DEVELOPMENT OF REGIONAL IMPACT
(DRI #4198)

TRAFFIC STUDY
FOR
0 ROCKY CREEK DATA CENTER

HENRY COUNTY, GEORGIA

Prepared for:

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July 12, 2024
A & R Project # 23-196

EXECUTIVE SUMMARY

Traffic impacts were evaluated for the proposed 1,253,752 square feet of data center development that will be located at 0 Rocky Creek Road and to the southeast of the intersection of SR 20 (McDonough Hampton Road) at Rocky Creek Road in Henry County, Georgia.

The development proposes one full access driveway on SR 20 (McDonough Hampton Road) at its existing median opening aligning with Bridget Drive and one gated emergency access on Rocky Creek Road.

Existing and future operations during the AM peak hour (7:00 AM – 9:00 AM) and PM peak hour (4:00 PM – 6:00 PM) before and after completion of the project were analyzed at the following intersections:

1. SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road
2. SR 20 (McDonough Hampton Road) @ Bridget Drive / Proposed Site Driveway
3. SR 20 (McDonough Hampton Road) @ Rocky Creek Road

Traffic Operations Summary

Table E1 below provides a summary of traffic operations for the "No-Build" and "Build" conditions for the year 2028 with and without system/site improvements. As per GRTA requirements, all approaches that do not meet the level-of-service (LOS) standard (considered failing) are highlighted in Table E1. The results of future "No-Build" traffic operations show that all the study intersections will continue to operate at a level of service "D" or better for all approaches in both the AM and PM peak hours.

The results of the "Build" traffic operations show that in the AM peak hour, the northbound (Simpson Mill Road) approach at the intersection of SR 20 at Simpson Mill Road / Oakland Road will experience delay of 39.6 seconds and falls under level-of-service "E" by just 4.6 seconds. The delay increased by a marginal 5.3 seconds from "No-Build" conditions. GDOT has converted this intersection into an RCUT intersection. The southbound (Bridget Drive) approach at the intersection of SR 20 at Bridget Drive/Site Driveway will operate at level-of-service "F" in the PM peak hour with marginal increase above the threshold. It is not uncommon for stop-controlled side-streets on arterial roadways to experience delays during peak hours as delays are caused by side-street wait times to turn left onto the mainline. This full access intersection serves as a U-Turn location for two adjacent RCUT intersections. The left-turn volumes from side streets do not meet traffic signal warrants for installation of a traffic signal. No other measure will aid improve the marginal delays experienced after the addition of the site driveway.
Table E1 also includes the project's total added trip and the respective percentage of overall total "Build" condition approach traffic volume for all failing LOS approaches after all improvements are completed.

Table E1 also includes the project's total added trip and the respective percentage of overall total "Build" condition approach traffic volume for all failing LOS approaches after all improvements are completed.

TABLE E1 – FUTURE INTERSECTION OPERATIONS AT FAILING APPROACHES

	Intersection	*No-Build Condition: LOS (Delay)*				*Build Condition: LOS (Delay)*							
		NO IMPROVEMENTS		SYSTEM IMPROVEMENTS		NO IMPROVEMENTS		SYSTEM / SITE IMPROVEMENTS		SITE VOLUMES AT FAILING APPROACH BUILD WITH IMPROVEMENTS		PRECENT SITE TRIPS OF TOTAL APPROACH TRIPS AT FAILING APPROACHES	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1	**SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road** -Eastbound Left -Westbound Left -Northbound Approach -Southbound Approach	 B (10.3) B (13.0) D (34.3) B (12.1)	 B (13.3) A (9.3) B (12.4) C (20.1)	N/A	N/A	 B (10.7) B (13.4) E (39.6) B (12.6)	 B (14.5) A (9.7) B (13.3) C (22.8)	N/A	N/A	 - - 9 -	No failing approaches	 - - 3% -	No failing approaches
2	**SR 20 (McDonough Hampton Road) @ Bridget Drive / Proposed Site Driveway** -Eastbound Left -Westbound U/*Left* -*Northbound Approach* -Southbound Approach	 B (11.7) D (27.6) - C (18.1)	 C (20.1) B (13.2) - D (34.3)	N/A	N/A	 B (11.7) C (23.2) D (31.8) D (26.0)	 C (21.6) B (14.1) C (21.9) F (53.8)	N/A	N/A	No failing approaches	 - - - 0	No failing approaches	 - - - 0%

Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersection.

- Full Access Site Driveway on SR 20 (McDonough Hampton Road), aligned with Bridge Drive
    - One entering and one exiting lanes.
    - Stop-sign controlled on the driveway approach with SR 20 remaining free flow.
    - Westbound U-Turn Lane on SR 20 to be restriped to allow left turn entering traffic.
    - Construct eastbound Right Turn Lane on SR 20 for entering traffic.
    - Provide adequate sight distance per AASHTO standards.

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INTRODUCTION

The purpose of this study is to determine the traffic impact from the proposed 1,253,752 square feet of data center development that will be located at 0 Rocky Creek Road and to the southeast of the intersection of SR 20 (McDonough Hampton Road) at Rocky Creek Road in Henry County, Georgia. The traffic analysis evaluates the current operations and the future conditions with the traffic generated by the development.

The development proposes one full access driveway on SR 20 (McDonough Hampton Road) at its existing median opening aligning with Bridget Drive and one gated emergency access on Rocky Creek Road.

Traffic operations for AM and PM peak hours have been analyzed in this study at the intersections of:

1. SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road
2. SR 20 (McDonough Hampton Road) @ Bridget Drive / Proposed Site Driveway
3. SR 20 (McDonough Hampton Road) @ Rocky Creek Road

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report.

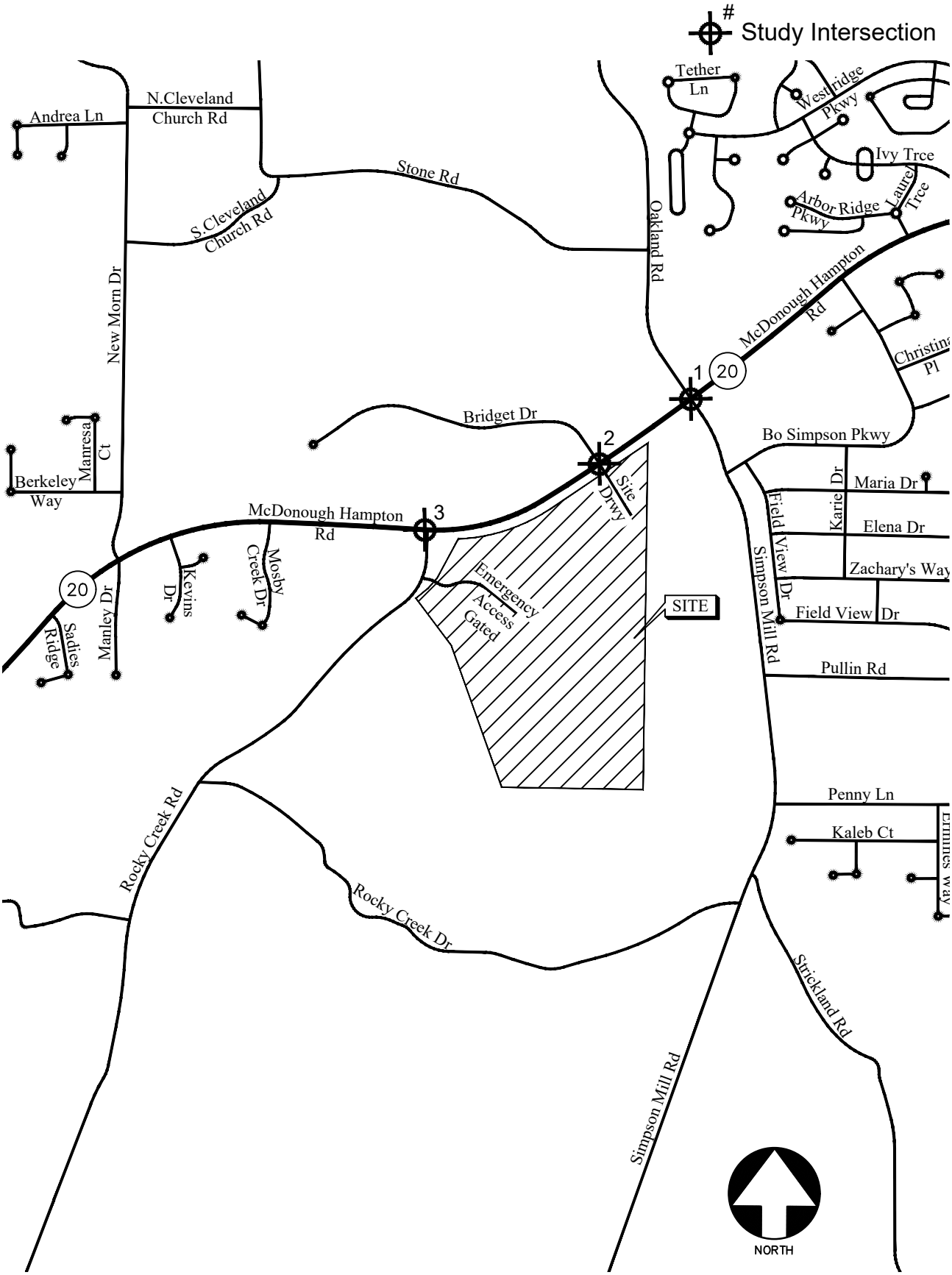
STUDY NETWORK DETERMINATION

The study network was determined by evaluating the amount of traffic that the proposed development will add to each roadway segment in the area. According to GRTA requirements, a roadway segment carries a "significant" amount of traffic if the project contributes 7% or more trips to the two-way daily service volumes of the roadway at the appropriate level of service standard. Upon agreement with GRTA a level of service standard of "D" was used for determining the study area network.

The traffic generated by the proposed project was then assigned to the area roadways using the trip distribution to determine the site-generated traffic on each roadway segment. The boundaries of the study network extend to the most distant intersections where at least 7% of the service volumes on the segment are attributed to project traffic. The trips generated by the development are low and do not account for more than 7% of volumes to qualify to be evaluated as per GRTA requirements. However, the following intersections have been selected as being suitable for evaluation in discussions with ARC, GRTA, GDOT and Henry County:

1. SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road
2. SR 20 (McDonough Hampton Road) @ Bridget Drive / Proposed Site Driveway
3. SR 20 (McDonough Hampton Road) @ Rocky Creek Road

The location of the development and the surrounding study network is shown in Figure 1. Other intersections within this corridor, such as unsignalized side streets, right-in / right-out driveways or private driveways have not been included in the study network.



LOCATION MAP AND STUDY INTERSECTIONS FIGURE 1

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EXISTING ROADWAY FACILITIES

The following is a brief description of each of the roadway facilities located in proximity to the site:

SR 20 (McDonough Hampton Road)

SR 20 (McDonough Hampton Road) is an east-west, four-lane, median-divided roadway with a posted speed limit of 60 mph in the vicinity of the site. GDOT traffic counts (Station ID's 151-0167 & 151-0163) indicate that the daily traffic volume on SR 20 (McDonough Hampton Road) in 2022 was 25,200 vehicles west of Ivy Trace and 17,200 vehicles east of Towaliga River. GDOT classifies SR 20 (McDonough Hampton Road) as an Urban Principal Arterial roadway.

Simpson Mill Road

Simpson Mill Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site.

Oakland Road

Oakland Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site.

Rocky Creek Road

Rocky Creek Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site.

Bridget Drive

Bridget Drive is a north-south, two-lane, undivided roadway with a posted speed limit of 25 mph.

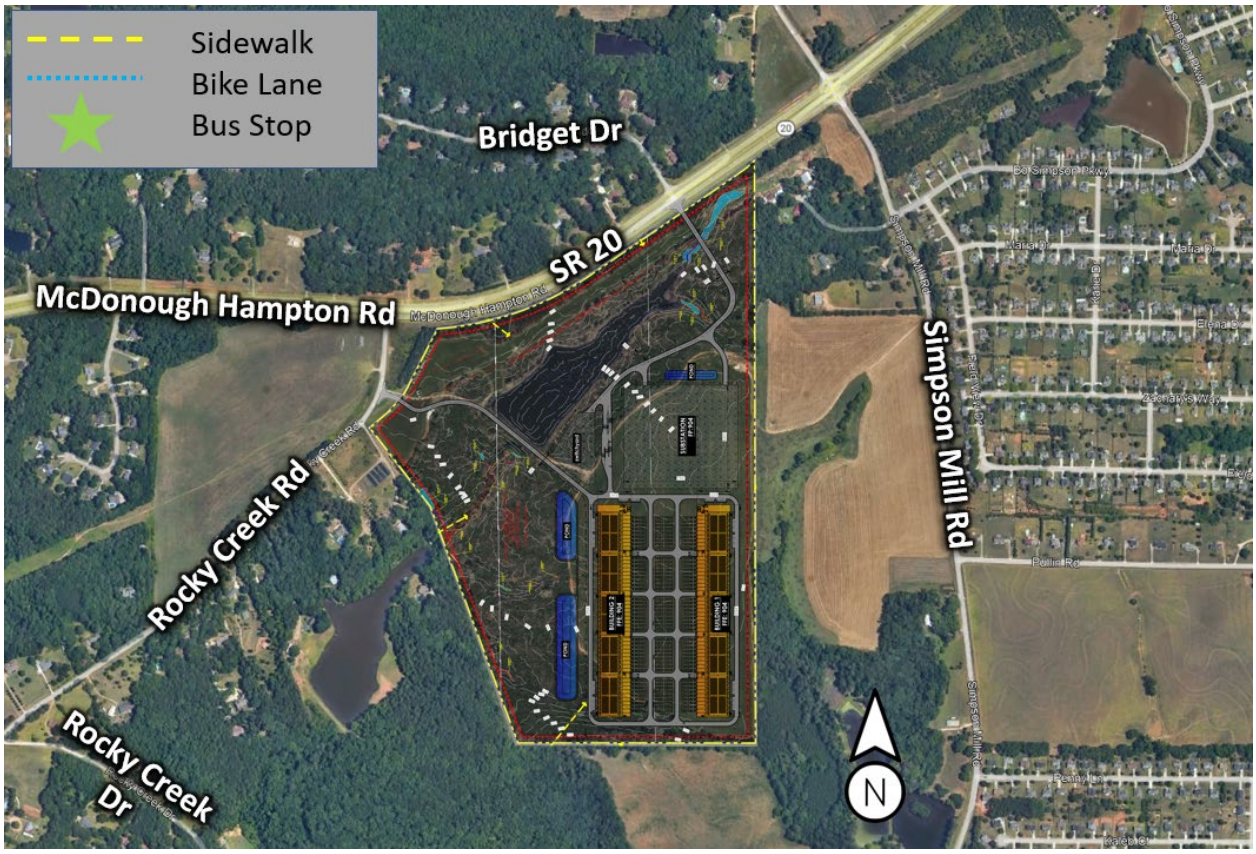
Existing Bicycle and Pedestrian Facilities

- Sidewalks, crosswalks, and bike paths are not present in the study network on SR 20, Rocky Creek Road and Simpson Mill Road and the developer is not proposing any sidewalks on these roads. Internal sidewalks connecting the proposed buildings to internal parking lots for pedestrian connectivity with the site will be constructed by the developer.

