point; thence along the property now or formerly of Sterling on the Lake, Pod O North 16°21'56" West, a distance of 153.60 feet to a point; thence along the property now or formerly of Sterling on the Lake, Pod Q, Phase 2, Pod P North 10°14'19" West, a distance of 148.44 feet to a point; thence North 09°13'44" West, a distance of 119.09 feet to a point; thence North 12°07'47" East, a distance of 26.45 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 01°27'17" East, a distance of 57.67 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 09°46'11" West, a distance of 63.59 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence North 21°32'36" West, a distance of 63.59 feet to an iron pin found (1/2" rebar with a yellow plastic cap stamped "Rochester LSF000484"); thence South 62°34'11" West, a distance of 95.00 feet to a point; thence 164.12 feet along an arc of a curve to the left having a radius of 215.00 feet and a chord bearing and distance of North 49°17'54" West, 160.16 feet to a point; thence North 71°09'59" West, a distance of 63.20 feet to a point; thence 223.30 feet along an arc of a curve to the left having a radius of 395.00 feet and a chord bearing and distance of North 87°21'42" West, 220.34 feet to a point; thence North 19°04'20" West, a distance of 87.48 feet to a point; thence North 31°15'55" West, a distance of 102.02 feet to a point on the southeastern Right-of-Way of said Capitola Farm Road; thence along said Right-of-Way 51.29 feet along an arc of a curve to the left having a radius of 733.26 feet and a chord bearing and distance of North 54°33'32" East, 51.28 feet to a point; thence North 52°33'19" East, a distance of 159.85 feet to a point; thence 63.52 feet along an arc of a curve to the right having a radius of 431.40 feet and a chord bearing and distance of North 56°46'25" East, 63.47 feet to a point; thence North 60°59'32" East, a distance of 33.91 feet to a point; thence 480.02 feet along an arc of a curve to the right having a radius of 268.83 feet and a chord bearing and distance of North 71°54'29" East, 47.96 feet to a point; thence North 77°01'33" East, a distance of 296.98 feet to the *Point of Beginning*.

Said tract contains 8.150 Acres.

Exhibit “C”
Conditions of Zoning

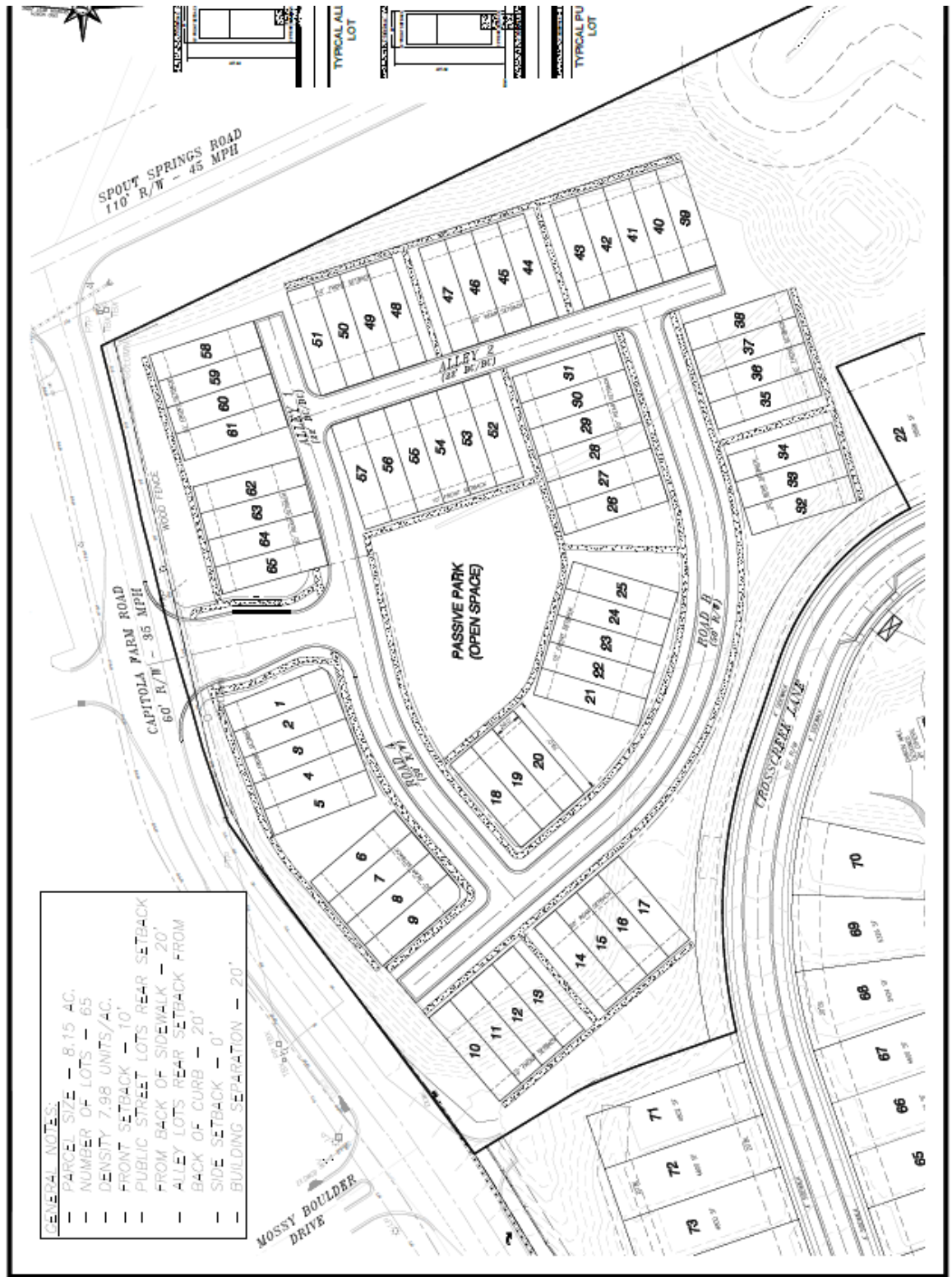
1. All conditions of zoning as set forth in Ordinances 239 and 240 and all subsequent and relevant modifications shall apply to the entire parcel except for the following changes:
 - A. Portion of parcel as shown as “Exhibit A; A.1”
 - 1) Shall be granted permission to construct townhomes.
 - 2) Townhomes shall significantly adhere to the renderings as shown below:





DISCLAIMER: THESE DRAWINGS ARE CONCEPTUAL AND SUBJECT TO CHANGE, NOT INTENDED FOR CONSTRUCTION.

3) Layout of townhomes shall generally adhere to the site plan as shown below:



- B. Portion of parcel as shown as “Exhibit A; A.2” shall adhere to all previously approved commercial conditions but shall no longer allow gas station as an allowed use.



FLOWERY BRANCH CITY COUNCIL



EXECUTIVE SUMMARY

SUBJECT: First Read of the rezoning request submitted by Mr. Bill Stark. Request is to rezone six parcels totaling 118 +/- acres from M-1 (Light Industrial) to R-3 (Multi-Family) with the intention to construct a residential community consisting of single family detached homes and townhomes. The request includes six (6) parcels and therefore requires six (6) corresponding ordinances. The ordinances are 625, 626, 627, 628 (encompassing phase one), and 629, 630 (encompassing phase two).

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

Tracts were rezoned from R-2 (Residential) to M-1 (Light Industrial) with the intent to construct an industrial park in 2014. The industrial park was never constructed. Although a site plan was not include in the rezoning(s) of 2014, one was recently crafted for the City by Rochester and Associates, Inc. to show a potential layout for an industrial site (see attached - AIM Potential M1 Layout by Rochester). Please note this plan includes additional parcels of land that are not included in the Bill Stark rezoning request.

March 18, 2021 work session discussion concerning buffers (plan attached below).

Updated May traffic study is attached.

FACTS AND ISSUES:

In reviewing the initial submittal Staff had concerns regarding the lack of connectivity between the two phases. Applicant would need to acquire additional land in order to connect the phases.

The applicant needs to have the entirety of the six parcels properly zoned for a higher density single family detached/townhome subdivision (R3) as part of the purchase agreement. The applicant is hesitant to acquire more land without having the proper zoning designation in place. In order to achieve this goal, and still meet the City's desire for a cohesive two-phase development, staff recommends rezoning all six parcels to the requested R3 zoning, but restricting phase two (parcels 08117 002001 & 08134 000006) as follows:

1. No permits shall be issued unless connectivity with phase one is achieved in a manner satisfactory to Flowery Branch Mayor and Council.
2. A revised site plan shall be submitted to Mayor and Council for approval prior to the issuance of any permits.
3. Elevations shall be submitted and approved by Mayor and Council prior to the issuance of any permits.
4. Ordinances 629 and 630 shall be amended prior to the final read to reflect the approved site plan, approved elevations, and all conditions as set forth by Mayor and Council.

OPTIONS:

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

No

AMOUNT AND SOURCE OF FUNDS:

RECOMMENDATION:

Approve as submitted and conditioned.

SAMPLE MOTION:

I make a motion to approve the first reading of ordinance 625 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 626 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 627 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 628 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 629 as submitted and conditioned.

I make a motion to approve the first reading of ordinance 630 as submitted and conditioned.

COLLABORATING DEPARTMENT:

DEPARTMENT: Planning

Prepared by: Vickie Short

ATTACHMENTS

- [Scanned complete rezoning application packet.pdf](#)
- [Combined pdf.pdf](#)
- [original layout & TSW suggestions.pdf](#)
- [AIM Potential M1 Layout by Rochester.pdf](#)
- [Staff Report .pdf](#)
- [March 18 Buffer Plan.pdf](#)
- [Mulberry Street Site Plan - including access RW \(markup\).pdf](#)
- [Mulberry Flowery Branch Subdivision Traffic Impact Study.pdf](#)
- [Combined 625-630 Incomplete for FIRST READ.pdf](#)



Development Planning & Engineering, Inc.

Letter of Intent
City of Flowery Branch
Mulberry Street

20-085



Development Planning & Engineering, Inc.

Letter of Intent

City of Flowery Branch
Community Development
PO Box 757
Flowery Branch, Georgia 30542

Rich Atkinson
Director of Planning and Community Development

RE: Mulberry Street Tract (Parcel numbers 08117 002008A, 08117002016D, 08117 002016B, 08117 002061, 08117 002001, 08134 000006)

Dear Mr. Atkinson:

Please let this letter serve as our letter of intent to accompany our Rezoning Application for the project located in the 5000 block of Mulberry Street in the City of Flowery Branch, Hall County, Georgia. The proposed use for the property is an approximately 117.9-acre tract that will be completed in two phases. We are proposing Phase 1, with an acreage of 48.15 and 55 single family detached houses along with 140 attached townhomes, yielding a density of 4.33 lots per acre. Phase 2 has a boundary acreage of 69.8 acres with 144 single family detached homes, yielding a density of 2.06 units per acre. We are requesting the subject property be rezoned from the existing M-1 zoning to R3 Residential Multi-Family district.

We request to have the following Development Standards for the proposed project. This illustrates Bill Stark Communities commitment to building a quality development for the City of Flowery Branch and surrounding neighbors.

Proposed Development Standards

Sidewalks	• Five feet in Width on Internal Streets
Proposed Buffer	• 40 Foot Natural Undisturbed Buffer adjacent to Residentially zoned properties as shown on the Zoning Exhibit

Landscape Strip	• 10-foot landscape strip along Mulberry Street with trees and shrubs every 50 linear feet
Driveways	• Driveway width minimum 16 feet
House Square Footage	• 1,600 Square Feet Minimum
Setbacks Minimum Lot & Square Footage	• Single Family Detached • Minimum 6,000 Square Feet Phase 1 • Minimum 6,875 Square Feet Phase 2 • Front Setback 20 feet • Side Setback 5 feet • Rear Setback 25 feet • Townhome- As shown on zoning plan
Architecture	• All Facades to be a combination of brick, stone, and/or concrete siding • Minimum 2-foot brick water table • Architectural Shingles • Minimum of a Two Car Garage
Landscaping	• Landscaped Entrance • Front, Side and Rear Yards shall be sodded • All lawn and common area maintenance provided by a Mandatory HOA within attached townhome portion • All common area maintenance provided by a Mandatory HOA within the single-family subdivision (Phase 1 & Phase 2)
Proposed Amenities	• Parks and natural areas located within Phase 1 and Phase 2 • Active Amenity, walking path, dog park and large central park in Phase 1 • Recreation Area in Phase 2

According to the City of Flowery Branch comprehensive plan, housing should be “diverse and affordable housing that meets the needs of existing and future city residents, with a desirable mix of housing types, detached, single-family and townhouses. For planned traditional neighborhoods, acceptable uses are primarily single-family residences. Duplexes, townhouses, and accessory apartments may be permitted. Greens, plazas, and pocket parks incorporated into development plans.”

We feel that our project supports the spirit of the recommendations of the Comprehensive Plan by providing a mix of housing types and various parks and amenities with 199 single family detached units and 140 townhomes.

YOUR ENGINEERING PARTNER WITH THE *EXPERIENCE* YOU EXPECT AND THE *SERVICE* YOU DESERVE

dpengr.com • 5074 Bristol Industrial Way Suite A Buford, Georgia 30518 • Telephone: 770.271.2868 • Fax: 770.271.0779

We appreciate your consideration of this rezoning request and please do not hesitate to give us a call if you have any questions.

Sincerely,

Tonya Woods
Development Planning and Engineering

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Development Planning & Engineering, Inc.

Rezoning Application City of Flowery Branch Mulberry Street

20-085



REZONING APPLICATION

Date: 12/4/2020

Address of Request:

Mulberry Street (Parcels parcels 08117 002008A, 08117002016D, 08117 002016B,
08117 002061, 08117 002001, 08134 000006)

Tax Map # See above Current Zoning: M1

Is this site located within the boundaries of the historic district? No
Yes

Currently a conforming use?

Any conditions of zoning, CUP's, etc.? NA

Applicant Information

Name: Stark Land Development /Development Planning and Engineering

Address: 3719 Winder Highway, Flowery Branch Georgia 30542

5074 Bristol Industrial Way, Suite B, Buford Georgia 30518

E-mail address: billstarkproperties@gmail.com twoods@dpengr.com

Phone number: 770.231.3829 770.271.2868

Signature:

Notary:



Property owner information (if different than the applicant)

Property owner (please print): _____

Signature of property owner: _____

Notary:

Property Information

Tax Map Number: parcels (08117 002008A, 08117002016D, 08117 002016B, 08117 002061, 08117 002001, 08134 000006)

Current Zoning: M1 Total Acres: 117.962

Is this property located within the city-limits of Flowery Branch? Yes

Proposed City of Flowery Branch Zoning: R3

Current Use: Vacant Land _____

Please review the Flowery Branch Code of Ordinances, Appendix C, "Zoning Ordinance", Article 34, for complete requirements.

Please provide the following at time of submittal in (one hard copy and digitally):

- Legal description
- Current survey of property



- Site plan shall meet the requirements of the Flowery Branch Code of Ordinances; Appendix C, “Zoning Ordinance”, Article 34 sections 34.5
- Development statistics per the Flowery Branch Code of Ordinances; Appendix C, “Zoning Ordinance”, Article 34 sections 34.6
- Analysis requirements per the Flowery Branch Code of Ordinances; Appendix C, “Zoning Ordinance”, Article 34 sections 34.7
- Detailed description of request
- Conflict of interest disclosure (attached)
- Disclosure of campaign contributions (attached)
- Names and addresses of adjoining property owners
- Reasons for requesting rezoning
- Signed statement authorizing City of Flowery Branch staff and/or City Council to inspect the subject property

Conflict of Interest Disclosure

Identify all members of the City Council of the City of Flowery Branch and Employees of the City of Flowery Branch Community Development Department who

Have a property interest in the real property affected by this request

Have a financial interest (direct ownership interest) of the total assets or capital stock of a business entity where such ownership interest is more than 10% in any business entity which has a property interest in the real property affected by this request

Have a member of the family (spouse, mother, father, brother, sister, son or daughter) having a property financial interest as herein defined, in the real property affected by this request



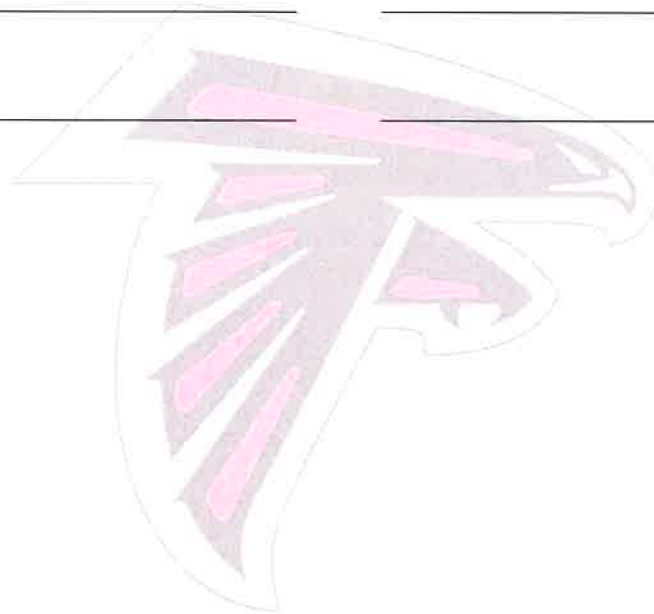
Disclosure of Campaign Contributions

List below the names of local government officials of the City of Flowery Branch to whom campaign contributions were made, within two (2) years immediately preceding the filing of this application, which campaign contributions total \$250.00 or more or to whom gifts were made having a total value of \$250.00 or more.

Elected Officials Name

Amount of Description of Gift

_____	_____
_____	_____



CITY STAFF ONLY

Application Received By: _____

Date: _____ Total Fee: _____





REZONING ADDITIONAL INFORMATION REQUIREMENT

Date:

____12/14/2020_____

Address of Request:

____Mulberry Street_____

Tax Map # ____Multiple parcels_____ Current Zoning: _M1_____

Please submit an analysis of the proposed project including:

1. Value of improvements upon complete build out.
Phase One approximately 44 million, Phase Two approximately 40 million
2. Property tax valuation based upon existing millage rate (indicate total tax expectation if project is phased).
3. Schedule of the total build out (showing a timeline of construction in months/years if project is phased). Phase One approximately 36 months, Phase Two 5 years
4. Anticipated total square footage (heated) to be built in the requested number of units.
542,000 Square feet
5. Total acreage developed with units. 117.96 acres
6. Total acreage for right of way and roads. 5850 linear feet x 50 feet
ROW=292,500 square feet= 6.7148 acres in ROW
7. Total acreage of open space/common area (include plan for maintenance of open space/common area). 19 acres/Phase 1 32 acres/Phase 2
8. Acreage required for buffer and watershed protection.



- Does the buffer comply with the current City ordinance? Yes
 - Do individual property lines for lots extend into the buffer? - Does the Developer intend to dedicate any of the site area to the City? If so, for what purpose? The majority of the stream buffers are located within common area, but there are several lots where the stream buffer encroaches.
9. Does your proposal consider Multi Transportation alternatives? (Please describe in detail) None
10. Please identify all amenities and total number of acres they incorporate by complete description. Multiple open spaces, parks, natural areas, and developed amenities. 19 acres/Phase 1 32 acres/Phase 2
11. Number of street lights and separation table as proposed on your site plan. Approximately 60 street lights
12. Will Technology Development be included in this development? Fiber/Internet/TV
13. List the total linear feet and cubic yards for sidewalks.
- Phase 1
- $5850 \text{ linear feet} \times 2 = 11,700 \times 5 \text{ feet in width} = 58,500 \times .33 \text{ feet} = 19305/27 = 715 \text{ cubic yards}$
- Phase 2
- $7125 \text{ linear feet} \times 2 = 14250 \times 5 \text{ feet in width} = 71,250 \times .33 \text{ feet} = 23512/27 = 870 \text{ cubic yards}$
14. Are appropriate storm water controls provided in your proposal? Are these controls completely and accurately reflected on all drawings and plans? Conceptual Stormwater facilities shown, to be fully engineered prior to land disturbance permitting



15. Has a transportation/traffic study been done to predict the impact of anticipated traffic? Has the project been reviewed by all appropriate County and State agencies relating to transportation issues? No
16. Does the proposal provide for utilization of “reuse” water? Is this depicted on the plans? Do the plans provide for storage of “reuse” water? No
17. What is the total capacity for daily Wastewater Management? $270 \times 339 = 91,530$ GPD
18. What is the anticipated maximum daily water consumption? Are low flow fixtures required by the development? 270 GPD per day per unit
19. Has a slope and grade study been done on this development? Does the study reflect density placement? Preliminary evaluation
20. Please identify what public safety needs are being considered for the project? NA
21. Has the Hall County School System been notified of the proposed density for this project? Not at this time
22. Please provide a copy of all private covenants and/or architectural guidelines to be filed regarding this development. To be provided
23. Information as required under Ordinance No. 349 for preliminary plat approval if rezoning involves subdivision. Ordinance No. 349 can be found at www.flowerybranchga.org



CITY STAFF ONLY

Received By: _____

Date: _____ Total Fee: _____



Rezoning Applicant's Response

Mulberry Street

Flowery Branch

(a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. *The proposed use of a R3 is suitable in view of the use of nearby properties.*

(b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. *Currently the project is zoned agriculture. The proposed zoning of R3 will not adversely affect the existing use or usability of the adjacent or nearby property.*

(c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. *No, the property does not have a reasonable economic use as currently zoned as industrial.*

(d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. *The proposed zoning of R3, and a planned 199 single family houses and 144 townhomes unit development would not cause an excessive or burdensome use of streets, facilities, utilities or schools.*

(e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. *The City's Comprehensive Plan shows the area being mixed use in nature, but this area would also be conducive to a neighborhood with varying housing types and prices. According to the Plan, one goal is:*

"3. Housing: Protect neighborhoods and promote diverse and affordable housing that meets the needs of existing and future city residents. Techniques to implement this goal include: residential and planned unit development zoning districts, subdivision regulations, community development plans, neighborhood improvement plans and programs, and housing code enforcement."

This R3 zoning district would promote additional housing options within the City.

(f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal. *Additional residential units within this area would further the growth of this part of the City and County. Due to the surrounding property uses, the property would best be suited for a zoning of the R3 zoning classification.*

(g) Existing use(s) and zoning of the subject property and nearby properties. *Within the immediate area, there are commercial and residential uses.*

(h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under

the existing zoning district classification. *This property has been vacant, due to the topography and creeks, the proposed plan encompasses protection of these areas.*

(i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. *This development would not deter improvement of the adjacent properties. It will increase housing options within the area.*

(j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. *This would not create an isolated zoning district. A mix of single family and attached single family is a compatible to the surrounding areas.*

(k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. *No negative effects would arise due to a change in the use or character of this zoning district.*

(l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. *The environmental impact would be minimal, as all local and state municipality ordinances regarding drainage, erosion, flooding, air and water quality would be met. The sensitive areas located within the site have been protected.*

(m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. *The Comprehensive Map provides for this area to be mixed use. The proposed plan will meet the purpose of the zoning ordinance.*



Development Planning & Engineering, Inc.

Legal Description
City of Flowery Branch
Mulberry Street

20-085

LEGAL DESCRIPTION

All that tract or parcel of land lying and being in Land Lot 117 of the 8th District, City of Flowery Branch, Hall County, Georgia and being more particularly described as follows.

Beginning at the Land Lot Corner common to Land Lots 116, 117, 133 and 134; THENCE North 15 degrees 02 minutes 30 seconds East for a distance of 1214.17 feet to a point on the easterly right-of-way of Flowery Way (50' r/w), said point being THE TRUE POINT OF BEGINNING;

THENCE North 54 degrees 28 minutes 51 seconds West a distance of 79.88 feet to a point;

THENCE along a curve to the right for an arc length of 83.93 feet, having a radius of 97.73 feet, being subtended by a chord bearing North 27 degrees 50 minutes 09 seconds West, for a distance of 81.37 feet to a point;

THENCE North 00 degrees 37 minutes 14 seconds East a distance of 37.65 feet to a point;

THENCE along a curve to the left for an arc length of 161.59 feet, having a radius of 1062.34 feet, being subtended by a chord bearing North 02 degrees 23 minutes 32 seconds East, for a distance of 161.43 feet to a point;

THENCE North 59 degrees 21 minutes 52 seconds East a distance of 550.94 feet to a point;

THENCE North 29 degrees 41 minutes 03 seconds West a distance of 227.76 feet to a point;

THENCE North 60 degrees 06 minutes 17 seconds East a distance of 95.98 feet to a point;

THENCE North 05 degrees 32 minutes 20 seconds West a distance of 505.00 feet to a point;

THENCE North 30 degrees 48 minutes 47 seconds West a distance of 200.02 feet to a point;

THENCE North 60 degrees 07 minutes 29 seconds East a distance of 546.35 feet to a point;

THENCE North 61 degrees 45 minutes 30 seconds West a distance of 170.77 feet to a point;

THENCE North 40 degrees 21 minutes 09 seconds East a distance of 281.72 feet to a point;

THENCE North 62 degrees 53 minutes 14 seconds West a distance of 366.82 feet to a point;

THENCE North 08 degrees 38 minutes 44 seconds West a distance of 3.72 feet to a point;

THENCE North 34 degrees 56 minutes 31 seconds East a distance of 32.42 feet to a point;

THENCE North 56 degrees 32 minutes 25 seconds East a distance of 104.80 feet to a point;

THENCE North 27 degrees 43 minutes 17 seconds East a distance of 60.76 feet to a point;

THENCE North 39 degrees 43 minutes 06 seconds East a distance of 52.39 feet to a point;

THENCE North 46 degrees 23 minutes 29 seconds East a distance of 104.80 feet to a point;

THENCE North 45 degrees 36 minutes 51 seconds East a distance of 102.84 feet to a point;

THENCE North 60 degrees 29 minutes 30 seconds East a distance of 49.12 feet to a point;

THENCE North 54 degrees 07 minutes 44 seconds East a distance of 93.75 feet to a point;

THENCE North 42 degrees 33 minutes 43 seconds East a distance of 80.31 feet to a point located on the westerly right-of-way of Mulberry Street;

THENCE South 21 degrees 44 minutes 30 seconds East a distance of 175.25 feet along said right-of-way to a point;

THENCE along a curve to the right for an arc length of 313.04 feet, having a radius of 2200.00 feet, being subtended by a chord bearing South 17 degrees 39 minutes 56 seconds East, for a distance of 312.77 feet along said right-of-way to a point;

THENCE South 13 degrees 35 minutes 21 seconds East a distance of 195.20 feet along said right-of-way to a point;

THENCE along a curve to the left for an arc length of 57.05 feet, having a radius of 2300.00 feet, being subtended by a chord bearing South 14 degrees 18 minutes 00 seconds East, for a distance of 57.05 feet along said right-of-way along said right-of-way to a point;

THENCE South 15 degrees 10 minutes 26 seconds East a distance of 185.01 feet along said right-of-way to a point;
 THENCE South 56 degrees 37 minutes 14 seconds West a distance of 346.80 feet leaving said right-of-way to a point;
 THENCE South 58 degrees 04 minutes 45 seconds East a distance of 70.72 feet to a point;
 THENCE South 33 degrees 41 minutes 04 seconds East a distance of 326.98 feet to a point;
 THENCE North 68 degrees 43 minutes 53 seconds East a distance of 204.17 feet to a point located on the southwesterly right-of-way of Mulberry Street;
 THENCE South 34 degrees 22 minutes 19 seconds East a distance of 56.13 feet along said right-of-way to a point;
 THENCE South 50 degrees 07 minutes 20 seconds East a distance of 100.00 feet along said right-of-way to a point;
 THENCE South 59 degrees 48 minutes 22 seconds East a distance of 100.00 feet along said right-of-way to a point;
 THENCE South 59 degrees 21 minutes 30 seconds West a distance of 309.92 feet leaving said right-of-way to a point;
 THENCE South 48 degrees 30 minutes 26 seconds East a distance of 170.07 feet to a point;
 THENCE North 47 degrees 46 minutes 21 seconds East a distance of 318.84 feet to a point located on the southwesterly right-of-way of Mulberry Street;
 THENCE along a curve to the right for an arc length of 94.92 feet, having a radius of 425.00 feet, being subtended by a chord bearing South 53 degrees 05 minutes 41 seconds East, for a distance of 94.72 feet along said right-of-way to a point;
 THENCE South 46 degrees 41 minutes 47 seconds East a distance of 67.27 feet along said right-of-way to a point;
 THENCE South 47 degrees 35 minutes 36 seconds West a distance of 347.20 feet leaving said right-of-way to a point;
 THENCE South 27 degrees 38 minutes 32 seconds East a distance of 367.62 feet to a point;
 THENCE South 60 degrees 15 minutes 22 seconds West a distance of 649.98 feet to a point;
 THENCE South 60 degrees 16 minutes 13 seconds West a distance of 352.85 feet to a point;
 THENCE North 48 degrees 12 minutes 16 seconds West a distance of 30.32 feet to a point;
 THENCE North 02 degrees 53 minutes 11 seconds West a distance of 24.24 feet to a point;
 THENCE North 24 degrees 11 minutes 12 seconds West a distance of 30.92 feet to a point;
 THENCE North 40 degrees 44 minutes 55 seconds East a distance of 27.08 feet to a point;
 THENCE North 07 degrees 29 minutes 14 seconds East a distance of 37.47 feet to a point;
 THENCE North 56 degrees 00 minutes 04 seconds West a distance of 35.03 feet to a point;
 THENCE South 78 degrees 44 minutes 58 seconds West a distance of 37.19 feet to a point;
 THENCE North 10 degrees 05 minutes 48 seconds West a distance of 14.68 feet to a point;
 THENCE North 11 degrees 22 minutes 48 seconds East a distance of 35.30 feet to a point;
 THENCE North 06 degrees 31 minutes 58 seconds East a distance of 20.38 feet to a point;
 THENCE North 39 degrees 32 minutes 23 seconds West a distance of 28.59 feet to a point;
 THENCE North 04 degrees 29 minutes 41 seconds West a distance of 33.89 feet to a point;
 THENCE North 00 degrees 17 minutes 51 seconds West a distance of 39.43 feet to a point;
 THENCE North 04 degrees 15 minutes 12 seconds East a distance of 30.56 feet to a point;
 THENCE South 60 degrees 19 minutes 46 seconds West a distance of 742.04 feet to a point, said point being THE TRUE POINT OF BEGINNING.

Said tract contains an area of 48.156 acres more or less.

Together with:

All that tract or parcel of land lying and being in Land Lot 116 and 117 of the 8th District, City of Flowery Branch, Hall County, Georgia and being more particularly described as follows.

Beginning at the Land Lot Corner common to Land Lots 116, 117, 133 and 134; THENCE South 30 degrees 22 minutes 57 seconds East for a distance of 1101.65 feet to a point; THENCE South 30 degrees 21 minutes 16 seconds East for a distance of 218.48 feet to a point, said point being THE TRUE POINT OF BEGINNING;

THENCE North 48 degrees 22 minutes 48 seconds East a distance of 875.57 feet to a point;
THENCE North 11 degrees 52 minutes 38 seconds East a distance of 26.55 feet to a point;
THENCE North 50 degrees 18 minutes 59 seconds East a distance of 47.92 feet to a point;
THENCE North 01 degrees 30 minutes 02 seconds West a distance of 62.59 feet to a point;
THENCE North 13 degrees 27 minutes 39 seconds East a distance of 69.62 feet to a point;
THENCE North 73 degrees 24 minutes 27 seconds East a distance of 32.42 feet to a point;
THENCE North 28 degrees 33 minutes 29 seconds West a distance of 42.32 feet to a point;
THENCE North 17 degrees 38 minutes 29 seconds East a distance of 31.76 feet to a point;
THENCE North 32 degrees 22 minutes 06 seconds East a distance of 80.36 feet to a point;
THENCE North 74 degrees 02 minutes 00 seconds East a distance of 46.63 feet to a point;
THENCE North 12 degrees 58 minutes 57 seconds East a distance of 49.55 feet to a point;
THENCE North 07 degrees 31 minutes 42 seconds West a distance of 50.45 feet to a point;
THENCE North 30 degrees 16 minutes 15 seconds East a distance of 26.90 feet to a point;
THENCE North 10 degrees 19 minutes 38 seconds West a distance of 26.62 feet to a point;
THENCE North 58 degrees 48 minutes 33 seconds East a distance of 24.02 feet to a point;
THENCE North 41 degrees 18 minutes 24 seconds East a distance of 34.46 feet to a point;
THENCE North 16 degrees 53 minutes 06 seconds West a distance of 36.79 feet to a point;
THENCE North 77 degrees 44 minutes 30 seconds East a distance of 26.19 feet to a point;
THENCE North 06 degrees 55 minutes 46 seconds East a distance of 19.96 feet to a point;
THENCE North 58 degrees 22 minutes 20 seconds East a distance of 32.80 feet to a point;
THENCE North 52 degrees 55 minutes 19 seconds East a distance of 39.42 feet to a point;
THENCE North 44 degrees 28 minutes 57 seconds East a distance of 28.81 feet to a point;
THENCE North 38 degrees 27 minutes 51 seconds East a distance of 28.60 feet to a point;
THENCE North 63 degrees 30 minutes 30 seconds West a distance of 21.24 feet to a point;
THENCE North 14 degrees 15 minutes 36 seconds West a distance of 47.62 feet to a point;
THENCE North 41 degrees 07 minutes 00 seconds East a distance of 23.46 feet to a point;
THENCE North 08 degrees 45 minutes 20 seconds West a distance of 35.65 feet to a point;
THENCE North 10 degrees 03 minutes 40 seconds East a distance of 44.66 feet to a point;
THENCE North 13 degrees 34 minutes 23 seconds West a distance of 63.51 feet to a point;
THENCE South 72 degrees 35 minutes 22 seconds West a distance of 35.85 feet to a point;
THENCE North 27 degrees 17 minutes 06 seconds East a distance of 43.82 feet to a point;
THENCE North 29 degrees 54 minutes 21 seconds West a distance of 49.61 feet to a point;
THENCE North 26 degrees 51 minutes 13 seconds West a distance of 95.89 feet to a point;
THENCE North 17 degrees 28 minutes 07 seconds West a distance of 55.39 feet to a point;
THENCE North 23 degrees 53 minutes 55 seconds West a distance of 149.25 feet to a point;
THENCE North 17 degrees 29 minutes 34 seconds West a distance of 47.91 feet to a point;
THENCE North 31 degrees 06 minutes 18 seconds West a distance of 33.89 feet to a point;

THENCE North 12 degrees 15 minutes 25 seconds West a distance of 26.69 feet to a point;
 THENCE North 65 degrees 43 minutes 13 seconds East a distance of 21.21 feet to a point;
 THENCE North 60 degrees 10 minutes 55 seconds East a distance of 787.01 feet to a point;
 THENCE North 21 degrees 58 minutes 54 seconds West a distance of 529.33 feet to a point;
 THENCE North 50 degrees 49 minutes 21 seconds East a distance of 298.67 feet to a point;
 THENCE South 42 degrees 11 minutes 33 seconds East a distance of 439.12 feet to a point;
 THENCE North 47 degrees 05 minutes 23 seconds East a distance of 201.10 feet to a point located on the southwesterly right-of-way of Mulberry Street;
 THENCE South 46 degrees 31 minutes 54 seconds East a distance of 178.61 feet along said right-of-way to a point;
 THENCE South 56 degrees 13 minutes 11 seconds West a distance of 409.48 feet leaving said right-of-way to a point;
 THENCE South 21 degrees 49 minutes 31 seconds East a distance of 400.05 feet to a point;
 THENCE along a curve to the left for an arc length of 289.42 feet, having a radius of 60.00 feet, being subtended by a chord bearing South 09 degrees 09 minutes 33 seconds East, for a distance of 80.01 feet to a point;
 THENCE North 80 degrees 50 minutes 59 seconds East a distance of 12.88 feet to a point;
 THENCE South 14 degrees 42 minutes 21 seconds East a distance of 467.39 feet to a point located on the northwesterly right-of-way of Lanier Parkway State Hwy. #365 (I-985);
 THENCE South 31 degrees 59 minutes 20 seconds West a distance of 146.27 feet along said right-of-way to a point;
 THENCE South 29 degrees 20 minutes 32 seconds West a distance of 506.50 feet along said right-of-way to a point;
 THENCE South 36 degrees 25 minutes 35 seconds West a distance of 258.07 feet along said right-of-way to a point;
 THENCE South 20 degrees 56 minutes 49 seconds West a distance of 240.77 feet along said right-of-way to a point;
 THENCE South 36 degrees 05 minutes 29 seconds West a distance of 215.20 feet along said right-of-way to a point;
 THENCE North 67 degrees 12 minutes 40 seconds West a distance of 10.00 feet along said right-of-way to a point;
 THENCE South 22 degrees 47 minutes 20 seconds West a distance of 701.09 feet along said right-of-way to a point;
 THENCE South 30 degrees 41 minutes 18 seconds West a distance of 300.64 feet along said right-of-way to a point;
 THENCE South 23 degrees 03 minutes 37 seconds West a distance of 301.00 feet along said right-of-way to a point;
 THENCE South 26 degrees 52 minutes 28 seconds West a distance of 325.95 feet along said right-of-way to a point;
 THENCE North 30 degrees 22 minutes 57 seconds West a distance of 1255.51 feet leaving said right-of-way to a point, said point being THE TRUE POINT OF BEGINNING.

Said tract contains an area of 69.806 acres more or less.



Development Planning & Engineering, Inc.

Adjacent Property Owners
City of Flowery Branch
Mulberry Street

20-085



Development Planning & Engineering, Inc.

Adjacent Property Owners
Mulberry Street Rezoning
M1-R3

08117 002053
DONALD SHANE JONES
5533 OAKFERN TRL
FLOWERY BRANCH, GA 30542

08117 002052
CNC PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS ROAD
BUFORD, GA 30518

08117 002051
CARL N. CLARK ESTATE PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS ROAD
BUFORD, GA 30518

08117 002050
CNC PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS ROAD
BUFORD, GA 30518

08117 002049
WILLIAM TERRY MOONEY
MOONEY JOAN
BOX 307 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08117 002062
GLORIA ANN PEAK
2640 LANIER BEACH SOUTH RD.
CUMMING, GA 30041

08117 002016L
GARY LEE PRUITT
5693 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08117 002016E
ELIZABETH I JOHNSON
5707 FLOWERY BRANCH WAY
FLOWERY BRANCH, GA 30542

08117 002042
LILLIE RHONDA MCKENZIE
MCKENZIE JOHN R
5733 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000009
DERRELL CHASTAIN
5737 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000013
ROBERT WAYNE CARROLL III
P O BOX 15424
CHESAPEAKE, VA 23328

08116 000037
CATHY E LONGINO
JOINER NANCY E
6533 BEARING DRIVE
FLOWERY BRANCH, GA 30542

08116 000038
MARTHA N SPARKS
6526 BEARING DRIVE
FLOWERY BRANCH, GA 30542

08116 000043
MICHAEL ERNEST PEKRUL
PEKRUL, SHEILA
6467 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000044
MARIA L WOLSCHLEGER
6473 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000046
ANNA L ROSADO
ROSADO JR EDWIN D
6485 FLOWERY WAY
FLOWERY BRANCH, GA 30542

YOUR ENGINEERING PARTNER WITH THE **EXPERIENCE YOU EXPECT AND THE SERVICE YOU DESERVE**

dpengr.com • 5074 Bristol Industrial Way Suite A Buford, Georgia 30518 • Telephone: 770.271.2868 • Fax: 770.271.0779

08116 000047
KEITH HENRY WEIMER
KARANTZA, KIMBERLY ANN
6501 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000048
CHRISTOPHER PAUL ZETROUER
ZETROUER, TONYA
6512 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000023
THE CHARLES D. & SHIRLEY L. TITSHAW FAMI
1840 MADDOX ROAD
HOSCHTON, GA 30548

08117 002001A
JACOBO VITAL
VITAL MARIA M
5656 MULBERRY STREET
FLOWERY BRANCH, GA 30542

08117 002002
RICKEY L PAYNE
5648 MULBERRY STREET
FLOWERY BRANCH, GA 30542

08117 002005
CARLTON G BINGHAM
P O BOX 61
FLOWERY BRANCH, GA 30542

08117 002003
EDMOND JUNIOR BINGHAM
BINGHAM SANDRA K
5632 MULBERRY ST
FLOWERY BRANCH, GA 30542

08117 002019
TEX R PENLAND
5602 MULBERRY ST
FLOWERY BRANCH, GA 30542

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08117 002016C
JOHNNY A MCCLURE
P O BOX 44
FLOWERY BRANCH, GA 30542

08117 002016A
SUE C. CLARK PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS
BUFORD, GA 30518

08117 002006
CARL N. CLARK ESTATE PROPERTIES, LLC
6164 LAKE LANIER HEIGHTS
BUFORD, GA 30518

08117 002007
BAILEY FAMILY ENTERPRISES, LLC
P.O. BOX 868
FLOWERY BRANCH, GA 30542

08117 002012
BAILEY FAMILY ENTERPRISES, LLC
P.O. BOX 868
FLOWERY BRANCH, GA 30542

08117 002010
DARRELL K TERRY
P O BOX 420
FLOWERY BRANCH, GA 30542

08117 002015
JW BAILEY FAMILY PARTNERSHIP LLC
P.O. BOX 267
FLOWERY BRANCH, GA 30542

08117 002059
JW BAILEY FAMILY PARTNERSHIP LLC
P.O. BOX 267
FLOWERY BRANCH, GA 30542

08117 002048
CARL N CLARK
6164 LAKE LANIER HEIGHTS ROAD
BUFORD, GA 30518

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08116 000045
JOHN W MARSHALL
MARSHALL BILLIE J
6479 FLOWERY WAY
FLOWERY BRANCH, GA 30542

08116 000022 and
08116 000023
THE CHARLES D. & SHIRLEY L. TITSHAW FAMI
1840 MADDUX ROAD
HOSCHTON, GA 30548

YOUR ENGINEERING PARTNER WITH THE *EXPERIENCE* YOU EXPECT AND THE *SERVICE* YOU DESERVE

dpengr.com • 5074 Bristol Industrial Way Suite A Buford, Georgia 30518 • Telephone: 770.271.2868 • Fax: 770.271.0779



Development Planning & Engineering, Inc.

Property Inspection Form
City of Flowery Branch
Mulberry Street

20-085

I, _____
owner of parcels 08117 002008A, 08117002016D, 08117 002016B, 08117 002061, 08117
002001, 08134 000006, hereby grant the City of Flowery Branch Staff and/or City Council to inspect
the above subject property as necessary for the rezoning application process.