Alternative Modes of Access

- Existing transit routes were not found in the study network.
- No high-capacity transit stations were found in the vicinity of the proposed development.

Existing Alternative Transportation Map



STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

Unsignalized Intersections

For unsignalized intersections controlled by a stop sign on minor streets, the level-of-service (LOS) for motor vehicles with controlled movements is determined by the computed control delay according to the thresholds stated in Table 1 below. LOS is determined for each minor street movement (or shared movement), as well as major street left turns. LOS is not defined for the intersection as a whole or for major street approaches. The LOS of any controlled movement which experiences a volume to capacity ratio greater than 1 is designed as "F" regardless of the control delay.

Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from "A" through "F". Level-of-service "A" indicates excellent operations with little delay to motorists, while level-of-service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross the main road without experiencing long delays.

TABLE 1 – LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Control Delay (sec/vehicle)	LOS by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	**v/c > 1.0**
≤ 10	A	F
> 10 and ≤ 15	B	F
> 15 and ≤ 25	C	F
> 25 and ≤ 35	D	F
> 35 and ≤ 50	E	F
> 50	F	F

*The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection.

Source: Highway Capacity Manual, 6th edition, Exhibit 20-2 *LOS Criteria: Motorized Vehicle Mode*

Signalized Intersections

According to HCM procedures, LOS can be calculated for the entire intersection, each intersection approach, and each lane group. HCM uses control delay alone to characterize LOS for the entire intersection or an approach. Control delay per vehicle is composed of initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Both control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. A volume-to-capacity ratio greater than 1.0 for a lane group indicates failure from capacity perspective. Therefore, such a lane group is assigned LOS F regardless of the amount of control delay.

Table 2 below summarizes the LOS criteria from HCM for motorized vehicles at signalized intersections.

TABLE 2 – LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Control Delay (sec/vehicle)*	LOS for Lane Group by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	**v/c > 1.0**
≤ 10	A	F
> 10 and ≤ 20	B	F
> 20 and ≤ 35	C	F
> 35 and ≤ 55	D	F
> 55 and ≤ 80	E	F
> 80	F	F

*For approach-based and intersection wide assessments, LOS is defined solely by control delay

Source: Highway Capacity Manual, 6th edition, Exhibit 19-8 *LOS Criteria: Motorized Vehicle Mode*

LOS A is typically assigned when the volume-to-capacity (v/c) ratio is low and either progression is exceptionally favorable, or the cycle length is very short. LOS B is typically assigned when the v/c ratio is low and either progression is highly favorable, or the cycle length is short. However, more vehicles are stopped than with LOS A. LOS C is typically assigned when progression is favorable, or the cycle length is moderate. Individual cycle failures (one or more queued vehicles are not able to depart because of insufficient capacity during the cycle) may begin to appear at this level. Many vehicles still pass through the intersection without stopping, but the number of vehicles stopping is significant. LOS D is typically assigned when the v/c ratio is high and either progression is ineffective, or the cycle length is long. There are many vehicle-stops and individual cycle failures are noticeable. LOS E is typically assigned when the v/c ratio is high, progression is very poor, the cycle length is long, and individual cycle failures are frequent. LOS F is typically assigned when the v/c ratio is very high, progression is very poor, the cycle length is long, and most cycles fail to clear the queue.

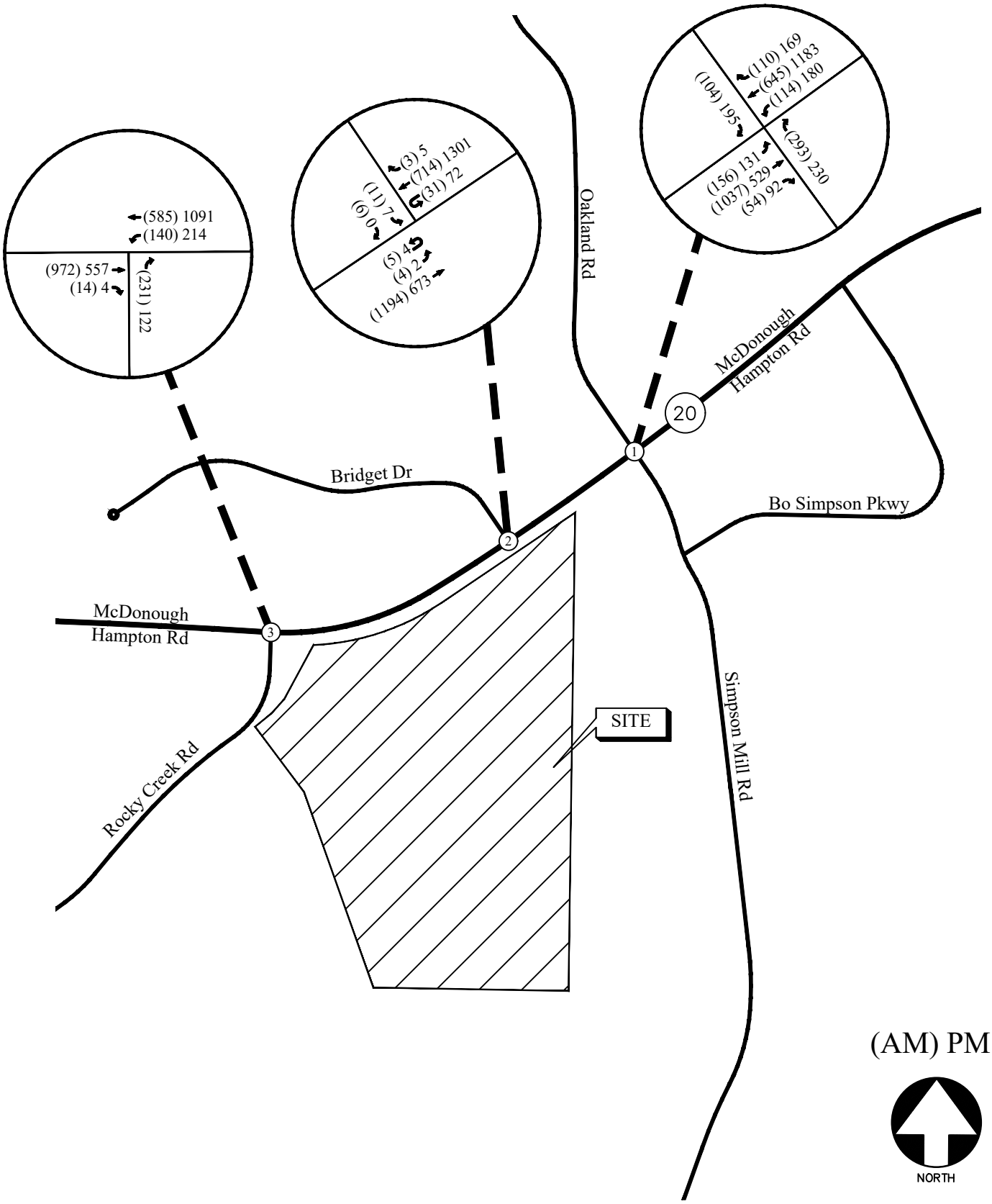
EXISTING 2024 TRAFFIC ANALYSIS

Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

1. SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road
2. SR 20 (McDonough Hampton Road) @ Bridget Drive
3. SR 20 (McDonough Hampton Road) @ Rocky Creek Road

Turning movement counts were collected on Tuesday, May 07, 2024. All turning movement counts were recorded during the AM and PM peak hours between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, respectively. The four consecutive 15-minute interval volumes that produced the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2. The existing traffic control and lane geometry for the intersections are shown in Figure 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES FIGURE 2

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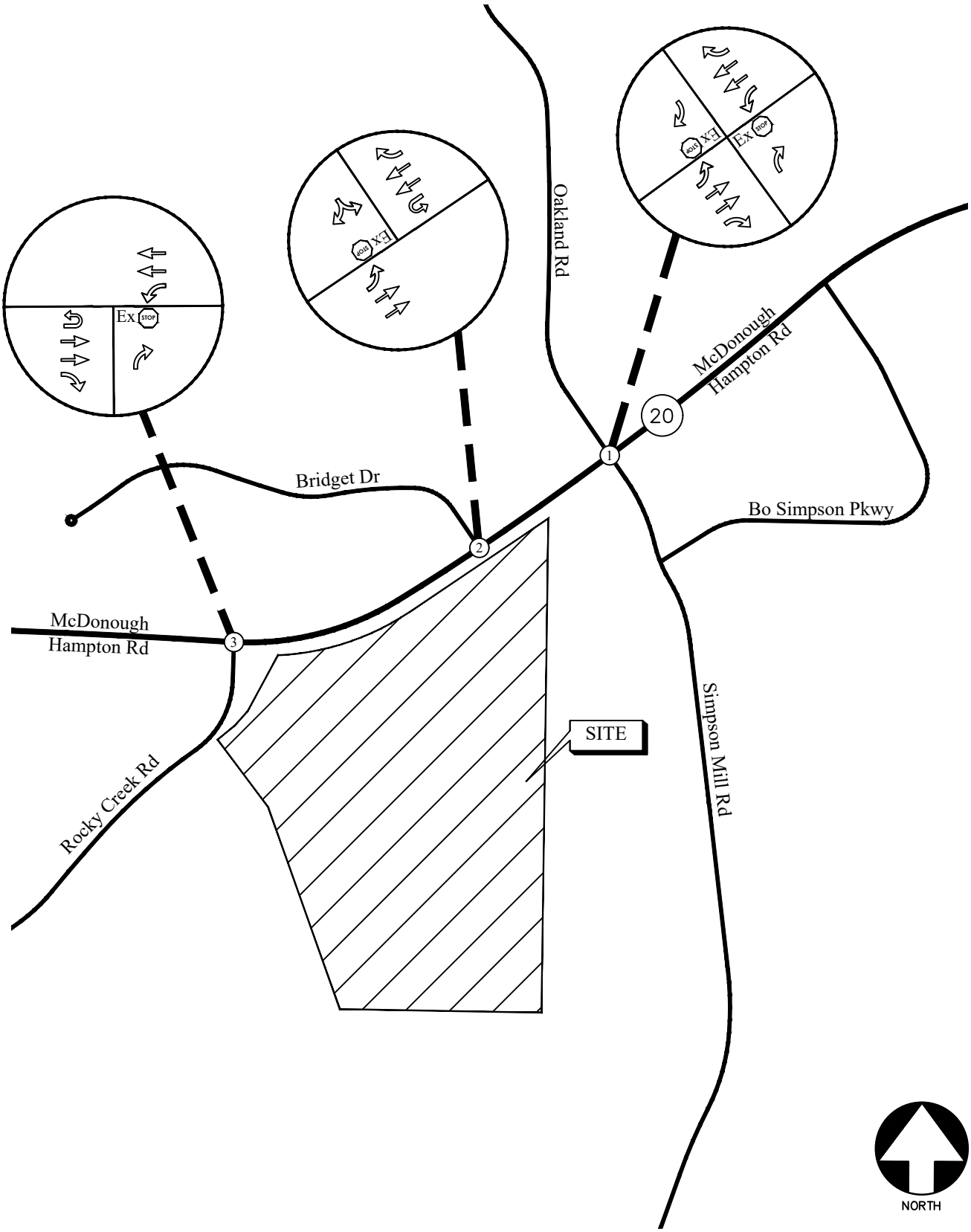

EXISTING TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 3

A&R Engineering Inc.

Existing Traffic Operations

Existing 2024 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analyses are shown in Table 3.

TABLE 3 – EXISTING INTERSECTION OPERATIONS

	Intersection	Traffic Control	AM Peak	PM Peak	LOS Standard
1	**SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road** -Eastbound Left -Westbound Left -Northbound Approach -Southbound Approach	(R-CUT) Stop Controlled on NB and SB Approaches	 B (10.0) B (12.4) D (28.4) B (11.8)	 B (13.3) A (9.3) B (12.4) C (20.1)	 D/D D/D D/D D/D
2	**SR 20 (McDonough Hampton Road) @ Bridget Drive** -Eastbound Left -Westbound U-Turn -Southbound Approach	Stop Controlled on SB Approach	 B (11.4) D (25.1) C (16.7)	 C (20.1) B (13.2) D (34.3)	 D/D D/D D/D
3	**SR 20 (McDonough Hampton Road) @ Rocky Creek Road** -Westbound Left -Northbound Approach	(R-CUT) Stop Controlled on NB Approach	 B (12.5) C (20.4)	 A (9.8) B (11.3)	 D/D D/D

The results of existing traffic operations analysis indicate that all the study intersections are operating at a level of service “D” or better for all approaches in both the AM and PM peak hours.

PROJECT DESCRIPTION

The proposed 1,253,752 square feet of data center development will be located at 0 Rocky Creek Road and to the southeast of the intersection of SR 20 (McDonough Hampton Road) at Rocky Creek Road in Henry County, Georgia. In general, the site will be located to the south of SR 20 between US 19/US 41 and I-75.

The development proposes one full access driveway on SR 20 (McDonough Hampton Road) at its existing median opening aligning with Bridget Drive and one gated emergency access on Rocky Creek Road.

Site Plan

A site plan is shown in Figure 4. A digital copy of the site plan is also provided with this report.

DC CONCEPT - HENRY COUNTY
DATA CENTER CAMPUS

DRI NUMBER :

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SITE INFORMATION

LOCATION:	0 ROCKY CREEK, HAMPTON, GA 30228
PARCEL NUMBER:	058-01006000
LAND LOTS:	211 & 238 - 6TH DISTRICT - HENRY COUNTY, GA
TOTAL SITE AREA:	148.20 ACRES
LINEAR FOOTAGE (HWY 20):	2,400 FEET
LINEAR FOOTAGE (ROCKY CREEK):	800 FEET

ZONING:

EXISTING ZONING:	RA (AGRICULTURAL/RES.)
PROPOSED ZONING:	OI (OFFICE INSTITUTIONAL)

SETBACK REQUIREMENTS:

REQUIRED:	PROVIDED:
FRONT YARD SETBACK: 50 FEET	50 FEET
SIDE YARD SETBACK: 15 FEET	40 FEET
REAR YARD SETBACK: 20 FEET	40 FEET

BUFFER REQUIREMENTS:

REQUIRED:	PROVIDED:
OI TO RA BUFFER: 40 FEET	40 FEET
TOTAL PRESERVED OPEN SPACE AREA :	75 ACRES

PROPOSED BUILDINGS:

TOTAL BUILDINGS:	(2) 2 STORY - 160 MW
TOTAL AREA PER BLDG. (G.S.F.)(TYP):	626,876 G.S.F.
TOTAL AREA OF BUILDINGS (G.S.F.) :	1,253,752 G.S.F.
TOTAL OFFICE AREA :	31,600 S.F.
PERCENTAGE FLOOR AREA :	18.57%
FLOOR AREA RATIO :	1,875: 10,000

TOTAL PARKING REQUIREMENTS:

REQUIRED:	PROVIDED:
53 SPACES PER BUILDING	54 SPACES PER BUILDING
TOTAL SPACES= 106	TOTAL SPACES = 108

REFERENCE CODE: 2.01.03-A

THIS SITE IS WITHIN THE TOWALIGA WATERSHED PROTECTION DISTRICT.

BUFFER REFERENCE CODE: 5.02.03

SITE LAYOUT EXHIBIT

0 ROCKY CREEK

HENRY COUNTY, GA

April 30, 2024

THOMAS & HUTTON
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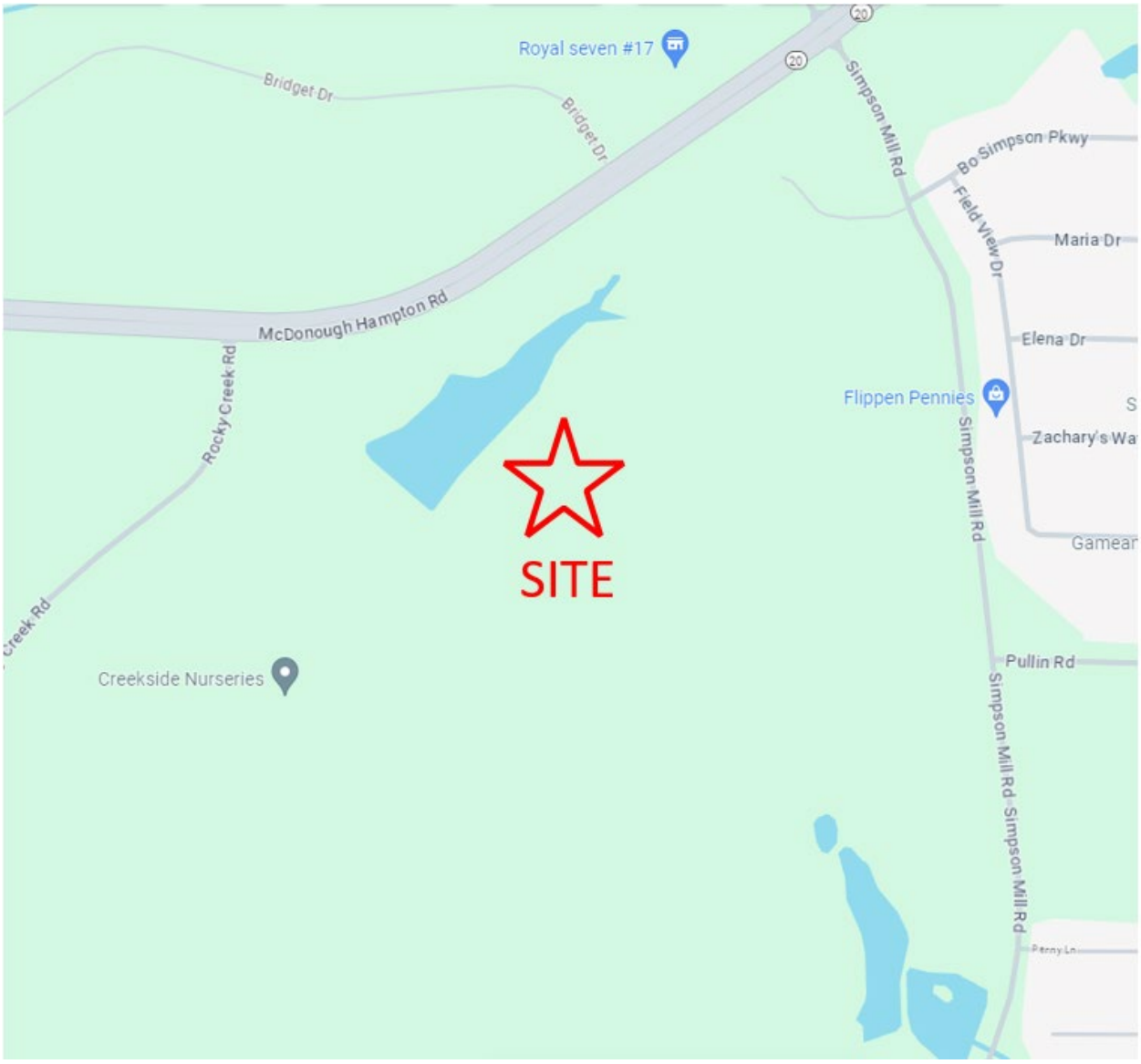
Planned Bicycle and Pedestrian Facilities

Sidewalks, crosswalks, and bike paths are not present in the study network on GA Highway 20, Rocky Creek Road and Simpson Mill Road and the developer is not proposing any sidewalks on these roads. Internal sidewalks connecting the proposed buildings to internal parking lots for pedestrian connectivity with the site will be constructed by the developer.

Potential Pedestrian and Bicycle Destinations



- Retail: Royal Seven # 17 (approximately 0.1 mile), Flippen Pennies (approximately 0.4 mile)
- Creekside Nurseries (approximately 0.06 mile)

Planned Transit Facilities

There is no existing or planned public transit service near the proposed development.

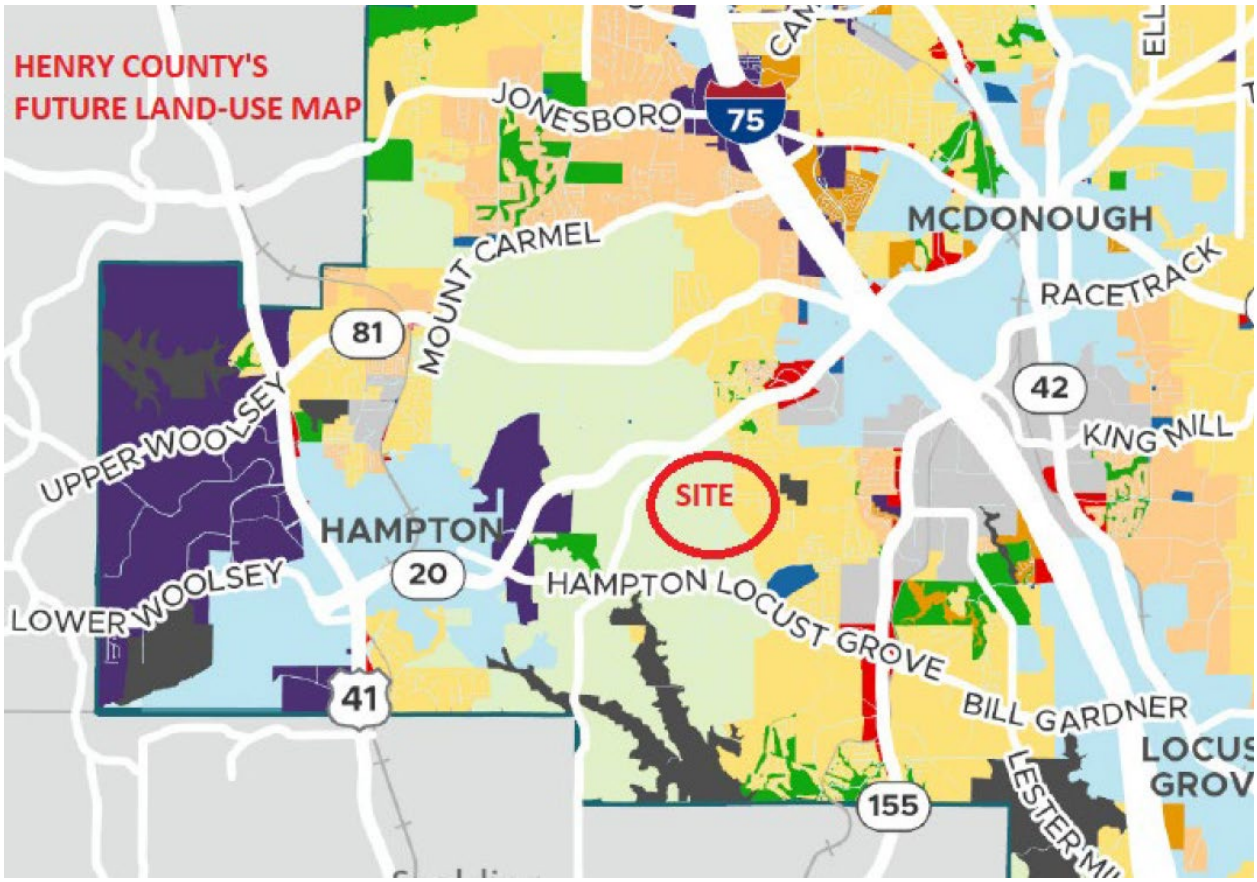
Consistency with Adopted Comprehensive Plan

The proposed development will include two 2-story data center buildings each of 626,876 sf for a total of 1,253,752 sf. Each building will have 15,800 sf office space. The property includes 148.2 acres of land. The site is currently zoned as RA (Agricultural-Residential) and is requesting a rezoning to OI (Office-Institutional). A water and sewer services availability letter from Henry County has already been obtained and included in the appendix.

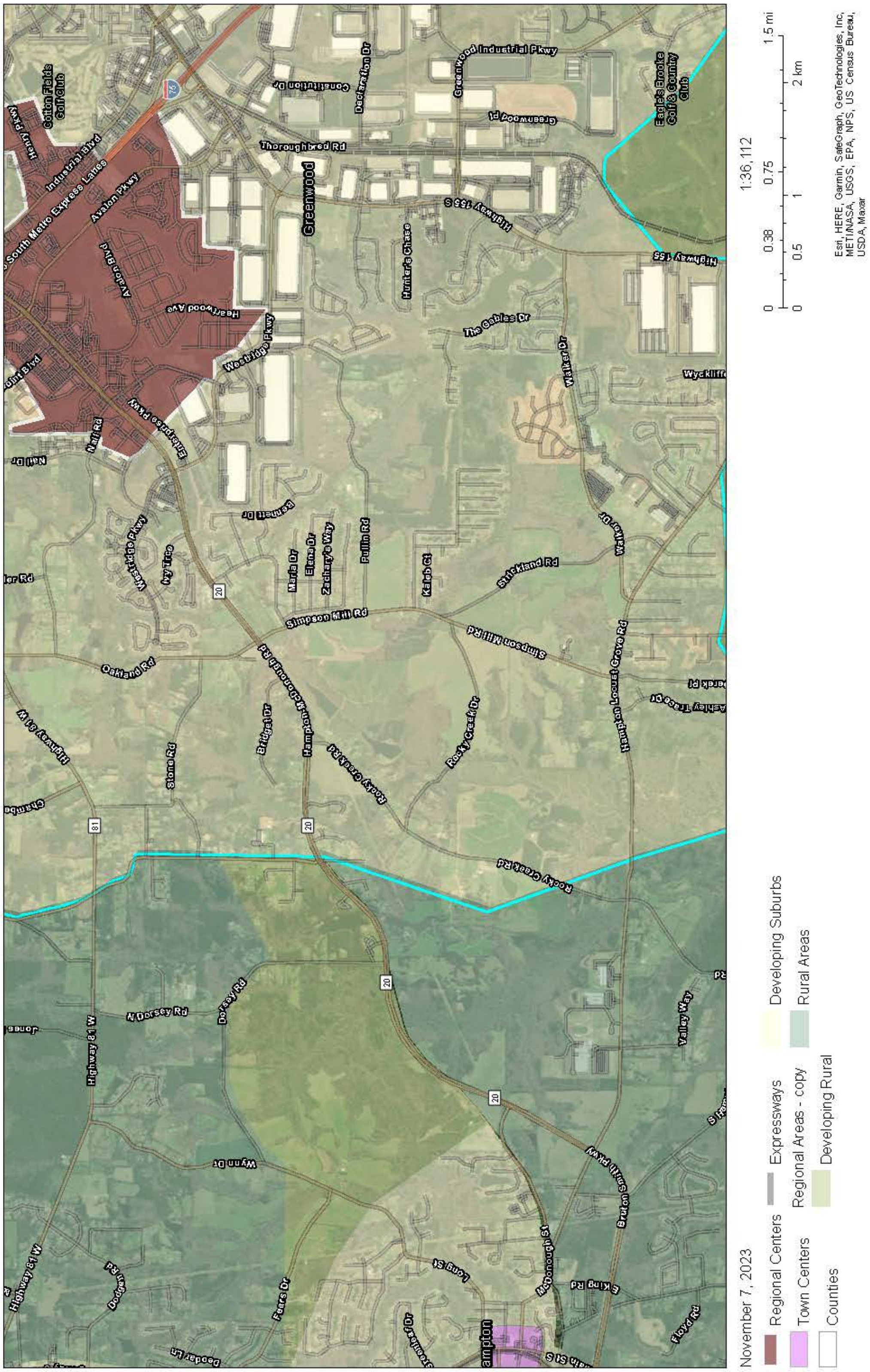
Future Land Use Map

Unified Growth Policy Map Land Use Area Designation	Developing Suburbs
Henry County Future Land Use Map	Low Density Suburban
Character Area Definition for Low Density Suburban Residential	This category consists of single-family homes on fairly large lots (mostly 0.5-1.0 acre in size) to maintain the lower density single-family character of unincorporated Henry County, but with improved aesthetics and roadway connectivity. Henry County's recommended transportation goals and policies as defined in its "Comprehensive Plan 2045" document are: • *Align transportation investments with the Development and Infrastructure Strategy* • *Avoid widening roadways and increasing capacity in areas where additional growth is not envisioned* • *Focus on roadway maintenance, bridge repairs, and safety improvements in more rural areas* • *Pursue and prioritize the creation of a dense multi-modal network of Complete Streets in the Central District* • *Require stronger connectivity in new developments, both internally and external to the development* • *Use technological improvements and travel demand management (TDM) strategies to improve the transportation network, avoiding large capital costs* • *Approach transportation infrastructure and funding incrementally, particularly the use of the SPLOST program* • *Regularly communicate the status of planned roadway and multimodal projects, increasing public confidence*

Relation to Existing Land Use Plans	The area is designated as Low Density Suburban Residential. The proposed amendment to the comprehensive plan to the rezoning efforts of the site for data center use will still keep to the spirit of the site density/low impact requirements due to the limited impacts the data center will have on the community and the property. No impact to county schools, parks and services and low traffic. The development area is less than low density suburban leaving 75 acres undisturbed.
Chattahoochee River/Metropolitan River Protection Act	N/A



2021 ARC Unified Growth Policy Map



Project Phasing

This project has been evaluated for the complete build-out of the development in 2028 in one phase.