Printed name:

Signature, date



1X6 Fascia
 1X4 Frieze
 1X4 Trim
 1X6 Header
 1X8 Band

Stark Properties
Mulberry Park/Flowery Branch Townhomes
“A” Elevation

01.21.21



1x6 Fascia
 1x4 Frieze
 1x4 Trim
 1x6 Header
 1x8 Band

Stark Properties
Mulberry Park/Flowery Branch Townhomes
“B” Elevation

01.21.21



The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e. applicable structural, and MEP design requirements, unit plan / floor plan change).
 ©2021 gmdesigngroup of georgia



Stark Properties
Mulberry Park/Flowery Branch Townhomes
"C" Elevation

1X6 Fascia
 1X4 Frieze
 1X4 Trim
 1X6 Header
 1X8 Band



1x6 Fascia
 1x4 Frieze
 1x4 Trim
 1x6 Header
 1x8 Band

Stark Properties
Mulberry Park/Flowery Branch Townhomes
“A” Elevation

01.22.21



1x6 Fascia
 1x4 Frieze
 1x4 Trim
 1x6 Header
 1x8 Band

Stark Properties
Mulberry Park/Flowery Branch Townhomes
“B” Elevation

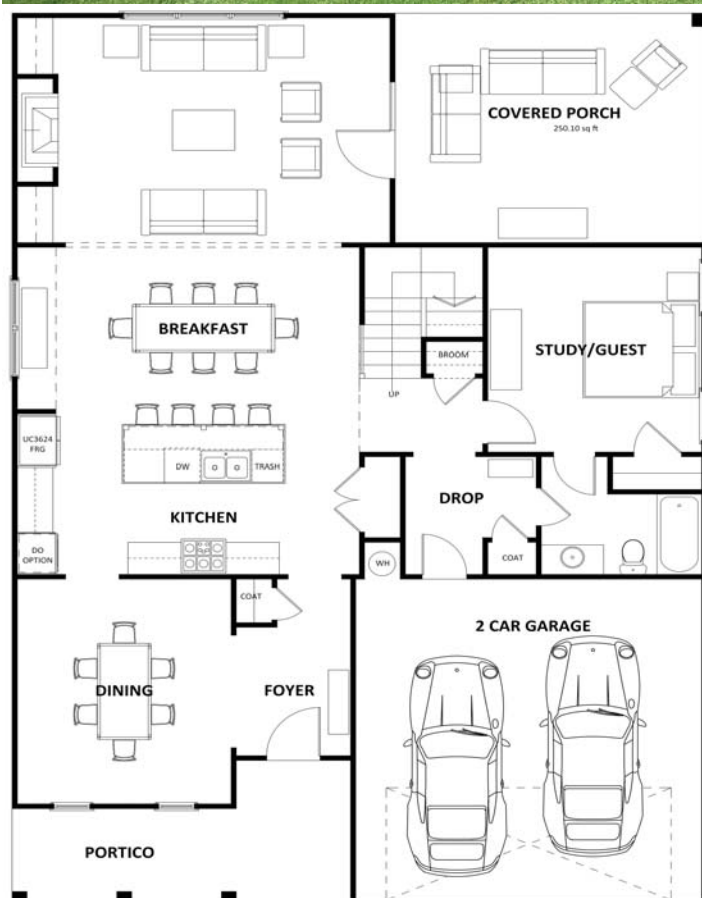
01.22.21



1X6 Fascia
1X4 Frieze
1X4 Trim
1X6 Header
1X8 Band

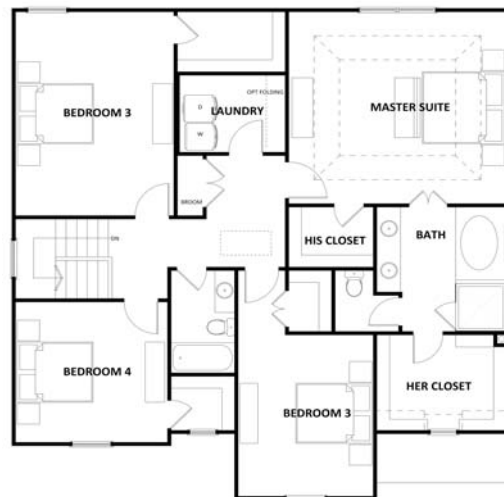
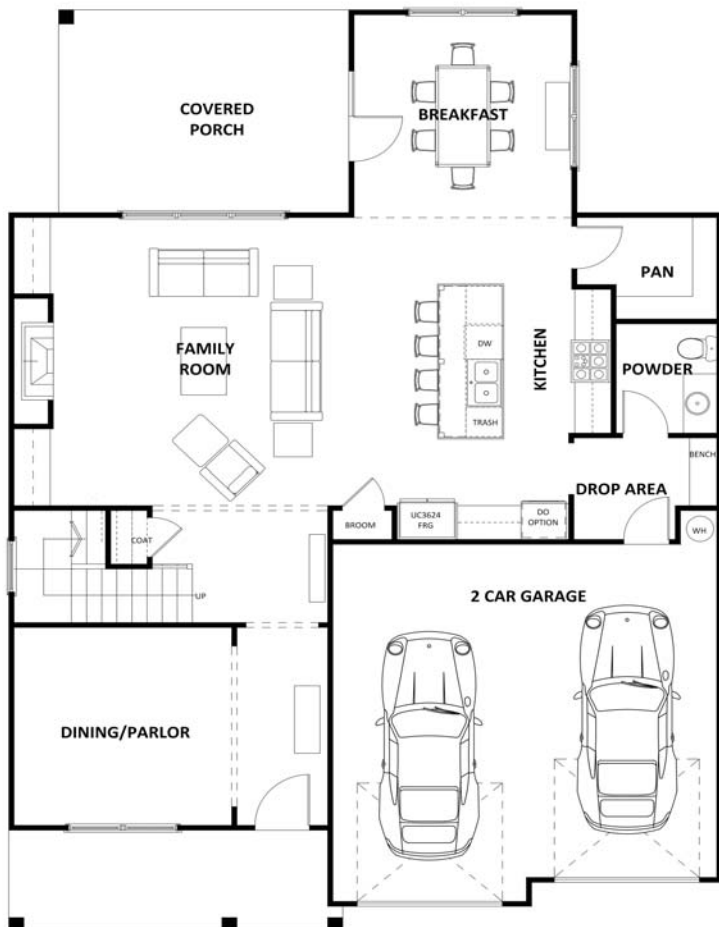
Stark Properties **Mulberry Park/Flowery Branch Townhomes** **"C" Elevation**

01.22.21



For more information on the Maddox please visit www.BowenHomes.com or call 770-271-4414  396

All information above is believed to be accurate but is not warranted. Offer subject to errors, changes, omissions, prior sales and withdrawals without notice. Pictures and renderings are for illustrative purposes only.



"A"



"B"

For more information on the Miller please visit www.BowenHomes.com or call 770-271-4414

397

All information above is believed to be accurate but is not warranted. Offer subject to errors, changes, omissions, prior sales and withdrawals without notice. Pictures and renderings are for illustrative purposes only.



"A"

COVERED
PORCH

"B"

COVERED
PORCH



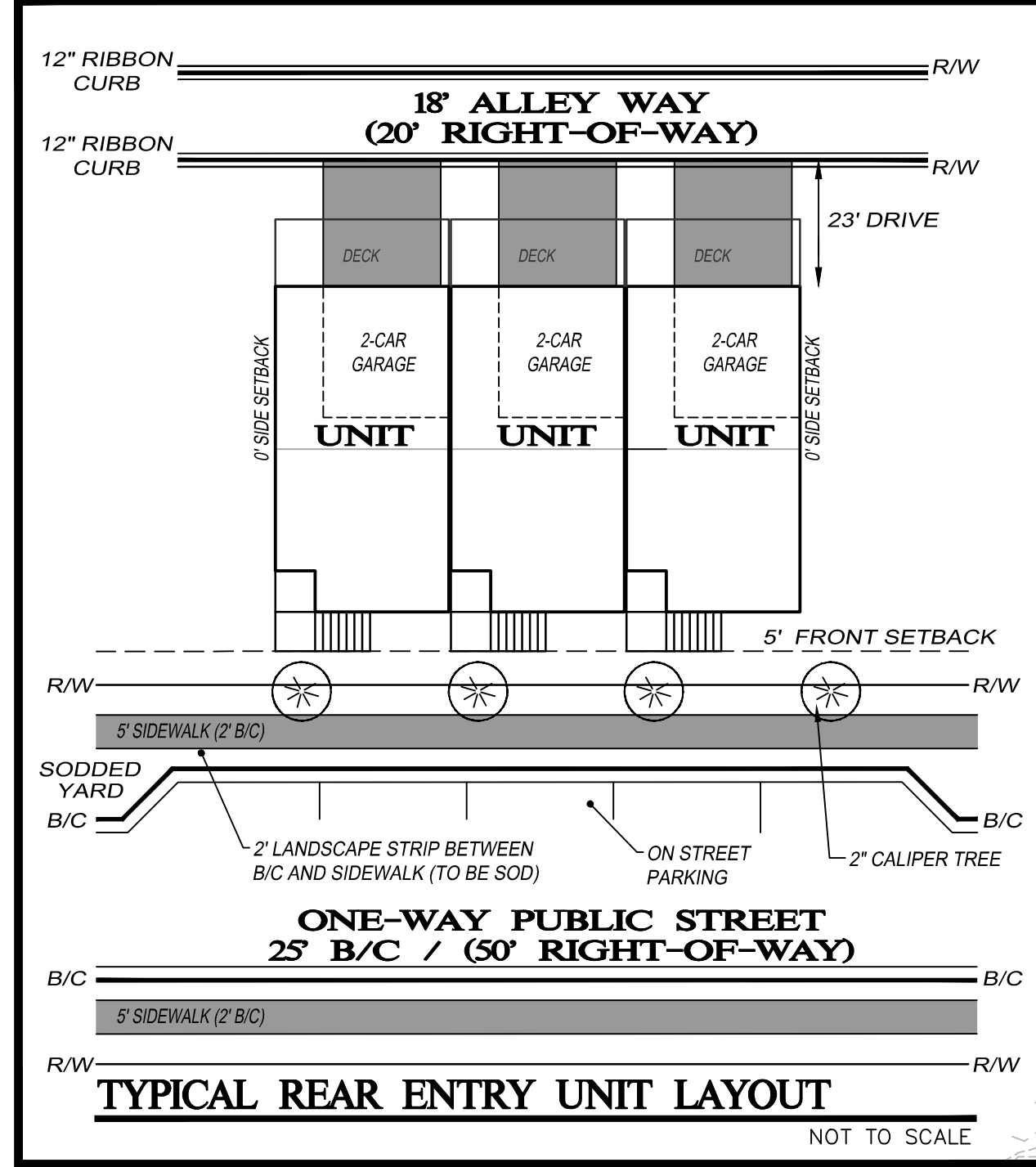
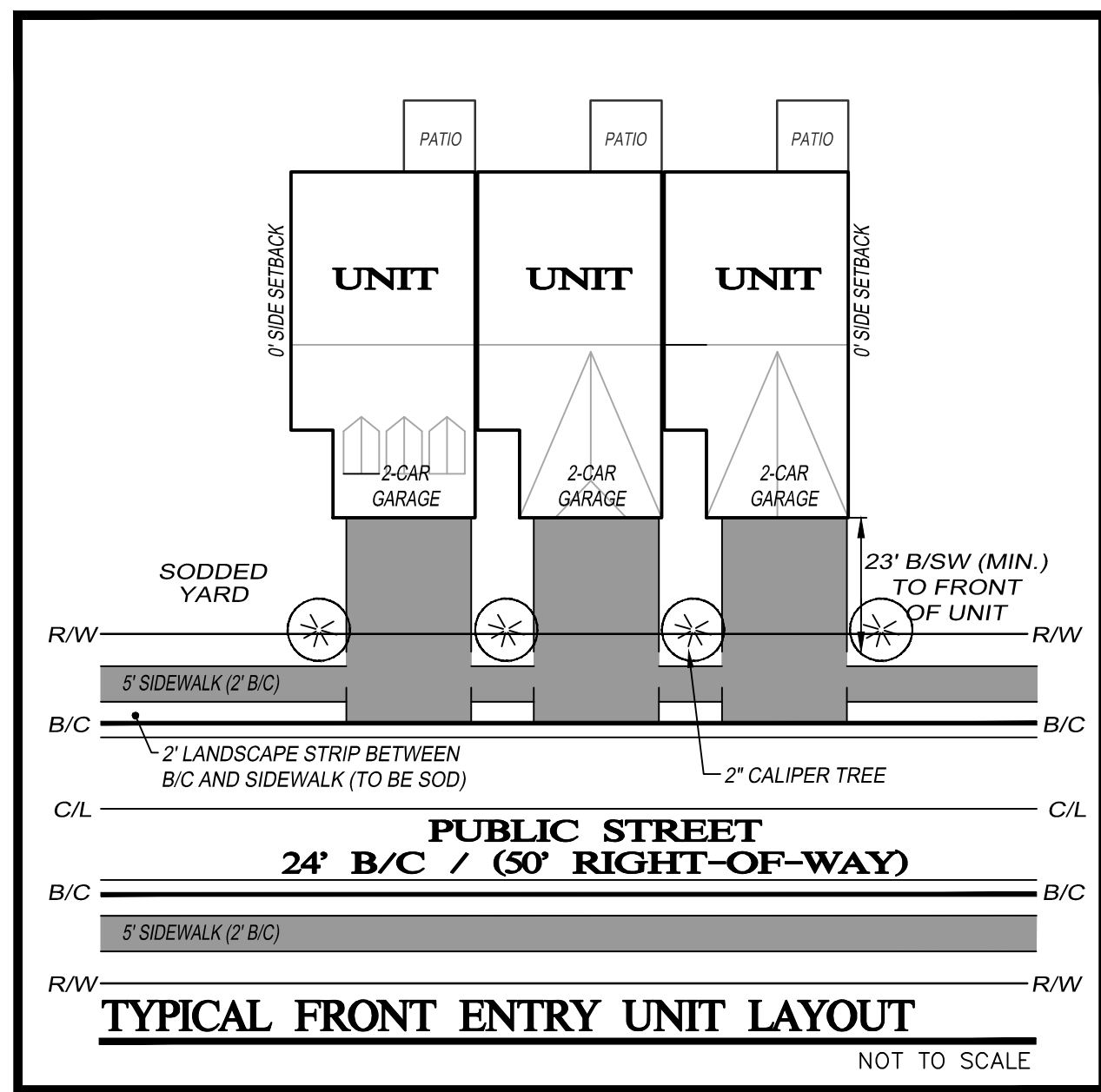
For more information on the Oakley please visit www.BowenHomes.com or call 770-271-4414

398

All information above is believed to be accurate but is not warranted. Offer subject to errors, changes, omissions, prior sales and withdrawals without notice. Pictures and renderings are for illustrative purposes only.

DEVELOPMENT SUMMARY

- EXISTING BOUNDARY ACREAGE: ±117.962 ACRES
- TAX PARCEL: 08117 002008A, 08117 002016D, 08117 002016B, 08117 002061, 08117 002001 and 08134 000006
- EXISTING ZONING: M1
- PROPOSED ZONING: R3
- PHASE 1 DEVELOPMENT SUMMARY:
BOUNDARY ACREAGE: ±48.156 ACRES
TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 55
TOTAL No. PROPOSED TOWNHOME UNITS: 140
GROSS DENSITY: 4.05 LOTS/ACRE
NET DENSITY: 4.33 LOTS/ACRE (±6.17 AC. FLOODPLAIN)
OPEN SPACE/Common Area PROVIDED = ±19 AC. (39%)
TOTAL LENGTH OF STREETS: ±5,850 L.F.
- PHASE 2 DEVELOPMENT SUMMARY:
BOUNDARY ACREAGE: ±69.806 ACRES
TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 144 (LOT #'S 100-243)
GROSS/NET DENSITY: 2.06 LOTS/ACRE
OPEN SPACE/Common Area PROVIDED = ±32 AC. (46%)
TOTAL LENGTH OF STREETS: ±7,125 L.F.
- MINIMUM SINGLE-FAMILY DETACHED LOT SIZE: (SEE TYPICAL LOT DETAIL)
- PROPOSED SETBACKS SINGLE-FAMILY DETACHED:
FRONT - 20'
REAR - 25'
SIDE - 5'
- BOUNDARY INFORMATION BASED ON SURVEY PROVIDED BY CLIENT.
- A PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN A FLOOD HAZARD AREA AS PER CITY OF FLOWERY BRANCH F.I.R.M. COMMUNITY PANEL NO. 13139C0291G, DATED APRIL 4, 2018.
- TOPOGRAPHIC AND UTILITY INFORMATION BASED ON HALL COUNTY GIS. DATUM IS MEAN SEA LEVEL.
- WATER AND SANITARY SEWER SERVICE TO BE PROVIDED BY THE CITY OF FLOWERY BRANCH.
- ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.
- SITE PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE BASED ON ACTUAL FIELD CONDITIONS.



PHASE 1 DEVELOPMENT

PROPOSED REAR ENTRY UNIT
22' x 55' FOOTPRINT

PROPOSED PHASE II SEWER ACCESS

PROPOSED FRONT ENTRY UNIT
24' x 50' FOOTPRINT

PHASE 2 DEVELOPMENT

COMPASS POINT PHASE 2-C
COMMON AREA

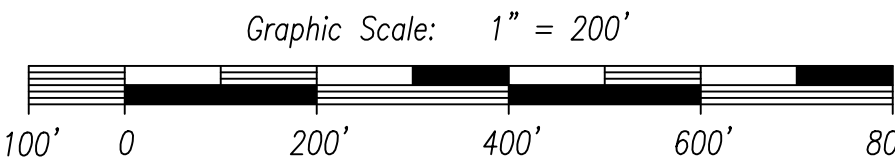
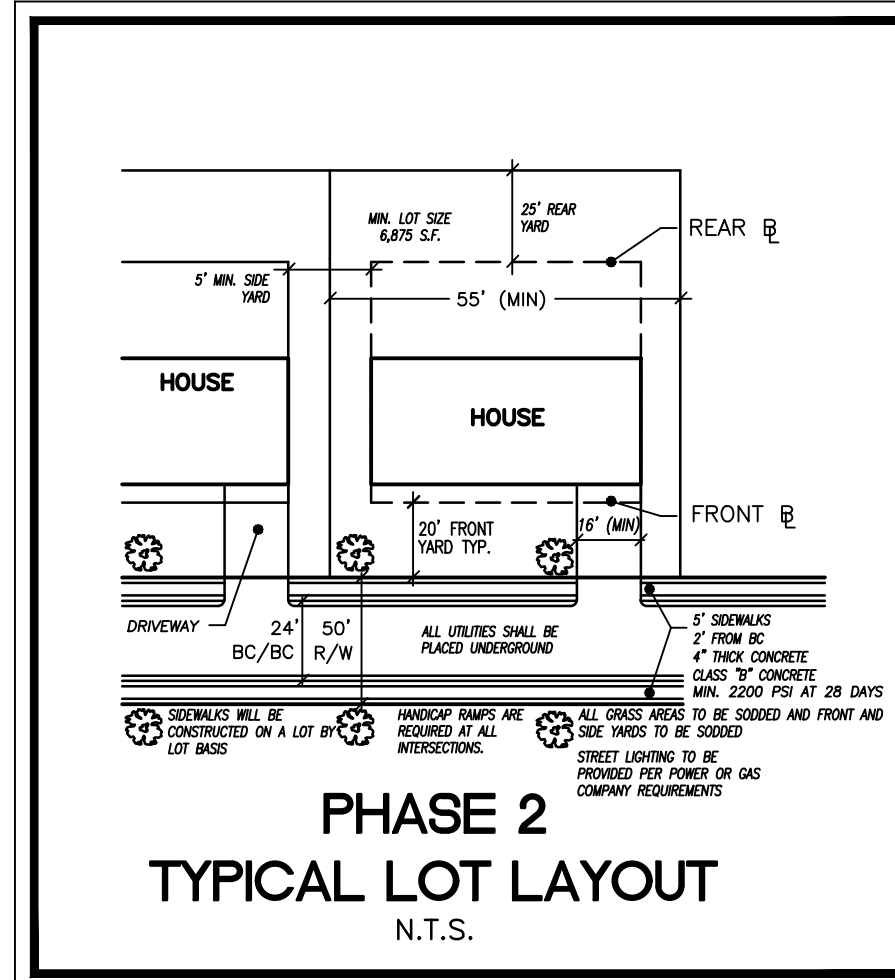
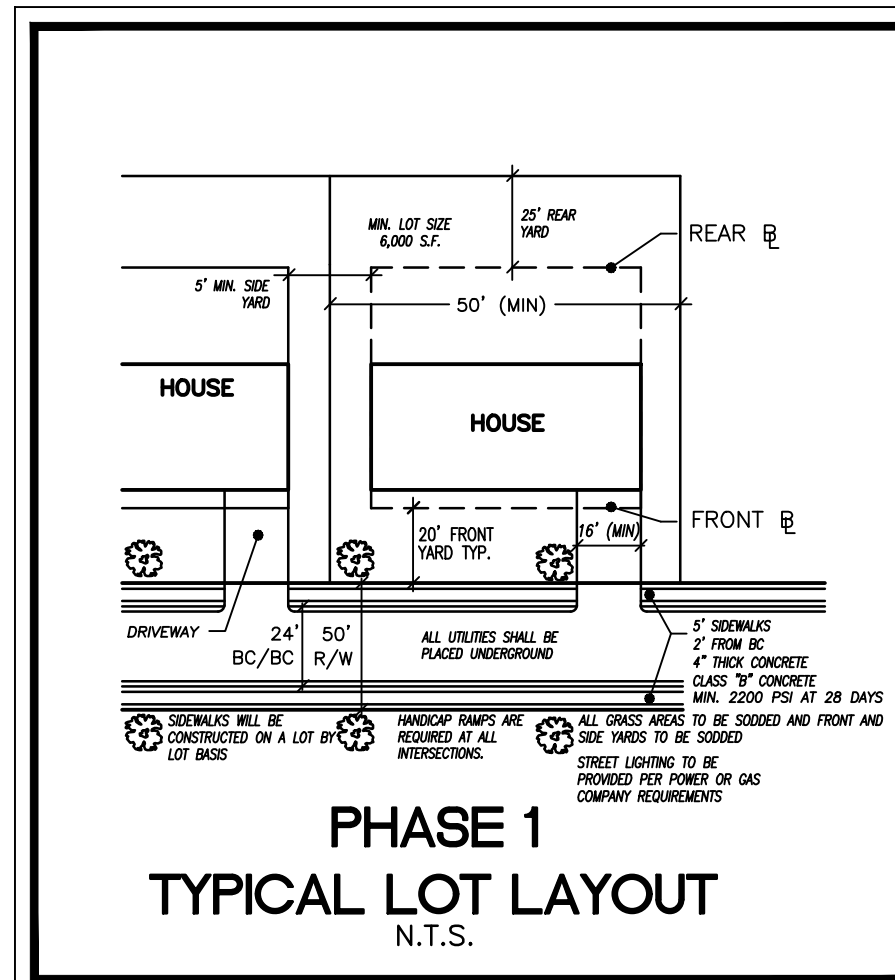
COMPASS POINT PHASE 3

R-3 BUFFER REDUCTIONS:

- REMOVE 40' NATURAL BUFFER ADJACENT TO PARCEL'S 08117 002016E, 08117 002050, 08117 002051, 08117 002052, 08117 002053.

R-3 VARIANCE REQUESTED:

- BUILDING SETBACKS PER TYPICAL SINGLE-FAMILY DETACHED LOT LAYOUTS.
- NO MINIMUM SETBACKS REQUIRED FOR TOWNHOMES. TOWNHOMES PER TYPICAL LAYOUT DETAIL PROVIDED.



5074 BRISTOL INDUSTRIAL WAY
SUITE A
BUFORD, GEORGIA 30518
(770) 271-2868
www.dpengr.com

PREPARED FOR:

STARK LAND DEVELOPMENT
3719 WINDER HWY.
FLOWERY BRANCH
GEORGIA 30542

PROJECT NAME:

MULBERRY STREET

TASK:

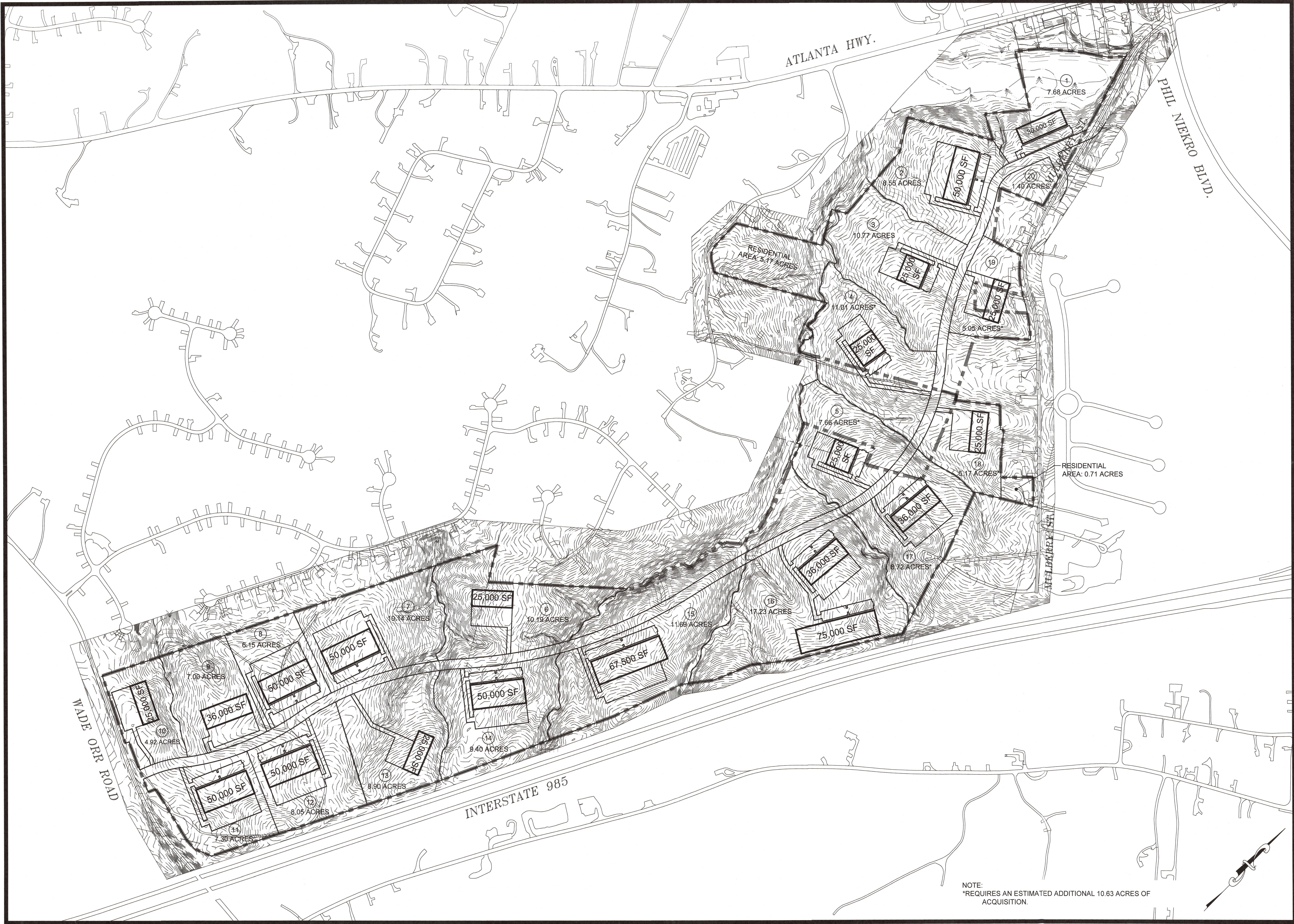
CONCEPTUAL LAND PLAN

PROJECT INFORMATION:

MULBERRY STREET
Project Name
20-085
Project Number
MULBERRY STREET
Project Address
116 AND 117
Land Lot No.(s)

District
CITY OF FLOWERY BRANCH
HALL COUNTY, GA
County, State

DATE	REVISION	No.	1	2	3	4	5
		DESIGN	AS SHOWN				
		KWB DRAWN	SCALE				
			1 of 1				
		CHECKED	SHEET				
		12/02/20	20-085				
		DATE	PROJECT No.				



Rochester & Associates, Inc.
425 Oak Street N.W. • Gainesville, Georgia 30501
(770)718.0600 (770)718.9090 Fax • www.rochester-assoc.com

CONCEPT PLAN
FOR

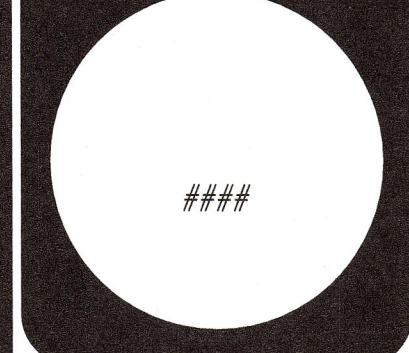
ADVENTURES IN MISSIONS

LAND LOTS 116, 117, & 134
DISTRICT 1, CITY OF GAINESVILLE
8th DISTRICT, CITY OF GAINESVILLE
HALL COUNTY, GEORGIA

REVISIONS	
NO.	DESCRIPTION

ANY CHANGES OR ALTERATIONS MADE TO THESE CONSTRUCTION DRAWINGS WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT HEREON AND ANY LIABILITY ASSOCIATED WITH THESE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE ARCHITECT. ANY CHANGES ARE KEPT ON FILE FOR VERIFICATION OF ANY CHANGES.

GRAPHIC SCALE
125' 0' 250' 500'



SHEET
1
OF
1

DATE: 1.17.2019
JOB NO.
SCALE: 1"=250'
DWG NO.
DRAWN BY: MDS

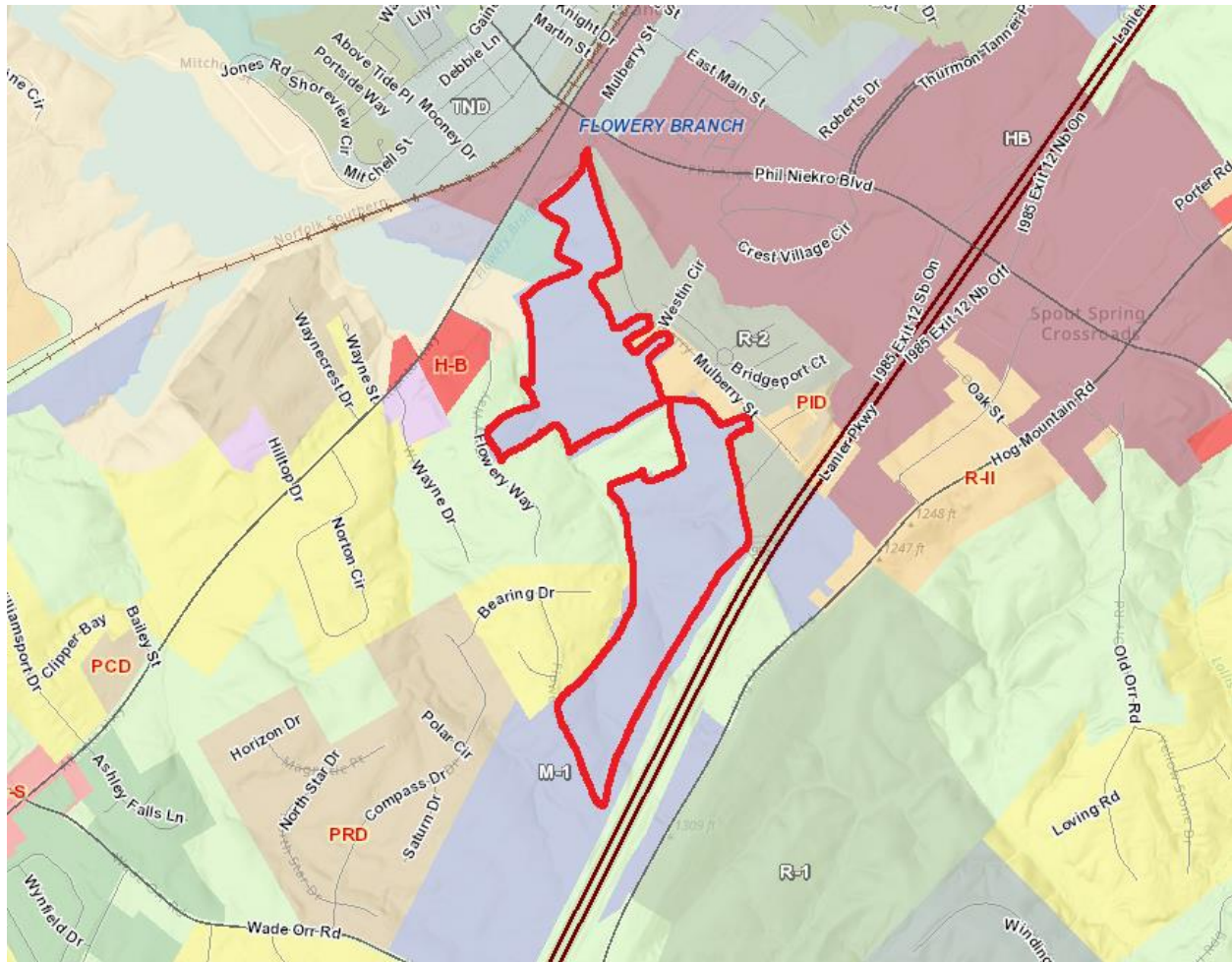


Staff Report
Stark Land Development Rezoning Request(s)
Ordinances 625-630

Request

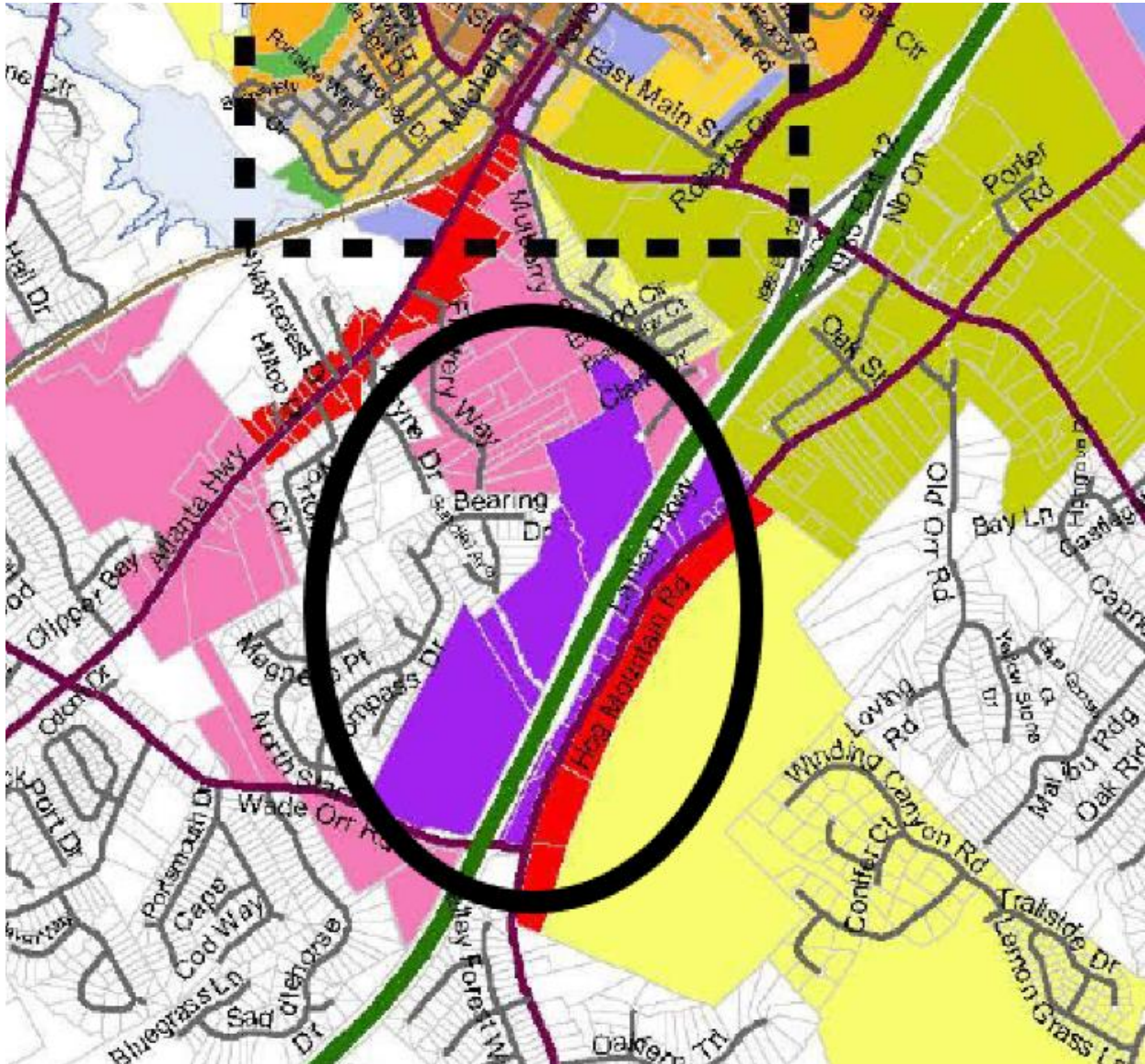
A request from Stark Land Development for the rezoning of six (6) parcels of land totaling 118 +/- acres of land from M-1 (Light Industrial) to R3 (Residential Multi-Family). The parcels for consideration are identified as follows: 08117 002008A, 08117 002014D, 08117 002014B, 08117 002061, 08117 002001, & 08134 000006.

Approximate location of all six parcels:

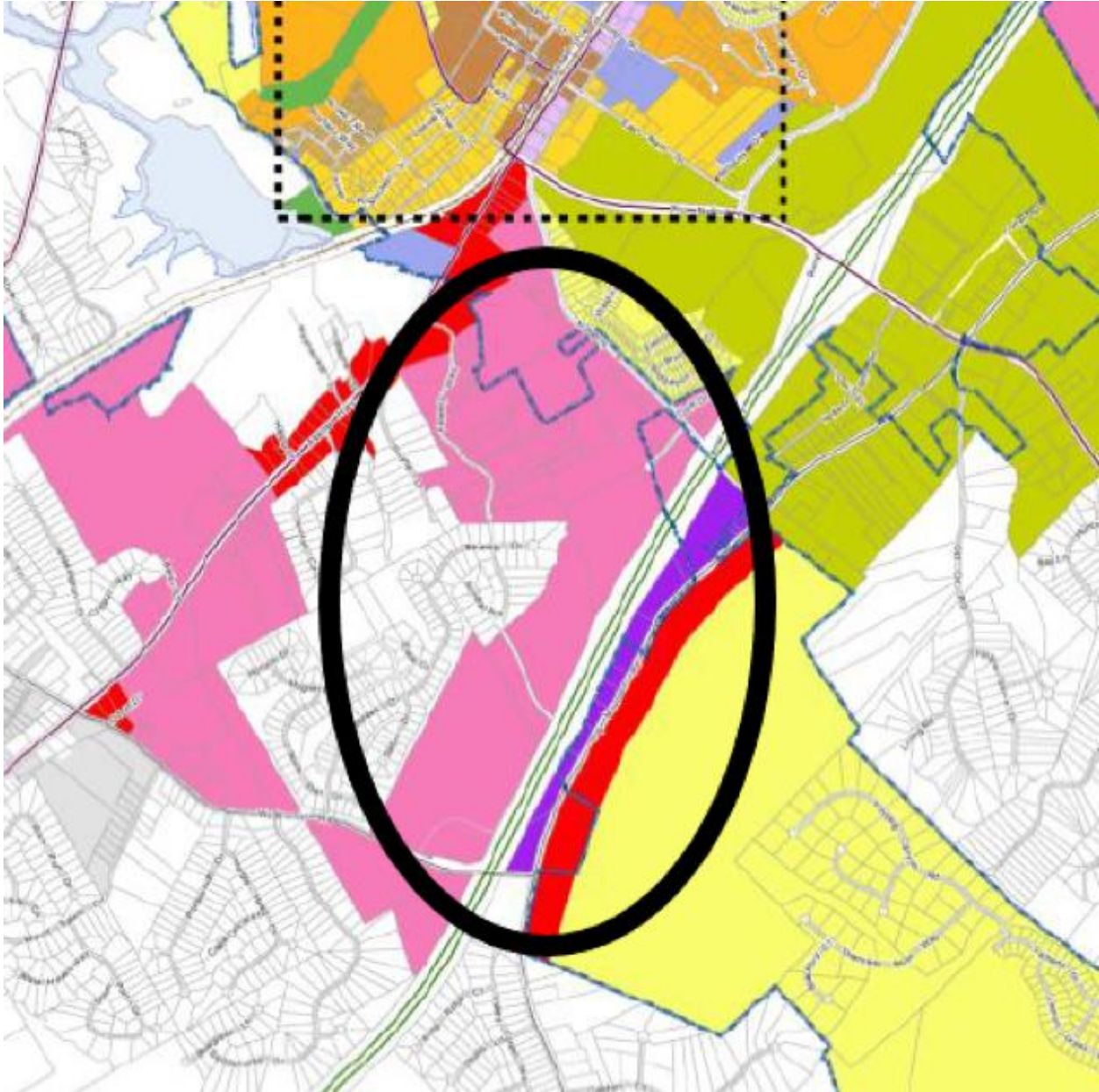




Comprehensive Plan



Currently, the parcels in question are designated as part of the “Industrial Employment” character area by the comprehensive plan. However, prior to these parcels being annexed and rezoned from R-2, A, and AR III to their current M-1 designation in 2014, the comprehensive plan labeled this area as “Mixed-Use”.



The “mixed-use” designation is more in-line with the City’s vision of an active, vibrant downtown supported by nearby residential. As the City has done on past projects, this proposed residential use, with its close proximity to downtown, can be viewed holistically as a large mixed-use project. The downtown as the commercial/retail component served by the developments on East Main, the TRG apartments, and Summit Lake creating a multi-faceted, cohesive, walkable, large scale mixed-use area.



If the project is approved, staff recommends updating the (or reverting) the character area to mixed-use.

Analysis

Flowerly Branch Zoning Ordinance Article 37 Rezoning and Conditional Use Applications

Sec. 34.7. - Analysis Requirements.

Applications to amend the official zoning map and applications for conditional uses shall provide a written analysis comparing the proposed action with the criteria in this Section. A zoning map amendment or conditional use application may be justified only if it bears a reasonable relationship to the public health, safety, morality, or general welfare, and after consideration of the analysis requirements which may in individual cases be considered criteria relevant to Zoning Administrator in making recommendations and by the Governing Body in the decision-making process.

Staff Response:

- (a) Whether the proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property. *Yes, a residential use is appropriate for this site and the surrounding area. It will help serve the downtown commercial/retail area.*
- (b) Whether the proposal will adversely affect the existing use or usability of adjacent or nearby property. *The development will not adversely affect the area and will in fact enhance it.*
- (c) Whether the property to be affected by the proposal can be used in accordance with the existing regulations and has a reasonable economic use as currently zoned. *Yes, current zoning of M-1 (Light Industrial) was previously (in 2014) deemed appropriate. However, the land has sat vacant since the rezoning occurred and may be challenged for M-1 use due to streams on the property and lack of large vehicular traffic.*
- (d) Whether the proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools. *It is staff's opinion that the use will not create any unnecessary burdens.*
- (e) Whether the proposal is in conformity with the policy and intent of the comprehensive plan including but not limited to the character area map and future land use plan map. *Currently, the Comprehensive Plan denotes this area as part of the "Industrial Employment" character area. However, prior to the 2014 annexation/rezoning, the area was designated as "Mixed-Use" and staff feels this is the proper designation and, if this project is approved, the "Mixed-Use" designation should be reinstated.*
- (f) Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the proposal.

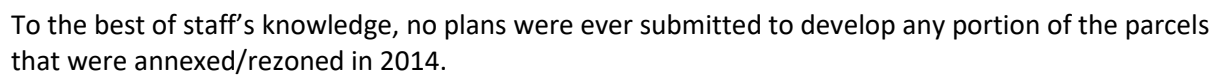
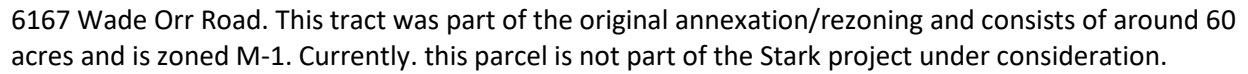


The number of streams and lack of large vehicular entrance capabilities may be harmful to the current M-1 zoning district designation.