Trip Generation

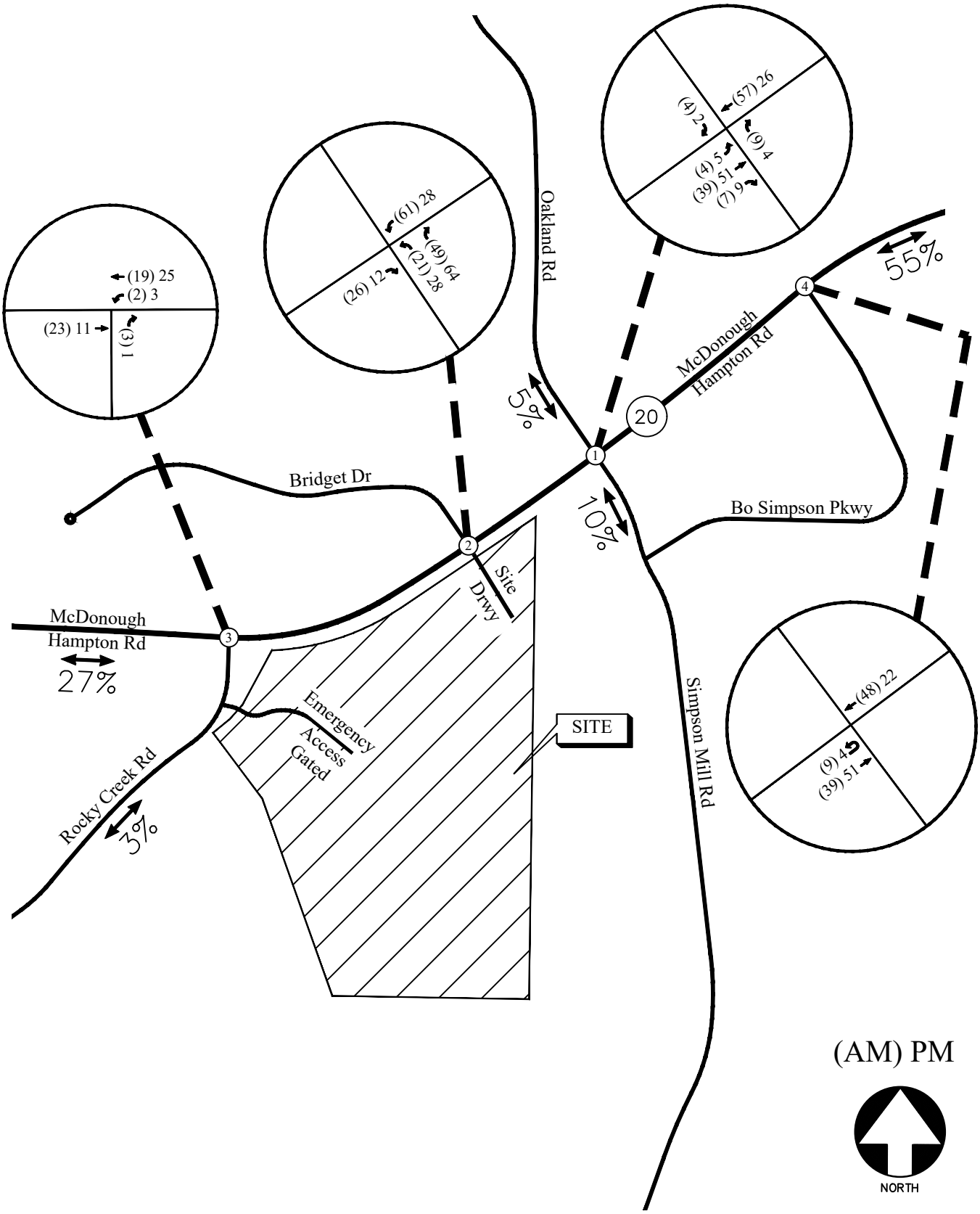
Trip generation estimates for the project were based on the rates and equations published in the 11th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE *Land Use: 160 – Data Center*. The calculated total trip generation for the proposed development is shown in Table 4.

TABLE 4 – TRIP GENERATION

Land Use	Size	AM Peak Hour			PM Peak Hour			24 Hour
		Enter	Exit	Total	Enter	Exit	Total	Two-way
ITE 160 – Data Center	1,253,752 sf	87	70	157	40	92	132	1,241

Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 5.



TRIP DISTRIBUTION AND SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 5

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FUTURE 2028 TRAFFIC ANALYSIS

The future 2028 traffic operations are analyzed for the "Build" and "No-Build" conditions.

Future "No-Build" Conditions

The "No-Build" (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future "No-Build" volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of traffic.

Annual Traffic Growth

In order to evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last five years (2017-2019, 2021-2022) revealed growth of approximately 1.2% in the area. This growth factor was applied to the existing traffic volumes to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting Future "No-Build" volumes on the roadway are shown in Figure 6.

Planned and Programmed Improvements in Study Area

The following improvements have been identified in the Regional Transportation Plan (Plan 2040), GDOT GeoPi, and/or the local comprehensive transportation plan. Since these programmed projects are not in the DRI network area, these projects are not considered in the traffic analysis.

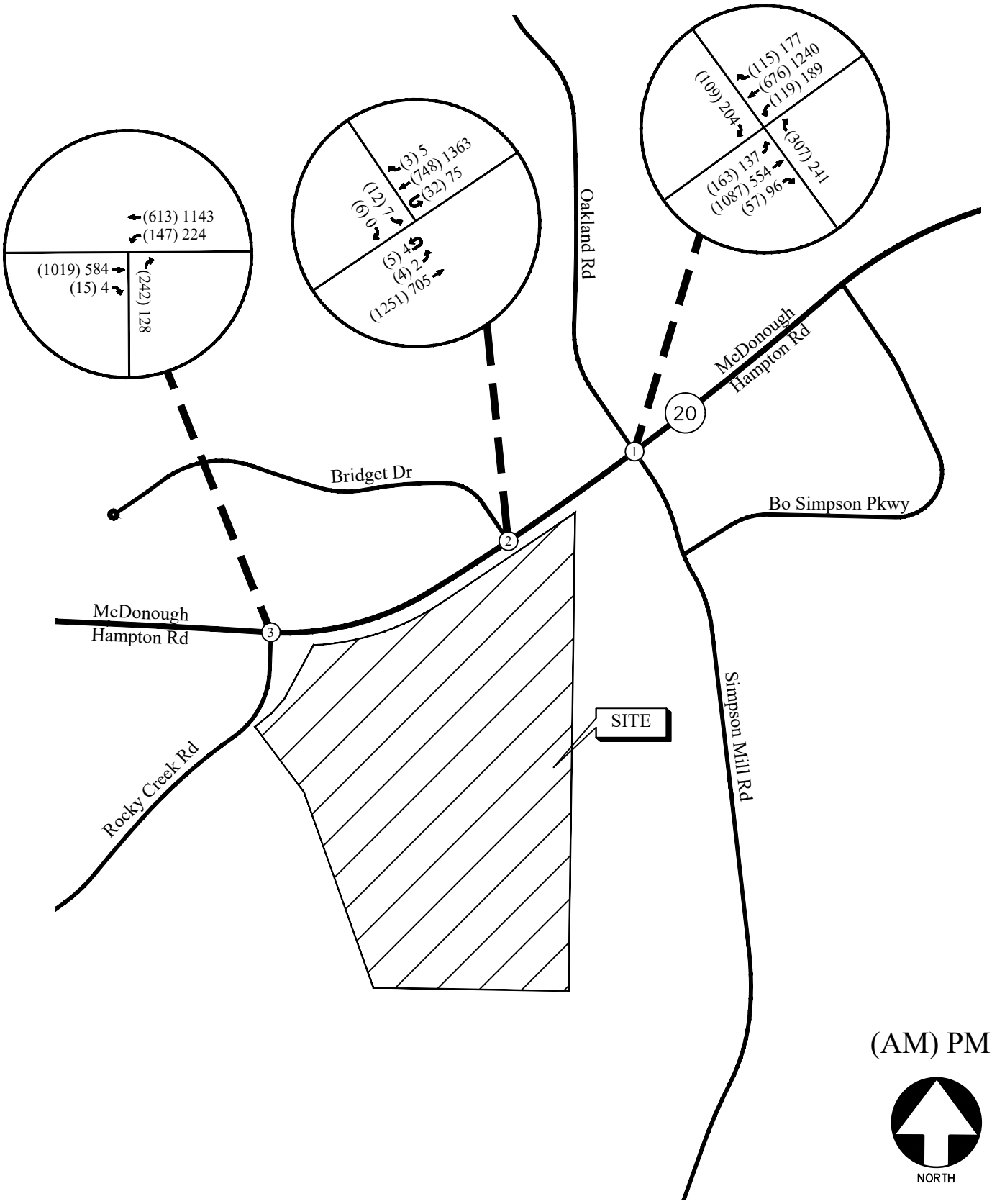
TABLE 5 – PLANNED AND PROGRAMMED IMPROVEMENTS

Item #	Project Name	From / To Points	Sponsor	GDOT PI #	ARC ID #	Design FY	ROW / UTL FY	CST FY
1	Hampton Locust Grove Road Widening	SR 20 to I-75 Southbound Ramps	GDOT/ Henry County	STP-0000-00(562), STP-1577(10) & CSSTP-0006-00(317)	HE-126A1	-	-	-
2	SR 155 (McDonough Road) Widening	The project begins at the intersection of SR 155 (Hampton Locust Grove Rd/Bill Gardener Parkway) and extends 3.75 miles to the intersection of SR 155 and I-75.	GDOT	0015284	HE-189	2026	2028	2030

GDOT PI # 0015284 – The project begins at the intersection of SR 155 (Hampton Locust Grove Rd/Bill Gardener Parkway) and extends 3.75 miles to the intersection of SR 155 and I-75. Projects design documents are not available yet on GEOPI.

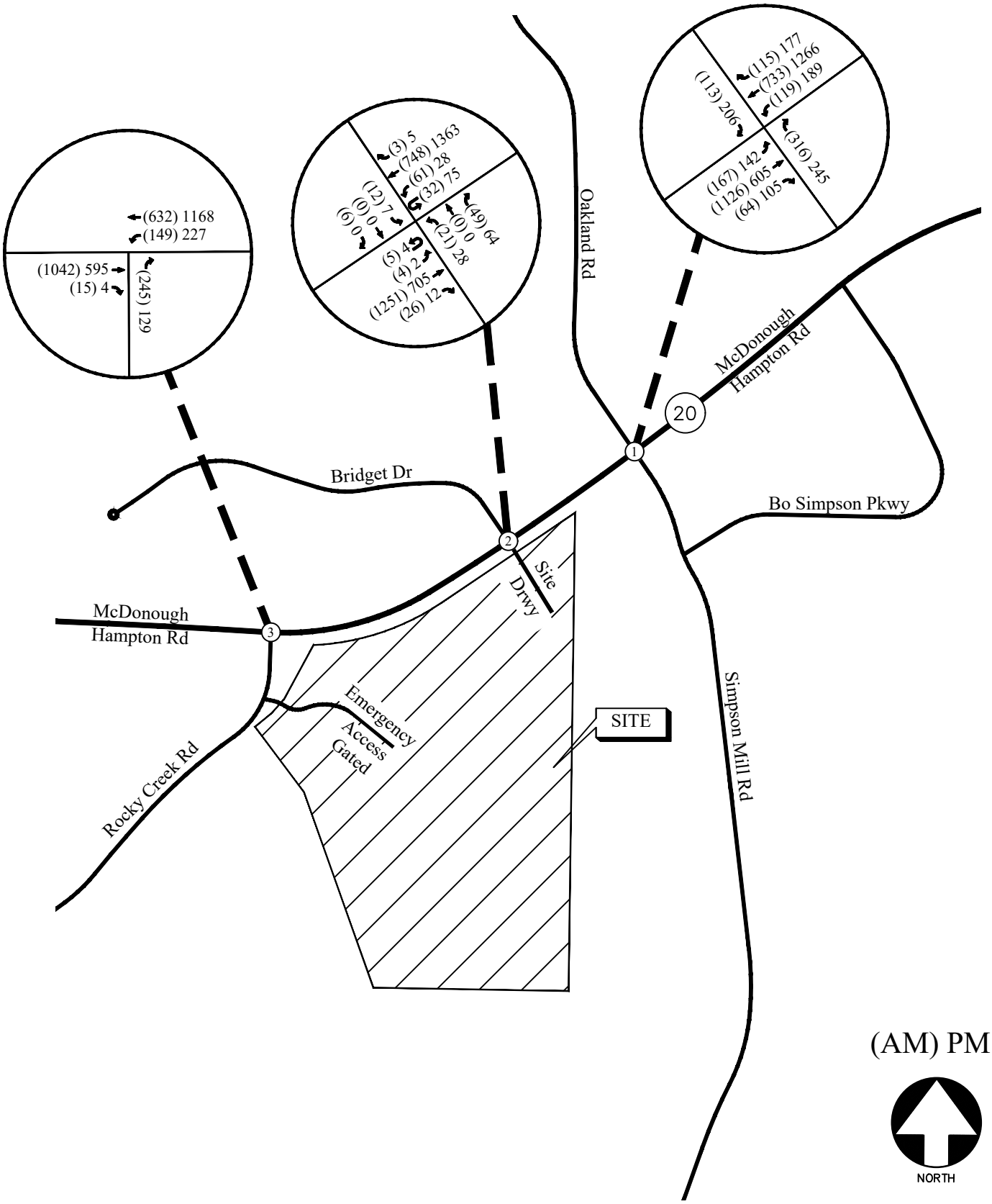
Future "Build" Conditions

The "Build" or development conditions include the estimated background traffic from the "No-Build" conditions plus the traffic from the proposed development. To evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 5) were added to base traffic volumes (Figure 6) to calculate the future traffic volumes after the construction of the development. These total future "Build" traffic volumes are shown in Figure 7.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 6

A&R Engineering Inc.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 7

A&R Engineering Inc.

Auxiliary Lane Analysis

Included below is analysis for a right turn lane for the site driveway on SR 20 per GDOT standards. The analysis below is based off the trip distribution included in the "Trip Distribution" section. According to the trip distribution, the 24-hour two-way volume entering and exiting the site is 1,241 vehicles.

A left turn lane analysis is not needed as there is an existing westbound U-turn Lane on SR 20 that can be re-striped and used for the left turning entering traffic.

Deceleration Turn Lane Analysis

For four lane roadways with AADT's greater than 10,000 vehicles and a posted speed limit of 60 mph, the daily site generated traffic right-turn movements threshold to warrant a deceleration lane is 50 right turning vehicles a day. The projected right-turn volumes per day for the driveway is included in Table 6.

TABLE 6 – GDOT REQUIREMENTS FOR DECELERATION LANES

Intersection	Right-turn traffic (% total entering)	Right-turn Volume (vehicles/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicles/day)	Warrants met?
SR 20 (McDonough Hampton Road) @ Bridget Drive / Site Driveway	30%	186 (Total Trips) ÷ 2 × 0.3 = (1,241) ÷ 2 x 0.3 = 186	60 mph / 4-Lane / > 10,000	50	Yes

A right turn lane is warranted on SR 20 at the proposed site driveway per GDOT standards.