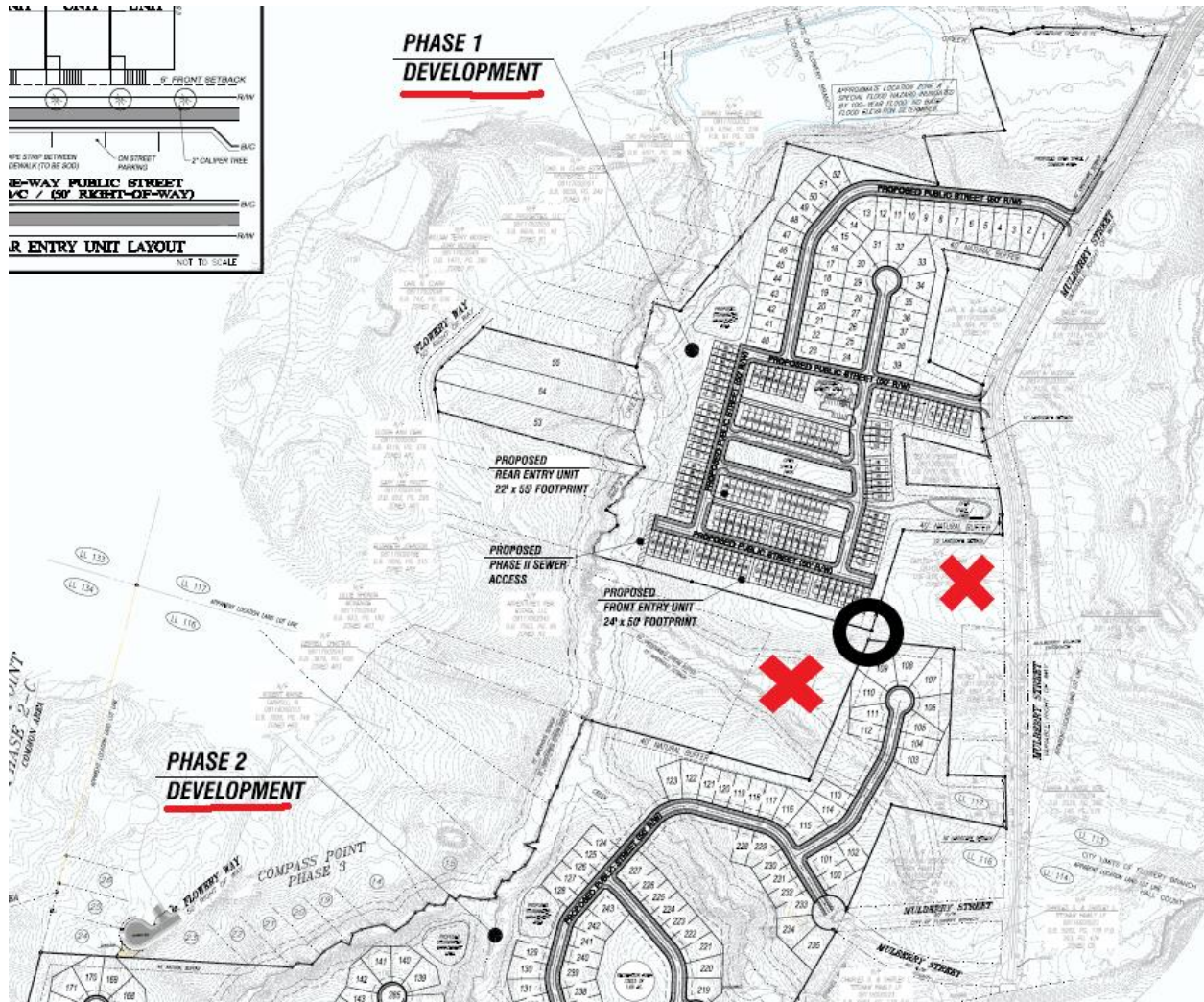
- (g) Existing use(s) and zoning of the subject property and nearby properties. *Currently vacant, the proposed use will fit in with, and enhance, the Mulberry/Phil Niekro corridor leading into downtown Flowery Branch.*
- (h) Existing value of the property under the existing zoning district classification, the extent to which the property value of the subject property is diminished by the existing zoning district, and the value of the property under the proposed zoning district; if such information is provided by the applicant or can be discerned. This consideration may include the length of time the property has been vacant or unused as currently zoned and efforts taken by the property owner(s) to use the property or sell the property under the existing zoning district classification. *Staff does not have a specific number regarding property value, but the current zoning classification of Light Industrial has not warranted any proposed development on the site(s) since its annexation/rezoning in 2014.*
- (i) Whether a proposed zoning map amendment or conditional use approval will be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations. *Staff does not feel that the proposed will be a deterrent but rather an enhancement to the surrounding area and a positive impact for downtown.*
- (j) The possible creation of an isolated zoning district unrelated to adjacent and nearby districts. *N/A*
- (k) Possible effects of the change in zoning district map, or change in use, on the character of a zoning district. *The proposed use will enhance the character of the existing district and surrounding area in staff's opinion.*
- (l) The possible impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. *The development, if approved, will need to go through all the required development reviews to ensure all applicable codes and requirements are met.*
- (m) The relation that the proposed map amendment or conditional use bears to the purpose of the overall zoning scheme and the purposes of this Zoning Ordinance. *The proposed development will enhance the surrounding area and meet the intent of the Zoning Ordinance.*

History

In 2014, the parcels in question were annexed and/or rezoned from multiple zoning (A, A III, R2) to M-1. There was no specific site plan associated with this project. However, a large industrial park was envisioned and recently Rochester Engineering provided a potential site plan for the area. This plan would require the City or developer to provide new public infrastructure. Additionally, this plan includes



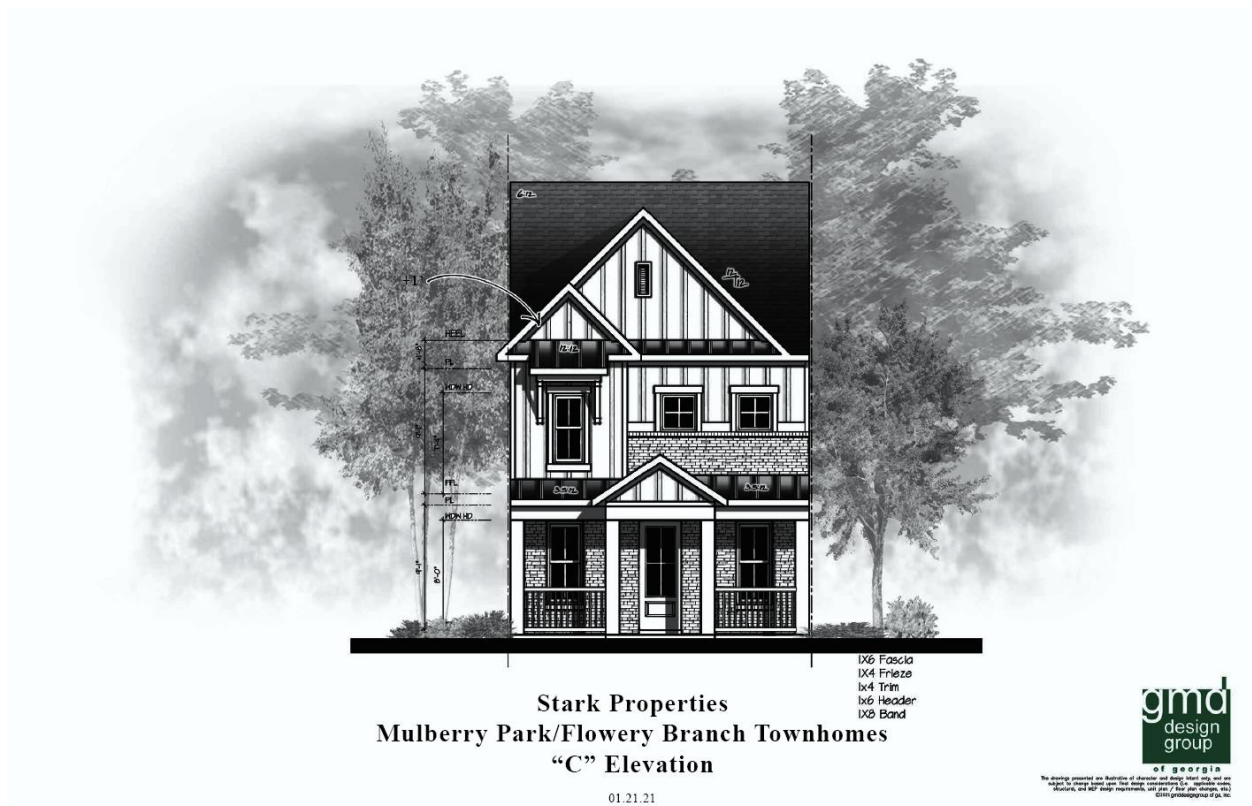
In reviewing the initial submittal Staff had concerns regarding the lack of connectivity between the two phases. Applicant would need to acquire additional land (possibly one or both parcels marked with a red X) in order to connect the phases.



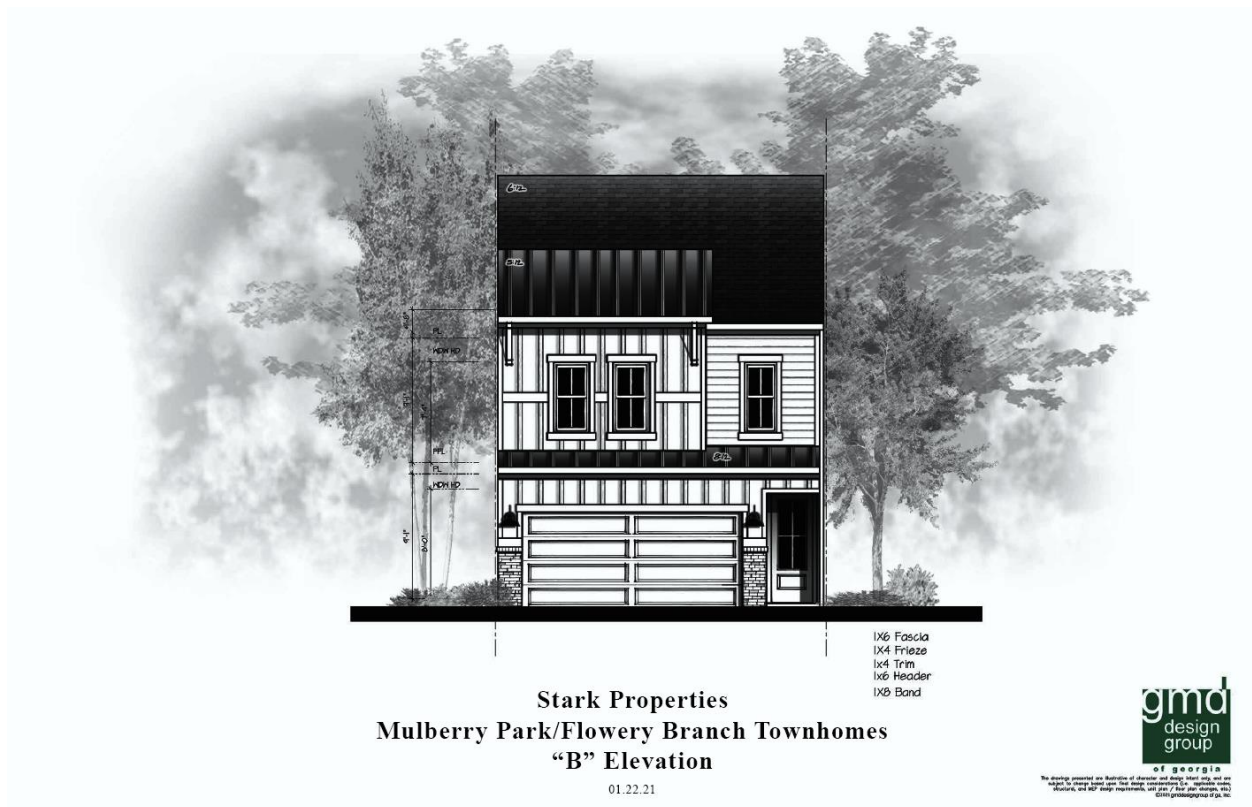
The applicant needs to have the entirety of the six parcels properly zoned for a higher density single family detached/townhome subdivision (R3) as part of the purchase agreement. The applicant is hesitant to acquire more land without having the proper zoning designation in place. In order to achieve this goal, and still meet the City's desire for a cohesive two-phase development, staff recommends rezoning all six parcels to the requested R3 zoning. but restricting phase two (parcels 08117 002001 & 08134 000006) as follows:

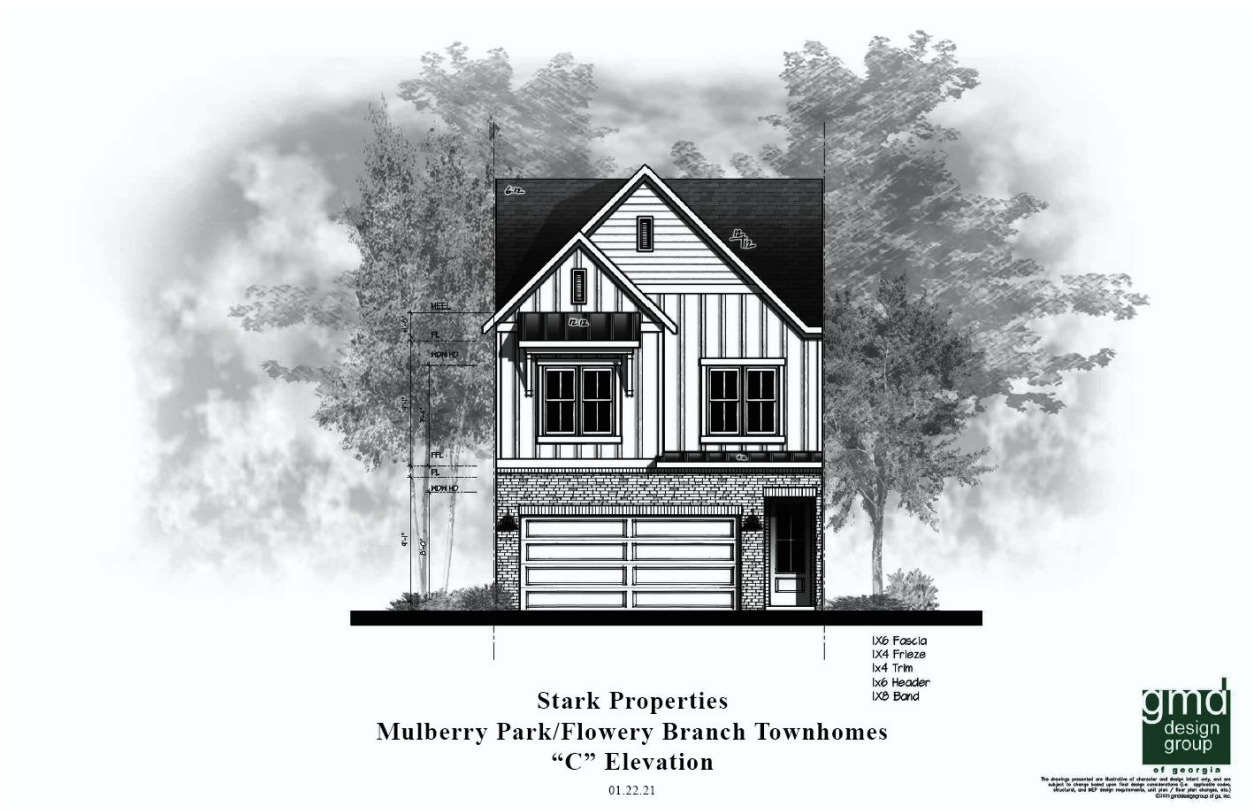
1. No permits shall be issued unless connectivity with phase one is achieved in a manner satisfactory to Flowery Branch Mayor and Council.
2. A revised site plan shall be submitted to Mayor and Council for approval prior to the issuance of any permits.













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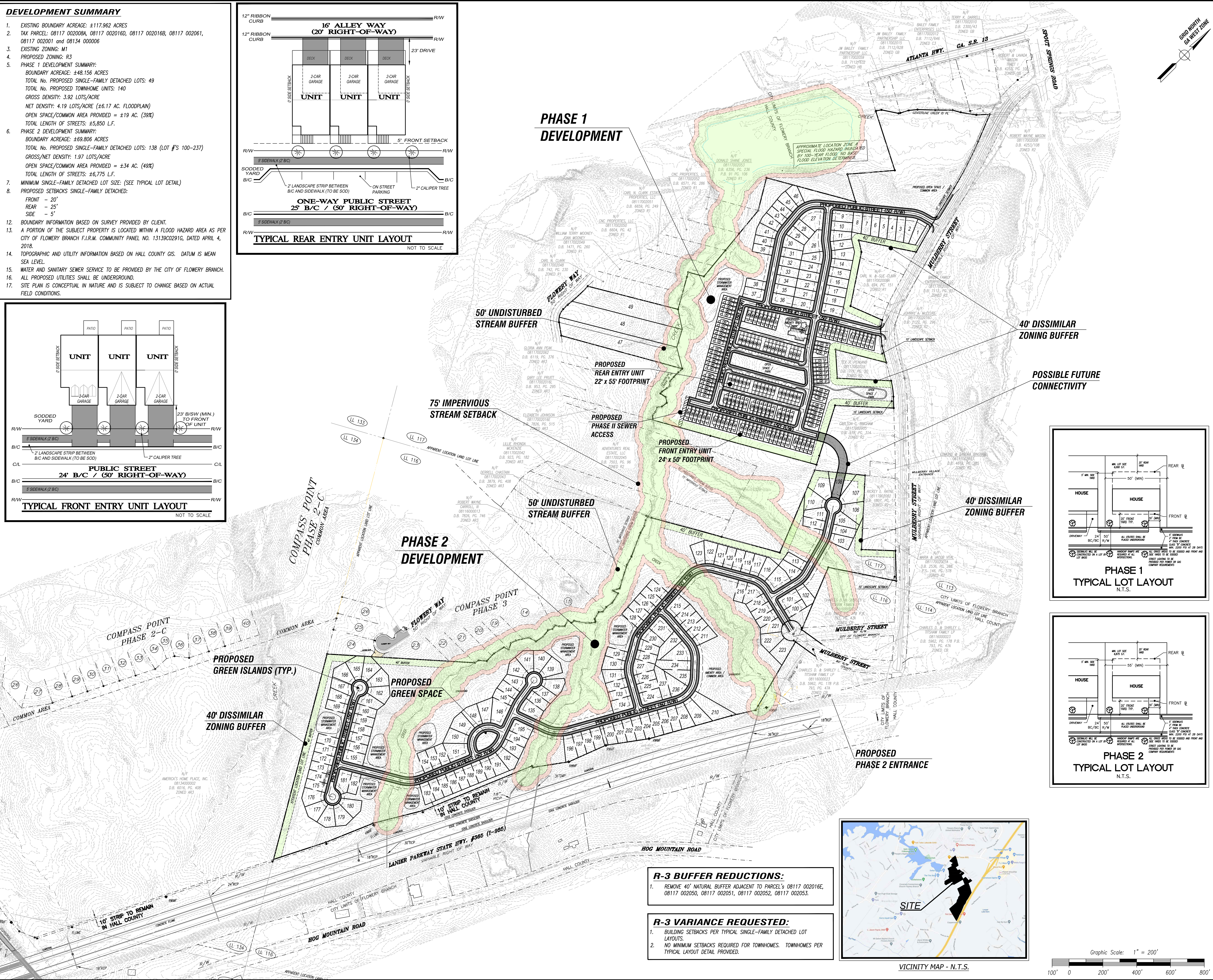
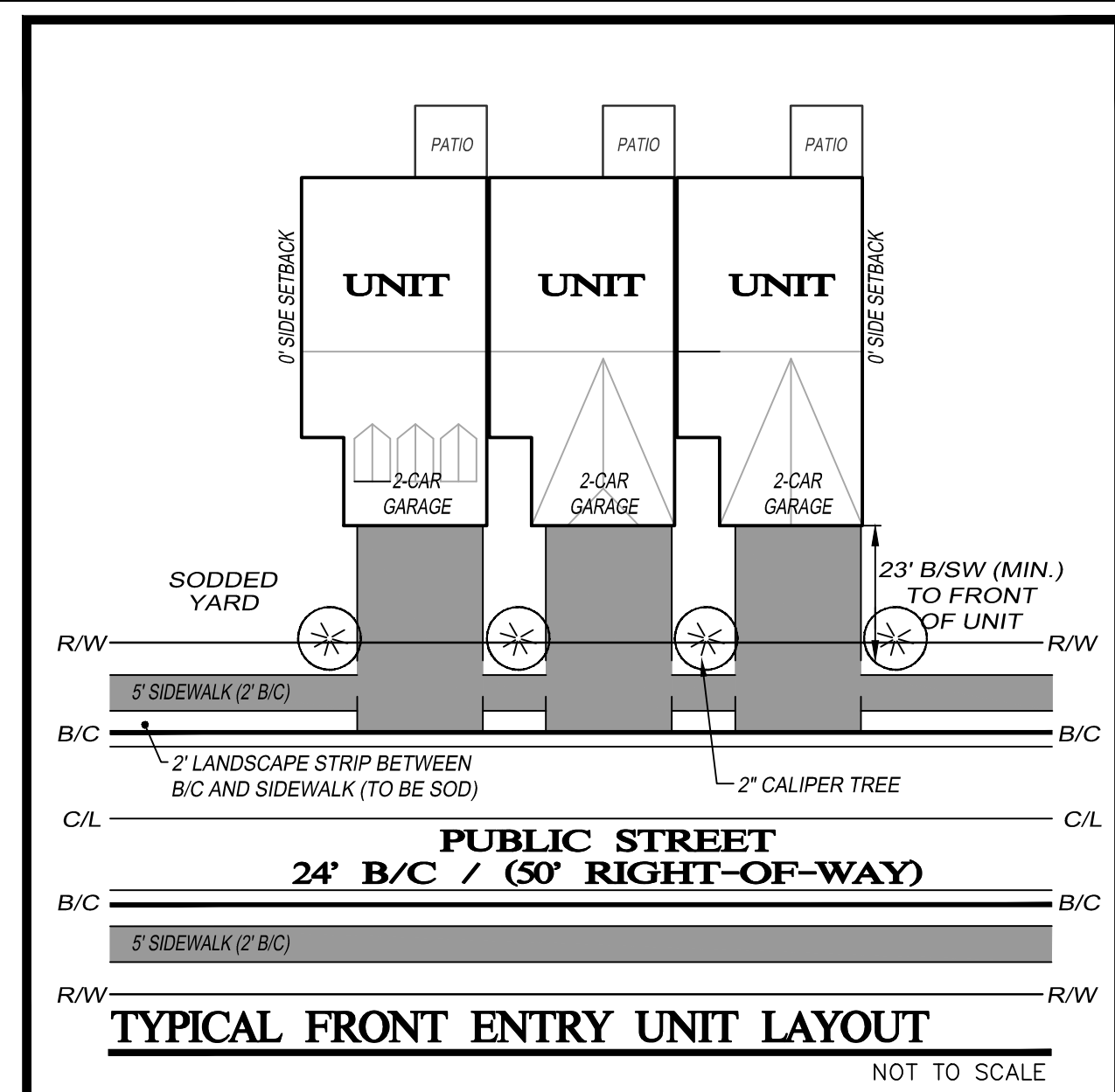
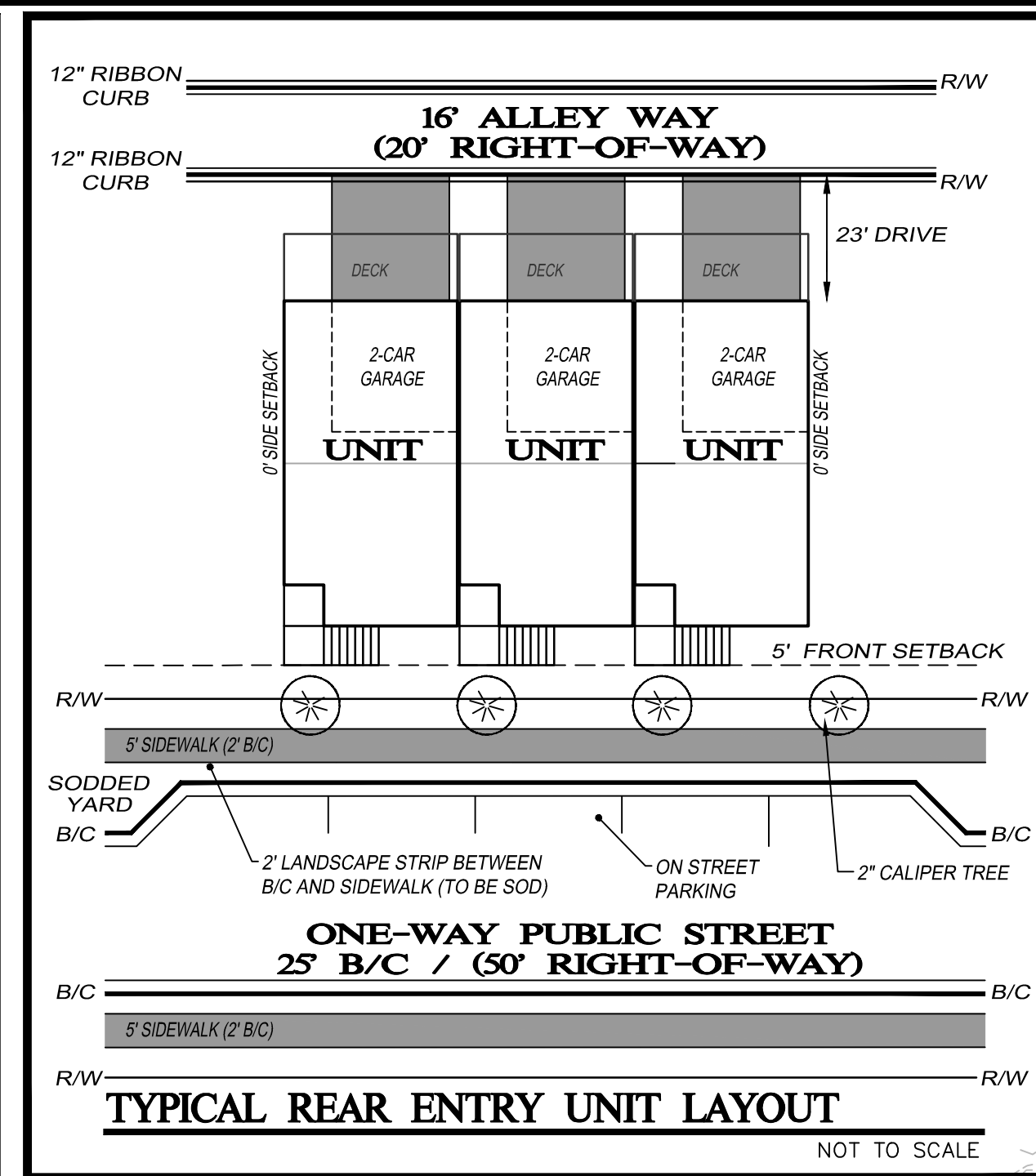


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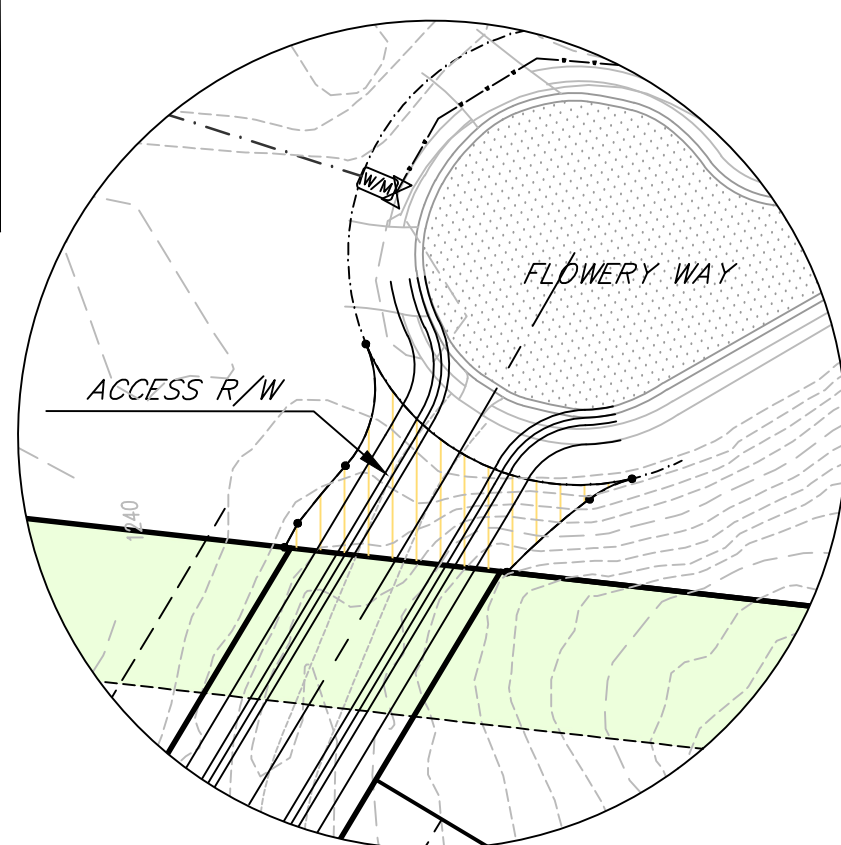
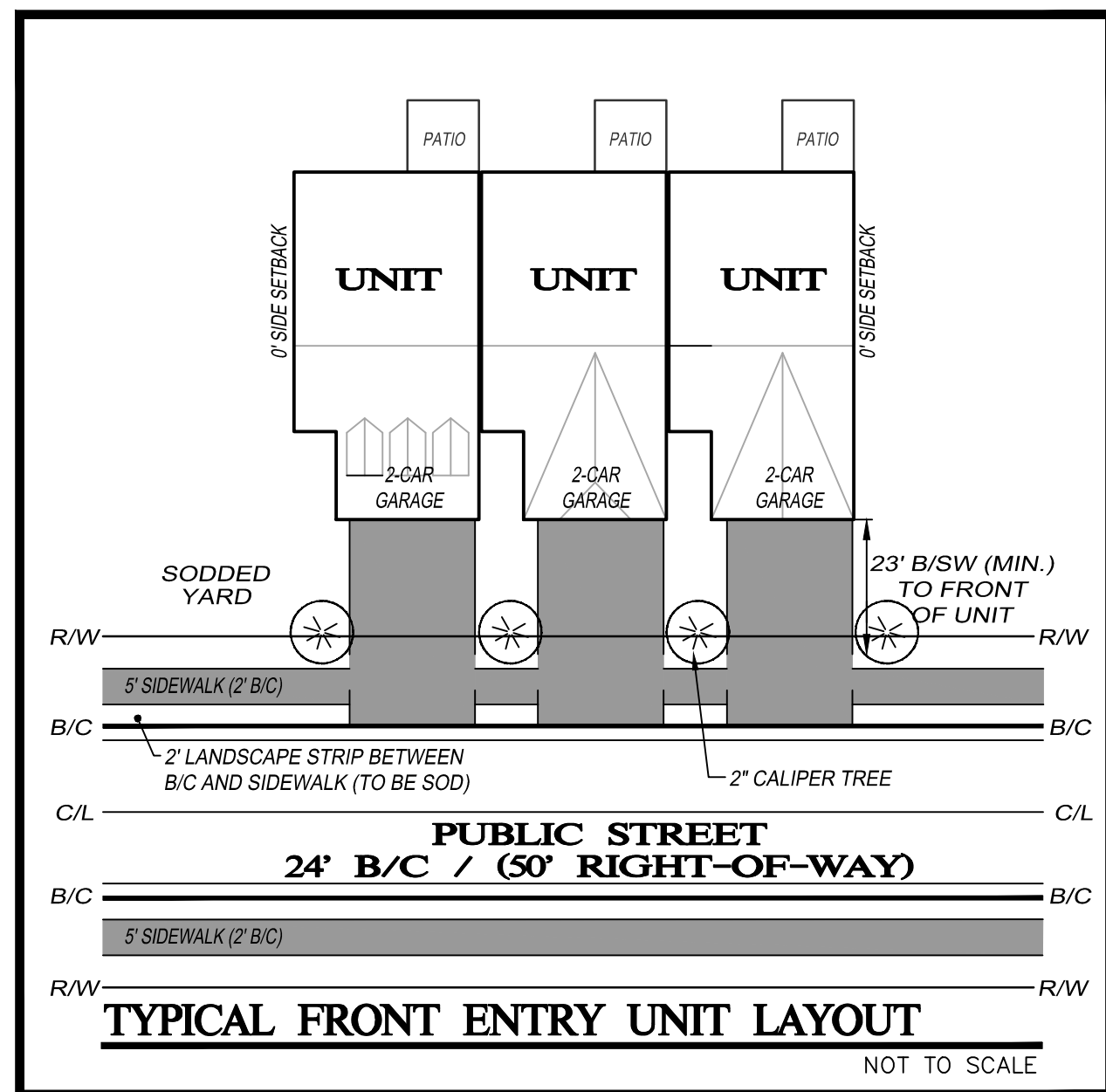
1. EXISTING BOUNDARY ACRES: ±117,962 ACRES
2. TAX PARCEL: 08117 002008A, 08117 002016D, 08117 002016B, 08117 002061, 08117 002001 and M134 000006
3. EXISTING ZONING: M1
4. PROPOSED ZONING: R3
5. PHASE 1 DEVELOPMENT SUMMARY:
 - BOUNDARY ACRES: ±48.156 ACRES
 - TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 49
 - TOTAL No. PROPOSED TOWNHOME UNITS: 140
 - GROSS DENSITY: 3.92 LOTS/ACRE
 - NET DENSITY: 4.19 LOTS/ACRE (±6.17 AC. FLOODPLAIN)
 - OPEN SPACE/Common Area PROVIDED = ±19 AC. (39%)
 - TOTAL LENGTH OF STREETS: ±5,850 L.F.
6. PHASE 2 DEVELOPMENT SUMMARY:
 - BOUNDARY ACRES: ±69,806 ACRES
 - TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 138 (LOT #S 100-237)
 - GROSS/NET DENSITY: 1.97 LOTS/ACRE
 - OPEN SPACE/Common Area PROVIDED = ±34 AC. (49%)
 - TOTAL LENGTH OF STREETS: ±6,775 L.F.
7. MINIMUM SINGLE-FAMILY DETACHED LOT SIZE: (SEE TYPICAL LOT DETAIL)
8. PROPOSED SETBACKS SINGLE-FAMILY DETACHED:
 - FRONT - 20'
 - REAR - 25'
 - SIDE - 5'
12. BOUNDARY INFORMATION BASED ON SURVEY PROVIDED BY CLIENT.
 - A PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN A FLOOD HAZARD AREA AS PER CITY OF FLOWERY BRANCH F.I.R.M. COMMUNITY PANEL NO. 13139C0291G, DATED APRIL 4, 2018.
14. TOPOGRAPHIC AND UTILITY INFORMATION BASED ON HALL COUNTY GIS. DATUM IS MEAN SEA LEVEL.
15. WATER AND SANITARY SEWER SERVICE TO BE PROVIDED BY THE CITY OF FLOWERY BRANCH.
16. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.
17. SITE PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE BASED ON ACTUAL FIELD CONDITIONS.



DESIGN	AS SHOWN SCALE
CHECKED	SHEET
12/02/20 DATE	20-085 PROJECT No.

DEVELOPMENT SUMMARY

- EXISTING BOUNDARY ACREAGE: ±117.962 ACRES
- TAX PARCEL: 08117 002008A, 08117 002016D, 08117 002016B, 08117 002061, 08117 002001 and 08134 000006
- EXISTING ZONING: M1
- PROPOSED ZONING: R3
- PHASE 1 DEVELOPMENT SUMMARY:
BOUNDARY ACREAGE: ±48.156 ACRES
TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 49
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TOTAL LENGTH OF STREETS: ±5,850 L.F.
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BOUNDARY ACREAGE: ±69.806 ACRES
TOTAL No. PROPOSED SINGLE-FAMILY DETACHED LOTS: 138 (LOT #'S 100-237)
GROSS/NET DENSITY: 1.97 LOTS/ACRE
OPEN SPACE/Common Area Provided = ±34 AC. (49%)
TOTAL LENGTH OF STREETS: ±6,775 L.F.
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Ingress/Egress to
Wade Or Road via
Compass Point
subdivision

Ingress/Egress to
Flowery Way

Ingress/Egress to
Mulberry Street

PHASE 1 DEVELOPMENT

50' UNDISTURBED
STREAM BUFFER

75' IMPERVIOUS
STREAM SETBACK

50' UNDISTURBED
STREAM BUFFER

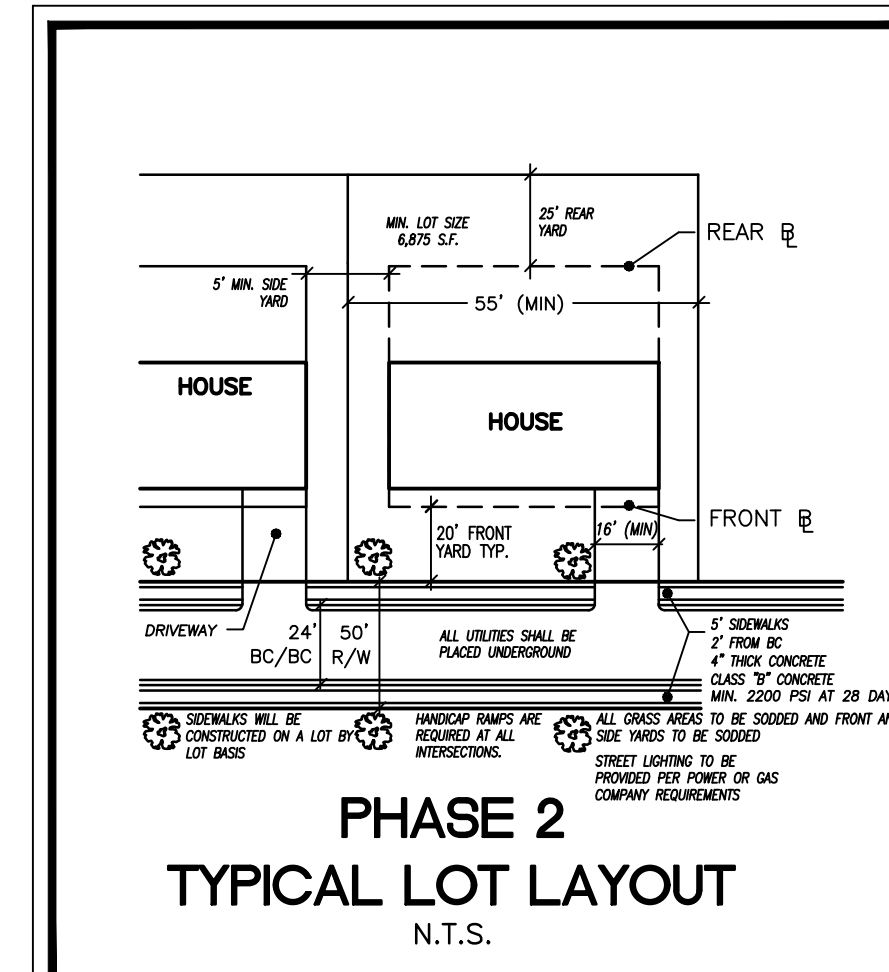
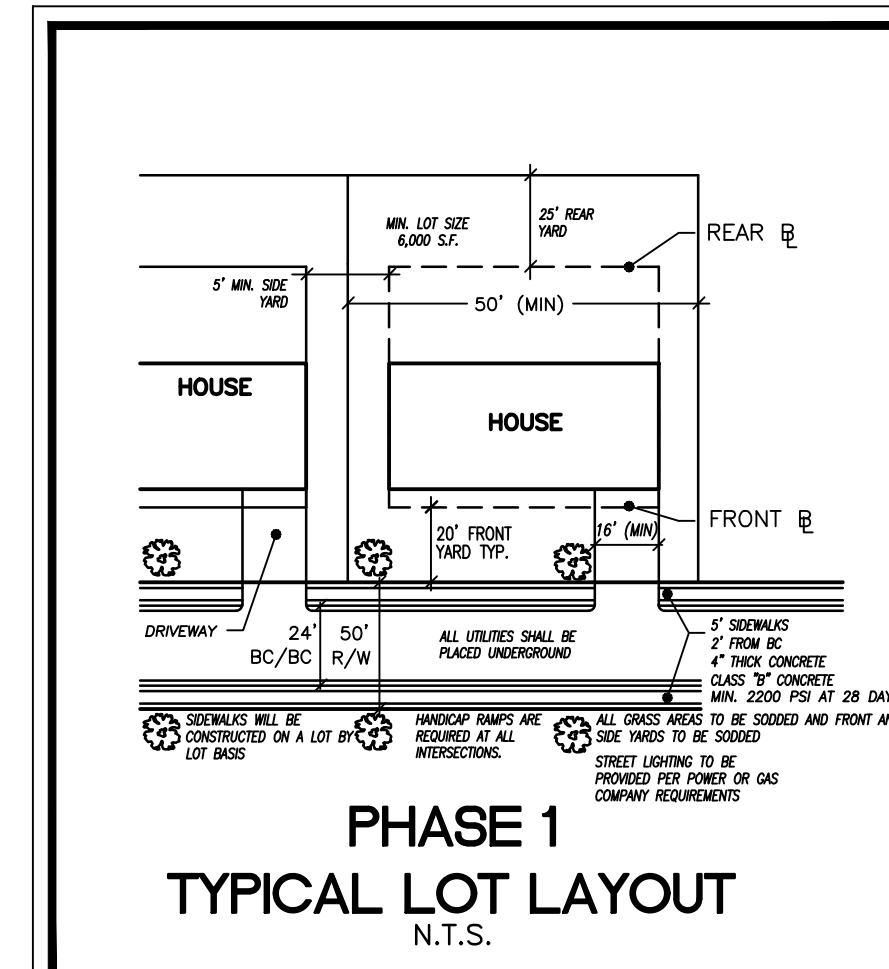
PROPOSED
REAR ENTRY UNIT
22' x 55' FOOTPRINT

PROPOSED
PHASE II SEWER
ACCESS

PROPOSED
FRONT ENTRY UNIT
24' x 50' FOOTPRINT

POSSIBLE FUTURE
CONNECTIVITY

40' DISSIMILAR
ZONING BUFFER



R-3 BUFFER REDUCTIONS:

- REMOVE 40' NATURAL BUFFER ADJACENT TO PARCEL'S 08117 002016E, 08117 002050, 08117 002051, 08117 002052, 08117 002053.

R-3 VARIANCE REQUESTED:

- BUILDING SETBACKS PER TYPICAL SINGLE-FAMILY DETACHED LOT LAYOUTS.
- NO MINIMUM SETBACKS REQUIRED FOR TOWNHOMES. TOWNHOMES PER TYPICAL LAYOUT DETAIL PROVIDED.



VICINITY MAP - N.T.S.



5074 BRISTOL INDUSTRIAL WAY
SUITE A
BUFORD, GEORGIA 30518
(770) 271-2868
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PREPARED FOR:

**STARK LAND
DEVELOPMENT**
3719 WINDER HWY.
FLOWERY BRANCH
GEORGIA 30542

PROJECT NAME:

MULBERRY STREET

TASK:

**CONCEPTUAL
LAND
PLAN**

PROJECT INFORMATION:

MULBERRY STREET
Project Name
20-085
Project Number
MULBERRY STREET
Project Address
116 AND 117
Land Lot No.(s)
District
CITY OF FLOWERY BRANCH
HALL COUNTY, GA
County, State

	1.	2.	3.	4.	5.						
DESIGN		AS SHOWN SCALE									
KWB DRAWN		1 of 1									
CHECKED		SHEET									
12/02/20		20-085									
DATE		PROJECT No.									
		Address Conceptual Land Plan Comments									
		Revised Phase 2 Access as requested by Client									
		02/09/2021									
		03/29/2021									

1 of 1

Traffic Impact Study

Proposed Mulberry Street Residential Subdivision
City of Flowery Branch, Georgia

May 7, 2021

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING



Traffic Impact Study

Proposed Mulberry Street Residential Subdivision City of Flowery Branch, Georgia

study prepared for:

Pine Grove Partners, LLC
3325 Mathieson Drive, NE
Atlanta, Georgia 30305

May 7, 2021



MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING

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Contents

INTRODUCTION1

EXISTING TRAFFIC CONDITIONS2

 DESCRIPTION OF EXISTING ROADWAYS2

 PEDESTRIAN, BICYCLE, AND TRANSIT ACCESSIBILITY3

 EXISTING TRAFFIC VOLUMES7

 EXISTING INTERSECTION OPERATIONS9

FUTURE NO-BUILD TRAFFIC CONDITIONS12

 PROGRAMMED TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS12

 NO-BUILD INTERSECTION OPERATIONS13

PROJECT TRAFFIC CHARACTERISTICS14

 PROJECT DESCRIPTION14

 TRIP GENERATION15

 TRIP DISTRIBUTION AND ASSIGNMENT16

FUTURE TRAFFIC CONDITIONS18

 FUTURE INTERSECTION OPERATIONS19

CONCLUSIONS AND RECOMMENDATIONS21

APPENDIX

Tables

TABLE 1 – HISTORIC GEORGIA DOT TRAFFIC VOLUME COUNTS AND ANNUAL GROWTH RATES8

TABLE 2 – EXISTING INTERSECTION OPERATIONS10

TABLE 3 – NO-BUILD INTERSECTION OPERATIONS13

TABLE 4 – MULBERRY STREET SUBDIVISION TRIP GENERATION.....15

TABLE 5 – FUTURE INTERSECTION OPERATIONS, PHASE I AND FULL BUILD-OUT20

Figures

FIGURE 1 – SITE LOCATION MAP1

FIGURE 2 – ADJUSTED EXISTING WEEKDAY A.M. AND P.M. PEAK HOUR TRAFFIC VOLUMES.....9

FIGURE 3 – SITE PLAN14

FIGURE 4 – WEEKDAY A.M. AND P.M. PEAK HOUR PROJECT TRIPS AND TRIP DISTRIBUTION PERCENTAGES – PHASE I16

FIGURE 5 – WEEKDAY A.M. AND P.M. PEAK HOUR PROJECT TRIPS AND TRIP DISTRIBUTION PERCENTAGES – FULL BUILD-OUT17

FIGURE 6 – FUTURE WEEKDAY A.M. AND P.M. PEAK HOUR VOLUMES – PHASE I.....18

FIGURE 7 – FUTURE WEEKDAY A.M. AND P.M. PEAK HOUR VOLUMES – FULL BUILD-OUT.....19

Photographs

PHOTOGRAPH 1 – MULBERRY STREET FACING NORTH FROM VICINITY OF PROPOSED SUBDIVISION NORTH ACCESS3

PHOTOGRAPH 2 – MULBERRY STREET FACING SOUTH FROM VICINITY OF PROPOSED SUBDIVISION NORTH ACCESS4

PHOTOGRAPH 3 – SPEED BUMP ON MULBERRY STREET4

PHOTOGRAPH 4 – PHIL NIEKRO BOULEVARD FACING WEST AT MULBERRY STREET, THEN ATLANTA HIGHWAY.....5

PHOTOGRAPH 5 – QUEUES ON WESTBOUND PHIL NIEKRO BOULEVARD FROM ATLANTA HIGHWAY PASSING MULBERRY STREET5

PHOTOGRAPH 6 – NORTHBOUND ATLANTA HIGHWAY AT PHIL NIEKRO BOULEVARD6

PHOTOGRAPH 7 – VIEW TO NORTH ON ATLANTA HIGHWAY FROM FLOWERY WAY6

PHOTOGRAPH 8 – VIEW TO EAST ON WADE ORR ROAD AT COMPASS DRIVE.....7

Introduction

This study assesses the traffic impact of a proposed residential subdivision in the City of Flowery Branch, Georgia. The site is located along the southwest side of Mulberry Street, south of Phil Niekro Boulevard, as shown in the location map in Figure 1. The proposed subdivision will be developed in two phases. Phase I will consist of 49 single family homes and 140 attached townhomes. Vehicular access will be provided at two locations along the west side of Mulberry Street. Phase II will consist of 138 single family homes. Phase II will be connected to Phase I, with additional vehicular accesses provided at the south end of Mulberry Street, and through the adjacent Compass Pointe subdivision, with connections to Flowery Way (which connects to Atlanta Road) and Compass Drive (which connects to Wade Orr Road).

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed residential 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 subdivision were assessed. The following is a description of existing transportation facilities, traffic volumes, and intersection operations.

Description of Existing Roadways

Mulberry Street is a local two-lane residential street that begins near Interstate 985, passes the subject site, has a side street stop sign controlled intersection with Phil Niekro Boulevard, then parallels the east side of Atlanta Highway to Spring Street. Mulberry Street south of Phil Niekro Boulevard provides access to a residential subdivision, a few low-density single family homes, and undeveloped land. The terrain is gently rolling and the posted speed limit is 25 mph. In 2019 (the latest year that data was available) the Georgia DOT recorded an Annual Average Daily Traffic (AADT) volume of 590 vehicles per day (vpd) on Mulberry Street midway between Phil Niekro Boulevard and its southern terminus. A 24-hour bi-directional traffic volume count was collected on Mulberry Street at the location of the Georgia DOT count station for this study on Wednesday, April 21, 2021 and recorded a northbound volume of 567 vehicles and a southbound volume of 569 vehicles for a two-way 24-hour volume of 1,136 vehicles.

Phil Niekro Boulevard is an urban minor arterial that begins at a signalized intersection at Atlanta Highway (west of which it is called Snelling Avenue) has an interchange with Interstate 985, then changes names to Spout Springs Road and continues to the southeast. The land along Phil Niekro Boulevard has a small retail node between Mulberry Street and Atlanta Highway, then includes undeveloped land or land being developed with residential subdivisions, with a small retail node at the I-985 interchange. The road has one through travel lane per direction with exclusive turn lanes at most intersections. The terrain is gently rolling and the posted speed limit is 35 mph, increasing to 45 mph east of Mulberry Street. In 2019 the Georgia DOT recorded an AADT volume of 8,220 vpd on Phil Niekro Boulevard west of Thurmon Tanner Parkway.

Atlanta Highway (Georgia State Route 13) is a north/south urban minor arterial that provides regional mobility through this area. The road has one through travel lane per direction with exclusive left turn lanes at its signalized intersection with Phil Niekro Boulevard / Snelling Avenue. There is an at-grade railroad crossing on Snelling Avenue immediately west of that intersection. The terrain is level to very gently rolling and the posted speed limit is 45 mph. In 2019 the Georgia DOT recorded an AADT volume of 9,060 vpd on Atlanta Highway south of Phil Niekro Boulevard. A 24-hour bi-directional traffic volume count was collected for this study on Wednesday, April 21, 2021 on Atlanta Highway at the location of the Georgia DOT count station and recorded a 24-hour volume of 8,946 vehicles.

Wade Orr Road is a two lane urban minor collector that begins at Atlanta Highway (west of which it is named Gaines Ferry Road), crosses Interstate 985 with no interchange, and terminates at Hog Mountain Road. The road provides access to residential subdivisions and undeveloped land. The road is winding with gently rolling terrain and the posted speed limit is 40 mph. In 2019 the Georgia DOT recorded an AADT volume of 4,610 vpd on Wade Orr Road west of Saddlehorse Drive. A 24-hour bi-directional traffic volume count was collected for this study on

Wednesday, April 21, 2021 on Wade Orr Road at the location of the Georgia DOT count station and recorded a 24-hour volume of 5,115 vehicles.

Flowery Way is a two lane local street that intersects with Atlanta Highway at a side street stop sign. The terrain is rolling and the posted speed limit is 30 mph. Compass Drive is a subdivision street that intersects with Wade Orr Road at a side street stop sign. The terrain is rolling and the posted speed limit is 25 mph.

Pedestrian, Bicycle, and Transit Accessibility

There is a sidewalk / path along the east side of Mulberry Street near the proposed subdivision access, for a short distance. However, most of Mulberry Street has no sidewalks. There is no sidewalk on Phil Niekro Boulevard near Mulberry Street, but there is sidewalk along the east side of Atlanta Highway north of Phil Niekro Boulevard and along the streets west of the railroad tracks, and there are crosswalks and pedestrian signals at the signalized intersection of Atlanta Highway at Phil Niekro Boulevard. There are no dedicated bicycle lanes near the proposed development. There is no regularly-scheduled mass transit service in the vicinity of the site.

Photographs 1 through 8 show the roadway conditions in the vicinity of the subject site.



Photograph 1 – Mulberry Street Facing North from Vicinity of Proposed Subdivision North Access



Photograph 2 – Mulberry Street Facing South from Vicinity of Proposed Subdivision North Access



Photograph 3 – Speed Bump on Mulberry Street



Photograph 4 – Phil Niekro Boulevard Facing West at Mulberry Street, then Atlanta Highway



Photograph 5 – Queues on Westbound Phil Niekro Boulevard from Atlanta Highway Passing Mulberry Street



Photograph 6 – Northbound Atlanta Highway at Phil Niekro Boulevard



Photograph 7 – View to North on Atlanta Highway from Flowery Way



Photograph 8 – View to East on Wade Orr Road at Compass Drive

Existing Traffic Volumes

Full turning movement traffic volume counts were collected for this study at the following intersections in the vicinity of the proposed development:

1. Phil Niekro Boulevard at Mulberry Street
2. Atlanta Highway at Phil Niekro Boulevard / Snelling Avenue
3. Atlanta Highway at Flowery Way
4. Wade Orr Road at Compass Drive

The counts were collected on Wednesday, April 21, 2021, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Area schools were in session on the day on which the counts were recorded, but this included some schooling from home due to the COVID-19 pandemic, addressed below.

In addition to the intersection turning movement counts, 24-hour bi-directional counts were collected on Mulberry Street at the location of Georgia DOT Count Station 139-8173, on Atlanta Highway west of Phil Niekro Boulevard at Georgia DOT Count Station 139-0169, and on Wade Orr Road west of Saddlehorse Drive at Georgia DOT Count Station 039-7381.

In order to account for decreased volumes due to the pandemic, an adjustment factor was developed to be applied to the counted volumes. The 2019 (latest year of data) Georgia DOT AADT volumes at the three count stations listed above were extrapolated to 2021 using the average annual growth rate at each location. This produces the “expected” 2021 AADT, without the influence of the COVID-19 pandemic. These were then compared to the 24-hour counts collected at each location for this study. Table 1 summarizes the historic counts and the current counts, including the annual growth between each count and the percent difference between the “expected” 2021 AADT and the current counts collected for this study.

Table 1 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates

Year	Mulberry St midway	Annual Growth	Atlanta Hwy W of Phil Niekro	Annual Growth	Phil Niekro N of Thurmon Tanner	Annual Growth	Wade Orr W of Saddlehorse	Annual Growth
Station ID	139-8173		139-0169		139-0445		139-7381	
2015	550		8,300		7,930		4,260	
2016	560	1.8%	8,540	2.9%	8,160	2.9%	4,360	2.3%
2017	570	1.8%	8,600	0.7%	8,220	0.7%	4,450	2.1%
2018	580	1.8%	8,530	-0.8%	8,160	-0.7%	4,520	1.6%
2019	590	1.7%	9,060	6.2%	8,220	0.7%	4,610	2.0%
<i>avg growth</i>		1.8%		2.2%		0.9%		2.0%
Expected 2021 AADT	611		10,221		8,341		4,795	
24-Hour 4/21/21	1,136		8,946				5,115	
<i>% Difference</i>	+85.9%		-12.5%				+6.7%	

The 24 hour volumes counted for this study were 85.9% higher than the “expected” 2021 AADT on Mulberry Street and 6.7% higher on Wade Orr Road, while they were 12.5% lower on Atlanta Highway. However, a closer review of the Georgia DOT data reveals that at the Mulberry Street and Wade Orr count stations, the Georgia DOT estimated ALL of the counts. It is unlikely that there has been almost 86% growth on Mulberry Street, and instead, more likely that Georgia DOT underestimated the counts. The counted volume on Mulberry Street for this study is consistent with the number of homes served by that street. At the Atlanta Highway count station, the 2016, 2017, and 2018 counts were also estimated but the 2015 and 2019 counts were actual. Therefore, the annual average growth from 2015 to 2019 at that count station, of 2.2%, is growth based on actual data and the -12.5% from the “expected” 2021 AADT to the counted data is considered the most reliable measure of actual conditions.

Based on the above discussion, all counted volumes for this study were increased by 10% to account for the effects of the pandemic. The full 12.5% difference was not applied because the pandemic is likely to have long-term effects on travel patterns and traffic volumes due to changes in behavior, such as increased working from home, so that the current counts may be as representative of “normal” conditions as would result from calibration back to 2019 conditions.

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 were adjusted by the 10% pandemic adjustment discussed above to produce the adjusted existing weekday a.m. and p.m. peak hour traffic volumes at each intersection, as shown in Figure 2. The raw count data is found in Appendix A.

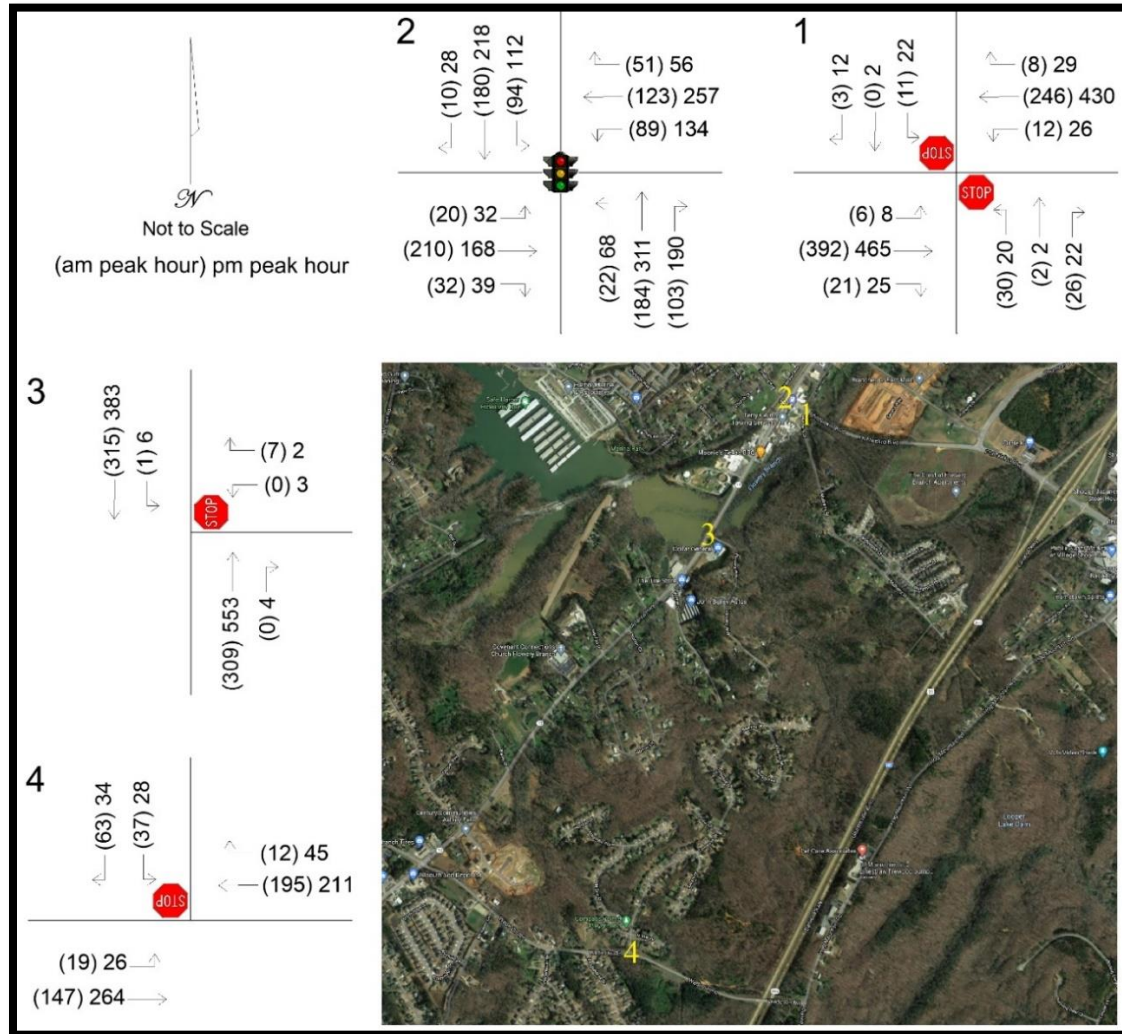


Figure 2 – Adjusted Existing Weekday A.M. and P.M. Peak Hour Traffic Volumes

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 2. 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 2 – Existing Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Phil Niekro Boulevard at Mulberry Street	A	2.1	A	2.0
northbound approach	C	15.3	C	19.3
southbound left/through	C	17.5	D	27.2
southbound right	A	9.8	B	11.2
eastbound left turn	A	7.8	A	8.3
westbound left turn	A	8.2	A	8.5
2. Atlanta Highway at Phil Niekro Boulevard / Snelling Avenue	C	24.7	C	31.2
northbound approach	B	15.2	C	20.6
southbound approach	B	11.6	B	14.9
eastbound approach	D	42.7	D	48.5
westbound approach	C	33.0	D	46.3
3. Atlanta Highway at Flowery Way	A	0.1	A	0.2
southbound left turn	A	8.0	A	8.7
westbound approach	B	10.2	C	16.4
4. Wade Orr Road at Compass Drive	A	3.1	A	1.6
southbound approach	B	11.5	B	12.1
eastbound left turn	A	7.8	A	7.9

The existing analysis reveals acceptable traffic operations at all study intersections. Therefore, no mitigation is identified for the existing condition based on capacity or delays. However, three observed field conditions are noted here.

First, due to the proximity of Atlanta Highway to Mulberry Street, queueing on westbound Phil Niekro Boulevard was observed to extend from the signal at Atlanta Highway past Mulberry Street. It is recommended that a “Do Not Block the Box” be implemented at the Phil Niekro / Mulberry intersection. This would include striping out a box on the pavement which vehicles should not block while queued waiting for the signal, and accompanying signage.

Second, westbound Phil Niekro Boulevard begins to widen east of Mulberry Street to transition from one westbound lane to two westbound lanes at Atlanta Highway. Currently, westbound left turners into Mulberry Street can “hug” the centerline and allow westbound through traffic to get around them, but that does not always necessarily happen and westbound through vehicles can either opt to drive onto the unpaved shoulder or wait behind the left turn vehicle. The westbound left turn volume, while moderate, is sufficient to justify creating a separate westbound left turn lane and it is recommended that this lane be added.

Third, there is a speed bump on Mulberry Street, signed as a speed hump. Speed bumps are smaller, more abrupt speed control devices, typically used in parking lots. These are generally not preferred on public roadways because 1) they tend to be so jarring that, if not seen, could damage a vehicle and/or cause it to lose control and 2) are typically not preferred by emergency services. It is recommended that the bump be replaced by a speed hump.

The three improvements recommended above are system improvements, that should be made independent of the proposed subdivision, whether or not the proposed subdivision is developed.

Future No-Build Traffic Conditions

Two future no-build conditions were developed, five years and ten years into the future. These represent the traffic conditions that would exist in the future at the completion of Phase I of the subdivision and at full build-out of the subdivision, but not including the proposed subdivision's trips. The purpose of the analysis of the no-build conditions 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 subdivision is under construction.

Table 1, presented previously, shows the Georgia DOT AADT volume counts and the annual growth rates between the counts on nearby roadways for the five years from 2015 to 2019 (the latest year for which counts are available). These counts were used to identify historic growth trends in volumes in the area. Based on a consideration of all the data, an annual growth factor of 2.0% per year was applied to the existing volumes when projecting the future no-build volumes. The growth factor was applied for five years, for a total of 10.4% growth, and ten years, for a total of 21.9% growth, that will occur while Phase I, and then full build-out, of the proposed subdivision is under construction.

Programmed Transportation Infrastructure Improvements

The Gainesville-Hall Metropolitan Planning Organization 2020 Regional Transportation Plan and the Georgia DOT Projects website were researched for planned (anticipated) or programmed (funded and scheduled) transportation improvement projects at the study intersections, the adjacent roadways, or which will affect traffic volumes and patterns at the study intersections within the buildout timeframe of the proposed subdivision. The following projects were identified:

GH-033 – GA 13 / Atlanta Highway widening from two to four lanes from Radford Road to south of GA 53. Long-term improvement anticipated after 2050.

GH-084 – McEver Road widening from two to four lanes from Lanier Islands Parkway to Gainesville Street. Mid-term improvement anticipated to be completed by 2034.

GH-129 – Capacity improvements to Thurmon Tanner Parkway at Interstate 985. Mid-term improvement anticipated to be completed by 2031.

These three projects are likely to improve capacity but are not located at any of the intersections evaluated in this study. It is possible that improvements to capacity in the area could influence volumes at the study intersections. Because these improvements are mid-to-long-term and not located at the study intersections, they were not modeled in the no-build or future analysis. The project information sheets can be found in Appendix F.

No-Build Intersection Operations

The no-build volumes were entered into the Synchro model and the 2026 and 2031 no-build traffic operations were analyzed at the study intersections using Synchro 10 software in accordance with the HCM 6 methodology. 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			
	Phase I		Full Build-Out		Phase I		Full Build-Out	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Phil Niekro Blvd at Mulberry St	A	2.2	A	2.5	A	2.3	A	2.9
northbound approach	C	16.8	C	19.2	C	22.6	D	27.9
southbound left/through	C	19.4	C	22.2	D	33.4	E	43.7
southbound right	A	10.0	B	10.2	B	11.6	B	12.1
eastbound left turn	A	7.9	A	8.0	A	8.5	A	8.7
westbound left turn	A	8.3	A	8.5	A	8.7	A	8.9
2. Atlanta Hwy at Phil Niekro Blvd / Snelling Ave	C	25.6	C	27.9	C	34.6	D	38.2
northbound approach	B	17.4	C	20.4	C	25.2	C	34.0
southbound approach	B	13.1	B	14.9	B	17.3	C	20.8
eastbound approach	D	42.4	D	46.4	D	50.4	D	50.6
westbound approach	C	32.4	C	32.7	D	49.8	D	49.4
3. Atlanta Hwy at Flowery Way	A	0.1	A	0.1	A	0.3	A	0.3
southbound left turn	A	8.1	A	8.2	A	8.9	A	9.2
westbound approach	B	10.5	B	10.8	C	18.7	C	20.0
4. Wade Orr Rd at Compass Dr	A	3.2	A	3.4	A	1.6	A	1.7
southbound approach	B	12.0	B	12.8	B	12.7	B	13.6
eastbound left turn	A	7.8	A	7.9	A	8.0	A	8.1

In the future no-build condition, the study intersections will continue to generally operate acceptably. Only one location will drop to LOS E in the ten year / full build-out no-build condition – the southbound left/through from Mulberry Street at Phil Niekro Boulevard. Higher delays on side street stop sign controlled approaches at busy thoroughfares such as Phil Niekro Boulevard are not unusual. Mitigation would require a change in control to a signal or a roundabout. Given that the high delay is for just one approach, during one time period, ten years into the future, a change in control is not recommended at this time and the side street volumes do not appear to be sufficient to warrant signalization. Therefore, there is no recommended mitigation for the no-build condition.

Project Traffic Characteristics

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

Project Description

The proposed subdivision will be developed in two phases. Phase I will consist of 49 single family homes and 140 attached townhomes. Vehicular access will be provided at two locations along the west side of Mulberry Street. Phase II will consist of 138 single family homes. Phase II will be connected to Phase I, with additional vehicular accesses provided at the south end of Mulberry Street, and through the adjacent Compass Pointe subdivision, with connections to Flowery Way (which connects to Atlanta Road) and Compass Drive (which connects to Wade Orr Road). The site plan is presented in Figure 3.

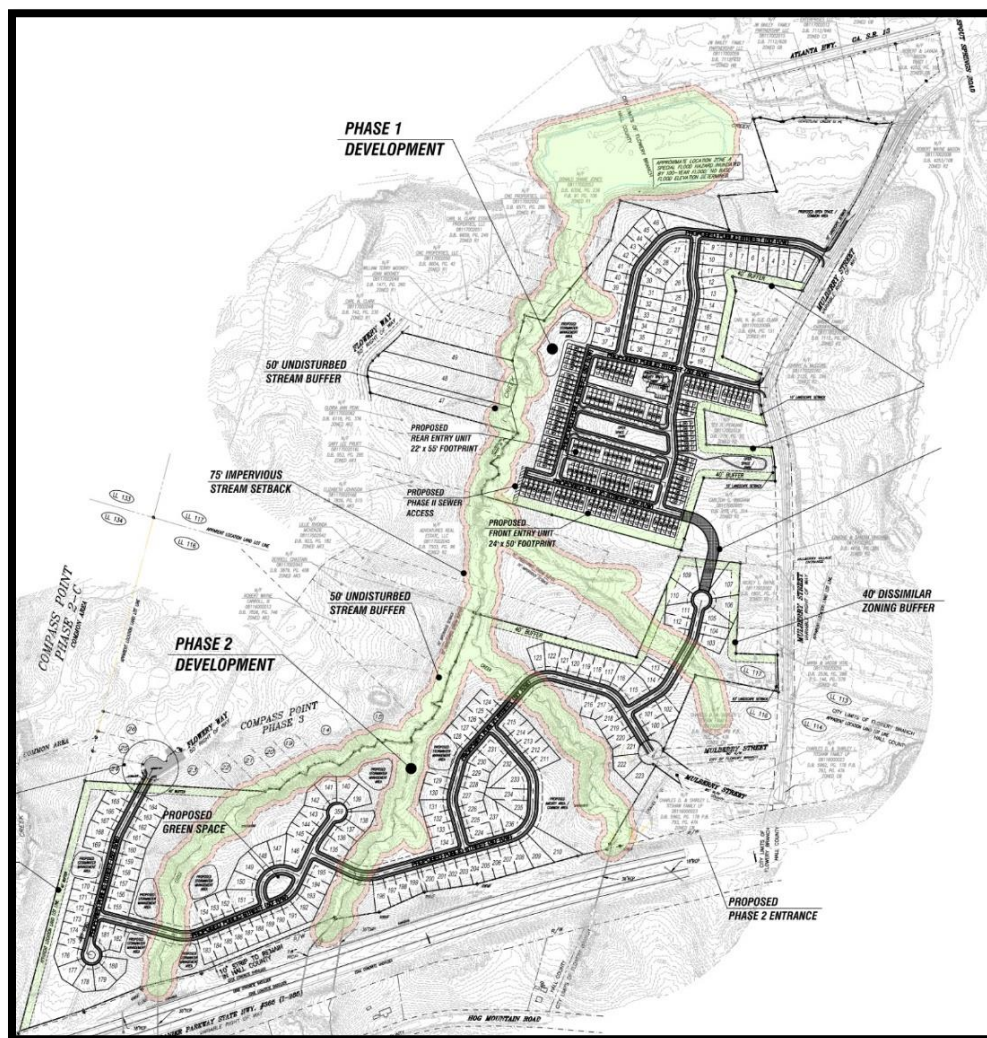


Figure 3 – Site Plan

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 proposed subdivision was calculated using the equations in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition with Supplement* (the current edition). ITE Land Use 210 – Single-Family Detached Housing was chosen for the single-family homes and ITE Land Use 220 – Multifamily Housing (Low-Rise) was chosen as representative of the townhomes. The trip generation for the project is presented in Table 4. Also presented in Table 4, for comparison purposes, is the trip generation if the site were to be alternatively developed with an industrial park according to a previous plan for the site.

Table 4 – Mulberry Street Subdivision Trip Generation

Land Use	ITE Code	Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Phase I											
Single Family	210	49 units	10	30	40	32	19	51	270	270	540
Townhomes	220	<u>140 units</u>	<u>15</u>	<u>51</u>	<u>66</u>	<u>50</u>	<u>30</u>	<u>80</u>	<u>509</u>	<u>509</u>	<u>1,018</u>
Total		189 units	25	81	106	82	49	131	779	779	1,558
Phase II											
Single Family	210	138 units	26	77	103	87	51	138	699	699	1,398
Total Trips Phase I + Phase II											
Residential		327 units	51	158	209	169	100	269	1,478	1,478	2,956
Alternative Potential Industrial Park Development											
Industrial Park	130	780,500 ft²	253	59	312	65	247	312	1,367	1,367	2,734
Difference to Proposed Subdivision			+202	-99	+103	-104	+147	+43	-111	-111	-222

Phase I of the proposed subdivision will generate 106 new trips in the a.m. peak hour, 131 new trips in the p.m. peak hour, and 1,558 new daily trips. At full build-out of both phases, the proposed subdivision will generate 209 new trips in the a.m. peak hour, 269 new trips in the p.m. peak hour, and 2,956 new daily trips.

If developed alternatively with an industrial park, the industrial park would generate 312 new trips in the a.m. peak hour (103 more trips than the proposed subdivision), 312 new trips in the p.m. peak hour (43 more trips than the proposed subdivision), and 2,734 new daily trips (222 less trips than the proposed subdivision). It is noted that industrial parks typically generate notable truck trips, whereas residential development do not. While truck volumes will vary significantly depending on the actual industrial use, the ITE trip Generation Manual suggests that some industrial uses generate 20% or more of their trips as trucks. These trucks would be

introduced to the currently-primarily-residential Mulberry Street and most would be making a left turn into Mulberry Street from Phil Niekro Boulevard and the tight right turn (for trucks) from Mulberry Street to Phil Niekro Boulevard, potentially encroaching into the opposing westbound lane on Phil Niekro Boulevard.

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 residential development were developed based on the locations and proximity of likely trip origins and destinations, such as employment centers, retail and offices, and schools in the area, and the routes of travel to those origins and destinations, including Interstate 985, Atlanta Highway, and Peachtree Industrial Boulevard / McEver 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 Phase I of the subdivision are shown in Figure 4 while Figure 5 shows the total trips for the full project build-out, which includes both Phase I and Phase II.

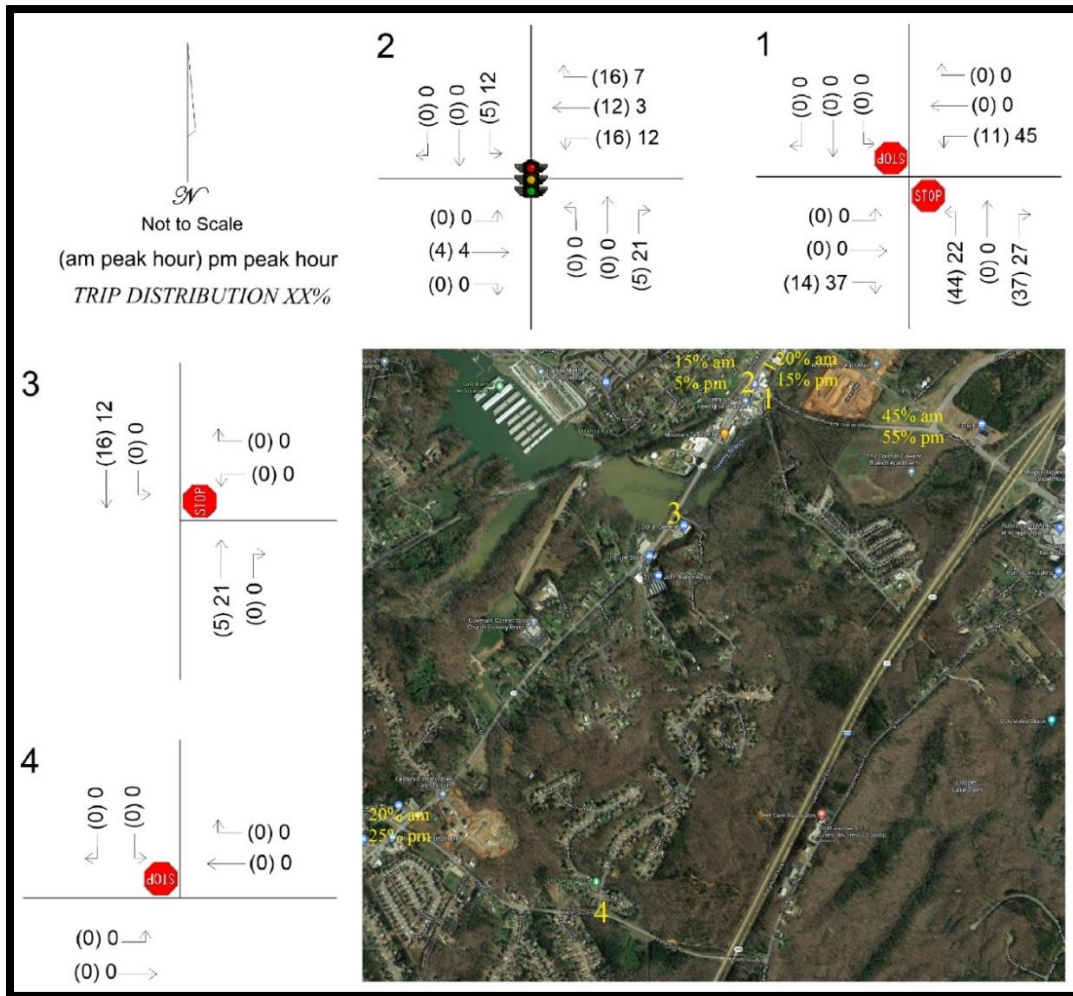


Figure 4 – Weekday A.M. and P.M. Peak Hour Project Trips and Trip Distribution Percentages – Phase I

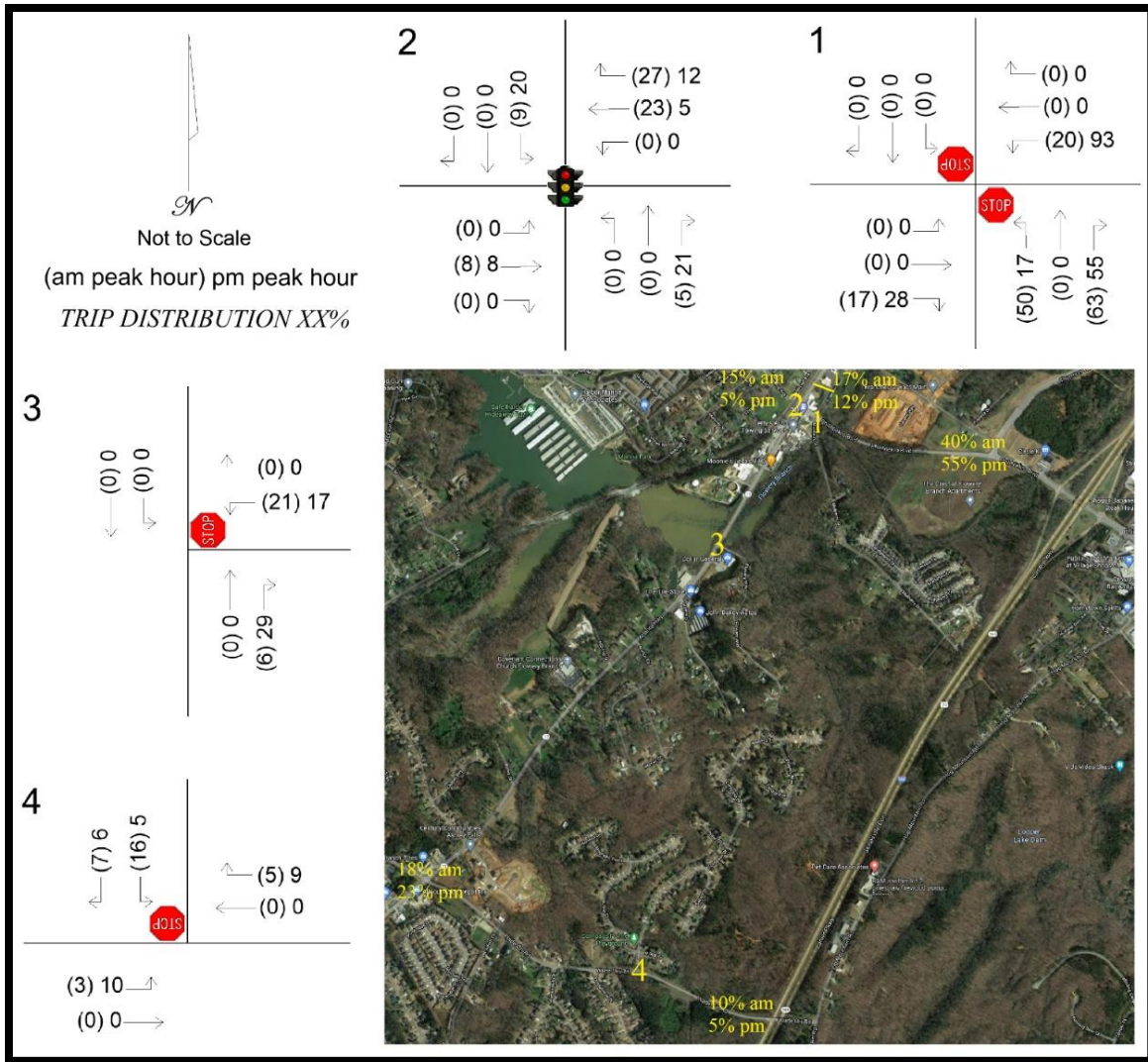


Figure 5 – Weekday A.M. and P.M. Peak Hour Project Trips and Trip Distribution Percentages – Full Build-Out

Future Traffic Conditions

The future build volumes consist of the no-build volumes plus the trips that will be generated by the proposed Mulberry Street subdivision. The Phase I volumes include the five year no-build volumes plus the Phase I development trips, as shown in Figure 6. The full build-out volumes include the ten year no-build volumes plus the trips from the full build-out of both Phase I and Phase II of the subdivision, as shown in Figure 7.

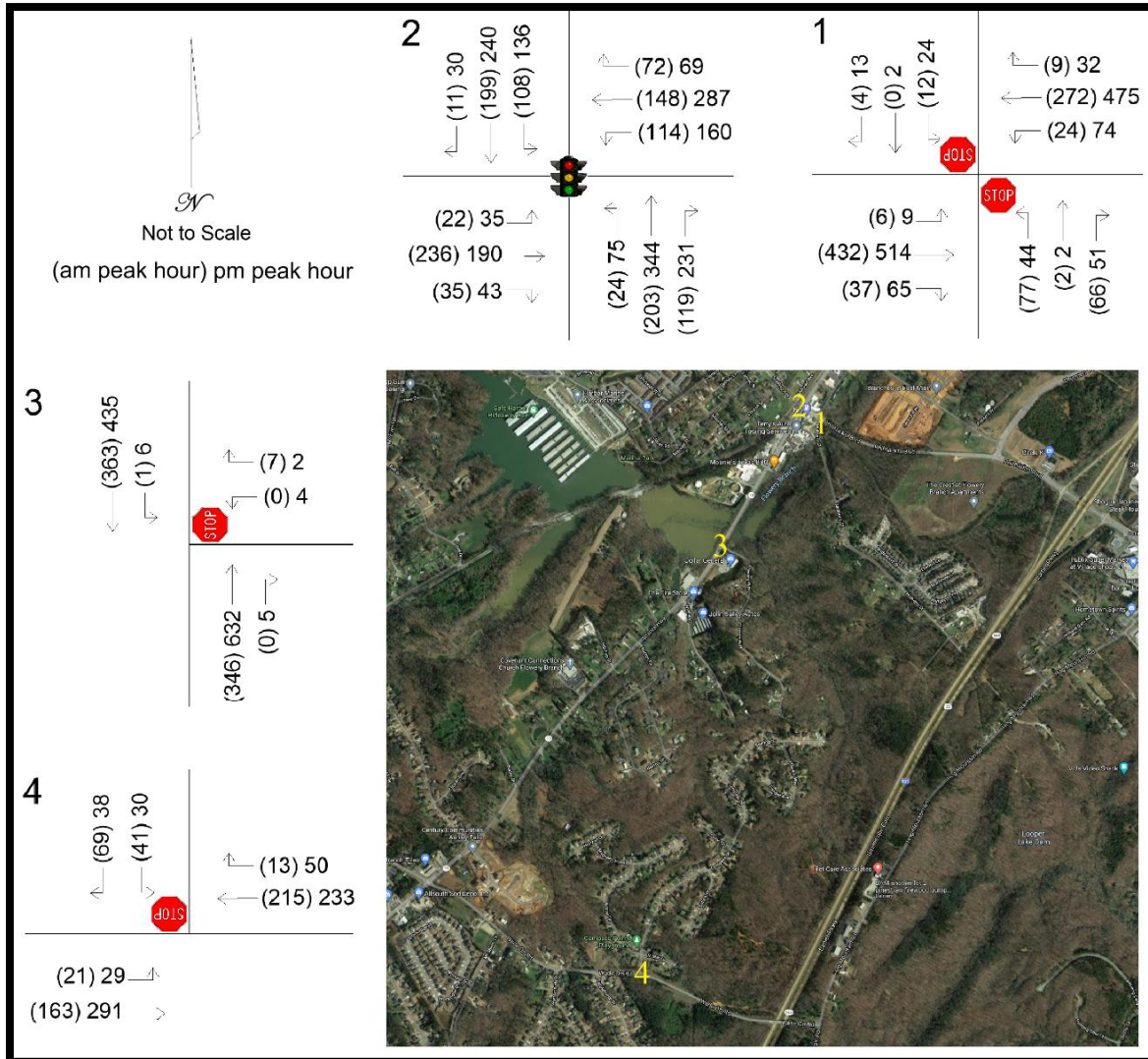


Figure 6 – Future Weekday A.M. and P.M. Peak Hour Volumes – Phase I

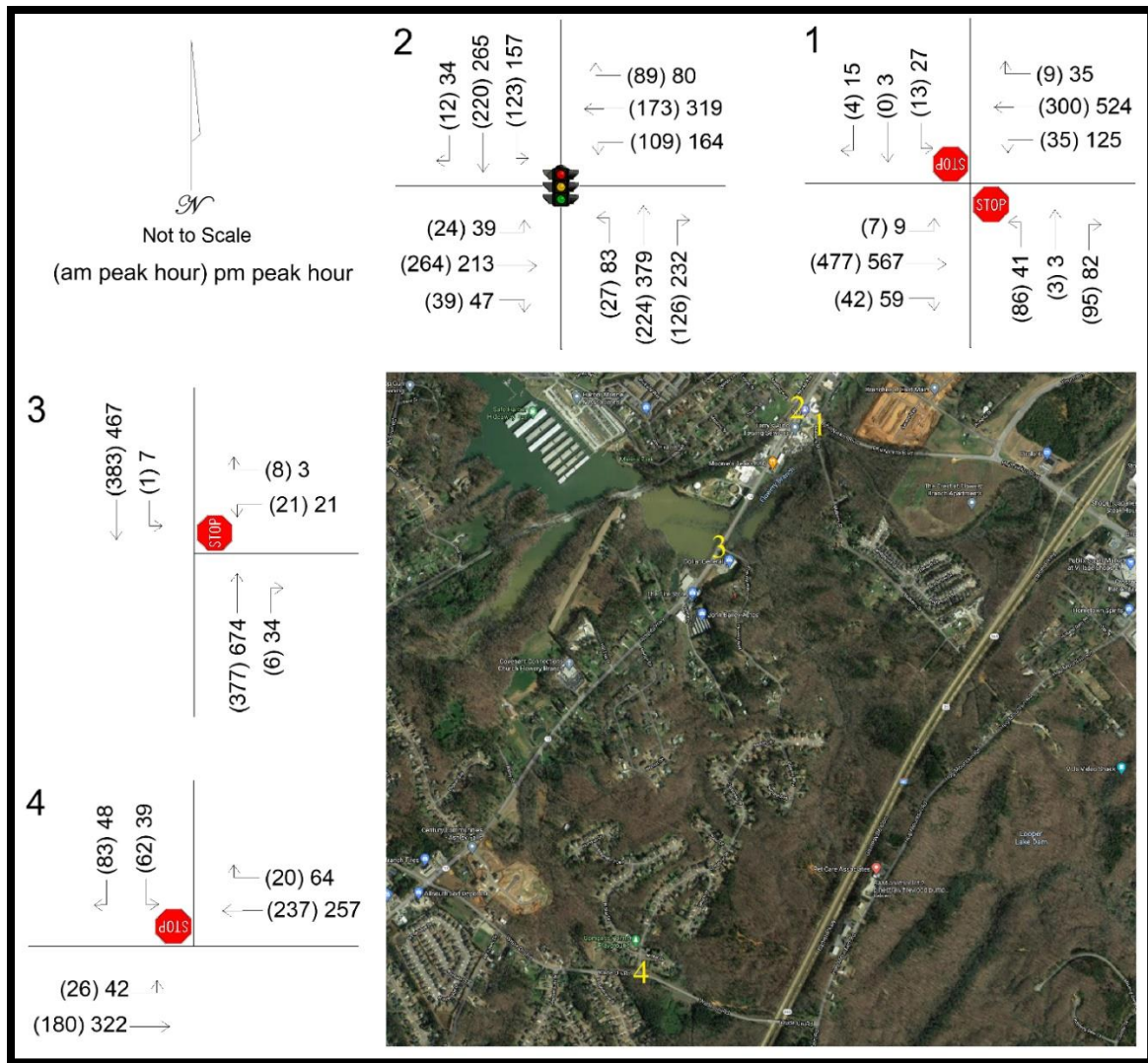


Figure 7 – Future Weekday A.M. and P.M. Peak Hour Volumes – Full Build-Out

Future Intersection Operations

An operational analysis was performed for the anticipated future project build-out, at the study intersections. 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 the 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, Phase I and Full Build-Out

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	Phase I		Full Build-Out		Phase I		Full Build-Out	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Phil Niekro Blvd at Mulberry St	A	4.5	A	6.4	A	4.3	A	7.6
northbound approach	C	22.3	D	30.6	D	32.0	E	49.4
southbound left/through	C	22.2	D	28.7	E	45.4	F	94.0
southbound right	A	10.0	B	10.2	B	11.5	B	12.0
eastbound left turn	A	7.9	A	8.0	A	8.5	A	8.6
westbound left turn	A	8.4	A	8.6	A	9.0	A	9.4
2. Atlanta Hwy at Phil Niekro Blvd / Snelling Ave	C	26.4	C	28.0	D	35.2	D	39.5
northbound approach	B	18.1	C	20.7	C	27.5	D	36.3
southbound approach	B	13.4	B	14.9	B	17.8	C	22.4
eastbound approach	D	43.8	D	45.2	D	50.8	D	49.9
westbound approach	C	32.9	C	33.5	D	48.6	D	50.5
3. Atlanta Hwy at Flowery Way	A	0.1	A	0.6	A	0.3	A	0.7
southbound left turn	A	8.1	A	8.2	A	9.0	A	9.3
westbound approach	B	10.5	B	15.3	C	19.4	D	25.7
4. Wade Orr Rd at Compass Dr	A	3.2	A	3.8	A	1.6	A	2.0
southbound approach	B	12.0	B	13.5	B	12.7	B	14.3
eastbound left turn	A	7.8	A	7.9	A	8.0	A	8.1

The future analysis reveals continued generally acceptable traffic operations at all study intersections. However, in the Phase I p.m. peak hour, the southbound left/through from Mulberry Street will operate at LOS E and both this movement and the northbound approach will operate unacceptably by full build-out of the proposed subdivision. As identified in the no-build analysis, high stop sign controlled side street approach delays are not unusual at busy thoroughfares such as Phil Niekro Boulevard and mitigating these delays would require a change in control to a signal or roundabout. A signal warrant study could be performed to determine if signalization of this intersection is justified. However, as with the no-build condition, the future volume projections on these side street approaches do not appear sufficient to satisfy the volume-based signal warrants. On the northbound approach, the addition of an exclusive right turn lane (so that the existing lane becomes a shared left/through) would prevent right turns from being blocked by the more challenging left turns. This lane would not completely mitigate the unacceptable delays on the northbound approach, but it would improve the heavy right turn delays to LOS B and, therefore, this right turn lane is recommended by the full build-out of the Mulberry Street subdivision.