Future Traffic Operations

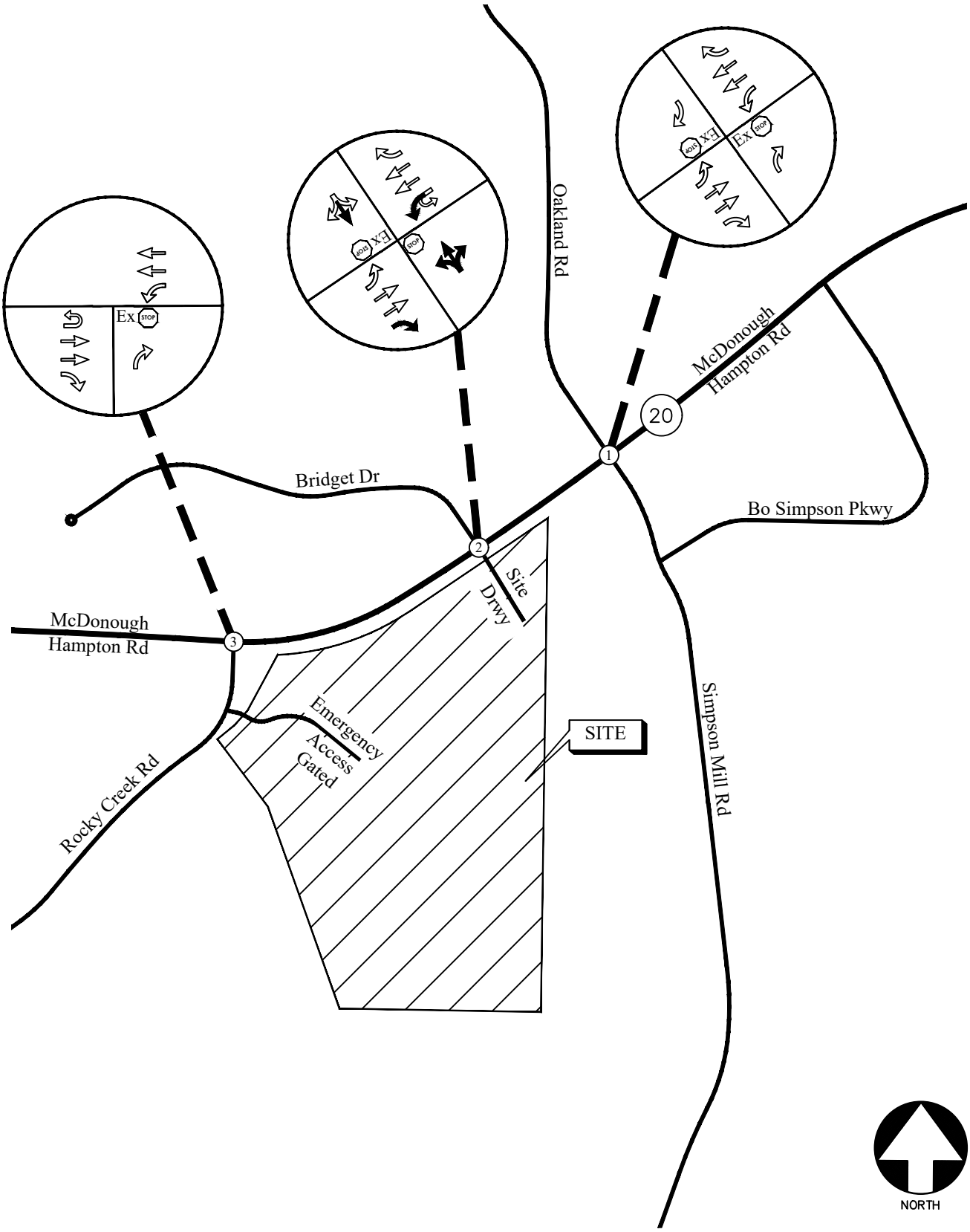
The future "No-Build" and "Build" traffic operations were analyzed using the volumes in Figure 6 and Figure 7, respectively. The results of the future traffic operations analysis are shown below in Table 7. Recommendations for future traffic control and lane geometry are shown in Figure 8.

TABLE 7 – FUTURE INTERSECTION OPERATIONS

Intersection		LOS (Delay)			
		NO-BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
1	**SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road**				
	-Eastbound Left	B (10.3)	B (13.3)	B (10.7)	B (14.5)
	-Westbound Left	B (13.0)	A (9.3)	B (13.4)	A (9.7)
	-Northbound Approach	D (34.3)	B (12.4)	E (39.6)	B (13.3)
	-Southbound Approach	B (12.1)	C (20.1)	B (12.6)	C (22.8)
2	**SR 20 (McDonough Hampton Road) @ Bridget Drive / Site Driveway**				
	-Eastbound Left	B (11.7)	C (20.1)	B (11.7)	C (21.6)
	-Westbound U/*Left*	D (27.6)	B (13.2)	C (23.2)	B (14.1)
	-Northbound Approach	-	-	D (31.8)	C (21.9)
	-Southbound Approach	C (18.1)	D (34.3)	D (26.0)	F (53.8)
3	**SR 20 (McDonough Hampton Road) @ Rocky Creek Road**				
	-Westbound Left	B (13.2)	A (9.8)	B (13.4)	B (10.1)
	-Northbound Approach	C (22.7)	B (11.3)	C (23.7)	B (11.6)

The results of future "No-Build" traffic operations show that all the study intersections will continue to operate at a level of service "D" or better for all approaches in both the AM and PM peak hours.

The results of the "Build" traffic operations show that in the AM peak hour, the northbound (Simpson Mill Road) approach at the intersection of SR 20 at Simpson Mill Road / Oakland Road will experience delay of 39.6 seconds and falls under level-of-service "E" by just 4.6 seconds. The delay increased by a marginal 5.3 seconds from "No-Build" conditions. GDOT has converted this intersection into an RCUT intersection. The southbound (Bridget Drive) approach at the intersection of SR 20 at Bridget Drive/Site Driveway will operate at level-of-service "F" in the PM peak hour with marginal increase above the threshold. It is not uncommon for stop-controlled side-streets on arterial roadways to experience delays during peak hours as delays are caused by side-street wait times to turn left onto the mainline. This full access intersection serves as a U-Turn location for two adjacent RCUT intersections. The left-turn volumes from side streets do not meet traffic signal warrants for installation of a traffic signal. No other measure will aid improve the marginal delays experienced after the addition of the site driveway.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 8

A&R Engineering Inc.

CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed 1,253,752 square feet of data center development that will be located at 0 Rocky Creek Road and to the southeast of the intersection of SR 20 (McDonough Hampton Road) at Rocky Creek Road in Henry County, Georgia.

The development proposes one full access driveway on SR 20 (McDonough Hampton Road) at its existing median opening aligning with Bridget Drive and one gated emergency access on Rocky Creek Road.

Traffic operations for AM and PM peak hours have been analyzed in this study at the intersections of:

1. SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road
2. SR 20 (McDonough Hampton Road) @ Bridget Drive / Proposed Site Driveway
3. SR 20 (McDonough Hampton Road) @ Rocky Creek Road

The analysis included the evaluation of Future operations for "No-Build" and "Build" conditions, both of which account for increases in annual growth of through traffic. The results of future "No-Build" traffic operations show that all the study intersections will continue to operate at a level of service "D" or better for all approaches in both the AM and PM peak hours.

The results of the "Build" traffic operations show that in the AM peak hour, the northbound (Simpson Mill Road) approach at the intersection of SR 20 at Simpson Mill Road / Oakland Road will experience delay of 39.6 seconds and falls under level-of-service "E" by just 4.6 seconds. The delay increased by a marginal 5.3 seconds from "No-Build" conditions. GDOT has converted this intersection into an RCUT intersection. The southbound (Bridget Drive) approach at the intersection of SR 20 at Bridget Drive/Site Driveway will operate at level-of-service "F" in the PM peak hour with marginal increase above the threshold. It is not uncommon for stop-controlled side-streets on arterial roadways to experience delays during peak hours as delays are caused by side-street wait times to turn left onto the mainline. This full access intersection serves as a U-Turn location for two adjacent RCUT intersections. The left-turn volumes from side streets do not meet traffic signal warrants for installation of a traffic signal. No other measure will aid improve the marginal delays experienced after the addition of the site driveway.

Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersection.

- Full Access Site Driveway on SR 20 (McDonough Hampton Road), aligned with Bridge Drive
    - One entering and one exiting lane.
    - Stop-sign controlled on the driveway approach with SR 20 remaining free flow.
    - Westbound U-Turn Lane on SR 20 to be restriped to allow left turn entering traffic.
    - Construct eastbound Right Turn Lane on SR 20 for entering traffic.
    - Provide adequate sight distance per AASHTO standards.

Appendix

Existing Intersection Traffic Counts

A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
SR 20 (McDonough Hampton Road) @ Rocky Creek Rd
7-9 am | 4-6 pm

File Name : 20240184
Site Code : 20240184
Start Date : 05-07-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Rocky Creek Road Northbound				Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	50	50	0	0	0	0	0	207	3	210	42	126	0	168	428
07:15 AM	0	0	76	76	0	0	0	0	0	248	6	254	43	163	0	206	536
07:30 AM	0	0	58	58	0	0	0	0	0	277	2	279	27	160	0	187	524
07:45 AM	0	0	47	47	0	0	0	0	0	240	3	243	28	136	0	164	454
Total	0	0	231	231	0	0	0	0	0	972	14	986	140	585	0	725	1942
08:00 AM	0	0	40	40	0	0	0	0	0	212	2	214	25	125	0	150	404
08:15 AM	0	0	47	47	0	0	0	0	0	193	0	193	24	130	0	154	394
08:30 AM	0	0	39	39	0	0	0	0	0	182	1	183	13	144	0	157	379
08:45 AM	0	0	34	34	0	0	0	0	0	150	1	151	19	104	0	123	308
Total	0	0	160	160	0	0	0	0	0	737	4	741	81	503	0	584	1485
*** BREAK ***																	
04:00 PM	0	0	47	47	0	0	0	0	0	130	2	132	46	240	0	286	465
04:15 PM	0	0	28	28	0	0	0	0	0	156	2	158	48	221	0	269	455
04:30 PM	0	0	34	34	0	0	0	0	0	145	1	146	46	279	0	325	505
04:45 PM	0	0	31	31	0	0	0	0	0	133	2	135	40	248	0	288	454
Total	0	0	140	140	0	0	0	0	0	564	7	571	180	988	0	1168	1879
05:00 PM	0	0	27	27	0	0	0	0	0	133	0	133	64	287	0	351	511
05:15 PM	0	0	30	30	0	0	0	0	0	146	1	147	64	277	0	341	518
05:30 PM	0	0	28	28	0	0	0	0	0	141	3	144	46	235	0	281	453
05:45 PM	0	0	16	16	0	0	0	0	0	145	2	147	52	209	0	261	424
Total	0	0	101	101	0	0	0	0	0	565	6	571	226	1008	0	1234	1906
Grand Total	0	0	632	632	0	0	0	0	0	2838	31	2869	627	3084	0	3711	7212
Apprch %	0	0	100		0	0	0		0	98.9	1.1		16.9	83.1	0		
Total %	0	0	8.8	8.8	0	0	0	0	0	39.4	0.4	39.8	8.7	42.8	0	51.5	

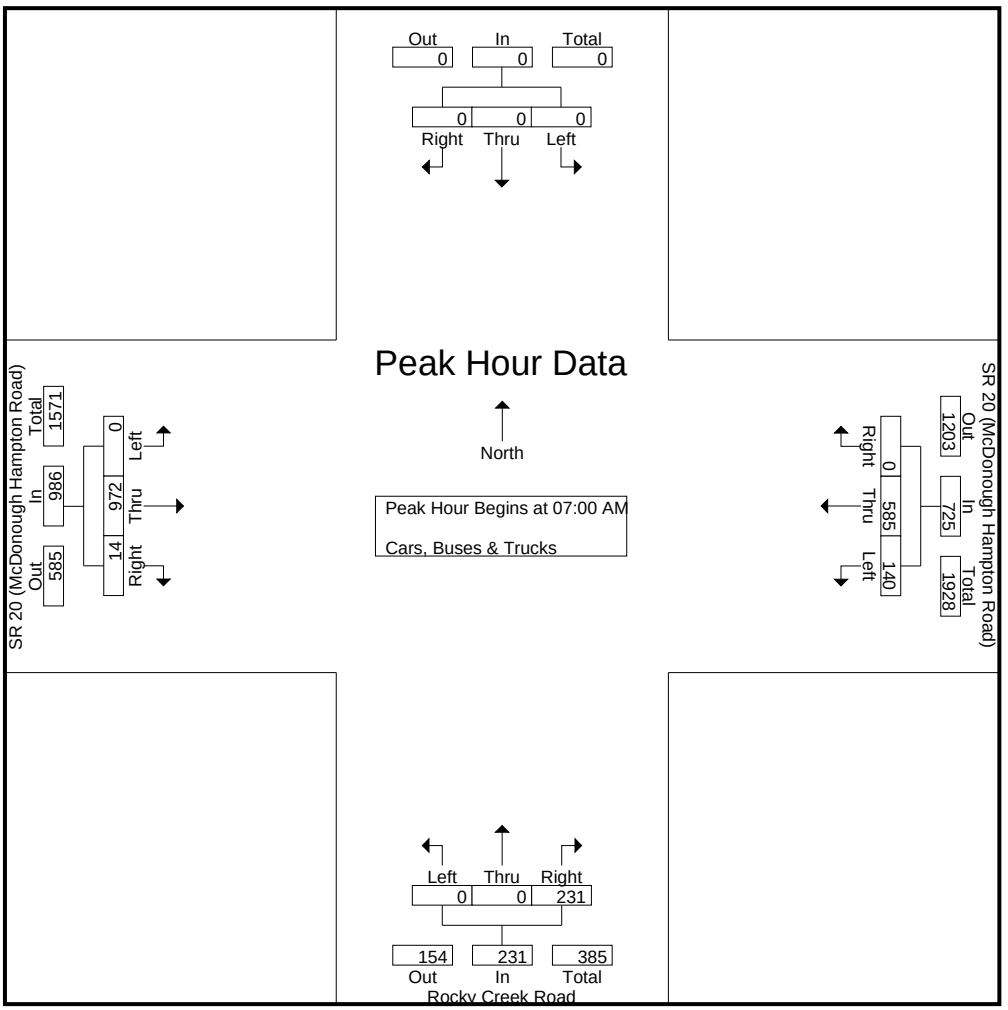
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
SR 20 (McDonough Hampton Road) @ Rocky Creek Rd
7-9 am | 4-6 pm

File Name : 20240184
Site Code : 20240184
Start Date : 05-07-2024
Page No : 2

	Rocky Creek Road Northbound				Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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 07:00 AM																	
07:00 AM	0	0	50	50	0	0	0	0	0	207	3	210	42	126	0	168	428
07:15 AM	0	0	**76**	**76**	0	0	0	0	0	248	**6**	254	**43**	**163**	0	**206**	**536**
07:30 AM	0	0	58	58	0	0	0	0	0	**277**	2	**279**	27	160	0	187	524
07:45 AM	0	0	47	47	0	0	0	0	0	240	3	243	28	136	0	164	454
Total Volume	0	0	231	231	0	0	0	0	0	972	14	986	140	585	0	725	1942
% App. Total	0	0	100		0	0	0		0	98.6	1.4		19.3	80.7	0		
PHF	.000	.000	.760	.760	.000	.000	.000	.000	.000	.877	.583	.884	.814	.897	.000	.880	.906