The project civil engineer should comply with all applicable design standards at the proposed accesses on Mulberry Street, including those for sight distance, turn lane storage and taper lengths, turn radii, roadway width, and grades.

Conclusions and Recommendations

This study assesses the traffic impact of a proposed residential subdivision in the City of Flowery Branch. The proposed subdivision will be developed in two phases. Phase I will consist of 49 single family homes and 140 attached townhomes. Vehicular access will be provided at two locations along the west side of Mulberry Street. Phase II will consist of 138 single family homes. Phase II will be connected to Phase I, with additional vehicular accesses provided at the south end of Mulberry Street, and through the adjacent Compass Pointe subdivision, with connections to Flowery Way (which connects to Atlanta Road) and Compass Drive (which connects to Wade Orr Road). The following are the findings and recommendations of this study:

1. Existing operations at the intersections evaluated are acceptable. No mitigation is identified for the existing condition based on delays. However, three recommendations are made:

- a. Stripe a "Do Not Block the Box" on Phil Niekro Boulevard at Mulberry Street.
- b. Add a westbound left turn lane on Phil Niekro Boulevard at Mulberry Street.
- c. Change the speed bump on Mulberry Street to a speed hump.

The three improvements recommended above are system improvements, that should be made independent of the proposed subdivision, whether or not the proposed subdivision is developed.

2. Traffic volume growth in this area has been moderate and this is expected to continue into the future, including new developments occurring in the area on Phil Niekro Boulevard.
3. No-build operations at the intersections evaluated will continue to be acceptable, with just the southbound left/through turn from Mulberry Street at Phil Niekro Boulevard dropping to LOS E in the full build-out p.m. Potential mitigation includes signalization or a roundabout at this intersection, but no mitigation was recommended for the no-build condition.
4. Phase I of the proposed subdivision will generate 106 new trips in the a.m. peak hour, 131 new trips in the p.m. peak hour, and 1,558 new daily trips. At full build-out of both phases, the proposed subdivision will generate 209 new trips in the a.m. peak hour, 269 new trips in the p.m. peak hour, and 2,956 new daily trips.
5. If developed alternatively with an industrial park, as previously proposed, the industrial park would generate 312 new trips in the a.m. peak hour (103 more trips than the proposed subdivision), 312 new trips in the p.m. peak hour (43 more trips than the proposed subdivision), and 2,734 new daily trips (222 less trips than the proposed subdivision). Many of these trips will likely be truck trips added to Mulberry Street and primarily turning left into and right out-from Mulberry Street at Phil Niekro Boulevard.
6. With the addition of the project trips, the future operations will see minor increases in delays, but continued acceptable operations for most intersections/approach/movements. However, the side street approaches, on both northbound and southbound Mulberry Street at Phil Niekro Boulevard, will incur

unacceptable delays. As with the no-build analysis, the side street volumes do not appear sufficient to warrant signalization. However, the addition of a northbound exclusive right turn lane is recommended on Mulberry Street by full build-out of the proposed subdivision.

7. Each project access on Mulberry Street should include one entering and one exiting lane and the exiting approaches should be controlled by side street stop sign and accompanying stop bar.
8. The project civil engineer should comply with applicable access design standards at the accesses on Mulberry Street including sight distances, turn radii, roadway widths, and grades.

Appendix A

Traffic Count Data and Volume Worksheets

Mulberry Street Subdivision Traffic Impact Study

City of Flowery Branch, Georgia

May 2021

Intersection: 1. Phil Niekro Boulevard at Mulberry Street

Weekday A.M. Peak Hour	Northbound Mulberry Street				Southbound Mulberry Street				Eastbound Phil Niekro Boulevard				Westbound Phil Niekro Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 7:15-8:15)	27	2	24	53	10	0	3	13	5	356	19	380	11	224	7	242
COVID-19 adjustment	10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%	
Adjusted 2021 Volumes	30	2	26	58	11	0	3	14	6	392	21	418	12	246	8	266
Total Annual Background Growth - Phase I	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
No-Build Volumes - Phase I	33	2	29	64	12	0	4	16	6	432	23	461	13	272	9	294
No-Build Volumes - Phase II	36	3	32	71	13	0	4	17	7	477	25	510	15	300	9	324
Proposed Mulberry Street Subdivision Trips - Phase I	44	0	37	81	0	0	0	0	0	0	14	14	11	0	0	11
Proposed Mulberry Street Subdivision Trips - Phases I +II	50	0	63	113	0	0	0	0	0	0	17	17	20	0	0	20
Build Volumes - Phase I	77	2	66	145	12	0	4	16	6	432	37	475	24	272	9	305
Build Volumes - Phases I + II	86	3	95	184	13	0	4	17	7	477	42	527	35	300	9	344

Weekday P.M. Peak Hour	Northbound Mulberry Street				Southbound Mulberry Street				Eastbound Phil Niekro Boulevard				Westbound Phil Niekro Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 4:15-5:15)	18	2	20	40	20	2	11	33	7	423	23	453	24	391	26	441
COVID-19 adjustment	10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%	
Adjusted 2021 Volumes	20	2	22	44	22	2	12	36	8	465	25	498	26	430	29	485
Total Annual Background Growth - Phase I	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
No-Build Volumes - Phase I	22	2	24	49	24	2	13	40	9	514	28	550	29	475	32	536
No-Build Volumes - Phase II	24	3	27	54	27	3	15	44	9	567	31	607	32	524	35	591
Proposed Mulberry Street Subdivision Trips - Phase I	22	0	27	49	0	0	0	0	0	0	37	37	45	0	0	45
Proposed Mulberry Street Subdivision Trips - Phases I +II	17	0	55	72	0	0	0	0	0	0	28	28	93	0	0	93
Build Volumes - Phase I	44	2	51	98	24	2	13	40	9	514	65	587	74	475	32	581
Build Volumes - Phases I + II	41	3	82	126	27	3	15	44	9	567	59	635	125	524	35	684

MARC R. ACAMPORA, PE, LLC

Mulberry Street Subdivision Traffic Impact Study

City of Flowery Branch, Georgia

May 2021

Intersection: 2. Atlanta Highway at Phil Niekro Boulevard / Snelling Avenue

Weekday A.M. Peak Hour

	Northbound Atlanta Highway				Southbound Atlanta Highway				Eastbound Snelling Avenue				Westbound Phil Niekro Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 7:15-8:15)	20	167	94	281	85	164	9	258	18	191	29	238	81	112	46	239
COVID-19 adjustment	10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%	
Adjusted 2021 Volumes	22	184	103	309	94	180	10	284	20	210	32	262	89	123	51	263
Total Annual Background Growth - Phase I	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
No-Build Volumes - Phase I	24	203	114	341	103	199	11	313	22	232	35	289	98	136	56	290
No-Build Volumes - Phase II	27	224	126	377	114	220	12	346	24	256	39	319	109	150	62	320
Proposed Mulberry Street Subdivision Trips - Phase I	0	0	5	5	5	0	0	5	0	4	0	4	16	12	16	44
Proposed Mulberry Street Subdivision Trips - Phases I +II	0	0	0	0	9	0	0	9	0	8	0	8	0	23	27	50
Build Volumes - Phase I	24	203	119	346	108	199	11	318	22	236	35	293	114	148	72	334
Build Volumes - Phases I + II	27	224	126	377	123	220	12	355	24	264	39	327	109	173	89	370

Weekday P.M. Peak Hour

	Northbound Atlanta Highway				Southbound Atlanta Highway				Eastbound Snelling Avenue				Westbound Phil Niekro Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 4:45-5:45)	62	283	173	518	102	198	25	325	29	153	35	217	122	234	51	407
COVID-19 adjustment	10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%		10.0%	10.0%	10.0%	
Adjusted 2021 Volumes	68	311	190	570	112	218	28	358	32	168	39	239	134	257	56	448
Total Annual Background Growth - Phase I	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
No-Build Volumes - Phase I	75	344	210	629	124	240	30	395	35	186	43	264	148	284	62	494
No-Build Volumes - Phase II	83	379	232	695	137	265	34	436	39	205	47	291	164	314	68	546
Proposed Mulberry Street Subdivision Trips - Phase I	0	0	21	21	12	0	0	12	0	4	0	4	12	3	7	22
Proposed Mulberry Street Subdivision Trips - Phases I +II	0	0	0	0	20	0	0	20	0	8	0	8	0	5	12	17
Build Volumes - Phase I	75	344	231	650	136	240	30	407	35	190	43	268	160	287	69	516
Build Volumes - Phases I + II	83	379	232	695	157	265	34	456	39	213	47	299	164	319	80	563

MARC R. ACAMPORA, PE, LLC

Mulberry Street Subdivision Traffic Impact Study

City of Flowery Branch, Georgia

May 2021

Intersection: 3. Atlanta Highway at Flowery Way

Weekday A.M. Peak Hour

	Northbound Atlanta Highway			Southbound Atlanta Highway				Westbound Flowery Way		
	T	R	Tot	L	T	Tot		L	R	Tot
Counted Volumes (Wednesday, April 21, 2021 7:15-8:15)	281	0	281	1	286	287		0	6	6
COVID-19 adjustment	10.0%	10.0%		10.0%	10.0%			10.0%	10.0%	
Adjusted 2021 Volumes	309	0	309	1	315	316		0	7	7
Total Annual Background Growth - Phase I	10.4%	10.4%		10.4%	10.4%			10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%		21.9%	21.9%			21.9%	21.9%	
No-Build Volumes - Phase I	341	0	341	1	347	349		0	7	7
No-Build Volumes - Phase II	377	0	377	1	383	385		0	8	8
Proposed Mulberry Street Subdivision Trips - Phase I	5	0	5	0	16	16		0	0	0
Proposed Mulberry Street Subdivision Trips - Phases I +II	0	6	6	0	0	0		21	0	21
Build Volumes - Phase I	346	0	346	1	363	365		0	7	7
Build Volumes - Phases I + II	377	6	383	1	383	385		21	8	29

Weekday P.M. Peak Hour

	Northbound Atlanta Highway			Southbound Atlanta Highway				Westbound Flowery Way		
	T	R	Tot	L	T	Tot		L	R	Tot
Counted Volumes (Wednesday, April 21, 2021 4:45-5:45)	503	4	507	5	348	353		3	2	5
COVID-19 adjustment	10.0%	10.0%		10.0%	10.0%			10.0%	10.0%	
Adjusted 2021 Volumes	553	4	558	6	383	388		3	2	6
Total Annual Background Growth - Phase I	10.4%	10.4%		10.4%	10.4%			10.4%	10.4%	
Total Annual Background Growth - Phase I	21.9%	21.9%		21.9%	21.9%			21.9%	21.9%	
No-Build Volumes - Phase I	611	5	616	6	423	429		4	2	6
No-Build Volumes - Phase II	674	5	680	7	467	473		4	3	7
Proposed Mulberry Street Subdivision Trips - Phase I	21	0	21	0	12	12		0	0	0
Proposed Mulberry Street Subdivision Trips - Phases I +II	0	29	29	0	0	0		17	0	17
Build Volumes - Phase I	632	5	637	6	435	441		4	2	6
Build Volumes - Phases I + II	674	34	709	7	467	473		21	3	24

MARC R. ACAMPORA, PE, LLC

Mulberry Street Subdivision Traffic Impact Study

City of Flowery Branch, Georgia

May 2021

Intersection: 4. Wade Orr Road at Compass Drive

Weekday A.M. Peak Hour		Southbound Compass Drive			Eastbound Wade Orr Road			Westbound Wade Orr Road		
		L	R	Tot	L	T	Tot	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 7:15-8:15)		34	57	91	17	134	151	177	11	188
COVID-19 adjustment		10.0%	10.0%		10.0%	10.0%		10.0%	10.0%	
Adjusted 2021 Volumes		37	63	100	19	147	166	195	12	207
Total Annual Background Growth - Phase I		10.4%	10.4%		10.4%	10.4%		10.4%	10.4%	
Total Annual Background Growth - Phase I		21.9%	21.9%		21.9%	21.9%		21.9%	21.9%	
No-Build Volumes - Phase I		41	69	111	21	163	183	215	13	228
No-Build Volumes - Phase II		46	76	122	23	180	202	237	15	252
Proposed Mulberry Street Subdivision Trips - Phase I		0	0	0	0	0	0	0	0	0
Proposed Mulberry Street Subdivision Trips - Phases I +II		16	7	23	3	0	3	0	5	5
Build Volumes - Phase I		41	69	111	21	163	183	215	13	228
Build Volumes - Phases I + II		62	83		26	180		237	20	

Weekday P.M. Peak Hour		Southbound Compass Drive			Eastbound Wade Orr Road			Westbound Wade Orr Road		
		L	R	Tot	L	T	Tot	T	R	Tot
Counted Volumes (Wednesday, April 21, 2021 4:15-5:15)		25	31	56	24	240	264	192	41	233
COVID-19 adjustment		10.0%	10.0%		10.0%	10.0%		10.0%	10.0%	
Adjusted 2021 Volumes		28	34	62	26	264	290	211	45	256
Total Annual Background Growth - Phase I		10.4%	10.4%		10.4%	10.4%		10.4%	10.4%	
Total Annual Background Growth - Phase I		21.9%	21.9%		21.9%	21.9%		21.9%	21.9%	
No-Build Volumes - Phase I		30	38	68	29	291	321	233	50	283
No-Build Volumes - Phase II		34	42	75	32	322	354	257	55	312
Proposed Mulberry Street Subdivision Trips - Phase I		0	0	0	0	0	0	0	0	0
Proposed Mulberry Street Subdivision Trips - Phases I +II		5	6	11	10	0	10	0	9	9
Build Volumes - Phase I		30	38	68	29	291	321	233	50	283
Build Volumes - Phases I + II		39	48		42	322		257	64	

MARC R. ACAMPORA, PE, LLC

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TMC Data
Phil Niekro Blvd @ Mulberry St
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790002
Site Code : 44790002
Start Date : 4/21/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Mulberry St Northbound					Mulberry St Southbound					Phil Niekro Blvd Eastbound					Phil Niekro Blvd 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	5	0	7	0	12	3	0	2	0	5	1	56	1	0	58	0	42	1	0	43	118
07:15 AM	11	0	7	0	18	1	0	0	0	1	0	94	2	0	96	2	51	1	0	54	169
07:30 AM	8	1	4	0	13	3	0	1	0	4	2	91	5	0	98	3	57	2	0	62	177
07:45 AM	3	0	9	0	12	3	0	2	0	5	2	87	8	0	97	2	62	3	0	67	181
Total	27	1	27	0	55	10	0	5	0	15	5	328	16	0	349	7	212	7	0	226	645
08:00 AM	5	1	4	0	10	3	0	0	0	3	1	84	4	0	89	4	54	1	0	59	161
08:15 AM	1	0	5	0	6	0	0	0	0	0	0	65	2	0	67	0	60	2	0	62	135
08:30 AM	1	0	11	0	12	2	0	3	0	5	1	62	1	0	64	4	65	0	0	69	150
08:45 AM	2	3	3	0	8	3	1	0	0	4	0	76	2	0	78	0	62	1	0	63	153
Total	9	4	23	0	36	8	1	3	0	12	2	287	9	0	298	8	241	4	0	253	599
*** BREAK ***																					
04:00 PM	3	0	7	0	10	6	0	4	0	10	0	102	4	0	106	5	97	2	0	104	230
04:15 PM	6	0	5	0	11	6	1	4	0	11	1	109	6	0	116	6	101	8	0	115	253
04:30 PM	5	1	4	0	10	5	0	1	0	6	3	106	5	0	114	5	99	7	0	111	241
04:45 PM	2	1	5	0	8	2	1	3	0	6	1	101	3	0	105	6	95	9	0	110	229
Total	16	2	21	0	39	19	2	12	0	33	5	418	18	0	441	22	392	26	0	440	953
05:00 PM	5	0	6	0	11	7	0	3	0	10	2	107	9	0	118	7	96	2	0	105	244
05:15 PM	2	0	9	0	11	4	0	3	0	7	0	104	3	0	107	10	92	8	0	110	235
05:30 PM	0	0	5	0	5	4	0	2	0	6	1	107	4	0	112	10	115	3	0	128	251
05:45 PM	0	0	3	0	3	7	0	2	0	9	0	105	3	0	108	8	98	7	0	113	233
Total	7	0	23	0	30	22	0	10	0	32	3	423	19	0	445	35	401	20	0	456	963
Grand Total	59	7	94	0	160	59	3	30	0	92	15	1456	62	0	1533	72	1246	57	0	1375	3160
Apprch %	36.9	4.4	58.8	0		64.1	3.3	32.6	0		1	95	4	0		5.2	90.6	4.1	0		
Total %	1.9	0.2	3	0	5.1	1.9	0.1	0.9	0	2.9	0.5	46.1	2	0	48.5	2.3	39.4	1.8	0	43.5	

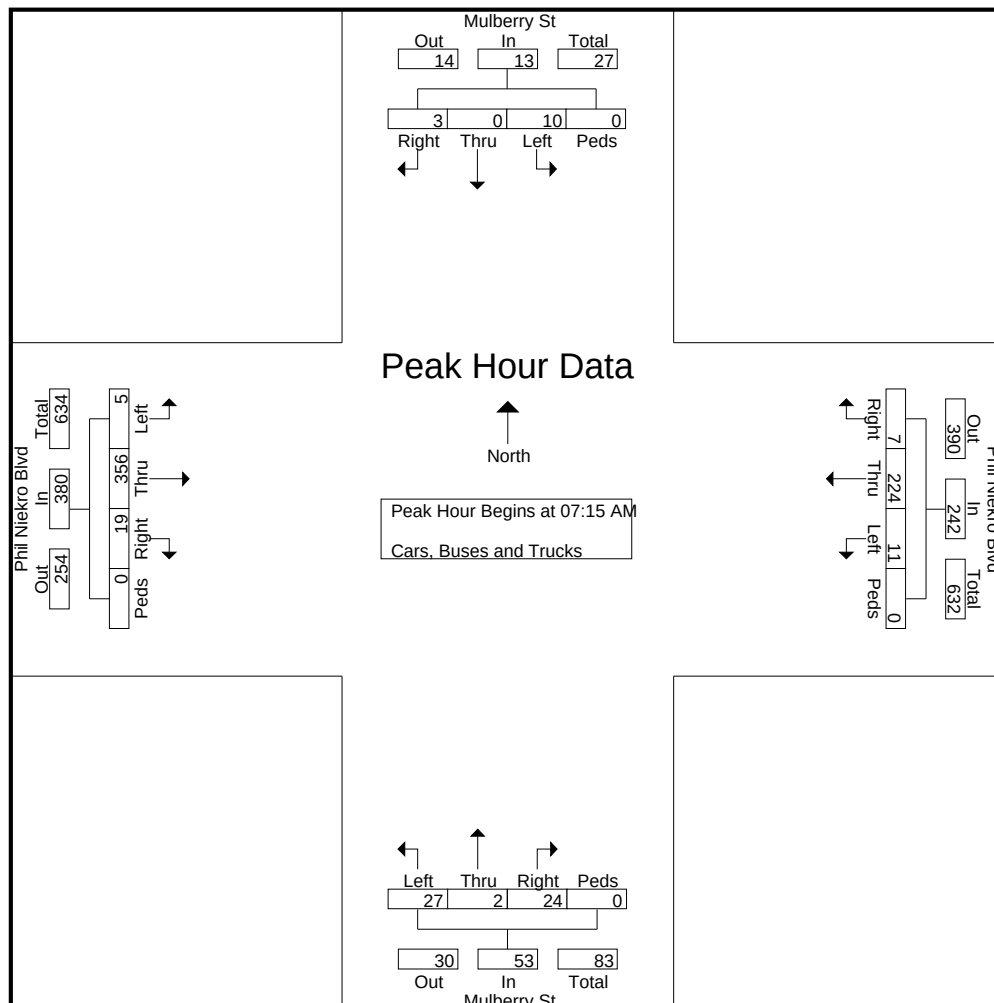
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TMC Data
Phil Niekro Blvd @ Mulberry St
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790002
Site Code : 44790002
Start Date : 4/21/2021
Page No : 2

	Mulberry St Northbound					Mulberry St Southbound					Phil Niekro Blvd Eastbound					Phil Niekro Blvd 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 07:15 AM																					
07:15 AM	11	0	7	0	18	1	0	0	0	1	0	94	2	0	96	2	51	1	0	54	169
07:30 AM	8	1	4	0	13	3	0	1	0	4	2	91	5	0	98	3	57	2	0	62	177
07:45 AM	3	0	9	0	12	3	0	2	0	5	2	87	8	0	97	2	62	3	0	67	181
08:00 AM	5	1	4	0	10	3	0	0	0	3	1	84	4	0	89	4	54	1	0	59	161
Total Volume	27	2	24	0	53	10	0	3	0	13	5	356	19	0	380	11	224	7	0	242	688
% App. Total	50.9		45.3			76.9		23.1			93.7					92.6					
PHF	.614	.500	.667	.000	.736	.833	.000	.375	.000	.650	.625	.947	.594	.000	.969	.688	.903	.583	.000	.903	.950



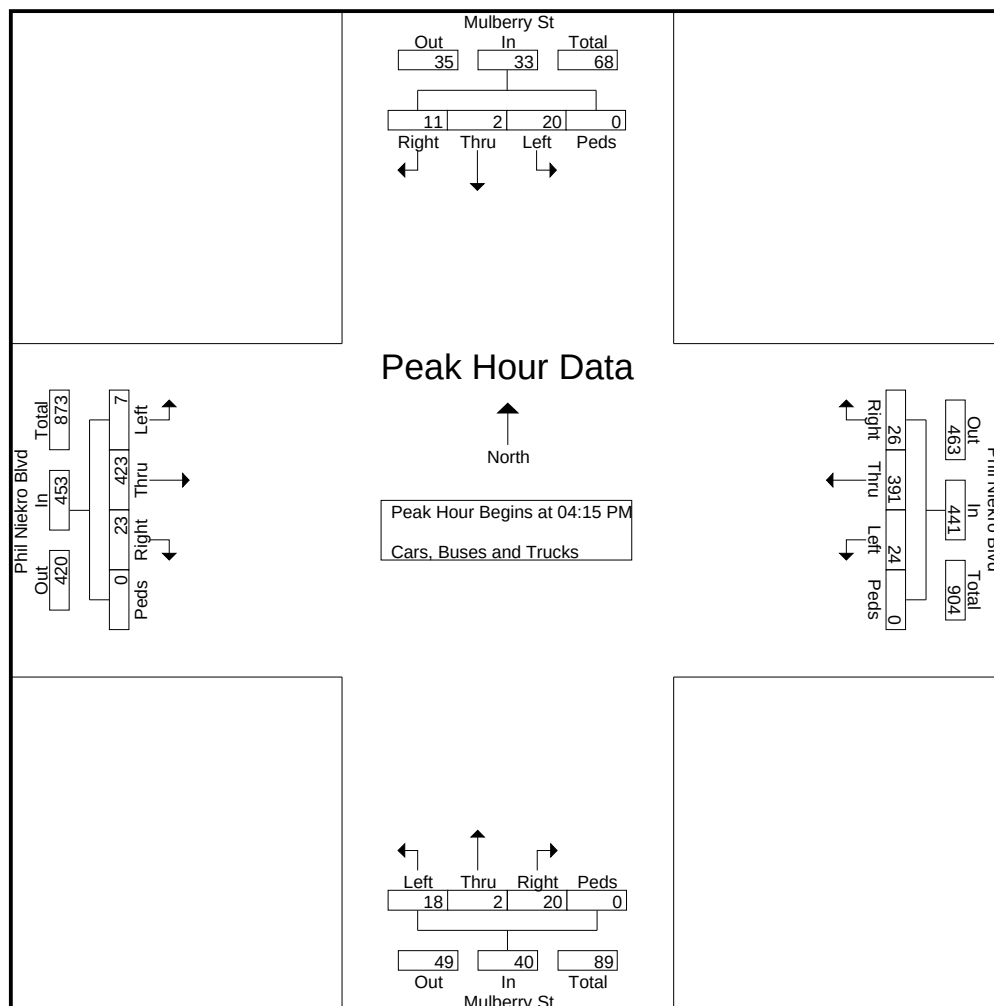
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TMC Data
Phil Niekro Blvd @ Mulberry St
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790002
Site Code : 44790002
Start Date : 4/21/2021
Page No : 3

	Mulberry St Northbound					Mulberry St Southbound					Phil Niekro Blvd Eastbound					Phil Niekro Blvd 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 04:15 PM																					
04:15 PM	6	0	5	0	11	6	1	4	0	11	1	109	6	0	116	6	101	8	0	115	253
04:30 PM	5	1	4	0	10	5	0	1	0	6	3	106	5	0	114	5	99	7	0	111	241
04:45 PM	2	1	5	0	8	2	1	3	0	6	1	101	3	0	105	6	95	9	0	110	229
05:00 PM	5	0	6	0	11	7	0	3	0	10	2	107	9	0	118	7	96	2	0	105	244
Total Volume	18	2	20	0	40	20	2	11	0	33	7	423	23	0	453	24	391	26	0	441	967
% App. Total						60.6		33.3				93.4				88.7					
PHF	.750	.500	.833	.000	.909	.714	.500	.688	.000	.750	.583	.970	.639	.000	.960	.857	.968	.722	.000	.959	.956



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TMC Data
Atlanta Hwy @ Phil Niekro Blvd/
Snelling Ave, Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790001
Site Code : 44790001
Start Date : 4/21/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Snelling Ave Eastbound					Phil Niekro Blvd 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	6	28	19	0	53	10	31	0	0	41	5	39	9	0	53	15	20	11	0	46	193
07:15 AM	4	25	16	0	45	18	39	1	0	58	4	59	6	0	69	19	27	12	0	58	230
07:30 AM	6	51	33	0	90	14	38	5	0	57	5	54	8	0	67	24	31	12	0	67	281
07:45 AM	2	46	21	0	69	27	43	2	0	72	5	43	9	0	57	22	30	8	0	60	258
Total	18	150	89	0	257	69	151	8	0	228	19	195	32	0	246	80	108	43	0	231	962
08:00 AM	8	45	24	0	77	26	44	1	0	71	4	35	6	0	45	16	24	14	0	54	247
08:15 AM	8	30	15	0	53	16	30	2	0	48	3	34	10	0	47	29	26	9	0	64	212
08:30 AM	3	29	13	0	45	12	34	2	0	48	4	39	13	0	56	23	32	11	0	66	215
08:45 AM	7	36	17	0	60	17	27	2	0	46	1	41	1	0	43	13	40	6	0	59	208
Total	26	140	69	0	235	71	135	7	0	213	12	149	30	0	191	81	122	40	0	243	882
*** BREAK ***																					
04:00 PM	10	55	28	0	93	24	59	10	0	93	7	53	7	0	67	20	69	12	0	101	354
04:15 PM	9	63	41	0	113	36	54	6	0	96	4	41	6	0	51	36	56	15	0	107	367
04:30 PM	14	82	36	0	132	24	41	8	0	73	4	46	6	0	56	31	56	15	0	102	363
04:45 PM	12	57	32	0	101	29	56	6	0	91	6	39	8	0	53	25	65	10	0	100	345
Total	45	257	137	0	439	113	210	30	0	353	21	179	27	0	227	112	246	52	0	410	1429
05:00 PM	11	75	51	0	137	24	45	7	0	76	13	25	10	0	48	35	48	12	0	95	356
05:15 PM	17	78	47	0	142	25	55	4	0	84	5	38	5	0	48	28	48	15	0	91	365
05:30 PM	22	73	43	0	138	24	42	8	0	74	5	51	12	0	68	34	73	14	0	121	401
05:45 PM	14	54	41	0	109	26	48	2	0	76	4	38	8	0	50	33	61	9	0	103	338
Total	64	280	182	0	526	99	190	21	0	310	27	152	35	0	214	130	230	50	0	410	1460
Grand Total	153	827	477	0	1457	352	686	66	0	1104	79	675	124	0	878	403	706	185	0	1294	4733
Apprch %	10.5	56.8	32.7	0		31.9	62.1	6	0		9	76.9	14.1	0		31.1	54.6	14.3	0		
Total %	3.2	17.5	10.1	0	30.8	7.4	14.5	1.4	0	23.3	1.7	14.3	2.6	0	18.6	8.5	14.9	3.9	0	27.3	

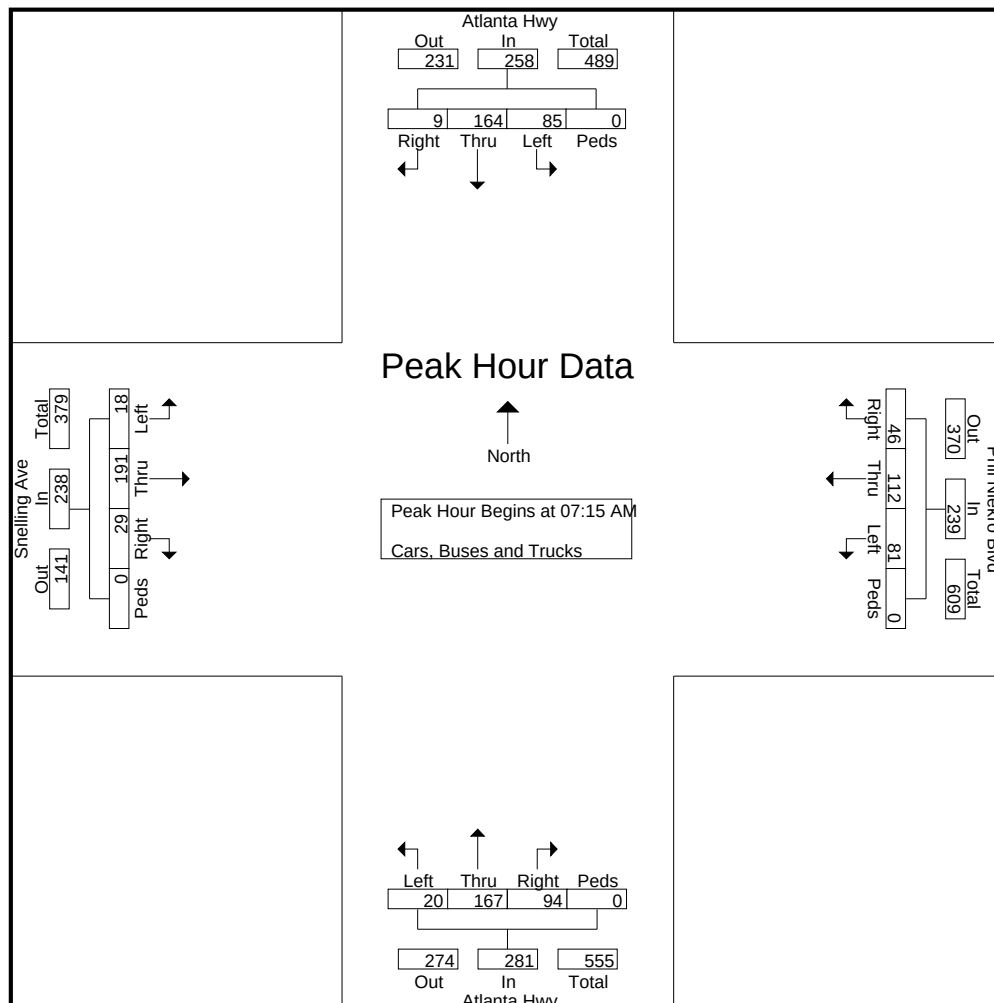
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TMC Data
Atlanta Hwy @ Phil Niekro Blvd/
Snelling Ave, Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790001
Site Code : 44790001
Start Date : 4/21/2021
Page No : 2

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Snelling Ave Eastbound					Phil Niekro Blvd 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 07:15 AM																					
07:15 AM	4	25	16	0	45	18	39	1	0	58	4	59	6	0	69	19	27	12	0	58	230
07:30 AM	6	51	33	0	90	14	38	5	0	57	5	54	8	0	67	24	31	12	0	67	281
07:45 AM	2	46	21	0	69	27	43	2	0	72	5	43	9	0	57	22	30	8	0	60	258
08:00 AM	8	45	24	0	77	26	44	1	0	71	4	35	6	0	45	16	24	14	0	54	247
Total Volume	20	167	94	0	281	85	164	9	0	258	18	191	29	0	238	81	112	46	0	239	1016
% App. Total		59.4	33.5			32.9	63.6				80.3	12.2				33.9	46.9	19.2			
PHF	.625	.819	.712	.000	.781	.787	.932	.450	.000	.896	.900	.809	.806	.000	.862	.844	.903	.821	.000	.892	.904



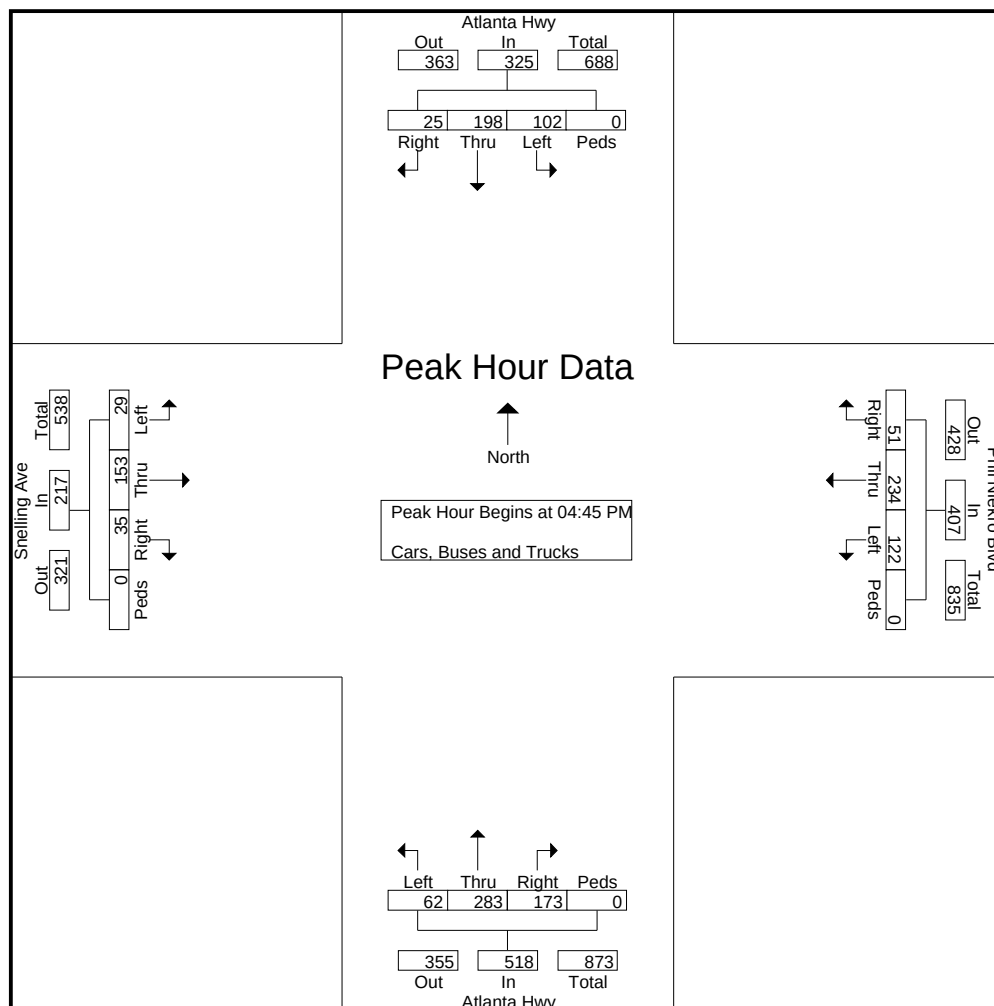
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TMC Data
Atlanta Hwy @ Phil Niekro Blvd/
Snelling Ave, Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790001
Site Code : 44790001
Start Date : 4/21/2021
Page No : 3

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Snelling Ave Eastbound					Phil Niekro Blvd 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 04:45 PM																					
04:45 PM	12	57	32	0	101	29	56	6	0	91	6	39	8	0	53	25	65	10	0	100	345
05:00 PM	11	75	51	0	137	24	45	7	0	76	13	25	10	0	48	35	48	12	0	95	356
05:15 PM	17	78	47	0	142	25	55	4	0	84	5	38	5	0	48	28	48	15	0	91	365
05:30 PM	22	73	43	0	138	24	42	8	0	74	5	51	12	0	68	34	73	14	0	121	401
Total Volume	62	283	173	0	518	102	198	25	0	325	29	153	35	0	217	122	234	51	0	407	1467
% App. Total		54.6	33.4			31.4	60.9				13.4	70.5	16.1			57.5	12.5				
PHF	.705	.907	.848	.000	.912	.879	.884	.781	.000	.893	.558	.750	.729	.000	.798	.871	.801	.850	.000	.841	.915



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TMC Data
Atlanta Hwy @ Flowery Way
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790003
Site Code : 44790003
Start Date : 4/21/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Eastbound					Flowery Way 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	45	0	0	45	1	53	0	0	54	0	0	0	0	0	0	0	3	0	3	102
07:15 AM	0	66	0	0	66	1	67	0	0	68	0	0	0	0	0	0	0	2	0	2	136
07:30 AM	0	70	0	0	70	0	74	0	0	74	0	0	0	0	0	0	0	2	0	2	146
07:45 AM	0	78	0	0	78	0	78	0	0	78	0	0	0	0	0	0	0	1	0	1	157
Total	0	259	0	0	259	2	272	0	0	274	0	0	0	0	0	0	0	8	0	8	541
08:00 AM	0	67	0	0	67	0	67	0	0	67	0	0	0	0	0	0	0	1	0	1	135
08:15 AM	0	64	1	0	65	1	65	0	0	66	0	0	0	0	0	0	0	1	0	1	132
08:30 AM	0	60	0	0	60	1	62	0	0	63	0	0	0	0	0	1	0	1	0	2	125
08:45 AM	0	47	2	0	49	0	53	0	0	53	0	0	0	0	0	0	0	0	0	0	102
Total	0	238	3	0	241	2	247	0	0	249	0	0	0	0	0	1	0	3	0	4	494
*** BREAK ***																					
04:00 PM	0	99	0	0	99	1	95	0	0	96	0	0	0	0	0	0	0	2	0	2	197
04:15 PM	0	102	0	0	102	0	79	0	0	79	0	0	0	0	0	0	0	0	0	0	181
04:30 PM	0	108	0	0	108	0	74	0	0	74	0	0	0	0	0	0	0	1	0	1	183
04:45 PM	0	115	0	0	115	1	85	0	0	86	0	0	0	0	0	0	0	1	0	1	202
Total	0	424	0	0	424	2	333	0	0	335	0	0	0	0	0	0	0	4	0	4	763
05:00 PM	0	124	1	0	125	0	91	0	0	91	0	0	0	0	0	0	0	0	0	0	216
05:15 PM	0	136	0	0	136	2	88	0	0	90	0	0	0	0	0	1	0	0	0	1	227
05:30 PM	0	128	3	0	131	2	84	0	0	86	0	0	0	0	0	2	0	1	0	3	220
05:45 PM	0	120	0	0	120	5	67	0	0	72	0	0	0	0	0	0	0	0	0	0	192
Total	0	508	4	0	512	9	330	0	0	339	0	0	0	0	0	3	0	1	0	4	855
Grand Total	0	1429	7	0	1436	15	1182	0	0	1197	0	0	0	0	0	4	0	16	0	20	2653
Apprch %	0	99.5	0.5	0		1.3	98.7	0	0		0	0	0	0		20	0	80	0		
Total %	0	53.9	0.3	0	54.1	0.6	44.6	0	0	45.1	0	0	0	0	0	0.2	0	0.6	0	0.8	

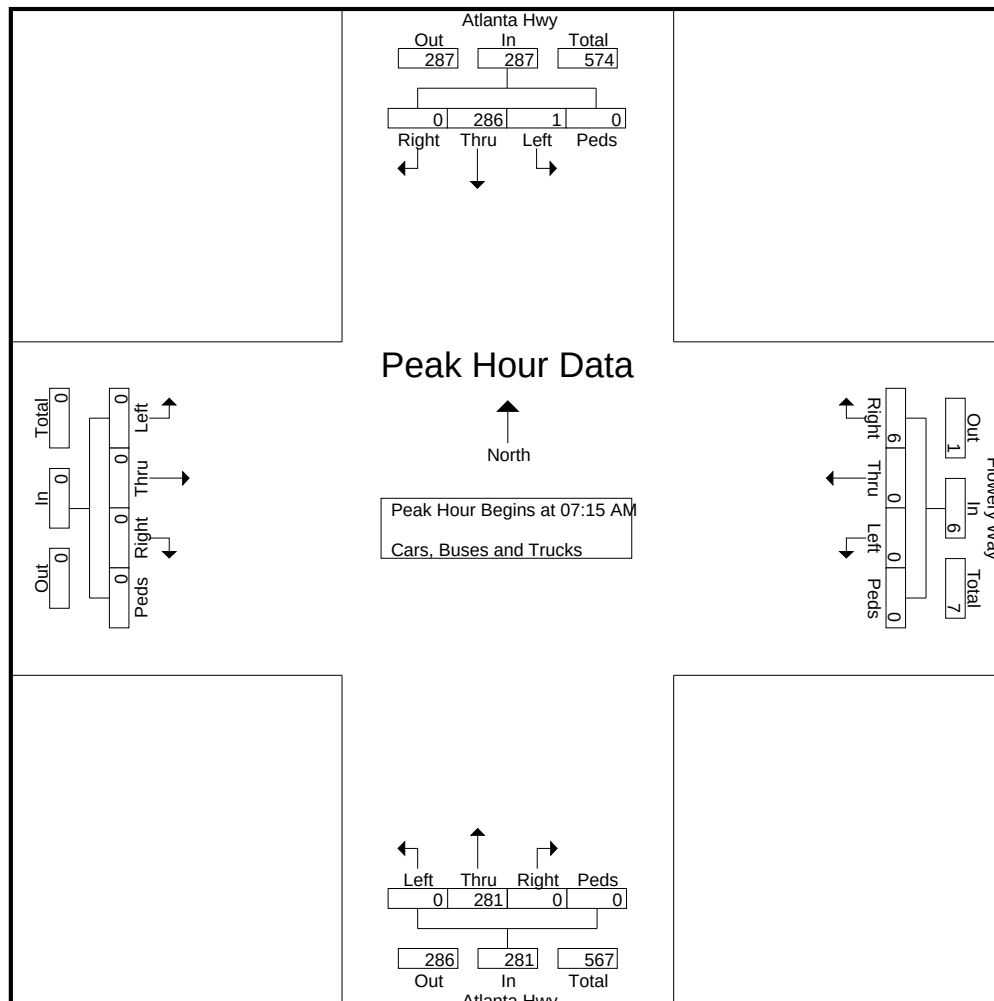
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TMC Data
Atlanta Hwy @ Flowery Way
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790003
Site Code : 44790003
Start Date : 4/21/2021
Page No : 2

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Eastbound					Flowery Way 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 07:15 AM																					
07:15 AM	0	66	0	0	66	1	67	0	0	68	0	0	0	0	0	0	0	2	0	2	136
07:30 AM	0	70	0	0	70	0	74	0	0	74	0	0	0	0	0	0	0	2	0	2	146
07:45 AM	0	78	0	0	78	0	78	0	0	78	0	0	0	0	0	0	0	1	0	1	157
08:00 AM	0	67	0	0	67	0	67	0	0	67	0	0	0	0	0	0	0	1	0	1	135
Total Volume	0	281	0	0	281	1	286	0	0	287	0	0	0	0	0	0	0	6	0	6	574
% App. Total							99.7											.750	.000	.750	
PHF	.000	.901	.000	.000	.901	.250	.917	.000	.000	.920	.000	.000	.000	.000	.000	.000	.000	.750	.000	.750	.914



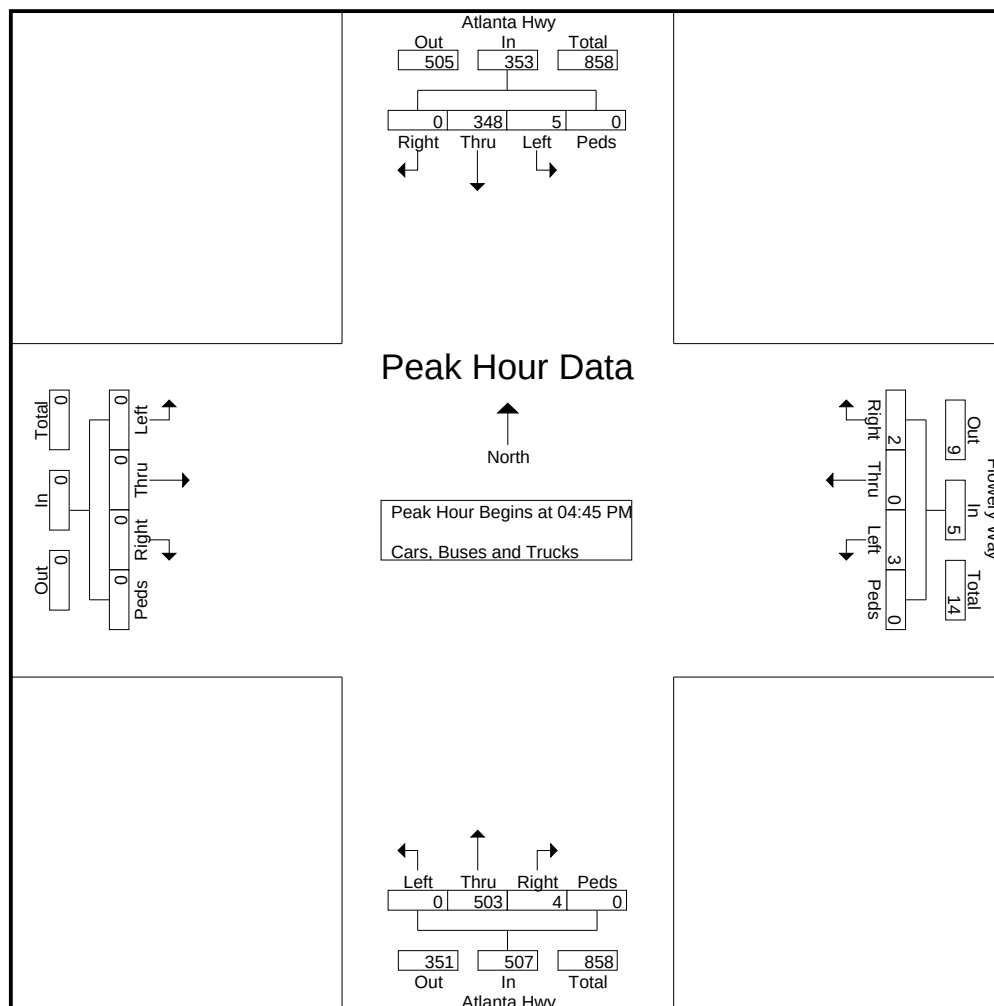
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TMC Data
Atlanta Hwy @ Flowery Way
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790003
Site Code : 44790003
Start Date : 4/21/2021
Page No : 3

	Atlanta Hwy Northbound					Atlanta Hwy Southbound					Eastbound					Flowery Way 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 04:45 PM																					
04:45 PM	0	115	0	0	115	1	85	0	0	86	0	0	0	0	0	0	0	1	0	1	202
05:00 PM	0	124	1	0	125	0	91	0	0	91	0	0	0	0	0	0	0	0	0	0	216
05:15 PM	0	136	0	0	136	2	88	0	0	90	0	0	0	0	0	1	0	0	0	1	227
05:30 PM	0	128	3	0	131	2	84	0	0	86	0	0	0	0	0	2	0	1	0	3	220
Total Volume	0	503	4	0	507	5	348	0	0	353	0	0	0	0	0	3	0	2	0	5	865
% App. Total		99.2					98.6									.375	.000	.500	.000	.417	.953
PHF	.000	.925	.333	.000	.932	.625	.956	.000	.000	.970	.000	.000	.000	.000	.000	.375	.000	.500	.000	.417	.953



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TMC Data
Wade Orr Rd @ Compass Dr
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790004
Site Code : 44790004
Start Date : 4/21/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	Northbound					Compass Dr Southbound					Wade Orr Rd Eastbound					Wade Orr 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	0	0	0	0	9	0	9	0	18	3	25	0	0	28	0	33	4	0	37	83
07:15 AM	0	0	0	0	0	8	0	13	0	21	5	30	0	0	35	0	38	1	0	39	95
07:30 AM	0	0	0	0	0	9	0	23	0	32	5	32	0	0	37	0	51	6	0	57	126
07:45 AM	0	0	0	0	0	7	0	11	0	18	4	35	0	0	39	0	49	3	0	52	109
Total	0	0	0	0	0	33	0	56	0	89	17	122	0	0	139	0	171	14	0	185	413
08:00 AM	0	0	0	0	0	10	0	10	0	20	3	37	0	0	40	0	39	1	0	40	100
08:15 AM	0	0	0	0	0	9	0	1	0	10	5	34	0	0	39	0	36	0	0	36	85
08:30 AM	0	0	0	0	0	5	0	1	0	6	3	29	0	0	32	0	35	3	0	38	76
08:45 AM	0	0	0	0	0	9	0	4	0	13	3	26	0	0	29	0	32	4	0	36	78
Total	0	0	0	0	0	33	0	16	0	49	14	126	0	0	140	0	142	8	0	150	339
*** BREAK ***																					
04:00 PM	0	0	0	0	0	5	0	3	0	8	7	51	0	0	58	0	45	14	0	59	125
04:15 PM	0	0	0	0	0	4	0	7	0	11	6	58	0	0	64	0	43	8	0	51	126
04:30 PM	0	0	0	0	0	8	0	5	0	13	4	55	0	0	59	0	51	12	0	63	135
04:45 PM	0	0	0	0	0	6	0	10	0	16	3	62	0	0	65	0	54	10	0	64	145
Total	0	0	0	0	0	23	0	25	0	48	20	226	0	0	246	0	193	44	0	237	531
05:00 PM	0	0	0	0	0	7	0	9	0	16	11	65	0	0	76	0	44	11	0	55	147
05:15 PM	0	0	0	0	0	3	0	3	0	6	8	62	0	0	70	0	37	8	0	45	121
05:30 PM	0	0	0	0	0	9	0	3	0	12	6	59	0	0	65	0	30	7	0	37	114
05:45 PM	0	0	0	0	0	6	0	6	0	12	10	57	0	0	67	0	35	9	0	44	123
Total	0	0	0	0	0	25	0	21	0	46	35	243	0	0	278	0	146	35	0	181	505
Grand Total	0	0	0	0	0	114	0	118	0	232	86	717	0	0	803	0	652	101	0	753	1788
Apprch %	0	0	0	0		49.1	0	50.9	0		10.7	89.3	0	0		0	86.6	13.4	0		
Total %	0	0	0	0	0	6.4	0	6.6	0	13	4.8	40.1	0	0	44.9	0	36.5	5.6	0	42.1	

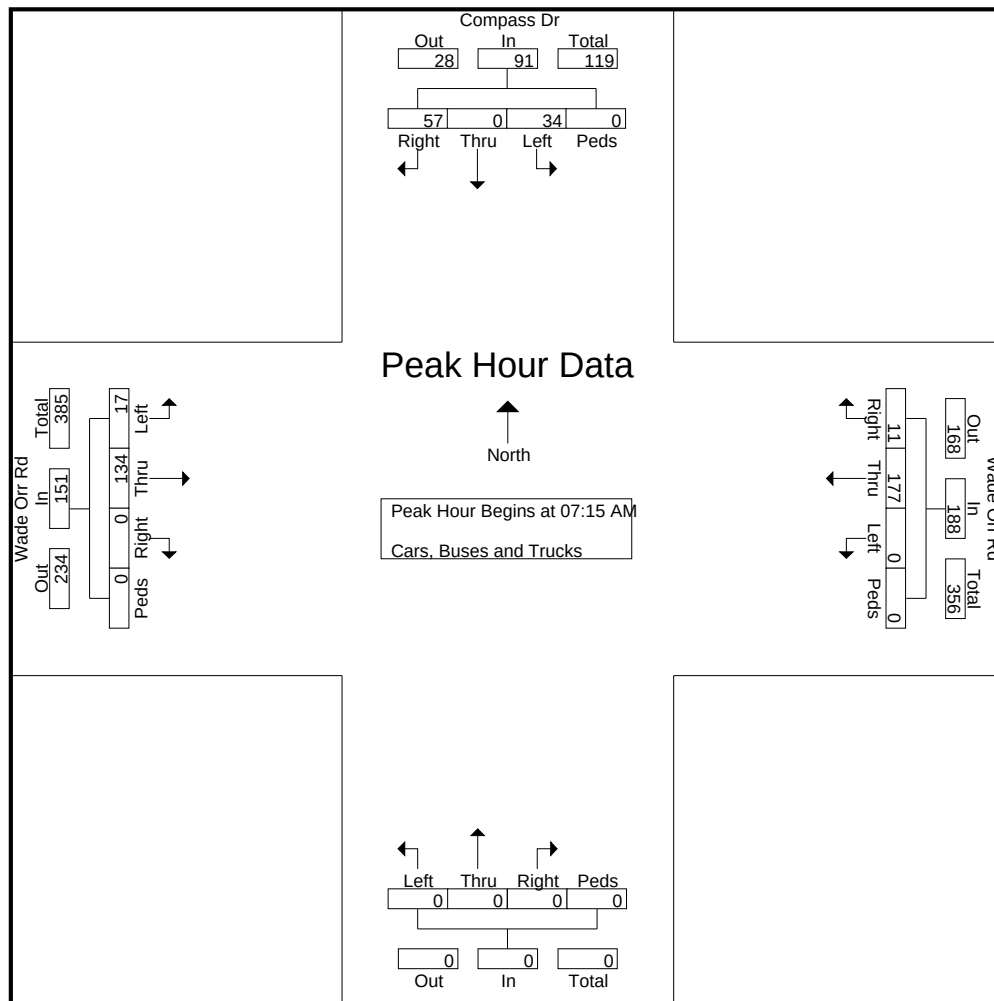
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TMC Data
Wade Orr Rd @ Compass Dr
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790004
Site Code : 44790004
Start Date : 4/21/2021
Page No : 2

	Northbound					Compass Dr Southbound					Wade Orr Rd Eastbound					Wade Orr 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 07:15 AM																					
07:15 AM	0	0	0	0	0	8	0	13	0	21	5	30	0	0	35	0	38	1	0	39	95
07:30 AM	0	0	0	0	0	9	0	23	0	32	5	32	0	0	37	0	51	6	0	57	126
07:45 AM	0	0	0	0	0	7	0	11	0	18	4	35	0	0	39	0	49	3	0	52	109
08:00 AM	0	0	0	0	0	10	0	10	0	20	3	37	0	0	40	0	39	1	0	40	100
Total Volume	0	0	0	0	0	34	0	57	0	91	17	134	0	0	151	0	177	11	0	188	430
% App. Total						37.4		62.6			11.3	88.7				94.1					
PHF	.000	.000	.000	.000	.000	.850	.000	.620	.000	.711	.850	.905	.000	.000	.944	.000	.868	.458	.000	.825	.853



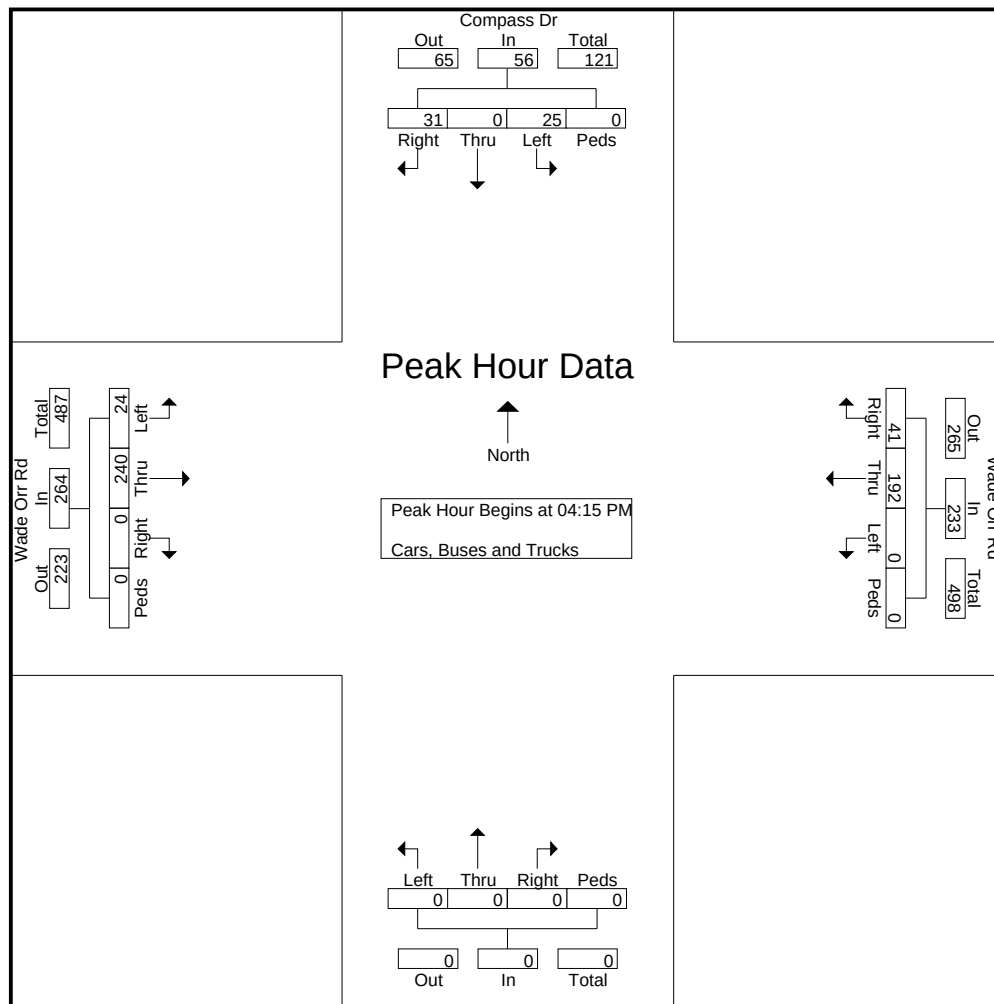
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TMC Data
Wade Orr Rd @ Compass Dr
Flowery Branch, GA
7-9 AM | 4-6 PM

File Name : 44790004
Site Code : 44790004
Start Date : 4/21/2021
Page No : 3

	Northbound					Compass Dr Southbound					Wade Orr Rd Eastbound					Wade Orr 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 04:15 PM																					
04:15 PM	0	0	0	0	0	4	0	7	0	11	6	58	0	0	64	0	43	8	0	51	126
04:30 PM	0	0	0	0	0	8	0	5	0	13	4	55	0	0	59	0	51	12	0	63	135
04:45 PM	0	0	0	0	0	6	0	10	0	16	3	62	0	0	65	0	54	10	0	64	145
05:00 PM	0	0	0	0	0	7	0	9	0	16	11	65	0	0	76	0	44	11	0	55	147
Total Volume	0	0	0	0	0	25	0	31	0	56	24	240	0	0	264	0	192	41	0	233	553
% App. Total						44.6		55.4			90.9					82.4	17.6				
PHF	.000	.000	.000	.000	.000	.781	.000	.775	.000	.875	.545	.923	.000	.000	.868	.000	.889	.854	.000	.910	.940



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Page 1

ADT Data

Site Code: 44790101
Atlanta Hwy South of Phil Niekro Blvd
Flowery Branch, GA

Start Time	21-Apr-21 Wed	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		8	48			3	69				
12:15		13	80			4	70				
12:30		5	88			5	64				
12:45		2	89	28	305	4	62	16	265	44	570
01:00		2	70			1	69				
01:15		2	69			3	73				
01:30		5	88			5	71				
01:45		2	71	11	298	0	85	9	298	20	596
02:00		4	82			3	68				
02:15		2	73			2	54				
02:30		0	80			0	77				
02:45		2	87	8	322	1	67	6	266	14	588
03:00		1	92			1	96				
03:15		1	78			1	76				
03:30		1	86			2	84				
03:45		3	114	6	370	0	99	4	355	10	725
04:00		3	109			3	98				
04:15		4	94			11	78				
04:30		9	107			6	76				
04:45		2	113	18	423	9	84	29	336	47	759
05:00		6	122			12	99				
05:15		10	139			21	84				
05:30		16	136			29	85				
05:45		19	112	51	509	26	63	88	331	139	840
06:00		18	100			31	82				
06:15		31	101			50	77				
06:30		29	86			62	63				
06:45		48	80	126	367	59	49	202	271	328	638
07:00		47	57			56	57				
07:15		68	50			66	66				
07:30		71	53			75	57				
07:45		80	63	266	223	80	36	277	216	543	439
08:00		64	52			64	48				
08:15		66	51			62	40				
08:30		61	37			65	27				
08:45		45	36	236	176	49	45	240	160	476	336
09:00		54	31			63	34				
09:15		74	30			49	29				
09:30		45	24			49	25				
09:45		71	19	244	104	57	10	218	98	462	202
10:00		65	20			45	14				
10:15		67	12			47	18				
10:30		45	13			60	16				
10:45		55	14	232	59	58	10	210	58	442	117
11:00		57	8			65	8				
11:15		84	10			56	7				
11:30		75	11			65	6				
11:45		89	6	305	35	61	3	247	24	552	59
Total		1531	3191			1546	2678			3077	5869
Percent		32.4%	67.6%			36.6%	63.4%			34.4%	65.6%
Grand Total		1531	3191			1546	2678			3077	5869
Percent		32.4%	67.6%			36.6%	63.4%			34.4%	65.6%
ADT		ADT 8,946		AADT 8,946							

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Page 1

ADT Data

Site Code: 44790102
Mulberry St South of Phil Niekro Blvd
Flowery Branch, GA

Start Time	21-Apr-21 Wed	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	7			1	11				
12:15		1	14			1	10				
12:30		1	4			5	10				
12:45		1	12	3	37	1	6	8	37	11	74
01:00		1	7			1	7				
01:15		2	10			3	7				
01:30		1	10			4	6				
01:45		0	3	4	30	2	6	10	26	14	56
02:00		1	8			0	7				
02:15		0	11			2	6				
02:30		1	6			0	15				
02:45		0	8	2	33	1	7	3	35	5	68
03:00		0	12			0	13				
03:15		0	14			1	13				
03:30		1	10			0	14				
03:45		0	3	1	39	0	9	1	49	2	88
04:00		0	10			1	8				
04:15		1	10			0	14				
04:30		1	9			0	10				
04:45		1	6	3	35	0	11	1	43	4	78
05:00		5	12			0	15				
05:15		1	11			1	18				
05:30		8	5			2	14				
05:45		9	4	23	32	0	13	3	60	26	92
06:00		8	9			2	18				
06:15		8	6			1	16				
06:30		12	17			2	10				
06:45		15	4	43	36	2	15	7	59	50	95
07:00		15	5			4	11				
07:15		18	5			4	9				
07:30		15	5			9	10				
07:45		10	4	58	19	10	9	27	39	85	58
08:00		11	5			8	8				
08:15		5	3			2	7				
08:30		10	5			5	7				
08:45		8	1	34	14	3	4	18	26	52	40
09:00		9	1			3	8				
09:15		8	4			4	7				
09:30		14	4			4	4				
09:45		5	4	36	13	3	3	14	22	50	35
10:00		10	3			4	3				
10:15		7	4			3	8				
10:30		6	4			4	9				
10:45		6	1	29	12	11	2	22	22	51	34
11:00		8	0			7	3				
11:15		4	0			7	5				
11:30		8	2			6	0				
11:45		9	0	29	2	9	0	29	8	58	10
Total		265	302			143	426			408	728
Percent		46.7%	53.3%			25.1%	74.9%			35.9%	64.1%
Grand Total		265	302			143	426			408	728
Percent		46.7%	53.3%			25.1%	74.9%			35.9%	64.1%
ADT		ADT 1,136		AADT 1,136							

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Page 1

ADT Data

Site Code: 44790102
Mulberry St South of Phil Niekro Blvd
Flowery Branch, GA

Start Time	21-Apr-21 Wed	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	7			1	11				
12:15		1	14			1	10				
12:30		1	4			5	10				
12:45		1	12	3	37	1	6	8	37	11	74
01:00		1	7			1	7				
01:15		2	10			3	7				
01:30		1	10			4	6				
01:45		0	3	4	30	2	6	10	26	14	56
02:00		1	8			0	7				
02:15		0	11			2	6				
02:30		1	6			0	15				
02:45		0	8	2	33	1	7	3	35	5	68
03:00		0	12			0	13				
03:15		0	14			1	13				
03:30		1	10			0	14				
03:45		0	3	1	39	0	9	1	49	2	88
04:00		0	10			1	8				
04:15		1	10			0	14				
04:30		1	9			0	10				
04:45		1	6	3	35	0	11	1	43	4	78
05:00		5	12			0	15				
05:15		1	11			1	18				
05:30		8	5			2	14				
05:45		9	4	23	32	0	13	3	60	26	92
06:00		8	9			2	18				
06:15		8	6			1	16				
06:30		12	17			2	10				
06:45		15	4	43	36	2	15	7	59	50	95
07:00		15	5			4	11				
07:15		18	5			4	9				
07:30		15	5			9	10				
07:45		10	4	58	19	10	9	27	39	85	58
08:00		11	5			8	8				
08:15		5	3			2	7				
08:30		10	5			5	7				
08:45		8	1	34	14	3	4	18	26	52	40
09:00		9	1			3	8				
09:15		8	4			4	7				
09:30		14	4			4	4				
09:45		5	4	36	13	3	3	14	22	50	35
10:00		10	3			4	3				
10:15		7	4			3	8				
10:30		6	4			4	9				
10:45		6	1	29	12	11	2	22	22	51	34
11:00		8	0			7	3				
11:15		4	0			7	5				
11:30		8	2			6	0				
11:45		9	0	29	2	9	0	29	8	58	10
Total		265	302			143	426			408	728
Percent		46.7%	53.3%			25.1%	74.9%			35.9%	64.1%
Grand Total		265	302			143	426			408	728
Percent		46.7%	53.3%			25.1%	74.9%			35.9%	64.1%
ADT		ADT 1,136		AADT 1,136							

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

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

existing a.m.

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	392	21	12	246	8	30	2	26	11	0	3
Future Vol, veh/h	6	392	21	12	246	8	30	2	26	11	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	74	74	74	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	6	404	22	13	273	9	41	3	35	17	0	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	282	0	0	426	0	0	722	724	404	750	742	278
Stage 1	-	-	-	-	-	-	416	416	-	304	304	-
Stage 2	-	-	-	-	-	-	306	308	-	446	438	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1280	-	-	1133	-	-	342	352	647	328	344	761
Stage 1	-	-	-	-	-	-	614	592	-	705	663	-
Stage 2	-	-	-	-	-	-	704	660	-	591	579	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1280	-	-	1133	-	-	336	346	647	304	338	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	336	346	-	304	338	-
Stage 1	-	-	-	-	-	-	610	588	-	701	656	-
Stage 2	-	-	-	-	-	-	692	653	-	553	576	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			15.3			15.8		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	429	1280	-	-	1133	-	-	304	761			
HCM Lane V/C Ratio	0.183	0.005	-	-	0.012	-	-	0.056	0.006			
HCM Control Delay (s)	15.3	7.8	0	-	8.2	-	-	17.5	9.8			
HCM Lane LOS	C	A	A	-	A	-	-	C	A			
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.2	0			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

existing a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	210	32	89	123	51	22	184	103	94	180	10
Future Volume (veh/h)	20	210	32	89	123	51	22	184	103	94	180	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	23	244	37	100	138	57	28	236	132	104	200	11
Peak Hour Factor	0.86	0.86	0.86	0.89	0.89	0.89	0.78	0.78	0.78	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	267	292	44	221	279	115	686	577	323	549	935	51
Arrive On Green	0.02	0.18	0.18	0.06	0.22	0.22	0.03	0.52	0.52	0.05	0.54	0.54
Sat Flow, veh/h	1781	1586	241	1753	1257	519	1781	1109	620	1753	1729	95
Grp Volume(v), veh/h	23	0	281	100	0	195	28	0	368	104	0	211
Grp Sat Flow(s),veh/h/ln	1781	0	1827	1753	0	1777	1781	0	1729	1753	0	1824
Q Serve(g_s), s	1.0	0.0	14.4	4.4	0.0	9.3	0.7	0.0	12.6	2.6	0.0	5.8
Cycle Q Clear(g_c), s	1.0	0.0	14.4	4.4	0.0	9.3	0.7	0.0	12.6	2.6	0.0	5.8
Prop In Lane	1.00		0.13	1.00		0.29	1.00		0.36	1.00		0.05
Lane Grp Cap(c), veh/h	267	0	337	221	0	395	686	0	899	549	0	987
V/C Ratio(X)	0.09	0.00	0.83	0.45	0.00	0.49	0.04	0.00	0.41	0.19	0.00	0.21
Avail Cap(c_a), veh/h	325	0	631	303	0	705	738	0	899	617	0	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.0	0.0	38.1	29.7	0.0	33.0	10.2	0.0	14.2	10.5	0.0	11.5
Incr Delay (d2), s/veh	0.1	0.0	5.4	1.4	0.0	1.0	0.0	0.0	1.4	0.2	0.0	0.5
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	0.0	6.9	1.9	0.0	4.1	0.3	0.0	5.0	1.0	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	0.0	43.6	31.1	0.0	33.9	10.2	0.0	15.6	10.7	0.0	12.0
LnGrp LOS	C	A	D	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		304			295			396			315	
Approach Delay, s/veh		42.7			33.0			15.2			11.6	
Approach LOS		D			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	55.0	10.5	22.4	7.1	57.0	6.8	26.1				
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	8.5	49.5	10.5	33.5	5.5	52.5	5.5	38.5				
Max Q Clear Time (g_c+I1), s	4.6	14.6	6.4	16.4	2.7	7.8	3.0	11.3				
Green Ext Time (p_c), s	0.1	2.6	0.1	1.5	0.0	1.3	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			24.7									
HCM 6th LOS			C									

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

existing a.m.

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	309	0	1	315
Future Vol, veh/h	0	7	309	0	1	315
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	9	343	0	1	342
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	687	343	0	0	343	0
Stage 1	343	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	413	700	-	-	1216	-
Stage 1	719	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	413	700	-	-	1216	-
Mov Cap-2 Maneuver	413	-	-	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.2	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	700	1216	-	
HCM Lane V/C Ratio	-	-	0.013	0.001	-	
HCM Control Delay (s)	-	-	10.2	8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

existing a.m.

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	147	195	12	37	63
Future Vol, veh/h	19	147	195	12	37	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	71	71
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	20	156	235	14	52	89
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	249	0	-	0	438	242
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	196	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1317	-	-	-	576	797
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	837	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1317	-	-	-	566	797
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	837	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		11.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1317	-	-	-	692	
HCM Lane V/C Ratio	0.015	-	-	-	0.204	
HCM Control Delay (s)	7.8	0	-	-	11.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.8	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

existing p.m.

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	465	25	26	430	29	20	2	22	22	2	12
Future Vol, veh/h	8	465	25	26	430	29	20	2	22	22	2	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	91	91	91	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	8	484	26	27	448	30	22	2	24	29	3	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	478	0	0	510	0	0	1027	1032	484	1043	1043	463
Stage 1	-	-	-	-	-	-	500	500	-	517	517	-
Stage 2	-	-	-	-	-	-	527	532	-	526	526	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1084	-	-	1055	-	-	213	233	583	207	229	599
Stage 1	-	-	-	-	-	-	553	543	-	541	534	-
Stage 2	-	-	-	-	-	-	535	526	-	535	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1084	-	-	1055	-	-	200	225	583	192	221	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	200	225	-	192	221	-
Stage 1	-	-	-	-	-	-	547	538	-	536	520	-
Stage 2	-	-	-	-	-	-	505	512	-	506	524	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			19.3			21.9		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	300	1084	-	-	1055	-	-	194	599
HCM Lane V/C Ratio	0.161	0.008	-	-	0.026	-	-	0.165	0.027
HCM Control Delay (s)	19.3	8.3	0	-	8.5	-	-	27.2	11.2
HCM Lane LOS	C	A	A	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.6	0.1

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

existing p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	168	39	134	257	56	68	311	190	112	218	28
Future Volume (veh/h)	32	168	39	134	257	56	68	311	190	112	218	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	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	40	210	49	160	306	67	75	342	209	126	245	31
Peak Hour Factor	0.80	0.80	0.80	0.84	0.84	0.84	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	159	257	60	267	347	76	626	552	337	400	842	107
Arrive On Green	0.03	0.17	0.17	0.09	0.23	0.23	0.04	0.52	0.52	0.05	0.53	0.53
Sat Flow, veh/h	1781	1467	342	1753	1486	325	1781	1069	654	1753	1602	203
Grp Volume(v), veh/h	40	0	259	160	0	373	75	0	551	126	0	276
Grp Sat Flow(s),veh/h/ln	1781	0	1809	1753	0	1812	1781	0	1723	1753	0	1804
Q Serve(g_s), s	2.0	0.0	14.9	7.8	0.0	21.4	2.1	0.0	24.5	3.6	0.0	9.2
Cycle Q Clear(g_c), s	2.0	0.0	14.9	7.8	0.0	21.4	2.1	0.0	24.5	3.6	0.0	9.2
Prop In Lane	1.00		0.19	1.00		0.18	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	159	0	316	267	0	423	626	0	889	400	0	949
V/C Ratio(X)	0.25	0.00	0.82	0.60	0.00	0.88	0.12	0.00	0.62	0.31	0.00	0.29
Avail Cap(c_a), veh/h	189	0	458	311	0	580	643	0	889	448	0	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.8	0.0	42.8	31.9	0.0	39.9	11.4	0.0	18.6	14.1	0.0	14.3
Incr Delay (d2), s/veh	0.8	0.0	7.5	2.4	0.0	11.6	0.1	0.0	3.2	0.4	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	7.3	3.4	0.0	10.8	0.8	0.0	10.2	1.4	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	0.0	50.3	34.3	0.0	51.5	11.4	0.0	21.8	14.6	0.0	15.1
LnGrp LOS	D	A	D	C	A	D	B	A	C	B	A	B
Approach Vol, veh/h		299			533			626			402	
Approach Delay, s/veh		48.5			46.3			20.6			14.9	
Approach LOS		D			D			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	60.1	14.3	23.4	9.0	61.2	8.0	29.6				
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	8.5	53.7	12.5	27.3	5.5	56.7	5.3	34.5				
Max Q Clear Time (g_c+I1), s	5.6	26.5	9.8	16.9	4.1	11.2	4.0	23.4				
Green Ext Time (p_c), s	0.1	4.1	0.1	1.0	0.0	1.8	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay			31.2									
HCM 6th LOS			C									

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

existing p.m.

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	2	553	4	6	383
Future Vol, veh/h	3	2	553	4	6	383
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	7	5	595	4	6	395
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1004	597	0	0	599	0
Stage 1	597	-	-	-	-	-
Stage 2	407	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	268	503	-	-	978	-
Stage 1	550	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	266	503	-	-	978	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	16.4	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	328	978	-	
HCM Lane V/C Ratio	-	-	0.036	0.006	-	
HCM Control Delay (s)	-	-	16.4	8.7	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

existing p.m.

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	264	211	45	28	34
Future Vol, veh/h	26	264	211	45	28	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	88	88
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	30	303	232	49	32	39
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	281	0	-	0	620	257
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	363	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1282	-	-	-	452	782
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	704	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1282	-	-	-	439	782
Mov Cap-2 Maneuver	-	-	-	-	439	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	704	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		12.1		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1282	-	-	-	578	
HCM Lane V/C Ratio	0.023	-	-	-	0.122	
HCM Control Delay (s)	7.9	0	-	-	12.1	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	

Appendix D

No-Build Intersection Operational Analysis

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

no-build a.m. - phase I

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	432	23	13	272	9	33	2	29	12	0	4
Future Vol, veh/h	6	432	23	13	272	9	33	2	29	12	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	76	76	76	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	6	445	24	14	302	10	43	3	38	18	0	6
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	469	0	0	795	797	445	825	816	307
Stage 1	-	-	-	-	-	-	457	457	-	335	335	-
Stage 2	-	-	-	-	-	-	338	340	-	490	481	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1248	-	-	1093	-	-	305	319	613	292	311	733
Stage 1	-	-	-	-	-	-	583	568	-	679	643	-
Stage 2	-	-	-	-	-	-	676	639	-	560	554	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1248	-	-	1093	-	-	298	313	613	268	305	733
Mov Cap-2 Maneuver	-	-	-	-	-	-	298	313	-	268	305	-
Stage 1	-	-	-	-	-	-	579	564	-	674	635	-
Stage 2	-	-	-	-	-	-	662	631	-	519	550	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			16.8			17		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	389	1248	-	-	1093	-	-	268	733			
HCM Lane V/C Ratio	0.216	0.005	-	-	0.013	-	-	0.069	0.008			
HCM Control Delay (s)	16.8	7.9	0	-	8.3	-	-	19.4	10			
HCM Lane LOS	C	A	A	-	A	-	-	C	B			
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.2	0			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

no-build a.m. - phase I

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	232	35	98	136	56	24	203	114	103	199	11
Future Volume (veh/h)	22	232	35	98	136	56	24	203	114	103	199	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	26	270	41	110	153	63	31	260	146	114	221	12
Peak Hour Factor	0.86	0.86	0.86	0.89	0.89	0.89	0.78	0.78	0.78	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	277	319	48	227	303	125	643	554	311	496	903	49
Arrive On Green	0.03	0.20	0.20	0.07	0.24	0.24	0.03	0.50	0.50	0.05	0.52	0.52
Sat Flow, veh/h	1781	1586	241	1753	1259	518	1781	1107	622	1753	1730	94
Grp Volume(v), veh/h	26	0	311	110	0	216	31	0	406	114	0	233
Grp Sat Flow(s),veh/h/ln	1781	0	1827	1753	0	1777	1781	0	1729	1753	0	1824
Q Serve(g_s), s	1.1	0.0	16.2	4.7	0.0	10.4	0.8	0.0	15.1	3.1	0.0	6.9
Cycle Q Clear(g_c), s	1.1	0.0	16.2	4.7	0.0	10.4	0.8	0.0	15.1	3.1	0.0	6.9
Prop In Lane	1.00		0.13	1.00		0.29	1.00		0.36	1.00		0.05
Lane Grp Cap(c), veh/h	277	0	367	227	0	428	643	0	866	496	0	952
V/C Ratio(X)	0.09	0.00	0.85	0.48	0.00	0.50	0.05	0.00	0.47	0.23	0.00	0.24
Avail Cap(c_a), veh/h	331	0	639	298	0	711	691	0	866	577	0	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	38.0	28.9	0.0	32.4	11.2	0.0	16.1	12.0	0.0	12.9
Incr Delay (d2), s/veh	0.1	0.0	5.4	1.6	0.0	0.9	0.0	0.0	1.8	0.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	7.7	2.1	0.0	4.5	0.3	0.0	6.2	1.2	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	43.4	30.5	0.0	33.3	11.3	0.0	17.9	12.2	0.0	13.5
LnGrp LOS	C	A	D	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		337			326			437			347	
Approach Delay, s/veh		42.4			32.4			17.4			13.1	
Approach LOS		D			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	53.9	11.0	24.3	7.4	56.0	7.0	28.3				
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	9.5	47.5	10.5	34.5	5.5	51.5	5.5	39.5				
Max Q Clear Time (g_c+I1), s	5.1	17.1	6.7	18.2	2.8	8.9	3.1	12.4				
Green Ext Time (p_c), s	0.1	2.8	0.1	1.6	0.0	1.5	0.0	1.3				
Intersection Summary												
HCM 6th Ctrl Delay			25.6									
HCM 6th LOS			C									

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

no-build a.m. - phase I

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	341	0	1	347
Future Vol, veh/h	0	7	341	0	1	347
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	9	379	0	1	377
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	758	379	0	0	379	0
Stage 1	379	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	375	668	-	-	1179	-
Stage 1	692	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	375	668	-	-	1179	-
Mov Cap-2 Maneuver	375	-	-	-	-	-
Stage 1	692	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.5	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	668	1179	-	
HCM Lane V/C Ratio	-	-	0.014	0.001	-	
HCM Control Delay (s)	-	-	10.5	8.1	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

no-build a.m. - phase I

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	163	215	13	41	69
Future Vol, veh/h	21	163	215	13	41	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	73	73
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	22	173	259	16	56	95
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	275	0	-	0	484	267
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	217	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1288	-	-	-	542	772
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	819	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1288	-	-	-	532	772
Mov Cap-2 Maneuver	-	-	-	-	532	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	819	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		12		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1288	-	-	-	661	
HCM Lane V/C Ratio	0.017	-	-	-	0.228	
HCM Control Delay (s)	7.8	0	-	-	12	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

no-build p.m. - phase I

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	514	28	29	475	32	22	2	24	24	2	13
Future Vol, veh/h	9	514	28	29	475	32	22	2	24	24	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	91	91	91	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	535	29	30	495	33	24	2	26	32	3	17
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	528	0	0	564	0	0	1135	1141	535	1154	1154	512
Stage 1	-	-	-	-	-	-	553	553	-	572	572	-
Stage 2	-	-	-	-	-	-	582	588	-	582	582	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1039	-	-	1008	-	-	179	201	545	174	197	562
Stage 1	-	-	-	-	-	-	517	514	-	505	504	-
Stage 2	-	-	-	-	-	-	499	496	-	499	499	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1039	-	-	1008	-	-	166	192	545	159	189	562
Mov Cap-2 Maneuver	-	-	-	-	-	-	166	192	-	159	189	-
Stage 1	-	-	-	-	-	-	510	507	-	498	489	-
Stage 2	-	-	-	-	-	-	467	481	-	467	493	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			22.6			26.1		
HCM LOS							C			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	257	1039	-	-	1008	-	-	161	562			
HCM Lane V/C Ratio	0.205	0.009	-	-	0.03	-	-	0.215	0.031			
HCM Control Delay (s)	22.6	8.5	0	-	8.7	-	-	33.4	11.6			
HCM Lane LOS	C	A	A	-	A	-	-	D	B			
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	0.8	0.1			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

no-build p.m. - phase I

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	186	43	148	284	62	75	344	210	124	240	30
Future Volume (veh/h)	35	186	43	148	284	62	75	344	210	124	240	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	44	232	54	176	338	74	82	378	231	139	270	34
Peak Hour Factor	0.80	0.80	0.80	0.84	0.84	0.84	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	156	279	65	274	375	82	581	530	324	339	818	103
Arrive On Green	0.03	0.19	0.19	0.10	0.25	0.25	0.04	0.50	0.50	0.06	0.51	0.51
Sat Flow, veh/h	1781	1467	342	1753	1486	325	1781	1069	654	1753	1603	202
Grp Volume(v), veh/h	44	0	286	176	0	412	82	0	609	139	0	304
Grp Sat Flow(s),veh/h/ln	1781	0	1809	1753	0	1812	1781	0	1723	1753	0	1804
Q Serve(g_s), s	2.2	0.0	16.9	8.6	0.0	24.4	2.5	0.0	30.6	4.3	0.0	11.0
Cycle Q Clear(g_c), s	2.2	0.0	16.9	8.6	0.0	24.4	2.5	0.0	30.6	4.3	0.0	11.0
Prop In Lane	1.00		0.19	1.00		0.18	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	156	0	344	274	0	457	581	0	854	339	0	921
V/C Ratio(X)	0.28	0.00	0.83	0.64	0.00	0.90	0.14	0.00	0.71	0.41	0.00	0.33
Avail Cap(c_a), veh/h	181	0	461	287	0	563	596	0	854	375	0	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.8	0.0	43.2	31.8	0.0	40.2	12.9	0.0	21.8	17.2	0.0	16.0
Incr Delay (d2), s/veh	1.0	0.0	9.3	4.5	0.0	15.4	0.1	0.0	5.0	0.8	0.0	1.0
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	0.0	8.4	4.0	0.0	12.7	1.0	0.0	13.1	1.7	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.7	0.0	52.5	36.4	0.0	55.6	13.0	0.0	26.9	18.0	0.0	16.9
LnGrp LOS	D	A	D	D	A	E	B	A	C	B	A	B
Approach Vol, veh/h	330			588			691			443		
Approach Delay, s/veh	50.4			49.8			25.2			17.3		
Approach LOS	D			D			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	59.5	15.1	25.6	9.1	61.2	8.2	32.5				
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	8.5	53.7	11.5	28.3	5.5	56.7	5.3	34.5				
Max Q Clear Time (g_c+I1), s	6.3	32.6	10.6	18.9	4.5	13.0	4.2	26.4				
Green Ext Time (p_c), s	0.1	4.4	0.0	1.1	0.0	2.0	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay	34.6											
HCM 6th LOS	C											

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

no-build p.m. - phase I

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	2	611	5	6	423
Future Vol, veh/h	4	2	611	5	6	423
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	45	45	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	9	4	657	5	6	436
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1108	660	0	0	662	0
Stage 1	660	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	232	463	-	-	927	-
Stage 1	514	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	231	463	-	-	927	-
Mov Cap-2 Maneuver	231	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	18.7	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	277	927	-	
HCM Lane V/C Ratio	-	-	0.048	0.007	-	
HCM Control Delay (s)	-	-	18.7	8.9	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

no-build p.m. - phase I

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	291	233	50	30	38
Future Vol, veh/h	29	291	233	50	30	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	90	90
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	33	334	256	55	33	42
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	311	0	-	0	684	284
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1249	-	-	-	414	755
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1249	-	-	-	401	755
Mov Cap-2 Maneuver	-	-	-	-	401	-
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	677	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		12.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1249	-	-	-	543	
HCM Lane V/C Ratio	0.027	-	-	-	0.139	
HCM Control Delay (s)	8	0	-	-	12.7	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

no-build a.m. - full build-out

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	7	477	25	15	300	9	36	3	32	13	0	4
Future Vol, veh/h	7	477	25	15	300	9	36	3	32	13	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	76	76	76	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	7	492	26	17	333	10	47	4	42	20	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	343	0	0	518	0	0	881	883	492	914	904	338
Stage 1	-	-	-	-	-	-	506	506	-	372	372	-
Stage 2	-	-	-	-	-	-	375	377	-	542	532	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1216	-	-	1048	-	-	267	285	577	254	277	704
Stage 1	-	-	-	-	-	-	549	540	-	648	619	-
Stage 2	-	-	-	-	-	-	646	616	-	525	526	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1216	-	-	1048	-	-	260	278	577	229	270	704
Mov Cap-2 Maneuver	-	-	-	-	-	-	260	278	-	229	270	-
Stage 1	-	-	-	-	-	-	545	536	-	643	609	-
Stage 2	-	-	-	-	-	-	630	606	-	479	522	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			19.2			19.4		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	347	1216	-	-	1048	-	-	229	704
HCM Lane V/C Ratio	0.269	0.006	-	-	0.016	-	-	0.087	0.009
HCM Control Delay (s)	19.2	8	0	-	8.5	-	-	22.2	10.2
HCM Lane LOS	C	A	A	-	A	-	-	C	B
HCM 95th %tile Q(veh)	1.1	0	-	-	0	-	-	0.3	0