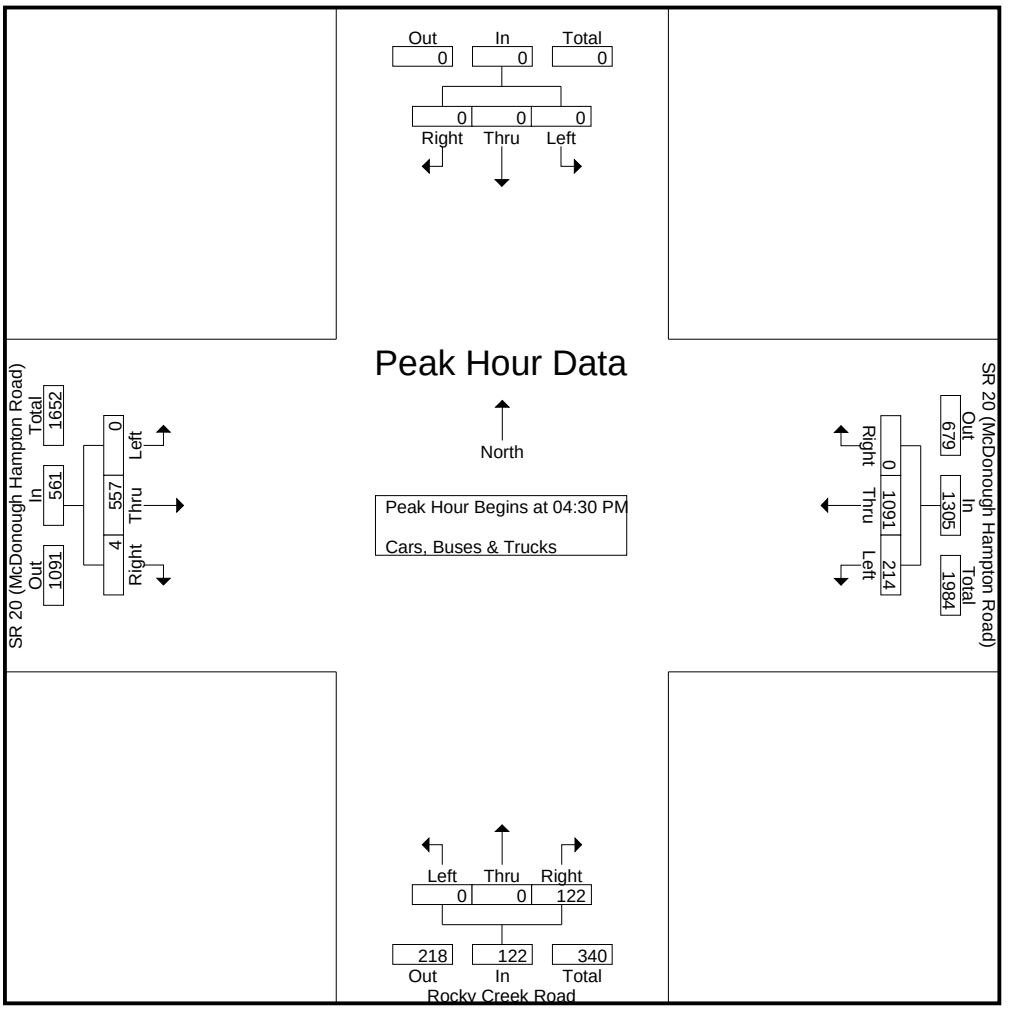
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
SR 20 (McDonough Hampton Road) @ Rocky Creek Rd
7-9 am | 4-6 pm

File Name : 20240184
Site Code : 20240184
Start Date : 05-07-2024
Page No : 3

	Rocky Creek Road Northbound				Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	**34**	**34**	0	0	0	0	0	145	1	146	46	279	0	325	505
04:45 PM	0	0	31	31	0	0	0	0	0	133	**2**	135	40	248	0	288	454
05:00 PM	0	0	27	27	0	0	0	0	0	133	0	133	**64**	**287**	0	**351**	511
05:15 PM	0	0	30	30	0	0	0	0	0	**146**	1	**147**	64	277	0	341	**518**
Total Volume	0	0	122	122	0	0	0	0	0	557	4	561	214	1091	0	1305	1988
% App. Total	0	0	100		0	0	0		0	99.3	0.7		16.4	83.6	0		
PHF	.000	.000	.897	.897	.000	.000	.000	.000	.000	.954	.500	.954	.836	.950	.000	.929	.959



A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
SR 20 (McDonough Hampton Road) @ Simpson
7-9 am | 4-6 pm

File Name : 20240185
Site Code : 20240185
Start Date : 05-07-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Simpson Mill Road Northbound				Oakland Road Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	49	49	0	0	32	32	33	209	21	263	36	139	16	191	535
07:15 AM	0	0	83	83	0	0	23	23	43	278	8	329	31	185	26	242	677
07:30 AM	0	0	94	94	0	0	19	19	49	281	13	343	18	175	42	235	691
07:45 AM	0	0	64	64	0	0	30	30	32	256	13	301	30	145	25	200	595
Total	0	0	290	290	0	0	104	104	157	1024	55	1236	115	644	109	868	2498
08:00 AM	0	0	52	52	0	0	32	32	32	222	20	274	35	140	17	192	550
08:15 AM	0	0	71	71	0	0	24	24	21	222	4	247	31	139	14	184	526
08:30 AM	0	0	57	57	0	0	24	24	16	198	18	232	34	144	11	189	502
08:45 AM	0	0	61	61	0	0	16	16	19	168	12	199	21	120	17	158	434
Total	0	0	241	241	0	0	96	96	88	810	54	952	121	543	59	723	2012
*** BREAK ***																	
04:00 PM	0	0	70	70	0	0	56	56	39	133	25	197	49	254	46	349	672
04:15 PM	0	0	83	83	0	0	37	37	36	145	26	207	50	256	46	352	679
04:30 PM	0	0	68	68	0	0	56	56	45	128	26	199	50	290	38	378	701
04:45 PM	0	0	58	58	0	0	28	28	22	136	22	180	40	276	49	365	631
Total	0	0	279	279	0	0	177	177	142	542	99	783	189	1076	179	1444	2683
05:00 PM	0	0	51	51	0	0	50	50	31	129	20	180	42	319	44	405	686
05:15 PM	0	0	53	53	0	0	61	61	33	136	24	193	48	298	38	384	691
05:30 PM	0	0	58	58	0	0	41	41	41	128	26	195	45	268	58	371	665
05:45 PM	0	0	49	49	0	0	42	42	29	133	25	187	46	244	40	330	608
Total	0	0	211	211	0	0	194	194	134	526	95	755	181	1129	180	1490	2650
Grand Total	0	0	1021	1021	0	0	571	571	521	2902	303	3726	606	3392	527	4525	9843
Apprch %	0	0	100		0	0	100		14	77.9	8.1		13.4	75	11.6		
Total %	0	0	10.4	10.4	0	0	5.8	5.8	5.3	29.5	3.1	37.9	6.2	34.5	5.4	46	

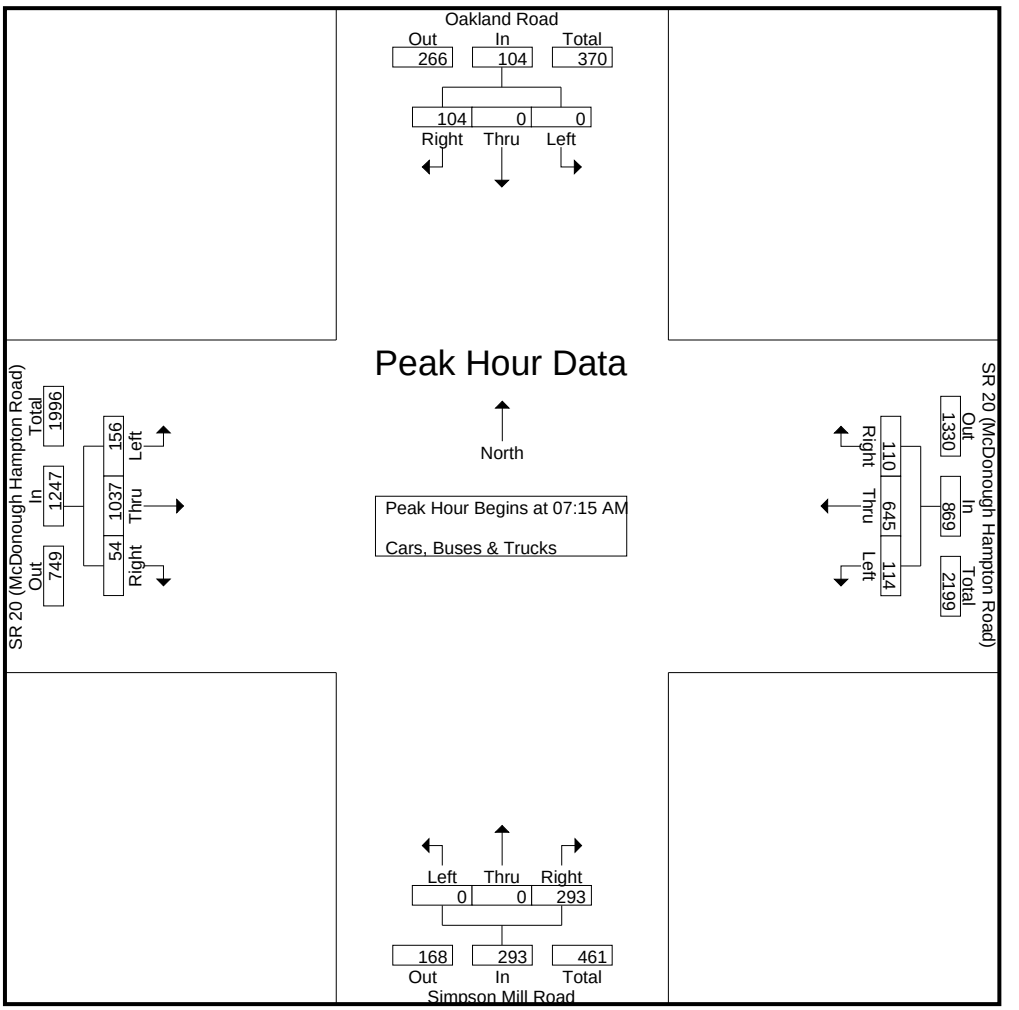
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
SR 20 (McDonough Hampton Road) @ Simpson
7-9 am | 4-6 pm

File Name : 20240185
Site Code : 20240185
Start Date : 05-07-2024
Page No : 2

	Simpson Mill Road Northbound				Oakland Road Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	83	83	0	0	23	23	43	278	8	329	31	**185**	26	**242**	677
07:30 AM	0	0	**94**	**94**	0	0	19	19	**49**	**281**	13	**343**	18	175	**42**	235	**691**
07:45 AM	0	0	64	64	0	0	30	30	32	256	13	301	30	145	25	200	595
08:00 AM	0	0	52	52	0	0	**32**	**32**	32	222	**20**	274	**35**	140	17	192	550
Total Volume	0	0	293	293	0	0	104	104	156	1037	54	1247	114	645	110	869	2513
% App. Total	0	0	100		0	0	100		12.5	83.2	4.3		13.1	74.2	12.7		
PHF	.000	.000	.779	.779	.000	.000	.813	.813	.796	.923	.675	.909	.814	.872	.655	.898	.909



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TMC Data
SR 20 (McDonough Hampton Road) @ Simpson
7-9 am | 4-6 pm

File Name : 20240185
Site Code : 20240185
Start Date : 05-07-2024
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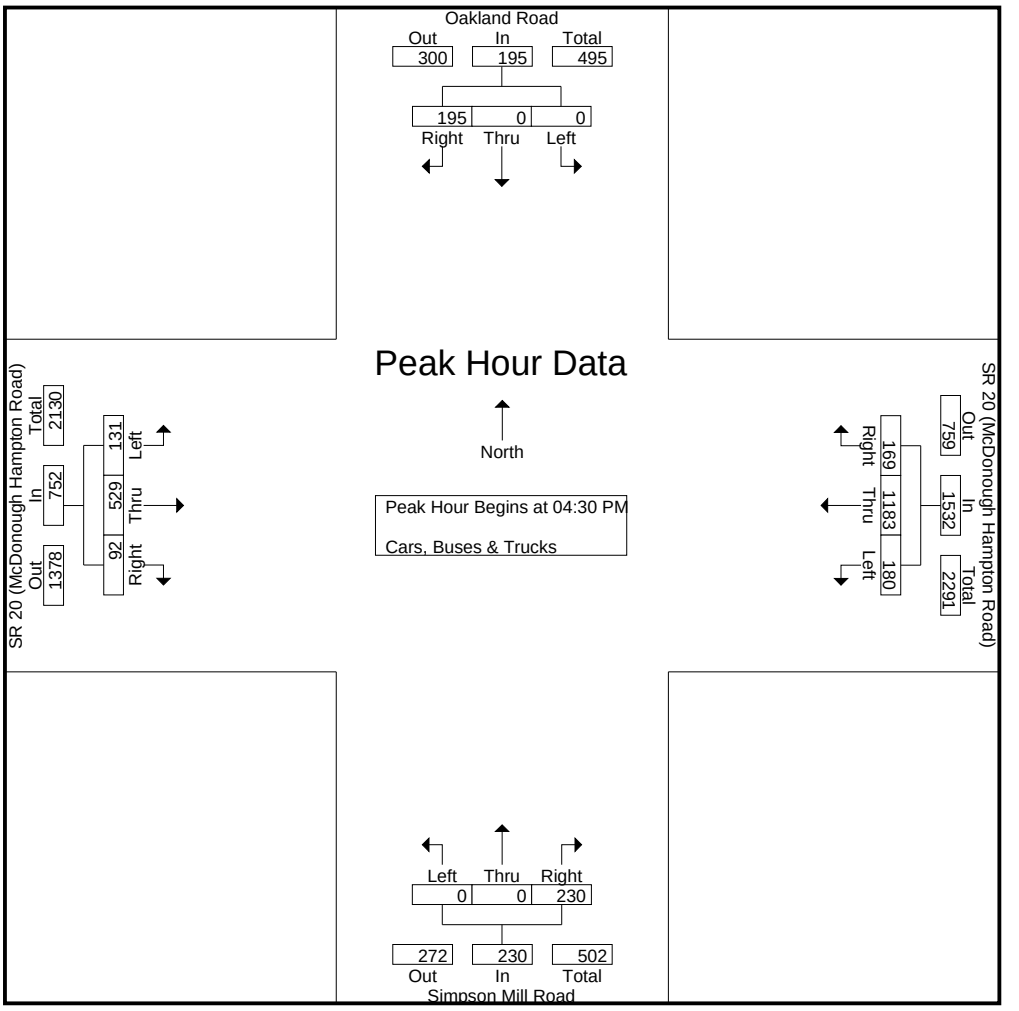
	Simpson Mill Road Northbound				Oakland Road Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	**68**	**68**	0	0	56	56	**45**	128	**26**	**199**	**50**	290	38	378	**701**
04:45 PM	0	0	58	58	0	0	28	28	22	**136**	22	180	40	276	**49**	365	631
05:00 PM	0	0	51	51	0	0	50	50	31	129	20	180	42	**319**	44	**405**	686
05:15 PM	0	0	53	53	0	0	**61**	**61**	33	136	24	193	48	298	38	384	691
Total Volume	0	0	230	230	0	0	195	195	131	529	92	752	180	1183	169	1532	2709
% App. Total	0	0	100		0	0	100		17.4	70.3	12.2		11.7	77.2	11		
PHF	.000	.000	.846	.846	.000	.000	.799	.799	.728	.972	.885	.945	.900	.927	.862	.946	.966