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

no-build a.m. - full build-out

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	256	39	109	150	62	27	224	126	114	220	12
Future Volume (veh/h)	24	256	39	109	150	62	27	224	126	114	220	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	28	298	45	122	169	70	35	287	162	127	244	13
Peak Hour Factor	0.86	0.86	0.86	0.89	0.89	0.89	0.78	0.78	0.78	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	282	344	52	229	326	135	605	535	302	447	881	47
Arrive On Green	0.03	0.22	0.22	0.07	0.26	0.26	0.03	0.48	0.48	0.05	0.51	0.51
Sat Flow, veh/h	1781	1587	240	1753	1256	520	1781	1105	624	1753	1732	92
Grp Volume(v), veh/h	28	0	343	122	0	239	35	0	449	127	0	257
Grp Sat Flow(s),veh/h/ln	1781	0	1827	1753	0	1777	1781	0	1728	1753	0	1824
Q Serve(g_s), s	1.2	0.0	18.7	5.4	0.0	11.9	1.0	0.0	18.7	3.7	0.0	8.3
Cycle Q Clear(g_c), s	1.2	0.0	18.7	5.4	0.0	11.9	1.0	0.0	18.7	3.7	0.0	8.3
Prop In Lane	1.00		0.13	1.00		0.29	1.00		0.36	1.00		0.05
Lane Grp Cap(c), veh/h	282	0	396	229	0	461	605	0	837	447	0	928
V/C Ratio(X)	0.10	0.00	0.87	0.53	0.00	0.52	0.06	0.00	0.54	0.28	0.00	0.28
Avail Cap(c_a), veh/h	323	0	595	286	0	673	642	0	837	522	0	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.3	0.0	39.0	29.1	0.0	32.7	12.6	0.0	18.6	13.8	0.0	14.5
Incr Delay (d2), s/veh	0.2	0.0	8.7	1.9	0.0	0.9	0.0	0.0	2.5	0.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	9.2	2.3	0.0	5.2	0.4	0.0	7.8	1.5	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	47.7	31.0	0.0	33.6	12.6	0.0	21.0	14.1	0.0	15.3
LnGrp LOS	C	A	D	C	A	C	B	A	C	B	A	B
Approach Vol, veh/h	371			361			484			384		
Approach Delay, s/veh	46.4			32.7			20.4			14.9		
Approach LOS	D			C			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.2	54.5	11.7	26.9	7.7	57.0	7.3	31.3				
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	10.1	47.7	10.6	33.6	5.3	52.5	5.1	39.1				
Max Q Clear Time (g_c+l1), s	5.7	20.7	7.4	20.7	3.0	10.3	3.2	13.9				
Green Ext Time (p_c), s	0.1	3.2	0.1	1.7	0.0	1.7	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay	27.9											
HCM 6th LOS	C											

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

no-build a.m. - full build-out

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	8	377	0	1	383
Future Vol, veh/h	0	8	377	0	1	383
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	11	419	0	1	416
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	837	419	0	0	419	0
Stage 1	419	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	337	634	-	-	1140	-
Stage 1	664	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	337	634	-	-	1140	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.8	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	634		1140	-	
HCM Lane V/C Ratio	-	0.017		0.001	-	
HCM Control Delay (s)	-	10.8		8.2	-	
HCM Lane LOS	-	B		A	-	
HCM 95th %tile Q(veh)	-	0.1		0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

no-build a.m. - full build-out

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	180	237	15	46	76
Future Vol, veh/h	23	180	237	15	46	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	73	73
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	24	191	286	18	63	104
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	304	0	-	0	534	295
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	239	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1257	-	-	-	507	744
Stage 1	-	-	-	-	755	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1257	-	-	-	496	744
Mov Cap-2 Maneuver	-	-	-	-	496	-
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	801	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		12.8		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1257	-	-	-	626	
HCM Lane V/C Ratio	0.019	-	-	-	0.267	
HCM Control Delay (s)	7.9	0	-	-	12.8	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

no-build p.m. - full build-out

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱			↰↱			↰	↱
Traffic Vol, veh/h	9	567	31	32	524	35	24	3	27	27	3	15
Future Vol, veh/h	9	567	31	32	524	35	24	3	27	27	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	91	91	91	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	591	32	33	546	36	26	3	30	36	4	20
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	582	0	0	623	0	0	1251	1257	591	1272	1271	564
Stage 1	-	-	-	-	-	-	609	609	-	630	630	-
Stage 2	-	-	-	-	-	-	642	648	-	642	641	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	992	-	-	958	-	-	149	171	507	144	168	525
Stage 1	-	-	-	-	-	-	482	485	-	470	475	-
Stage 2	-	-	-	-	-	-	463	466	-	463	469	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	992	-	-	958	-	-	135	163	507	129	160	525
Mov Cap-2 Maneuver	-	-	-	-	-	-	135	163	-	129	160	-
Stage 1	-	-	-	-	-	-	475	478	-	463	459	-
Stage 2	-	-	-	-	-	-	426	450	-	427	462	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			27.9			33.2		
HCM LOS							D			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	216	992	-	-	958	-	-	132	525			
HCM Lane V/C Ratio	0.275	0.009	-	-	0.035	-	-	0.303	0.038			
HCM Control Delay (s)	27.9	8.7	0	-	8.9	-	-	43.7	12.1			
HCM Lane LOS	D	A	A	-	A	-	-	E	B			
HCM 95th %tile Q(veh)	1.1	0	-	-	0.1	-	-	1.2	0.1			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

no-build p.m. - full build-out

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	205	47	164	314	68	83	379	232	137	265	34
Future Volume (veh/h)	39	205	47	164	314	68	83	379	232	137	265	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	49	256	59	195	374	81	91	416	255	154	298	38
Peak Hour Factor	0.80	0.80	0.80	0.84	0.84	0.84	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	158	306	71	288	411	89	524	495	304	268	777	99
Arrive On Green	0.04	0.21	0.21	0.10	0.28	0.28	0.04	0.46	0.46	0.06	0.49	0.49
Sat Flow, veh/h	1781	1470	339	1753	1490	323	1781	1068	655	1753	1600	204
Grp Volume(v), veh/h	49	0	315	195	0	455	91	0	671	154	0	336
Grp Sat Flow(s),veh/h/ln	1781	0	1809	1753	0	1812	1781	0	1723	1753	0	1804
Q Serve(g_s), s	2.4	0.0	18.6	9.4	0.0	27.1	3.0	0.0	38.1	5.1	0.0	13.1
Cycle Q Clear(g_c), s	2.4	0.0	18.6	9.4	0.0	27.1	3.0	0.0	38.1	5.1	0.0	13.1
Prop In Lane	1.00		0.19	1.00		0.18	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	158	0	377	288	0	500	524	0	799	268	0	876
V/C Ratio(X)	0.31	0.00	0.84	0.68	0.00	0.91	0.17	0.00	0.84	0.57	0.00	0.38
Avail Cap(c_a), veh/h	184	0	463	320	0	593	543	0	799	306	0	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	42.3	30.6	0.0	39.0	14.9	0.0	26.2	21.8	0.0	18.1
Incr Delay (d2), s/veh	1.1	0.0	10.6	4.9	0.0	16.4	0.2	0.0	10.3	2.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	9.4	4.3	0.0	14.2	1.2	0.0	17.4	2.1	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	0.0	52.9	35.5	0.0	55.4	15.1	0.0	36.6	23.8	0.0	19.4
LnGrp LOS	D	A	D	D	A	E	B	A	D	C	A	B
Approach Vol, veh/h		364			650			762			490	
Approach Delay, s/veh		50.6			49.4			34.0			20.8	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	56.2	15.9	27.7	9.2	58.6	8.4	35.3				
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	9.5	50.5	13.5	28.5	5.9	54.1	5.5	36.5				
Max Q Clear Time (g_c+I1), s	7.1	40.1	11.4	20.6	5.0	15.1	4.4	29.1				
Green Ext Time (p_c), s	0.1	3.5	0.1	1.1	0.0	2.3	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay			38.2									
HCM 6th LOS			D									

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

no-build p.m. - full build-out

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	3	674	5	7	467
Future Vol, veh/h	4	3	674	5	7	467
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	45	45	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	9	7	725	5	7	481
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1223	728	0	0	730	0
Stage 1	728	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	198	423	-	-	874	-
Stage 1	478	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	196	423	-	-	874	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	20	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	255	874	-	
HCM Lane V/C Ratio	-	-	0.061	0.008	-	
HCM Control Delay (s)	-	-	20	9.2	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

no-build p.m. - full build-out

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	322	257	55	34	42
Future Vol, veh/h	32	322	257	55	34	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	90	90
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	37	370	282	60	38	47
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	342	0	-	0	756	312
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	444	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1217	-	-	-	376	728
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	646	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1217	-	-	-	362	728
Mov Cap-2 Maneuver	-	-	-	-	362	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	646	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		13.6		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1217	-	-	-	501	
HCM Lane V/C Ratio	0.03	-	-	-	0.169	
HCM Control Delay (s)	8.1	0	-	-	13.6	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6	

Appendix E

Future Intersection Operational Analysis

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future phase I a.m.

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱			↰			↰	↱
Traffic Vol, veh/h	6	432	37	24	272	9	77	2	66	12	0	4
Future Vol, veh/h	6	432	37	24	272	9	77	2	66	12	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	85	85	85	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	6	445	38	27	302	10	91	2	78	18	0	6
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	483	0	0	821	823	445	877	856	307
Stage 1	-	-	-	-	-	-	457	457	-	361	361	-
Stage 2	-	-	-	-	-	-	364	366	-	516	495	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1248	-	-	1080	-	-	293	309	613	269	295	733
Stage 1	-	-	-	-	-	-	583	568	-	657	626	-
Stage 2	-	-	-	-	-	-	655	623	-	542	546	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1248	-	-	1080	-	-	284	299	613	228	286	733
Mov Cap-2 Maneuver	-	-	-	-	-	-	284	299	-	228	286	-
Stage 1	-	-	-	-	-	-	579	564	-	652	610	-
Stage 2	-	-	-	-	-	-	633	607	-	468	542	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.7			22.3			19.2		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	376	1248	-	-	1080	-	-	228	733			
HCM Lane V/C Ratio	0.454	0.005	-	-	0.025	-	-	0.081	0.008			
HCM Control Delay (s)	22.3	7.9	0	-	8.4	-	-	22.2	10			
HCM Lane LOS	C	A	A	-	A	-	-	C	B			
HCM 95th %tile Q(veh)	2.3	0	-	-	0.1	-	-	0.3	0			

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

future phase I a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	236	35	114	148	72	24	203	119	108	199	11
Future Volume (veh/h)	22	236	35	114	148	72	24	203	119	108	199	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	25	271	40	124	161	78	30	257	151	120	221	12
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.79	0.79	0.79	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	264	318	47	236	294	142	639	540	317	491	901	49
Arrive On Green	0.02	0.20	0.20	0.07	0.25	0.25	0.03	0.50	0.50	0.05	0.52	0.52
Sat Flow, veh/h	1781	1593	235	1753	1190	577	1781	1087	639	1753	1730	94
Grp Volume(v), veh/h	25	0	311	124	0	239	30	0	408	120	0	233
Grp Sat Flow(s),veh/h/ln	1781	0	1828	1753	0	1767	1781	0	1726	1753	0	1824
Q Serve(g_s), s	1.1	0.0	16.5	5.4	0.0	11.8	0.8	0.0	15.7	3.3	0.0	7.1
Cycle Q Clear(g_c), s	1.1	0.0	16.5	5.4	0.0	11.8	0.8	0.0	15.7	3.3	0.0	7.1
Prop In Lane	1.00		0.13	1.00		0.33	1.00		0.37	1.00		0.05
Lane Grp Cap(c), veh/h	264	0	365	236	0	436	639	0	857	491	0	949
V/C Ratio(X)	0.09	0.00	0.85	0.53	0.00	0.55	0.05	0.00	0.48	0.24	0.00	0.25
Avail Cap(c_a), veh/h	317	0	610	296	0	680	686	0	857	569	0	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	38.8	29.0	0.0	32.9	11.6	0.0	16.7	12.4	0.0	13.2
Incr Delay (d2), s/veh	0.2	0.0	6.0	1.8	0.0	1.1	0.0	0.0	1.9	0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	7.9	2.4	0.0	5.1	0.3	0.0	6.4	1.3	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	44.8	30.8	0.0	34.0	11.7	0.0	18.6	12.6	0.0	13.9
LnGrp LOS	C	A	D	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h	336			363			438			353		
Approach Delay, s/veh	43.8			32.9			18.1			13.4		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	54.4	11.8	24.6	7.3	56.8	7.0	29.3				
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	9.7	48.1	10.7	33.5	5.5	52.3	5.5	38.7				
Max Q Clear Time (g_c+I1), s	5.3	17.7	7.4	18.5	2.8	9.1	3.1	13.8				
Green Ext Time (p_c), s	0.1	2.9	0.1	1.6	0.0	1.5	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay	26.4											
HCM 6th LOS	C											

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

future phase I a.m.

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	346	0	1	363
Future Vol, veh/h	0	7	346	0	1	363
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	9	384	0	1	395
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	781	384	0	0	384	0
Stage 1	384	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	363	664	-	-	1174	-
Stage 1	688	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	363	664	-	-	1174	-
Mov Cap-2 Maneuver	363	-	-	-	-	-
Stage 1	688	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.5	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	664	1174	-	
HCM Lane V/C Ratio	-	-	0.014	0.001	-	
HCM Control Delay (s)	-	-	10.5	8.1	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

future phase I a.m.

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	163	215	13	41	69
Future Vol, veh/h	21	163	215	13	41	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	73	73
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	22	173	259	16	56	95
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	275	0	-	0	484	267
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	217	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1288	-	-	-	542	772
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	819	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1288	-	-	-	532	772
Mov Cap-2 Maneuver	-	-	-	-	532	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	819	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		12		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1288	-	-	-	661	
HCM Lane V/C Ratio	0.017	-	-	-	0.228	
HCM Control Delay (s)	7.8	0	-	-	12	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future phase I p.m.

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	514	65	74	475	32	44	2	51	24	2	13
Future Vol, veh/h	9	514	65	74	475	32	44	2	51	24	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	98	98	98	94	94	94	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	530	67	76	485	33	47	2	54	32	3	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	518	0	0	597	0	0	1212	1218	530	1264	1269	502
Stage 1	-	-	-	-	-	-	548	548	-	654	654	-
Stage 2	-	-	-	-	-	-	664	670	-	610	615	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1048	-	-	980	-	-	159	181	549	146	168	569
Stage 1	-	-	-	-	-	-	521	517	-	456	463	-
Stage 2	-	-	-	-	-	-	450	455	-	482	482	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1048	-	-	980	-	-	142	165	549	121	153	569
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	165	-	121	153	-
Stage 1	-	-	-	-	-	-	514	510	-	450	427	-
Stage 2	-	-	-	-	-	-	400	420	-	427	476	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.1			32			34.1		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	234	1048	-	-	980	-	-	123	569
HCM Lane V/C Ratio	0.441	0.009	-	-	0.077	-	-	0.282	0.03
HCM Control Delay (s)	32	8.5	0	-	9	-	-	45.4	11.5
HCM Lane LOS	D	A	A	-	A	-	-	E	B
HCM 95th %tile Q(veh)	2.1	0	-	-	0.2	-	-	1.1	0.1

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

future phase I p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	190	43	160	287	69	75	344	231	136	240	30
Future Volume (veh/h)	35	190	43	160	287	69	75	344	231	136	240	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	44	238	54	186	334	80	82	378	254	151	267	33
Peak Hour Factor	0.80	0.80	0.80	0.86	0.86	0.86	0.91	0.91	0.91	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	159	277	63	277	372	89	578	497	334	318	809	100
Arrive On Green	0.03	0.19	0.19	0.10	0.25	0.25	0.04	0.48	0.48	0.06	0.50	0.50
Sat Flow, veh/h	1781	1475	335	1753	1458	349	1781	1027	690	1753	1606	199
Grp Volume(v), veh/h	44	0	292	186	0	414	82	0	632	151	0	300
Grp Sat Flow(s),veh/h/ln	1781	0	1810	1753	0	1807	1781	0	1717	1753	0	1805
Q Serve(g_s), s	2.1	0.0	17.0	8.9	0.0	24.1	2.5	0.0	32.7	4.7	0.0	10.8
Cycle Q Clear(g_c), s	2.1	0.0	17.0	8.9	0.0	24.1	2.5	0.0	32.7	4.7	0.0	10.8
Prop In Lane	1.00		0.18	1.00		0.19	1.00		0.40	1.00		0.11
Lane Grp Cap(c), veh/h	159	0	340	277	0	461	578	0	832	318	0	909
V/C Ratio(X)	0.28	0.00	0.86	0.67	0.00	0.90	0.14	0.00	0.76	0.48	0.00	0.33
Avail Cap(c_a), veh/h	222	0	489	301	0	572	590	0	832	365	0	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	42.8	31.2	0.0	39.2	13.2	0.0	22.9	18.4	0.0	16.1
Incr Delay (d2), s/veh	0.9	0.0	10.3	5.2	0.0	14.9	0.1	0.0	6.5	1.1	0.0	1.0
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	0.0	8.5	4.1	0.0	12.4	1.0	0.0	14.2	1.9	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	0.0	53.1	36.4	0.0	54.0	13.3	0.0	29.4	19.5	0.0	17.0
LnGrp LOS	D	A	D	D	A	D	B	A	C	B	A	B
Approach Vol, veh/h	336			600			714			451		
Approach Delay, s/veh	50.8			48.6			27.5			17.8		
Approach LOS	D			D			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	57.2	15.5	24.9	9.1	59.3	8.2	32.2				
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	9.6	50.5	12.5	29.4	5.3	54.8	7.5	34.4				
Max Q Clear Time (g_c+I1), s	6.7	34.7	10.9	19.0	4.5	12.8	4.1	26.1				
Green Ext Time (p_c), s	0.1	4.1	0.1	1.2	0.0	2.0	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay	35.2											
HCM 6th LOS	D											

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

future phase I p.m.

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	2	632	5	6	435
Future Vol, veh/h	4	2	632	5	6	435
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	45	45	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	9	4	680	5	6	448
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1143	683	0	0	685	0
Stage 1	683	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	221	449	-	-	908	-
Stage 1	502	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	219	449	-	-	908	-
Mov Cap-2 Maneuver	219	-	-	-	-	-
Stage 1	502	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	19.4	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	264	908	-	
HCM Lane V/C Ratio	-	-	0.051	0.007	-	
HCM Control Delay (s)	-	-	19.4	9	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

future phase I p.m.

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	291	233	50	30	38
Future Vol, veh/h	29	291	233	50	30	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	90	90
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	33	334	256	55	33	42
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	311	0	-	0	684	284
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1249	-	-	-	414	755
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1249	-	-	-	401	755
Mov Cap-2 Maneuver	-	-	-	-	401	-
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	677	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		12.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1249	-	-	-	543	
HCM Lane V/C Ratio	0.027	-	-	-	0.139	
HCM Control Delay (s)	8	0	-	-	12.7	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future full build-out a.m.

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	477	42	35	300	9	86	3	95	13	0	4
Future Vol, veh/h	7	477	42	35	300	9	86	3	95	13	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	90	90	90	88	88	88	65	65	65
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	7	492	43	39	333	10	98	3	108	20	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	343	0	0	535	0	0	925	927	492	999	965	338
Stage 1	-	-	-	-	-	-	506	506	-	416	416	-
Stage 2	-	-	-	-	-	-	419	421	-	583	549	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1216	-	-	1033	-	-	250	268	577	222	255	704
Stage 1	-	-	-	-	-	-	549	540	-	614	592	-
Stage 2	-	-	-	-	-	-	612	589	-	498	516	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1216	-	-	1033	-	-	239	256	577	172	243	704
Mov Cap-2 Maneuver	-	-	-	-	-	-	239	256	-	172	243	-
Stage 1	-	-	-	-	-	-	545	536	-	609	570	-
Stage 2	-	-	-	-	-	-	584	567	-	399	512	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.9			30.6			24.3		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	343	1216	-	-	1033	-	-	172	704
HCM Lane V/C Ratio	0.61	0.006	-	-	0.038	-	-	0.116	0.009
HCM Control Delay (s)	30.6	8	0	-	8.6	-	-	28.7	10.2
HCM Lane LOS	D	A	A	-	A	-	-	D	B
HCM 95th %tile Q(veh)	3.8	0	-	-	0.1	-	-	0.4	0

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

future full build-out a.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	264	39	109	173	89	27	224	126	123	220	12
Future Volume (veh/h)	24	264	39	109	173	89	27	224	126	123	220	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	28	303	45	118	188	97	34	284	159	137	244	13
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.79	0.79	0.79	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	248	350	52	227	304	157	601	529	296	450	876	47
Arrive On Green	0.03	0.22	0.22	0.07	0.26	0.26	0.03	0.48	0.48	0.06	0.51	0.51
Sat Flow, veh/h	1781	1591	236	1753	1163	600	1781	1108	621	1753	1732	92
Grp Volume(v), veh/h	28	0	348	118	0	285	34	0	443	137	0	257
Grp Sat Flow(s),veh/h/ln	1781	0	1828	1753	0	1762	1781	0	1729	1753	0	1824
Q Serve(g_s), s	1.2	0.0	18.8	5.1	0.0	14.6	1.0	0.0	18.4	4.0	0.0	8.3
Cycle Q Clear(g_c), s	1.2	0.0	18.8	5.1	0.0	14.6	1.0	0.0	18.4	4.0	0.0	8.3
Prop In Lane	1.00		0.13	1.00		0.34	1.00		0.36	1.00		0.05
Lane Grp Cap(c), veh/h	248	0	402	227	0	460	601	0	825	450	0	922
V/C Ratio(X)	0.11	0.00	0.87	0.52	0.00	0.62	0.06	0.00	0.54	0.30	0.00	0.28
Avail Cap(c_a), veh/h	289	0	617	288	0	688	639	0	825	536	0	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	38.4	28.8	0.0	33.3	12.8	0.0	18.8	13.8	0.0	14.5
Incr Delay (d2), s/veh	0.2	0.0	8.0	1.8	0.0	1.4	0.0	0.0	2.5	0.4	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	9.2	2.2	0.0	6.3	0.4	0.0	7.7	1.6	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	0.0	46.4	30.6	0.0	34.6	12.8	0.0	21.3	14.2	0.0	15.3
LnGrp LOS	C	A	D	C	A	C	B	A	C	B	A	B
Approach Vol, veh/h		376			403			477			394	
Approach Delay, s/veh		45.2			33.5			20.7			14.9	
Approach LOS		D			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	53.3	11.5	27.0	7.6	56.2	7.2	31.2				
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	11.0	46.0	10.5	34.5	5.3	51.7	5.1	39.9				
Max Q Clear Time (g_c+I1), s	6.0	20.4	7.1	20.8	3.0	10.3	3.2	16.6				
Green Ext Time (p_c), s	0.1	3.1	0.1	1.8	0.0	1.7	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay			28.0									
HCM 6th LOS			C									

Mulberry Street Subdivision Flowery Branch
3: Atlanta Highway & Flowery Way

future full build-out a.m.

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	8	377	6	1	383
Future Vol, veh/h	21	8	377	6	1	383
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	90	90	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	26	10	419	7	1	416
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	841	423	0	0	426	0
Stage 1	423	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	335	631	-	-	1133	-
Stage 1	661	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	335	631	-	-	1133	-
Mov Cap-2 Maneuver	335	-	-	-	-	-
Stage 1	661	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	15.3	0	0			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	385	1133	-	
HCM Lane V/C Ratio	-	-	0.094	0.001	-	
HCM Control Delay (s)	-	-	15.3	8.2	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

future full build-out a.m.

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	180	237	20	62	83
Future Vol, veh/h	26	180	237	20	62	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	83	83	80	80
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	28	191	286	24	78	104
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	310	0	-	0	545	298
Stage 1	-	-	-	-	298	-
Stage 2	-	-	-	-	247	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1250	-	-	-	499	741
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	794	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1250	-	-	-	487	741
Mov Cap-2 Maneuver	-	-	-	-	487	-
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	794	-
Approach	EB	WB		SB		
HCM Control Delay, s	1	0		13.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1250	-	-	-	606	
HCM Lane V/C Ratio	0.022	-	-	-	0.299	
HCM Control Delay (s)	7.9	0	-	-	13.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3	

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future full build-out p.m.

Intersection												
Int Delay, s/veh	7.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	567	59	125	524	35	41	3	82	27	3	15
Future Vol, veh/h	9	567	59	125	524	35	41	3	82	27	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	99	99	99	96	96	96	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	585	61	126	529	35	43	3	85	36	4	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	564	0	0	646	0	0	1414	1419	585	1477	1463	547
Stage 1	-	-	-	-	-	-	603	603	-	799	799	-
Stage 2	-	-	-	-	-	-	811	816	-	678	664	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1008	-	-	939	-	-	115	137	511	104	129	537
Stage 1	-	-	-	-	-	-	486	488	-	379	398	-
Stage 2	-	-	-	-	-	-	373	391	-	442	458	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1008	-	-	939	-	-	96	117	511	75	110	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	117	-	75	110	-
Stage 1	-	-	-	-	-	-	479	481	-	374	345	-
Stage 2	-	-	-	-	-	-	307	339	-	361	452	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.7			49.4			66.7		
HCM LOS							E			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	205	1008	-	-	939	-	-	77	537
HCM Lane V/C Ratio	0.64	0.009	-	-	0.134	-	-	0.519	0.037
HCM Control Delay (s)	49.4	8.6	0	-	9.4	-	-	94	12
HCM Lane LOS	E	A	A	-	A	-	-	F	B
HCM 95th %tile Q(veh)	3.8	0	-	-	0.5	-	-	2.2	0.1

Mulberry Street Subdivision Flowery Branch
1: Mulberry Street & Phil Niekro Boulevard

future full build-out p.m. with mitigation

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱			↰	↱		↰	↱
Traffic Vol, veh/h	9	567	59	125	524	35	41	3	82	27	3	15
Future Vol, veh/h	9	567	59	125	524	35	41	3	82	27	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	80	-	-	-	-	100	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	99	99	99	96	96	96	75	75	75
Heavy Vehicles, %	2	4	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	9	585	61	126	529	35	43	3	85	36	4	20
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	564	0	0	646	0	0	1414	1419	585	1477	1463	547
Stage 1	-	-	-	-	-	-	603	603	-	799	799	-
Stage 2	-	-	-	-	-	-	811	816	-	678	664	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1008	-	-	939	-	-	115	137	511	104	129	537
Stage 1	-	-	-	-	-	-	486	488	-	379	398	-
Stage 2	-	-	-	-	-	-	373	391	-	442	458	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1008	-	-	939	-	-	96	117	511	75	110	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	117	-	75	110	-
Stage 1	-	-	-	-	-	-	479	481	-	374	345	-
Stage 2	-	-	-	-	-	-	307	339	-	361	452	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.7			33.8			66.7		
HCM LOS							D			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	97	511	1008	-	-	939	-	-	77	537		
HCM Lane V/C Ratio	0.473	0.167	0.009	-	-	0.134	-	-	0.519	0.037		
HCM Control Delay (s)	71.7	13.5	8.6	0	-	9.4	-	-	94	12		
HCM Lane LOS	F	B	A	A	-	A	-	-	F	B		
HCM 95th %tile Q(veh)	2	0.6	0	-	-	0.5	-	-	2.2	0.1		

Mulberry Street Subdivision Flowery Branch

2: Atlanta Highway & Snelling Avenue/Phil Niekro Boulevard

future full build-out p.m.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	213	47	164	319	80	83	379	232	157	265	34
Future Volume (veh/h)	39	213	47	164	319	80	83	379	232	157	265	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1841	1870	1841	1841	1841	1841	1870
Adj Flow Rate, veh/h	49	266	59	191	371	93	91	416	255	174	294	38
Peak Hour Factor	0.80	0.80	0.80	0.86	0.86	0.86	0.91	0.91	0.91	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	4	2	4	2	4	4	4	4	2
Cap, veh/h	156	320	71	285	405	102	522	485	297	267	769	99
Arrive On Green	0.03	0.22	0.22	0.10	0.28	0.28	0.04	0.45	0.45	0.07	0.48	0.48
Sat Flow, veh/h	1781	1482	329	1753	1443	362	1781	1068	655	1753	1597	206
Grp Volume(v), veh/h	49	0	325	191	0	464	91	0	671	174	0	332
Grp Sat Flow(s),veh/h/ln	1781	0	1811	1753	0	1805	1781	0	1723	1753	0	1804
Q Serve(g_s), s	2.4	0.0	19.3	9.2	0.0	27.9	3.0	0.0	39.1	5.8	0.0	13.1
Cycle Q Clear(g_c), s	2.4	0.0	19.3	9.2	0.0	27.9	3.0	0.0	39.1	5.8	0.0	13.1
Prop In Lane	1.00		0.18	1.00		0.20	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	156	0	391	285	0	507	522	0	782	267	0	869
V/C Ratio(X)	0.31	0.00	0.83	0.67	0.00	0.92	0.17	0.00	0.86	0.65	0.00	0.38
Avail Cap(c_a), veh/h	181	0	476	305	0	587	540	0	782	292	0	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	42.1	30.5	0.0	39.1	15.5	0.0	27.4	22.9	0.0	18.5
Incr Delay (d2), s/veh	1.1	0.0	10.0	5.1	0.0	17.6	0.2	0.0	11.7	4.5	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	9.6	4.2	0.0	14.7	1.2	0.0	18.1	2.6	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.6	0.0	52.1	35.6	0.0	56.7	15.7	0.0	39.2	27.5	0.0	19.8
LnGrp LOS	D	A	D	D	A	E	B	A	D	C	A	B
Approach Vol, veh/h		374			655			762			506	
Approach Delay, s/veh		49.9			50.5			36.3			22.4	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	55.5	15.7	28.8	9.3	58.6	8.4	36.0				
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	9.5	50.5	12.5	29.5	5.9	54.1	5.5	36.5				
Max Q Clear Time (g_c+I1), s	7.8	41.1	11.2	21.3	5.0	15.1	4.4	29.9				
Green Ext Time (p_c), s	0.1	3.3	0.1	1.2	0.0	2.2	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay			39.5									
HCM 6th LOS			D									

Mulberry Street Subdivision Flowery Branch

3: Atlanta Highway & Flowery Way

future full build-out p.m.

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	3	674	34	7	467
Future Vol, veh/h	21	3	674	34	7	467
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	-	-	-	40	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	93	93	97	97
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	28	4	725	37	7	481
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1239	744	0	0	762	0
Stage 1	744	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	194	415	-	-	850	-
Stage 1	470	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	192	415	-	-	850	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	470	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	25.7	0	0.1			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	206	850	-	
HCM Lane V/C Ratio	-	-	0.155	0.008	-	
HCM Control Delay (s)	-	-	25.7	9.3	-	
HCM Lane LOS	-	-	D	A	-	
HCM 95th %tile Q(veh)	-	-	0.5	0	-	

Mulberry Street Subdivision Flowery Branch
4: Wade Orr Road & Compass Drive

future full build-out p.m.

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	322	257	64	39	48
Future Vol, veh/h	42	322	257	64	39	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	91	91	91	91
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	48	370	282	70	43	53
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	352	0	-	0	783	317
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1207	-	-	-	362	724
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	632	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1207	-	-	-	344	724
Mov Cap-2 Maneuver	-	-	-	-	344	-
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	632	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		14.3		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1207	-	-	-	484	
HCM Lane V/C Ratio	0.04	-	-	-	0.198	
HCM Control Delay (s)	8.1	0	-	-	14.3	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7	

Appendix F

Programmed System Improvement Information Sheets

2050 Regional Transportation Plan 2020 Update

Project Name SR 13 From Radford road to South of SR 53	GHMPO No. GH-033	GDOT No. 0001822
	County Hall	City Oakwood/Flowery Bra
Local Rd. Name Falcon Pkwy	GDOT District 1	Cong. District 9
US/State Rd. Name SR 13	Map ID 33	RC GMRC

Project Description

The widening from two to four lanes of SR 13/ Falcon Parkway (Atlanta Highway) from Radford Road to south of SR 53/Winder Highway.

Improvement Type Widening **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

To improve mobility and decrease congestion along this important north/south link in the southwestern section of Hall County.

Project Termini	From Radford Road	Length (miles) 4.0	
	To SR 53/Winder Highway	Exist. Lanes 2	Future Lanes 4
Bike / Ped. Sidewalks, bike lanes on State Bike Route 55		Exist. Vol. 5,500 (2015)	Design Vol. 9,280 (2050)
Connectivity I-985			
Network Year 2050+	LRTP Project Tier: Project Band 4 - Unfunded		Open to Traffic Date 2050+

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	OTHER	TOTAL
Precons	Pre-Engineering	L200		\$1,098,873	\$4,395,493	\$0	
Precons	Right-of-Way	L200	\$0	\$4,664,340	\$18,657,362	\$0	\$23,321,702
Precons	Construction	L200	\$0	\$13,735,915	\$54,943,660	\$0	\$68,679,575
Precons	Utilities	L1C0	\$0	\$1,774,964	\$7,099,857	\$0	\$8,874,821
		TOTAL	\$0	\$21,274,092	\$85,096,372	\$0	\$100,876,098



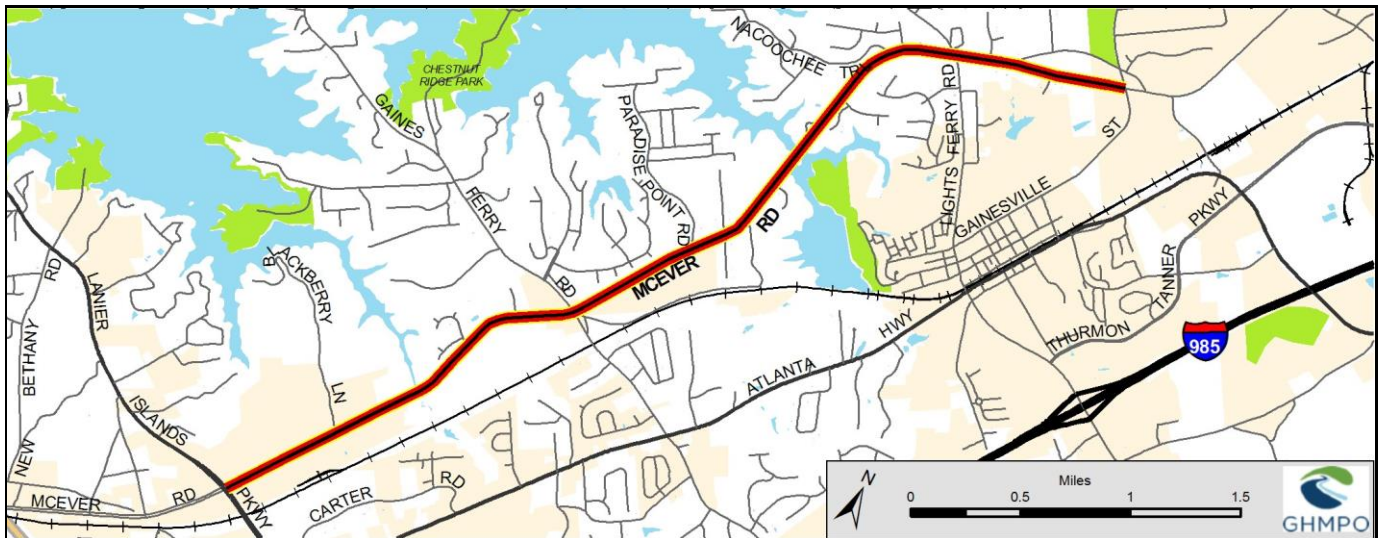
2050 Regional Transportation Plan 2020 Update

Project Name McEver Road From SR 347/Lanier Islands Parkway To CS 537/Gainesville Street	GHMPO No. GH-084	GDOT No. 0001821
	County Hall	City Buford, Flowery Branch
Local Rd. Name McEver Rd	GDOT District 1	Cong. District 9
US/State Rd. Name N/A	Map ID 84	RC GMRC

Project Description McEver Road from SR 347/Lanier Islands Parkway to CS 537/Gainesville Street			
Improvement Type Widening	Regionally Significant Yes	Capacity Adding Yes	Funding Source Split
Project Intent Improve access to a rapidly growing area in Hall County.			

Project Termini From Lanier islands pkwy To Gainesville St	Length (miles) 5.1	
	Exist. Lanes 2	Future Lanes 4
Bike / Ped. Sidewalks, bike lanes recommended	Exist. Vol. 3,560 (2015)	Design Vol. 9,530 (2050)
Connectivity SR 347/Lanier Islands Pkwy		
Network Year 2040	LRTP Project Tier: Project band 3 (2031-2040)	Open to Traffic Date 2034

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	OTHER	TOTAL
2019	Pre-Engineering	LOCAL	\$2,753,516	\$671,304	\$2,685,216	\$0	\$6,110,036
LR	Right-of-Way	LOCAL	\$2,880,888	\$0	\$0	\$0	\$2,880,888
LR	Construction	State/Federal	\$0	\$10,855,041	\$43,420,166	\$0	\$54,275,207
LR	Utilities	LOCAL	\$15,505,732	\$0	\$0	\$0	\$15,505,732
		TOTAL	\$21,140,136	\$11,526,345	\$46,105,382	\$0	\$78,771,863



2050 Regional Transportation Plan 2020 Update

Project Name SR 13 at I-985 & At cr 527/Thurmon Tanner Pkwy	GHMPO No. GH-129	GDOT No. 0016616
	County Hall	City Flowery Branch
Local Rd. Name Atlanta Hwy, Falcon Pkwy	GDOT District 1	Cong. District 9
US/State Rd. Name SR 13	Map ID	RC GMRC

Project Description

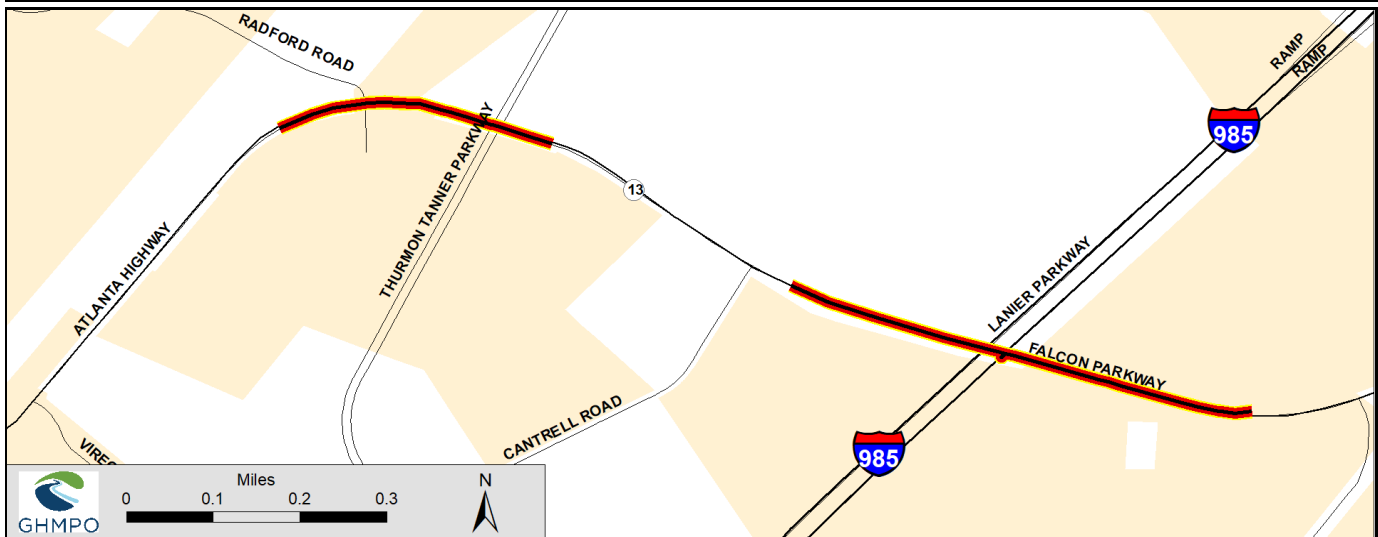
This project will add turning capacity to Thurmon Tanner Pkwy by converting the existing thru lane into a thru-right lane on I-985 Off-ramp by shifting and narrowing the median. These changes will increase capacity.

Improvement Type Operations **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent

Project Termini	From Just West of Radford Road	Length (miles) .8	
	To Just East of I-985	Exist. Lanes N/A	Future Lanes N/A
Bike / Ped.		Exist. Vol. 4,605 (2015)	Design Vol. 8,000 (2050)
Connectivity I-985			
Network Year 2040	LRTP Project Tier: Project Band 3 (2031-2040)	Open to Traffic Date (2031-	

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	OTHER	TOTAL
2021	Utilities	HB 170	\$0	\$86,364	\$0	\$0	\$86,364
2021	Construction	HB 170	\$0	\$719,701	\$0	\$0	\$719,701
Auth.	Pre-Engineering		\$0	\$0	\$0	\$0	\$0
Auth.	Right-of-Way		\$0	\$0	\$0	\$0	\$0
TOTAL			\$0	\$806,065	\$0	\$0	\$806,065



Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

ORDINANCE 625

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 9.8+/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 5558 MULBERRY STREET, IDENTIFIED AS TAX PARCEL 08117 002008A AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 9.8. +/- acre tract of land identified as tax parcel 08117 002008A; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.
2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

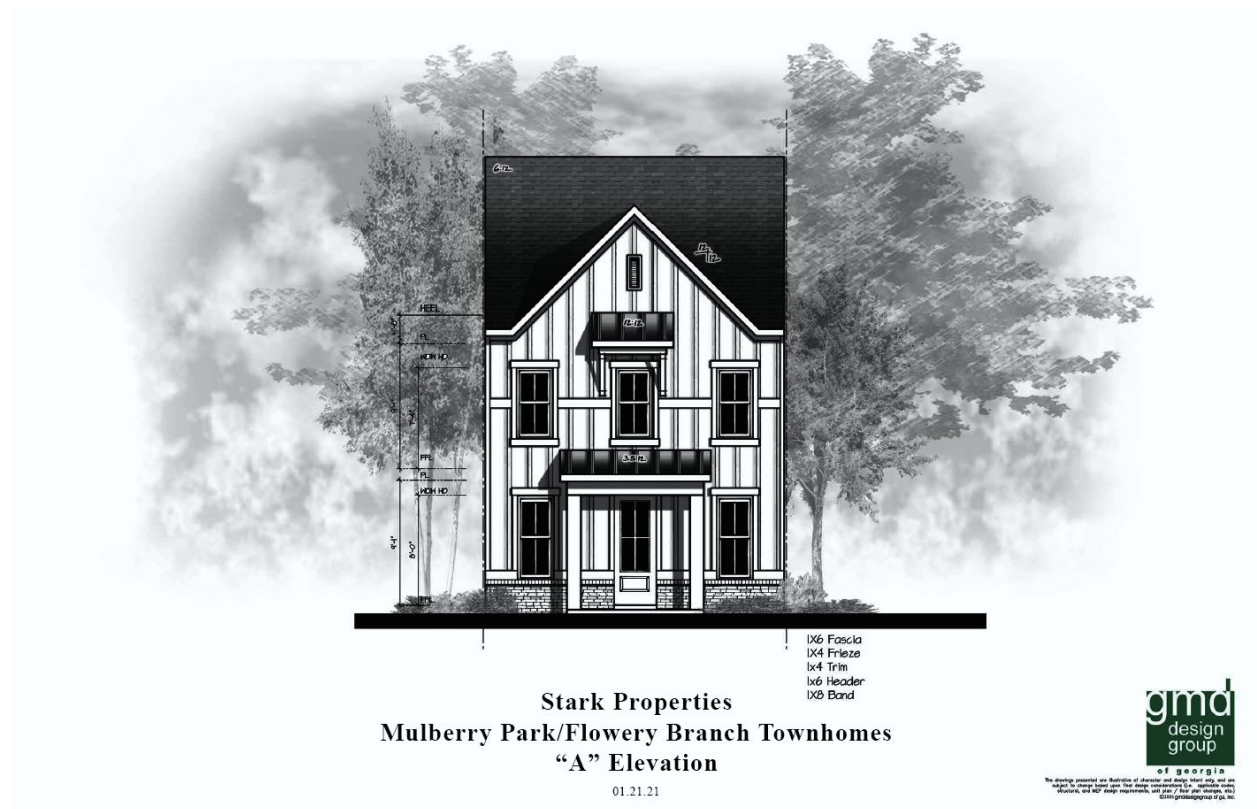
Exhibit “A”

Exhibit “B”

Exhibit “C”

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:









Stark Properties
Mulberry Park/Flowery Branch Townhomes
“B” Elevation

01.22.21

1x6 Fascia
1x4 Frieze
1x4 Trim
1x6 Header
1x8 Band



of georgia
The drawings presented are a representation of the design and design intent only and are subject to change without notice. This drawing is not to be used for construction, site, material, finish, structure, and MEP design requirements. All drawings are the property of GMD Design Group, Inc. ©2011 GMD Design Group, Inc.