A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
SR 20 (McDonough Hampton Rd) @ Bridget Drive
7-9 am | 4-6 pm

File Name : 20240186
Site Code : 20240186
Start Date : 05-07-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Northbound				Bridget Drive Southbound				SR 20 (McDonough Hampton Rd) Eastbound					SR 20 (McDonough Hampton Rd) Westbound					
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
07:00 AM	0	0	0	0	3	0	1	4	1	255	0	1	257	0	166	0	5	171	432
07:15 AM	0	0	0	0	2	0	2	4	1	323	0	0	324	0	204	0	4	208	536
07:30 AM	0	0	0	0	3	0	0	3	1	332	0	2	335	0	185	1	8	194	532
07:45 AM	0	0	0	0	3	0	3	6	1	284	0	2	287	0	159	2	14	175	468
Total	0	0	0	0	11	0	6	17	4	1194	0	5	1203	0	714	3	31	748	1968
08:00 AM	0	0	0	0	0	0	0	0	0	250	0	2	252	0	148	0	24	172	424
08:15 AM	0	0	0	0	0	0	0	0	1	238	0	1	240	0	153	1	9	163	403
08:30 AM	0	0	0	0	0	0	1	1	0	221	0	0	221	0	156	1	11	168	390
08:45 AM	0	0	0	0	2	0	0	2	0	183	0	1	184	0	122	0	14	136	322
Total	0	0	0	0	2	0	1	3	1	892	0	4	897	0	579	2	58	639	1539
*** BREAK ***																			
04:00 PM	0	0	0	0	1	0	1	2	1	176	0	0	177	0	285	5	20	310	489
04:15 PM	0	0	0	0	2	0	0	2	2	182	0	0	184	0	269	1	23	293	479
04:30 PM	0	0	0	0	1	0	0	1	0	178	0	1	179	0	324	2	20	346	526
04:45 PM	0	0	0	0	1	0	0	1	0	163	0	1	164	0	287	1	16	304	469
Total	0	0	0	0	5	0	1	6	3	699	0	2	704	0	1165	9	79	1253	1963
05:00 PM	0	0	0	0	4	0	0	4	1	157	0	2	160	0	349	1	19	369	533
05:15 PM	0	0	0	0	1	0	0	1	1	175	0	0	176	0	341	1	17	359	536
05:30 PM	0	0	0	0	2	0	0	2	1	168	0	0	169	0	281	3	25	309	480
05:45 PM	0	0	0	0	2	0	1	3	0	159	0	2	161	0	258	2	26	286	450
Total	0	0	0	0	9	0	1	10	3	659	0	4	666	0	1229	7	87	1323	1999
Grand Total	0	0	0	0	27	0	9	36	11	3444	0	15	3470	0	3687	21	255	3963	7469
Apprch %	0	0	0		75	0	25		0.3	99.3	0	0.4		0	93	0.5	6.4		
Total %	0	0	0	0	0.4	0	0.1	0.5	0.1	46.1	0	0.2	46.5	0	49.4	0.3	3.4	53.1	

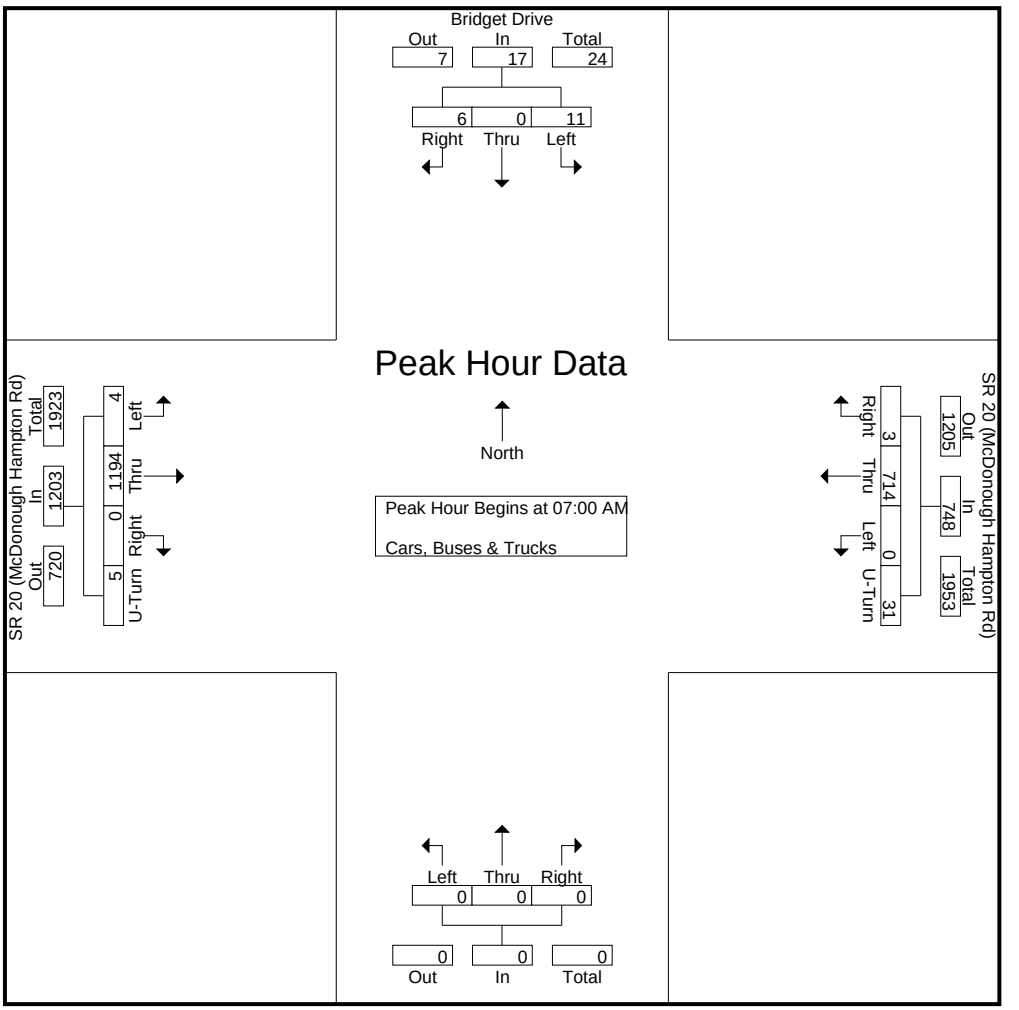
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
SR 20 (McDonough Hampton Rd) @ Bridget Drive
7-9 am | 4-6 pm

File Name : 20240186
Site Code : 20240186
Start Date : 05-07-2024
Page No : 2

	Northbound				Bridget Drive Southbound				SR 20 (McDonough Hampton Rd) Eastbound					SR 20 (McDonough Hampton Rd) Westbound					
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	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 07:00 AM																			
07:00 AM	0	0	0	0	**3**	0	1	4	**1**	255	0	1	257	0	166	0	5	171	432
07:15 AM	0	0	0	0	2	0	2	4	1	323	0	0	324	0	**204**	0	4	**208**	**536**
07:30 AM	0	0	0	0	3	0	0	3	1	**332**	0	**2**	**335**	0	185	1	8	194	532
07:45 AM	0	0	0	0	3	0	**3**	**6**	1	284	0	2	287	0	159	**2**	**14**	175	468
Total Volume	0	0	0	0	11	0	6	17	4	1194	0	5	1203	0	714	3	31	748	1968
% App. Total	0	0	0		64.7	0	35.3		0.3	99.3	0	0.4		0	95.5	0.4	4.1		
PHF	.000	.000	.000	.000	.917	.000	.500	.708	1.00	.899	.000	.625	.898	.000	.875	.375	.554	.899	.918



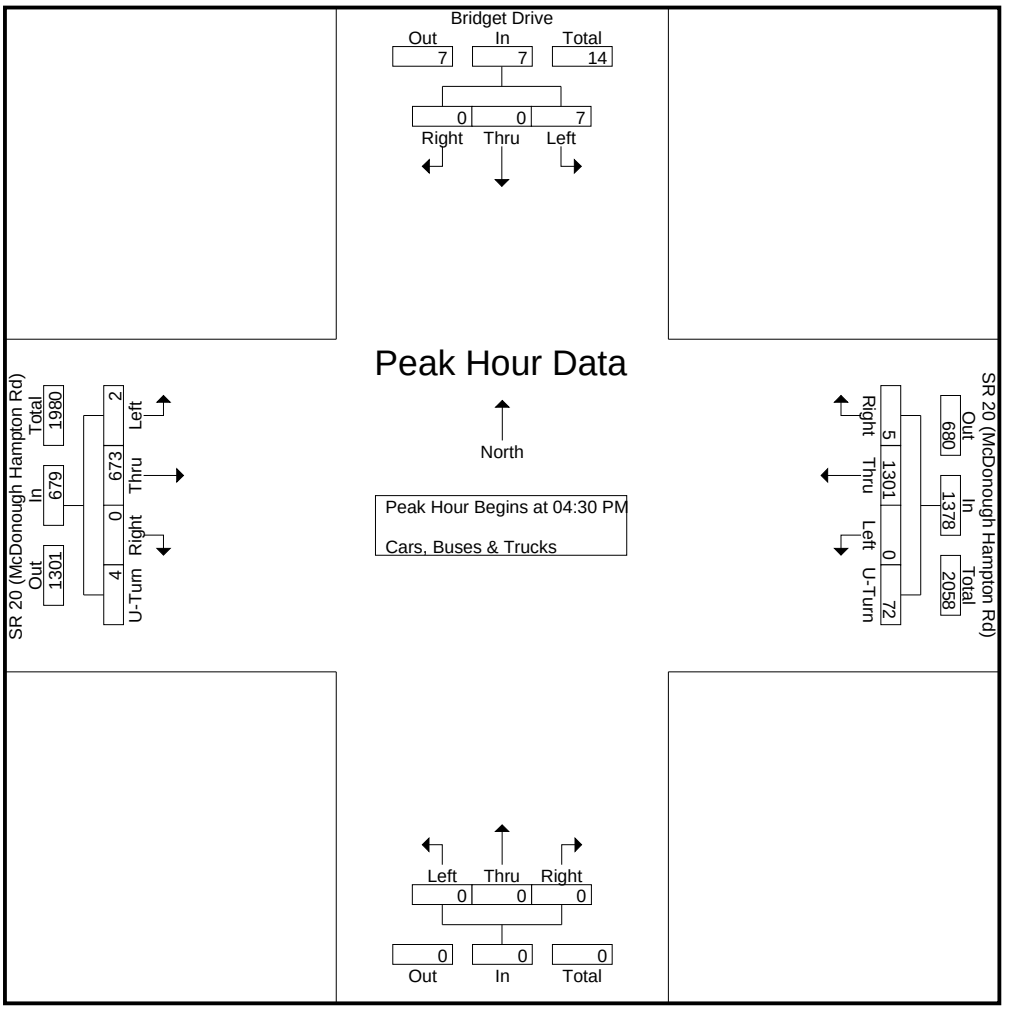
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
SR 20 (McDonough Hampton Rd) @ Bridget Drive
7-9 am | 4-6 pm

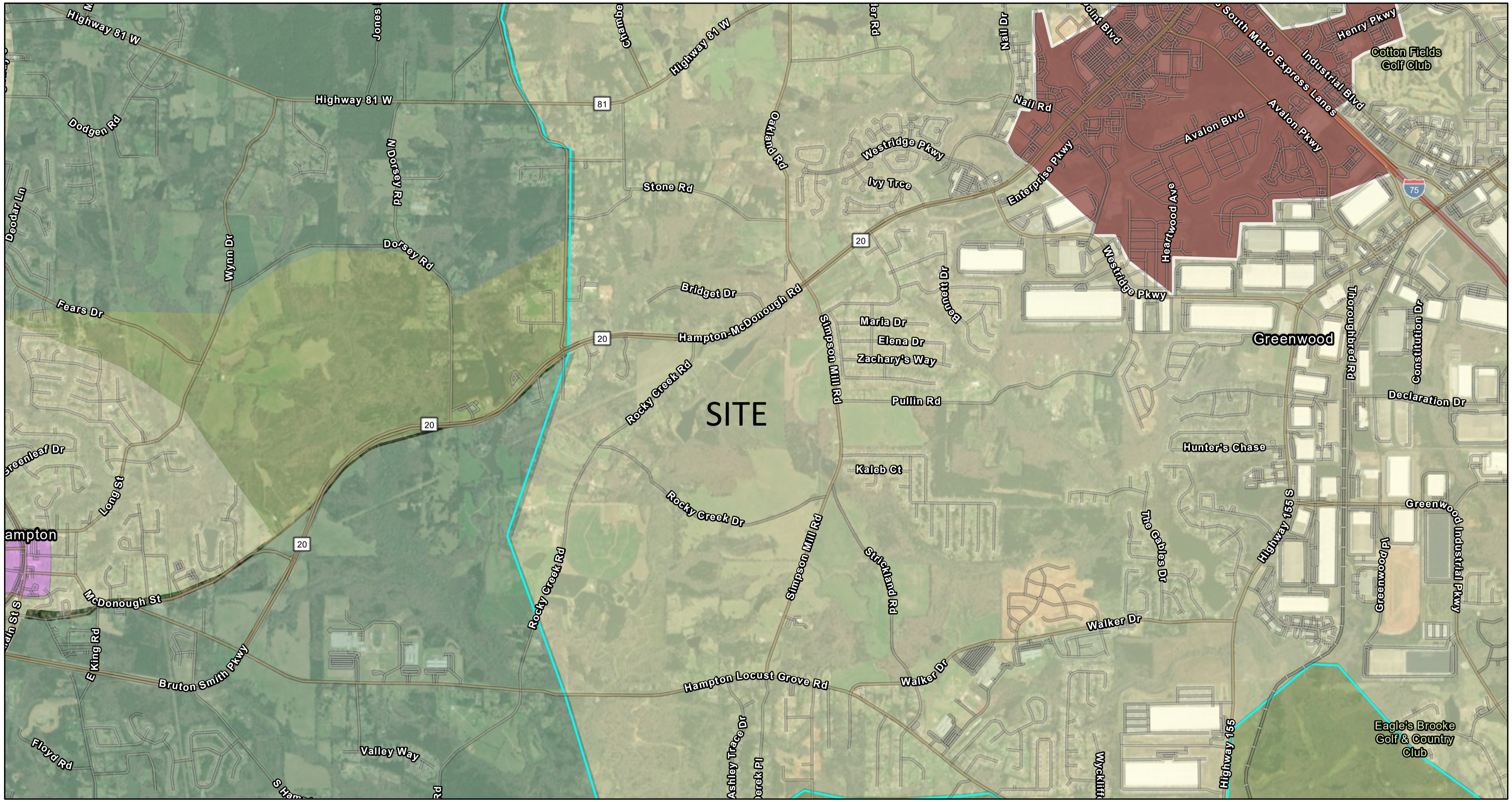
File Name : 20240186
Site Code : 20240186
Start Date : 05-07-2024
Page No : 3