01.22.21



The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e. applicable codes, structure, and MEP design requirements, wall plan / floor plan changes, etc.)
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the OAKLEY



Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

ORDINANCE 626

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 28.54+/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 0 MULBERRY STREET, IDENTIFIED AS TAX PARCEL 08117 002016D AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 28.54. +/- acre tract of land identified as tax parcel 08117 002016D; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.
2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

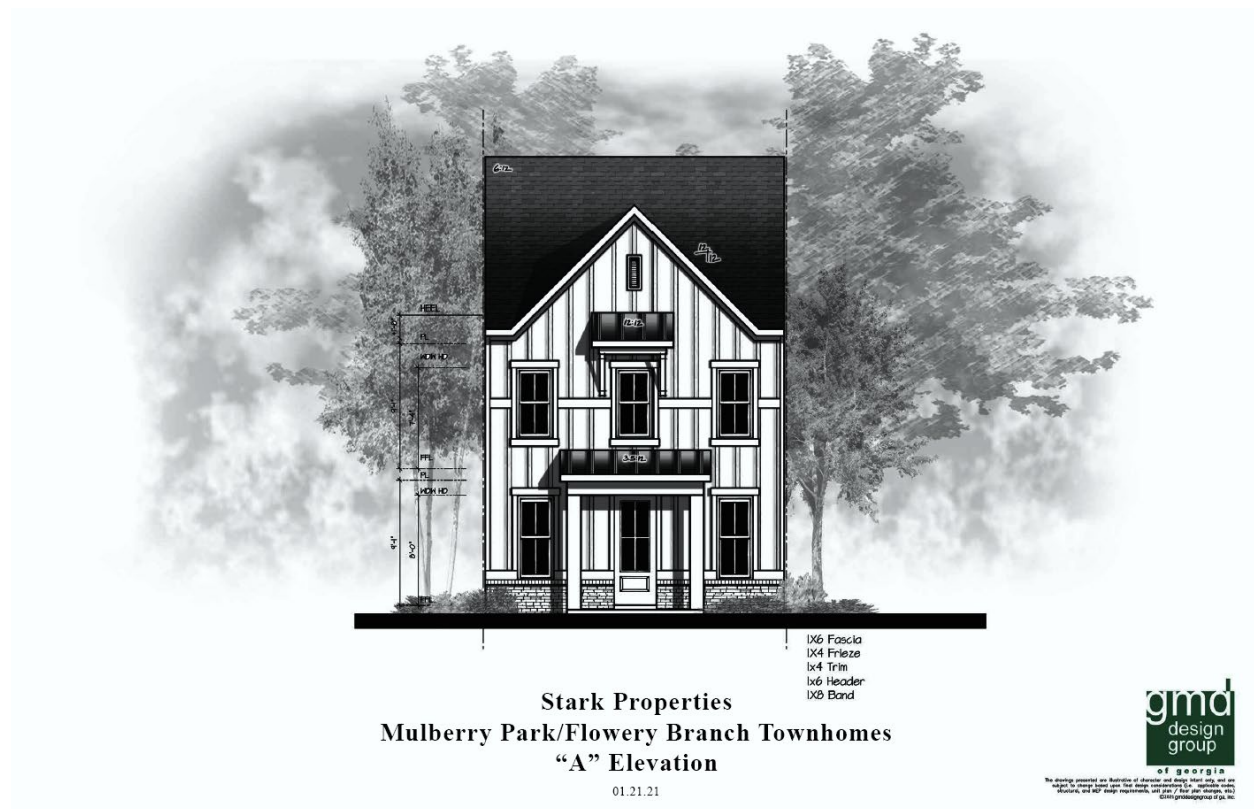
Exhibit “A”

Exhibit “B”

Exhibit “C”

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:









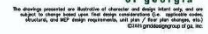
01.22.21



The drawings presented are illustrative of character and design intent only, are subject to change based upon final design considerations (i.e., applicable code structure, and MEP design requirements, wall plan / floor plan changes, etc.).



01.22.21



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Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

ORDINANCE 627

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 7.63+/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 5675 FLOWERY WAY, IDENTIFIED AS TAX PARCEL 08117 002016B AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 7.63+/- acre tract of land identified as tax parcel 08117 002016B; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

Exhibit "A"

Exhibit "B"

01/13/2021
03/04/2021

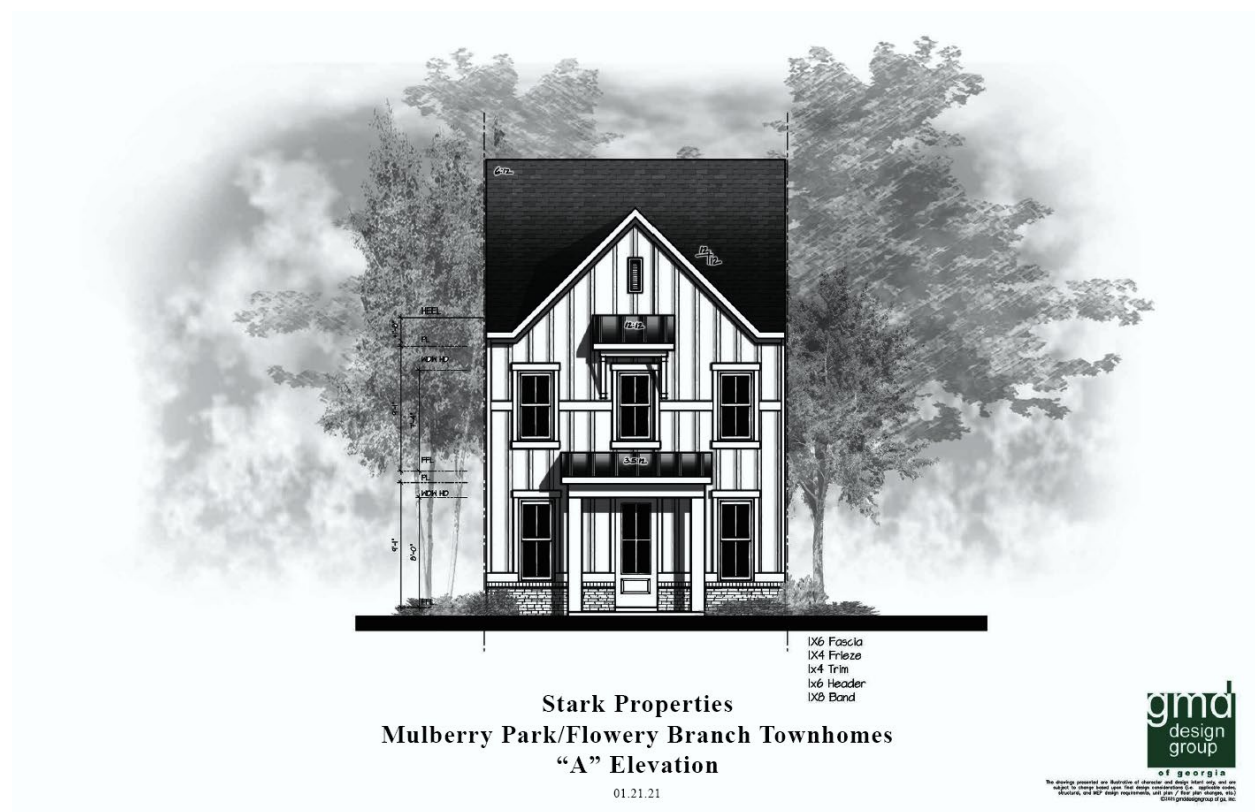
First Reading
Adopted

04/15/2021
05/20/2021

Exhibit "C"

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:



Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

First Reading
Adopted

04/15/2021
05/20/2021



Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

First Reading
Adopted

04/15/2021
05/20/2021



Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation

01.21.21

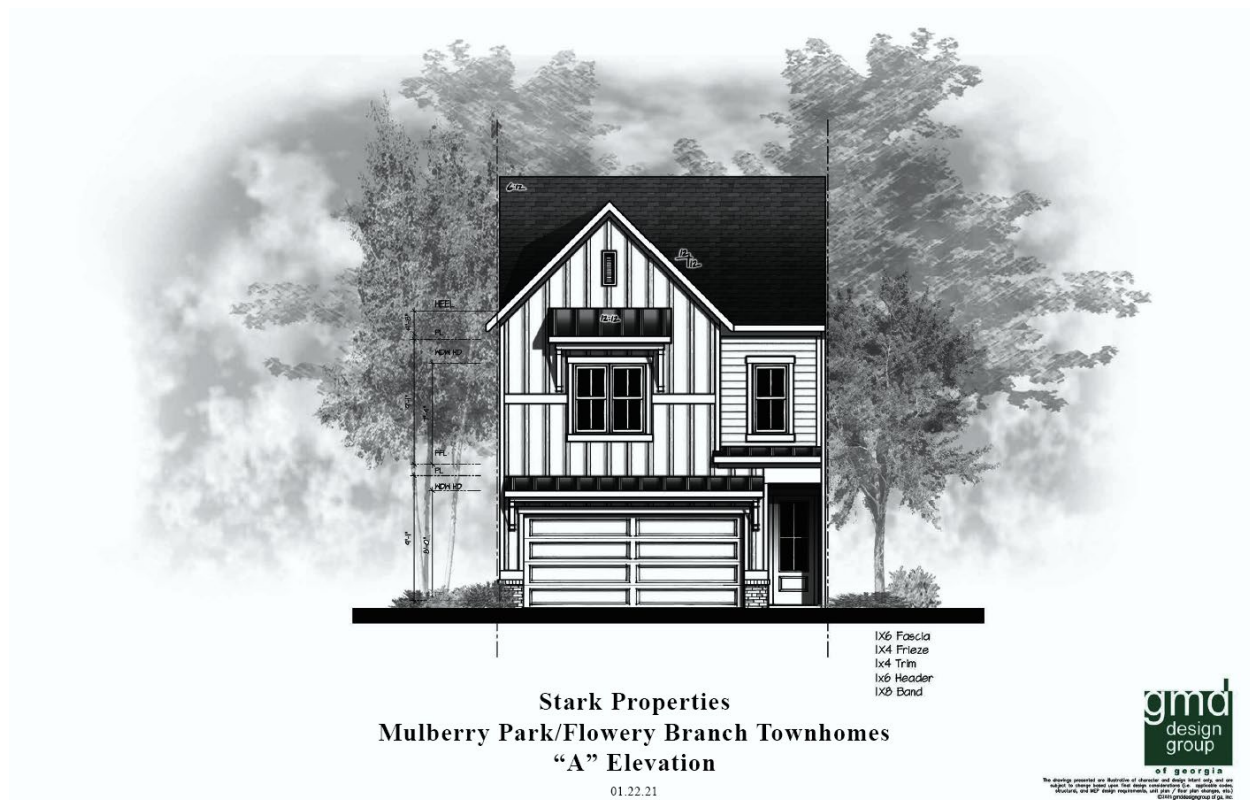


The drawings presented are a reproduction of drawings and designs created and are subject to change without notice. This drawing is not to be used for construction, site, landscape, or other purposes without the written approval of the design group.

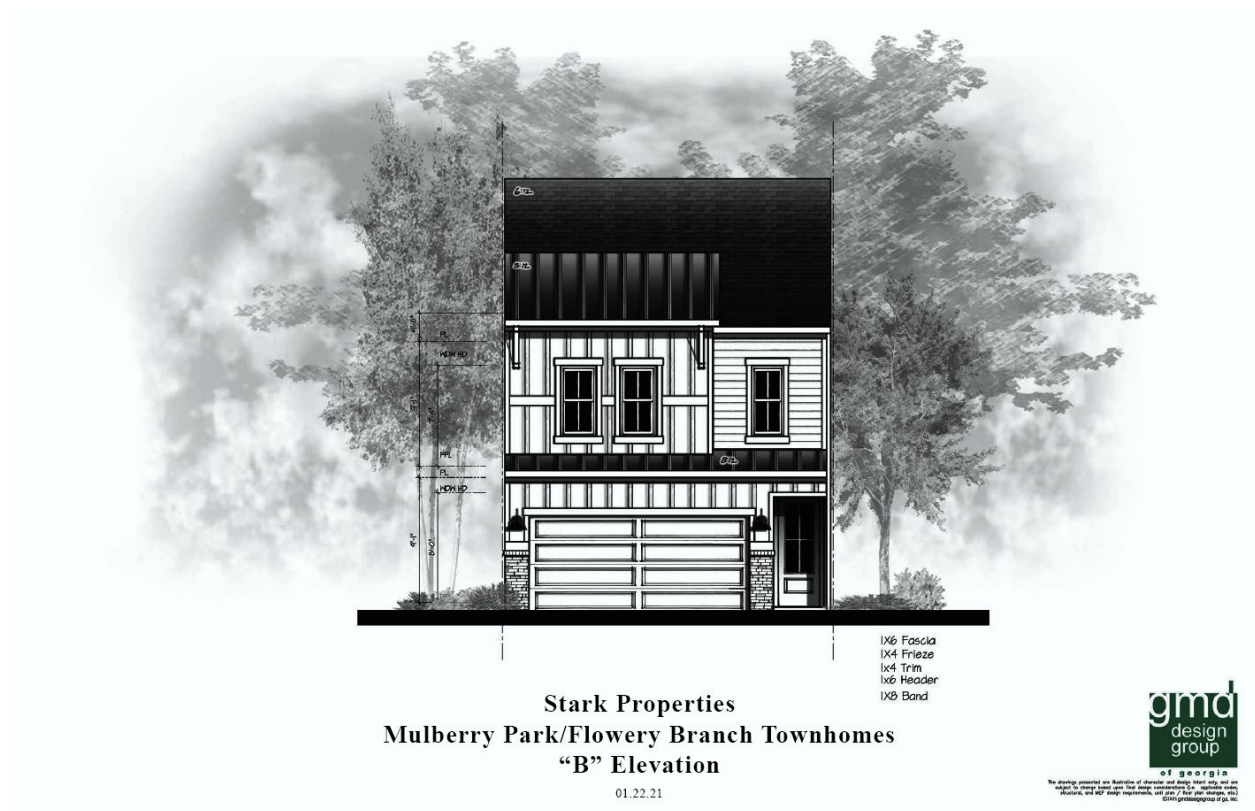
01/13/2021
03/04/2021

First Reading
Adopted

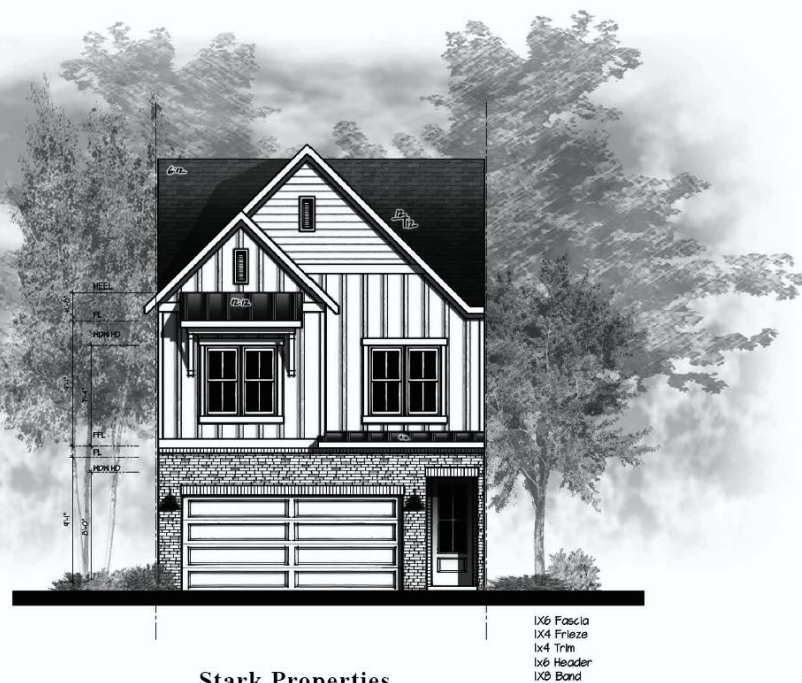
04/15/2021
05/20/2021



04/15/2021
05/20/2021



04/15/2021
05/20/2021



Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation

01.22.21

IX6 Fascia
IX4 Frieze
IX4 Trim
IX6 Header
IX8 Band



The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e. applicable code, structural, and MEP design requirements, soil plan / floor plan charges, etc.)

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

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Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

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the MILLER "B"



ORDINANCE 628

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 2.52 +/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 0 FLOWERY WAY, IDENTIFIED AS TAX PARCEL 08117 002061 AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 2.52+/- acre tract of land identified as tax parcel 08117 002016; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

Exhibit "A"

Exhibit "B"

Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

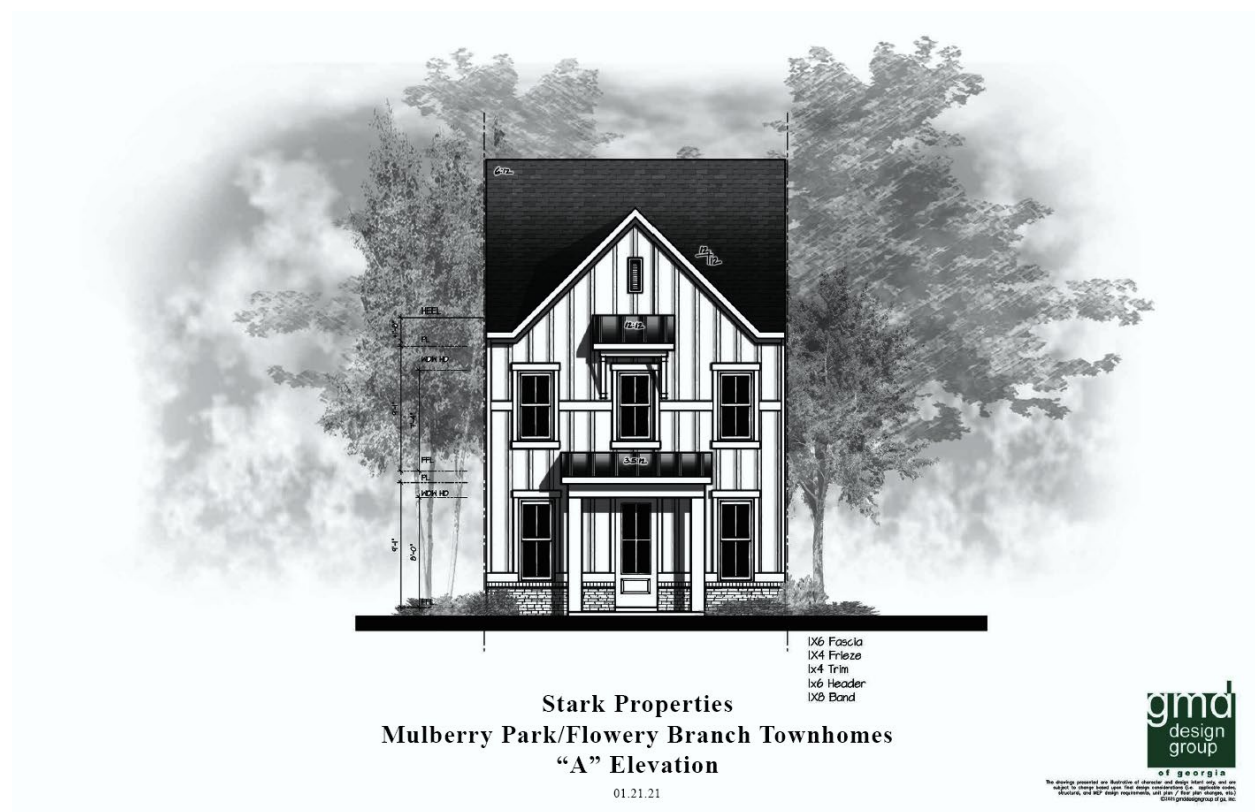
First Reading
Adopted

04/15/2021
05/20/2021

Exhibit "C"

Phase one (parcels 08117 002008A, 08117 002016D, 08117 002016B, and 08117 002061; ordinances 625, 626, 627, & 628) shall be conditioned as follows:

1. Water and sewer shall be provided by the City of Flowery Branch.
2. Site plan shall generally adhere to the plan submitted on XXXXXXXX and as shown below (to be added prior to final read).
3. Elevations shall generally adhere to those submitted by the applicant and as shown below:



Public Hearing Published
Public Hearing

01/13/2021
03/04/2021

First Reading
Adopted

04/15/2021
05/20/2021





Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation

01.21.21



The drawings presented are a reproduction of drawings and designs created and are subject to change without notice. This drawing is not to be used for construction, site, landscape, or other purposes without the written approval of the design group.

Public Hearing Published
Public Hearing

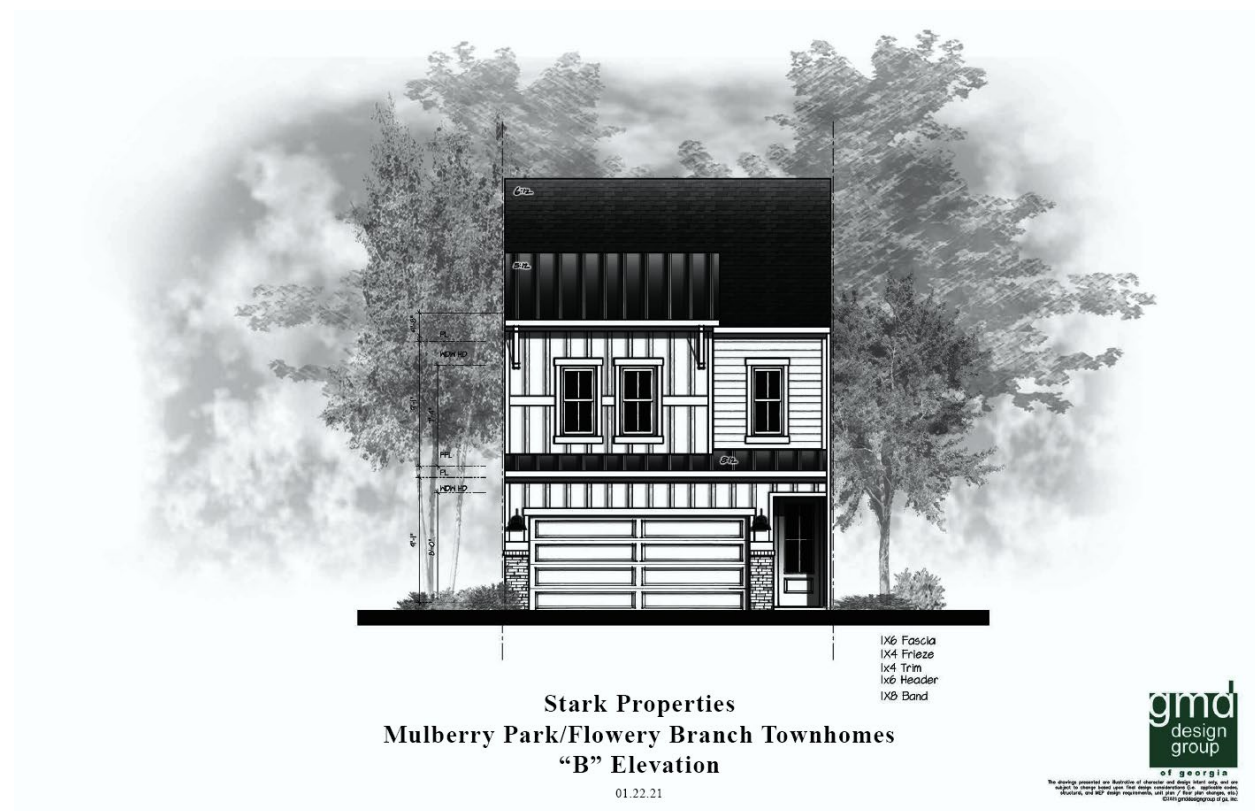
01/13/2021
03/04/2021

First Reading
Adopted

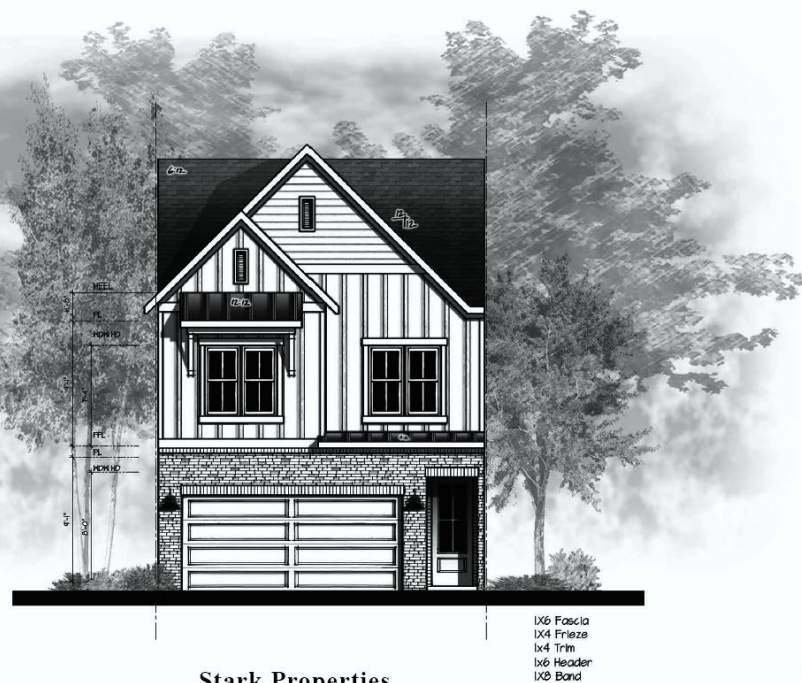
04/15/2021
05/20/2021



04/15/2021
05/20/2021



04/15/2021
05/20/2021



b6
b7C

**Stark Properties
Mulberry Park/Flowery Branch Townhomes
“C” Elevation**

01.22.21

IX6 Fascia
IX4 Frieze
IX4 Trim
IX6 Header
IX8 Band



The drawings presented are illustrative of character and design intent only, and are subject to change based upon final design considerations (i.e. applicable codes, structural, and MEP design requirements, and plan / floor plan changes, etc.)

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

Bowen & Bowen
HOMEBUILDERS
www.bowehomes.com

the MADDUX



Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

ORDINANCE 629

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 38.84 +/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 5692 MULBERRY STREET, IDENTIFIED AS TAX PARCEL 08117 002001 AS SHOWN ON ATTACHED EXHIBIT "A", AS DESCRIBED ON EXHIBIT "B", FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT "C"; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 38.84+/- acre tract of land identified as tax parcel 08117 002001; shown on Exhibit "A"; and legally described on Exhibit "B"; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit "C"; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

Exhibit "A"

Exhibit "B"

Exhibit "C"

1. No permits shall be issued unless connectivity with phase one is achieved in a manner satisfactory to Flowery Branch Mayor and Council.
2. A revised site plan shall be submitted to Mayor and Council for approval prior to the issuance of any permits.
3. Elevations shall be submitted and approved by Mayor and Council prior to the issuance of any permits.
4. Ordinances 629 and 630 shall be amended to reflect the approved site plan, approved elevations, and all conditions as set forth by Mayor and Council.

ORDINANCE 630

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF FLOWERY BRANCH, GEORGIA, BY REZONING A 33.15 +/- ACRE TRACT OF LAND OWNED BY ADVENTURES IN REAL ESTATE LLC. COMMONLY KNOWN AS 0 FLOWERY WAY, IDENTIFIED AS TAX PARCEL 08117 000006 AS SHOWN ON ATTACHED EXHIBIT “A”, AS DESCRIBED ON EXHIBIT “B”, FROM M-1 (LIGHT INDUSTRIAL) TO R-3 (MULTI-FAMILY RESIDENTIAL) SUBJECT TO THE CONDITIONS SET FORTH IN EXHIBIT “C”; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING ORDINANCES, PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER LAWFUL PURPOSES.

WHEREAS, Stark Land Development, LLC. desires to develop the 33.15+/- acre tract of land identified as tax parcel 08117 00006; shown on Exhibit “A”; and legally described on Exhibit “B”; and

WHEREAS, specific conditions shall be placed on subject property are shown on attached exhibit “C”; and

WHEREAS, the City Council of the City of Flowery Branch has considered the rezoning application of Stark Land Development, LLC. in conjunction with the standards set forth in Article 34 - Section 34.7 of Zoning Ordinance No. 348 of the City of Flowery Branch, Georgia; and

WHEREAS, Stark Land Development, LLC. has submitted to the City Council of Flowery Branch, Georgia, a written and signed application requesting to be rezoned and whereas a survey and complete description of the land to be rezoned is included in the application; and

WHEREAS, the City Council held a public hearing at the meeting of March 4, 2021 duly noticed as prescribed by law and published in the Gainesville Times, regarding said application, as shall be set forth in the minutes of said meeting.

NOW THEREFORE, THE COUNCIL OF THE CITY OF FLOWERY BRANCH DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. FINDINGS.

The City Council finds that the proposed rezoning of the parcel from Flowery Branch M-1 (Light Industrial) to Flowery Branch R-3 (Residential Multi-Family) is consistent with the adopted standards for governing the exercise of the zoning power consistent with O.C.G.A. § 36-66-5 and requirements of the Zoning Ordinance as identified below.

1. The proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

2. The proposal is not expected to adversely affect the existing use or usability of adjacent or nearby property.
3. The property shall be used in accordance with the existing regulations and has a reasonable economic use as currently zoned.
4. The development if approved and constructed is not expected to result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.
5. The proposal is in conformity with the policy and intent of the comprehensive plan and the character area map and future land use plan map.
6. The proposal is considered appropriate in view of existing use(s) and zoning of the subject property and nearby properties.
7. No determination has been made by staff with regard to the value differential between development under the current M-1(Light Industrial) as opposed to the proposed R-3 (Residential Multi-Family).
8. A proposed development will not be a deterrent to the value or improvement of development of adjacent property in accordance with existing regulations.
9. There are no known adverse effects that would result from the changes to the R-3 zoning district.
10. Development as proposed is not expected to impact on the environment, including but not limited to, drainage, soil erosion and sedimentation, flooding, air quality and water quality. Compliance with city subdivision and land development regulations will be required, which include but are not limited to soil erosion and sedimentation, stormwater, and flood damage prevention.

SECTION 2. LEGAL DESCRIPTION AND CONDITIONS.

The property as shown in attached Exhibit “A” and as legally described in Exhibit “B” shall be rezoned to R-3 (Residential Multi-Family). Conditions are set forth in Exhibit “C”. Said Exhibits are incorporated by reference as if fully set forth herein.

SECTION 3. AMENDMENT OF THE ZONING MAP.

This Ordinance is enacted as an amendment to the Zoning Map of Flowery Branch, Georgia. Accordingly, the Zoning Administrator is hereby authorized to update the Official Map consistent with Article 3 of the Zoning Ordinance.

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

SECTION 4. SEVERABILITY.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of this Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE.

The effective date of this Ordinance shall be upon adoption by the City Council of the City of Flowery Branch, Georgia.

SECTION 6. REPEALER.

All ordinances and parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

Adopted this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

Public Hearing Published 01/13/2021
Public Hearing 03/04/2021

First Reading 04/15/2021
Adopted 05/20/2021

Exhibit “A”

Exhibit “B”

Exhibit “C”

1. No permits shall be issued unless connectivity with phase one is achieved in a manner satisfactory to Flowery Branch Mayor and Council.
2. A revised site plan shall be submitted to Mayor and Council for approval prior to the issuance of any permits.
3. Elevations shall be submitted and approved by Mayor and Council prior to the issuance of any permits.
4. Ordinances 629 and 630 shall be amended to reflect the approved site plan, approved elevations, and all conditions as set forth by Mayor and Council.



FLOWERY BRANCH CITY COUNCIL

EXECUTIVE SUMMARY



SUBJECT: Heritage Homes Group, LLC Land Exchange Amendment

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

The City of Flowery Branch (“City”) and Winterset Holdings, LLC (“Winterset”) entered into a real estate exchange agreement on January 27, 2020. The approximately 1.206 ± acre property to be exchanged by Winterset consists of the four lots included in the block bounded by Mitchell, Spring, Church and Chestnut Streets. The approximately 1.406 ± acre property to be exchanged by the City is located at 5702 Main Street and was the site of the former Mooney Manufacturing buildings. The original agreement contemplated that the exchange would close on or before May 29, 2020 assuming Winterset could delivery possession of its property without tenants. In an effort to meet that that closing deadline, the city council took up the initial consideration and approval of the zoning for the development contemplated by Winterset for Mooney Manufacturing site. But with the Coronavirus pandemic’s impact on Winterset’s ability to transition the tenants, the real estate exchange contemplated by the agreement was not consummated and the agreement has expired.

The City and Winterset, however, remained interested in renewing the real estate exchange agreement which is the subject of this agenda item. The terms of the agreement remain the same as the original except that Winterset is being replaced by a related entity – Heritage Homes Group, LLC (“Heritage”), and the closing deadline for the exchange is now set for no later than May 14, 2021.

FACTS AND ISSUES:

The original closing deadline in the agreement has proven to aggressive to meet given the conditions precedent to closing, and the parties have agreed to extend the closing deadline until June 30, 2021.

OPTIONS:

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

Yes

AMOUNT AND SOURCE OF FUNDS:

RECOMMENDATION:

Approve

SAMPLE MOTION:

COLLABORATING DEPARTMENT:

Administration

DEPARTMENT: Administration

Prepared by: Vickie Short

ATTACHMENTS

- [FINAL FIRST_AMENDMENT_TO_REAL_ESTATE_EXCHANGE_AGREEMENT.docx](#)

FIRST AMENDMENT TO REAL PROPERTY EXCHANGE AGREEMENT

THIS FIRST AMENDMENT TO REAL PROPERTY EXCHANGE AGREEMENT (this "Amendment"), is made and entered into effective the 14th day of May, 2021, by and between the City of Flowery Branch, Georgia (hereinafter referred to as "City") and Heritage Group Homes, LLC, a Georgia limited liability company, (hereinafter referred to as "Heritage").

WHEREAS, City and Heritage entered into that certain real property exchange agreement dated March 5, 2021 (the "Original Agreement"), for the exchange of certain real property (the "Exchange Parcels"); and

WHEREAS, City and Heritage desire to amend the Original Agreement, on and subject to the terms and conditions set forth herein.

NOW, THEREFORE, AND IN CONSIDERATION of the sum of One and No/100 Dollars (\$1.00), each to the other paid, the receipt and adequacy and sufficiency of which is hereby acknowledge, and the mutual covenants flowing between the parties hereto, the Original Agreement is hereby amended as follows:

1. Closing. The first sentence of Section 6. Closing. of the Original Agreement is deleted in its entirety and replaced with the following: "The consummation of the exchange of the Exchange Parcels contemplated under this Agreement ("Closing") shall be held on or before June 30, 2021."

EXCEPT AS HEREIN PROVIDED, all other terms and conditions of the Original Agreement shall remain the same and the parties hereto do hereby ratify the Original Agreement.

IN WITNESS WHEREOF, City and Heritage have carefully read and reviewed this Amendment and each term and provision contained herein, and by the execution of this Amendment shows their informed and voluntary consent thereto. The parties hereby agree that, at the time this Amendment is executed, the terms of this Amendment are commercially reasonable and effectuate the intent and purpose of City and Heritage with respect to the Exchange Parcels.

This 20th day of May, 2021.

CITY: CITY OF FLOWERY BRANCH, GEORGIA

By: _____
James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

HERITAGE: HERITAGE GROUP HOMES, LLC

By: _____
Michael Phelps, Member

ATTEST:

Chris Hill, Member



FLOWERY BRANCH CITY COUNCIL

EXECUTIVE SUMMARY



SUBJECT: Resolution 21-004: 5318 Railroad Ave and The Depot Repairs Budget Adjustment Request

COUNCIL MEETING DATE: May 20, 2021

HISTORY:

N/A

FACTS AND ISSUES:

5318 Railroad Avenue is a rental property and needs windows and exterior repairs. The Depot restrooms need repairs and upgrades for public use.

This request is not an adjustment from the fund balance. It is a request to move funds between two departments.

OPTIONS:

Approve budget adjustment as presented or not approve.

IF FUNDING IS INVOLVED, ARE FUNDS APPROVED IN THE CURRENT BUDGET:

No

AMOUNT AND SOURCE OF FUNDS:

\$31,300 transfer from Public Works budget to City Hall Buildings Budget

RECOMMENDATION:

To approve a budget adjustment to move \$31,300 from the Public Works Department budget to City Hall/Buildings – Repairs & Maintenance to complete repairs at 5318 Railroad Avenue and The Depot.

SAMPLE MOTION:

I make a motion to approve Resolution 21-004 as presented.

COLLABORATING DEPARTMENT:

Public Works

DEPARTMENT: Finance

Prepared by: Vickie Short

ATTACHMENTS

- [EXECUTIVE SUMMARY - 5318 Railroad Ave and Depot Repairs Budget Adjustment.pdf](#)
- [Resolution 21-004.pdf](#)

- Attachment A - Resolution 21-004 Budget Adjustment Form.pdf
- Attachment B - Quotes.pdf

FLOWERY BRANCH CITY COUNCIL
EXECUTIVE SUMMARY

SUBJECT: Resolution 21-004: 5318 Railroad Ave and The Depot Repairs Budget Adjustment Request

DATE: May 17, 2021

(X) RECOMMENDATION

() POLICY DISCUSSION

BUDGET INFORMATION:

() STATUS REPORT

ANNUAL-

() OTHER

CAPITAL-

COMMISSION ACTION REQUESTED ON: May 20, 2021

PURPOSE: To approve a budget adjustment to move \$31,300 from the Public Works Department budget to City Hall/Buildings – Repairs & Maintenance to complete repairs at 5318 Railroad Avenue and The Depot.

HISTORY: N/A

FACTS AND ISSUES: 5318 Railroad Avenue is a rental property and needs windows and exterior repairs. The Depot restrooms need repairs and upgrades for public use.

This request is not an adjustment from the fund balance. It is a request to move funds between two departments.

OPTIONS: Approve budget adjustment as presented or not approve.

RECOMMENDED SAMPLE MOTION: I make a motion to approve Resolution 21-004, the repairs budget adjustment, as presented, effective May 20, 2021.

DEPARTMENT: Finance

Prepared by: Alisha Gamble

RESOLUTION NO.: 21-004

**TO AMEND THE BUDGET FOR FISCAL YEAR 2021 AS PREVIOUSLY ADOPTED ON
JUNE 25, 2020.**

WHEREAS, the City Council approved a budget for fiscal year 2021 for the City of Flowery Branch on June 25, 2020 by Resolution 20-018; and

WHEREAS, the budget is a dynamic rather than static revenue and spending plan which requires adjustment from time to time as circumstances change; and

WHEREAS, these adjustments maintain a balanced budget for all funds.

NOW, THEREFORE, BE IT RESOLVED THAT the governing body for the City of Flowery Branch hereby adopts the adjustments to the budget listed on “Attachment A” and “Attachment B” attached hereto and made a part of the Resolution.

RESOLVED this 20th day of May 2021.

James M. Miller, Mayor

ATTEST:

Vickie Short, City Clerk

APPROVED AS TO FORM:

E. Ronald Bennett, Jr., City Attorney

**City of Flowery Branch
Request For Budget Adjustment**



Fund/Department: 100

Effective Date: 5/20/2020

Account Number	Account Name	Current Budget	Debit (Credit)	Revised Budget
				-
100-4210-522250	PWs / Roads - Repairs & Maintenance	80,000	(31,300)	48,700
100-1565-522200	City Hall & Bldg's / Repairs & Maintenance	27,885	31,300	59,185
				-
				-
				-
				-
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				-
				-
<u>Totals</u>		\$ 107,885	\$ -	\$ 107,885

Justification: RESOLUTION 21-004: BUDGET AMENDMENT TO FY2021 APPROVED BUDGET FROM JUNE 25, 2020.
(See Attachment A and Attachment B for Details)

Approvals: Finance Director: *Olivia L Gamble* Date: 5/17/2021
City Manager: *Vickie Short* Date: 5/17/2021
Mayor: _____ Date: _____

<i>Finance Department Use</i>	
Posted By: _____	Date Posted: _____
Council Action Required: Yes _____ No _____	Budget Adjust. #: _____



Gwinnett Window & Door Inc.

PO Box 2346
2941 Buford Hwy
Buford, Ga. 30515
770-945-3253
Fax 770-945-7228

Bid Details

Flowery Branch
Windows
, Ga.

Aluminum Framed Storefront Glass & Glazing

BID DOCUMENTS:

Architect:
Date:
Plans Date:
Project No#

Replace 2 twin windows in front
Replace door sidelite
Clear the 2 exterior door
Repair wood trim on 3 windows 2front, 1 Side
Paint trim on windows and doors

This pricing is based on estimator's best interpretation of specs and drawings.
Any changes will require a change in the quoted amount.

Quote: \$ 6,400.00

Bid Notes:

Material Lead Time:	10-11 Weeks
Shop Drawings:	Not Included
PE Calcs:	Not Included
Engineer Stamped Drawing:	Not Included
Field Testing:	Not Included
As Builts:	Not Included

Break Metal:	Not Included		
Tax:	Not Included		
Certain Materials In this Bid May Not Fully Comply with The Plans or Specification			

Price Subject to change
no Responsibility from errors resulting from the use of Drawings provided.
ation and alignment as shown on the architect's drawings,It is the responsibility of the customer to verified rough openings are correct

Special Charges

- All materials must be ordered at the same time or additional freight and/or setup charges may apply.
Releasing or producing the order in phases may result in a higher price from
changes in material needs due to differences in optimization.
- This was quote using weekday (Normal Hours) labor rates. After hours and weekend rates add upcharges

Warranty

Unless otherwise noted, standard warranty applies



Gwinnett Window & Door Inc.

PO Box 2346
2941 Buford Hwy
Buford, Ga. 30515
770-945-3253
Fax 770-945-7228

Bid Details

Train Depot Bathrooms

, Ga.

Aluminum Framed Storefront Glass & Glazing

BID DOCUMENTS:

Architect:

Date:

Plans Date:

Project No#

Tile Install & Demo	\$720 tile allotment
Remove Toilets	
Remove Partitions	
New Partitions	
Vanities plumbing	
Vanities Demo	
Vanities Build	with Corian
Mirror Demo	
Mirror Install	
Remove Toilets	
Install Toilets	Existing
Install Bead board	
stain Bead Board	
Paint wall above bead board	
restroom accessories	
Install trim	Base board, Chair rail.
Install existing hand rails	

This pricing is based on estimator's best interpretation of specs and drawings.
Any changes will require a change in the quoted amount.

Quote: \$ 24,900.00

Bid Notes:

Material Lead Time:	5-6 Weeks
Shop Drawings:	Not Included
PE Calcs:	Not Included
Engineer Stamped Drawing:	Not Included
Field Testing:	Not Included
As Builts:	Not Included
Break Metal:	Not Included
Tax:	Not Included

Certain Materials In this Bid May Not Fully Comply with The Plans or Specification

Price Subject to change

no Responsibility from errors resulting from the use of Drawings provided.

ation and alignment as shown on the architect's drawings,It is the responsibility of the customer to verified rough openings are correct

Special Charges

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changes in material needs due to differences in optimization.

This was quote using weekday (Normal Hours) labor rates. After hours and weekend rates add upcharges

Warranty

Unless otherwise noted, standard warranty applies

Tile

Bead Board Example

Corian Color Choices

Solid Plastic (HDPE) Color Selection Guide



White
9201



Cream
9235



Ivory Essence
Speckle 9500*



Caramel
9658



Mocha
9212



Metallic Bronze
9513



Olive
9223



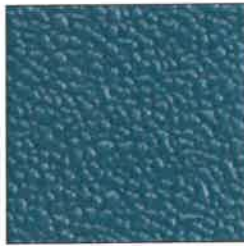
Moss
9233



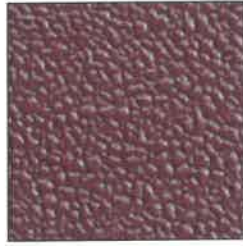
Hunter Green
9508



Azure
9231



Blue
9509



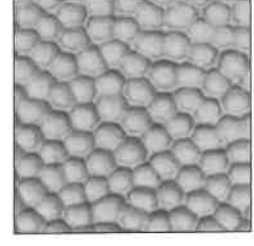
Burgundy
9211



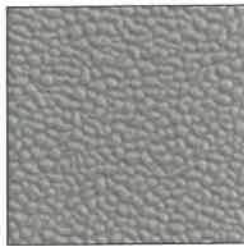
Folkstone Gray
9400*



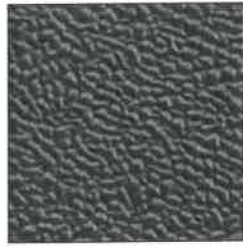
Gray
9200



Metallic Silver
9511



Charcoal
9237



Black
9205



Black Confetti
9217*