	Northbound				Bridget Drive Southbound				SR 20 (McDonough Hampton Rd) Eastbound					SR 20 (McDonough Hampton Rd) Westbound					
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 04:30 PM																			
04:30 PM	0	0	0	0	1	0	0	1	0	**178**	0	1	**179**	0	324	**2**	**20**	346	526
04:45 PM	0	0	0	0	1	0	0	1	0	163	0	1	164	0	287	1	16	304	469
05:00 PM	0	0	0	0	**4**	0	0	**4**	**1**	157	0	**2**	160	0	**349**	1	19	**369**	533
05:15 PM	0	0	0	0	1	0	0	1	1	175	0	0	176	0	341	1	17	359	**536**
Total Volume	0	0	0	0	7	0	0	7	2	673	0	4	679	0	1301	5	72	1378	2064
% App. Total	0	0	0		100	0	0		0.3	99.1	0	0.6		0	94.4	0.4	5.2		
PHF	.000	.000	.000	.000	.438	.000	.000	.438	.500	.945	.000	.500	.948	.000	.932	.625	.900	.934	.963



Character Areas

2021 ARC Unified Growth Policy Map



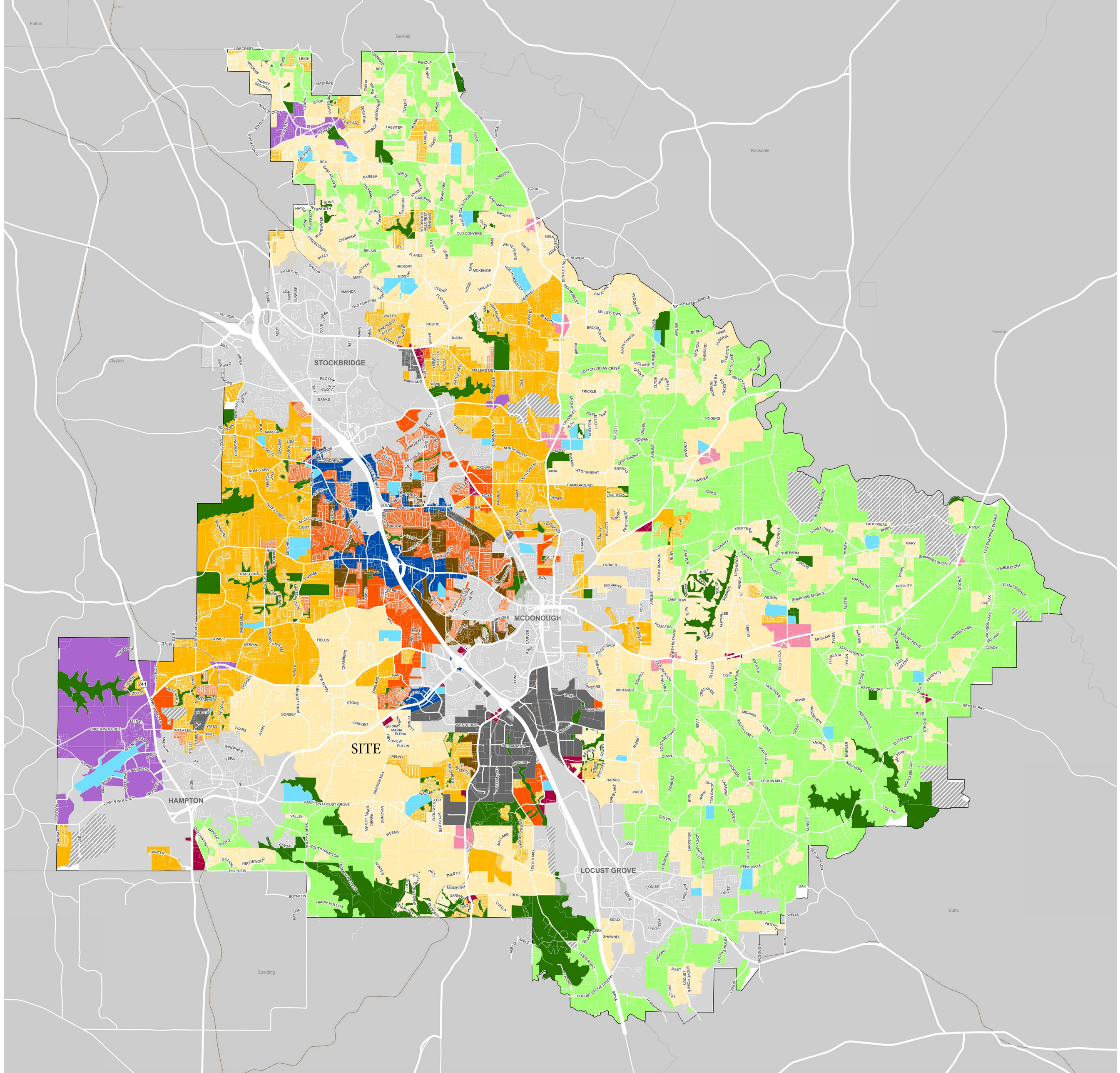
November 7, 2023

Regional Centers
Town Centers
Counties
Expressways
Regional Areas - copy
Developing Rural
Developing Suburbs
Rural Areas

1:36,112

0 0.38 0.75 1.5 mi
0 0.5 1 2 km

Henry County Future Land Use Map



- Railroads
- Incorporated Area

2023 FLUM

Future Land Use

- Greenspace
- Rural Residential
- Low Density Suburban
- Medium Density Suburban
- High Density Suburban
- Urban Residential
- Commercial
- Village
- Low Density Mixed Use
- High Density Mixed Use
- Industrial
- Public-Institutional
- Utilities
- Office-Institutional

0 1 2 4 Miles

GRTA Letter of Understanding

LETTER OF UNDERSTANDING

June11th, 2024

Christy Swearingen
Red Wolf DCD Properties, LLC
1427 East 7 Street
Brooklyn, NY 11230

RE: **0 Rocky Creek** (**DRI#: 4198)**

Dear Christy Swearingen:

The purpose of this Letter of Understanding is to document the discussions during the Methodology Meeting held virtually on June 3rd, 2024 regarding **DRI 4198 0 Rock Creek** Development of Regional Impact (DRI). The *GRTA DRI Review Procedures*, as well as the inputs and parameters documented in this Letter of Understanding and the revised Methodology Meeting Packet, shall be adhered to in preparing the GRTA required Transportation Study.

PROJECT OVERVIEW

- The proposed site is located at 0 Rocky Creek Road in Henry County. In general, the site is located to the South of SR 20 between US 19/US 41 and I-75. GPS Coordinates: 33°24'00"N, 84°13'24"W .
- The proposed development includes two 2-story data center buildings each of 599,300 Square Feet for a total of 1,198,600 Square Feet. Each building will have 15,800 Square Feet of Office Space. The property includes 148.2 acres of land.
- The projected build-out is one phase to be completed by 2028.
- The proposed development includes (1) Full site access along SR 20 (McDonough Hampton Road) and (1) Gated Emergency Access along Rocky Creek Road.
- The DRI trigger for this development is a Rezoning.
- The vehicular trip generation is estimated to be 1,241 net daily trips based on the *ITE Trip Generation Manual 11th edition.*
- The applicant is applying for approval under GRTA's expedited Traffic Impact Study review process.

STUDY NETWORK

1. SR 20 (McDonough Hampton Road) @ Simpson Mill Road / Oakland Road
2. SR 20 (McDonough Hampton Road) @ Bridget Drive / Site Driveway 1
3. SR 20 (McDonough Hampton Road) @ Rocky Creek Road
4. Rocky Creek Road @ Site Driveway 2

METHODOLOGY MEETING PACKET INPUTS & PARAMETERS

- The Site Plan shall meet all the applicable requirements in Section 7.1 of the *GRTA DRI Review Procedures*.
- All Study Network intersections shall be analyzed during the AM and PM peak hours for (1) existing conditions, (2) future "no-build" conditions, and (3) future "build" conditions as specified in the *GRTA DRI Review Procedures*.
- This DRI shall be modeled and reviewed in one phase to be completed by 2028.

- The Level of Service (LOS) standard for all analysis shall be LOS D unless specified otherwise in Section 3.2.2.1. For example, a LOS E standard is allowed if the existing LOS for the intersection or approach is a LOS F.

- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account as required in Section 3.2.2.

- The trip generation calculations in the revised Methodology Meeting Packet shall be used in the Transportation Study. Mixed-use and pass-by reductions are not allowed for this site. Pass-by reductions shall not exceed 15% of a roadway's traffic volume standard established in Appendix 7.2.

- The trip assignment approach in the revised Methodology Meeting Packet shall be utilized for all Study Network intersection movements.

- The applicant shall research TIP, STIP, RTP and GDOT's construction work program, as well as any local government and transit operator plans (SPLOST, CIP, etc.), to determine the open date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. Programmed transportation projects anticipated to open on or before the Build Out year of the DRI Project shall be modeled as completed in the No-Build and Build conditions unless approved otherwise.

- A 1.2% annual traffic Background Growth Rate shall be used for all roadways.

- Capacity analysis shall be based on turning movement counts collected not more than 12-months prior to the date of the actual DRI submittal to GRTA, unless specified otherwise. As specified in Section 2.3, turning movement counts shall be collected while local schools are in session, on a Tuesday, Wednesday or Thursday (unless approved otherwise) and not during holiday periods (weeks of July 4th, Thanksgiving and +/- 5 days of Christmas).

- COVID-19: The transportation analysis shall utilize existing turning movement count data when available during COVID. All counts older than a year shall be grown by the Background Growth Rate unless approved otherwise. If new counts are required, a control count location where existing count data is available shall be used for developing traffic growth extrapolation rates. The traffic engineer shall submit the proposed growth rates to GRTA, GDOT and local government stakeholders for input and GRTA approval before submitting the Transportation Study.

- If the *GRTA DRI Review Procedures* requires an Enhanced Focus Area for Heavy Vehicles or an Enhanced Focus Area for Dense Urban Environments, the Transportation Study shall incorporate the inputs and parameters agreed to at the Methodology Meeting and documented in the revised Methodology Meeting Packet. These inputs may include a Heavy Vehicle modeling percentages, a Heavy Vehicle route map, a pedestrian crosswalk delay adjustment and a bus blockage adjustment factor.

ADDITIONAL REQUIREMENTS

All applicable requirements of the *GRTA DRI Review Procedures* must be met for the Transportation Study to be considered complete. The *GRTA DRI Review Procedures* are located on GRTA's DRI website: https://www.srta.ga.gov/programs-projects/dev-of-regional-impact/ Contact GRTA staff if you have any questions on these requirements.

The Transportation Study shall also include as attachments the native LOS modeling file (i.e., Synchro modeling files) as well as the modeling reports (PDFs) for all Study Network intersections for the Existing, No-Build and Build conditions for all phases. The PDF reports shall be numbered (in page headers) and organized in order according to the Study Network numbering sequence in this Letter of Understanding. The reports shall also be organized in the following sequence: *Existing condition AM, Existing condition PM, No-build condition AM, No-Build condition PM, Build condition AM, Build condition PM*. If improvements are modeled, those PDFs shall be labeled as such and follow the appropriate condition's applicable peak period.

The Transportation Study appendices shall also include all turning movement count data, regardless of if using historic data or newly collected turning movement counts.

When documenting any Queue Length impacts required in Section 3.2.3.6, the TIS Executive Summary shall also note any individual *movements* not meeting the LOS standard where the DRI Project adds trips in the Build condition and exceeds available storage capacity for that movement.

When identifying mitigations in the existing, no-build and build conditions, the mitigations identified in preceding conditions shall not be modeled as complete when conducting the LOS analysis. The same mitigation may still be proposed as mitigation in the subsequent condition but it shall not be included as completed in the default analysis. For example, a turn lane may be identified as a needed improvement in the no-build condition. The turn lane should not be modeled as completed in the build condition. The turn lane should only be modeled as complete in the no-build with improvements condition and the build with improvements condition.

DRI REVIEW PACKAGE SUBMITTAL

GRTA will begin reviewing the DRI once the DRI Review Package is submitted and deemed complete. The DRI Review Package includes: the permitting Local Government inputting both Department of Community Affairs (DCA) forms into the DCA DRI website; and the **Traffic Engineer submittal of the GRTA Transportation Study (including LOS appendices, traffic count data and any other required attachments) and Site Plan to GRTA staff and ALL stakeholders included in the CC list of this Letter of Understanding**.

All DRI Review Packages shall be submitted electronically via email to all stakeholders in the CC list of the Letter of Understanding. If the DRI Review Package total file size is greater than 10 MB, the DRI Review Package shall be submitted via email with a FTP link provided for downloading the files.

Please contact me if you have any questions about the Letter of Understanding or the *GRTA DRI Review Procedures*.

Sincerely,

Brittany Williams
Program Manager

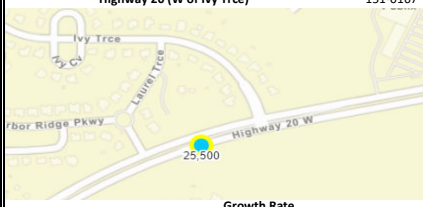
Cc:

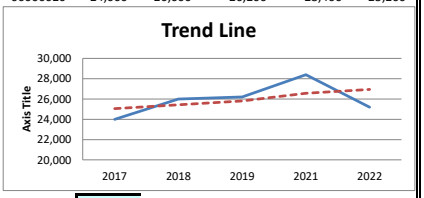
Zane Grennell, DCA
Donald Shockey, ARC
Brittany Williams, GRTA/SRTA
Kenta Lanham, Henry County
Kamau As-Salaam, Henry County
Toussaint Kirk, Henry County
David Simmons, Henry County
Sam Baker, Henry County
Daniel Trevorrow, GDOT District 3
Donald Wilkerson, GDOT District 3
Wanda Moore, City of Hampton
Patrick Kelley, Henry Co. Water Authority
Tara Brown, Henry Co. Water Authority
Tony Carnell, Henry Co. Water Authority
Abdul Amer, A & R Engineering, Inc
Naser Omer, A & R Engineering, Inc
Naila Amer, A & R Engineering, Inc
Victor Garcia, A & R Engineering, Inc
Scott Greene, Thomas & Hutton
Christy Swearingen, Swearingen Consultants

Linear Regression of Daily Traffic

Location	Growth Rate	R Squared	Station ID	Route	2017	2018	2019	2021	2022
Highway 20 (W of Ivy Trce)	1.8%	0.23	151-0167	00000020	24,000	26,000	26,200	28,400	25,200
Highway 20 (W of Dorsey Rd)	4.0%	0.86	151-0163	00002000	14,800	14,800	16,500	16,800	17,200
Rocky Creek Rd (S of Rocky Cree	-5.2%	0.74	151-8116	00028500	2,650	2,690	2,740	2,210	2,260
Hampton Locust Grove Rd (W o	-5.5%	0.71	151-0372	00065000	7,480	6,340	6,380	6,360	5,480
McDonough St (E of Hampton L	1.9%	0.98	151-0162	00055401	2,330	2,370	2,410	2,460	2,520
Weighted Average	**1.2%**	0.32	Sum of Count Stations =		51,260	52,200	54,230	56,230	52,660

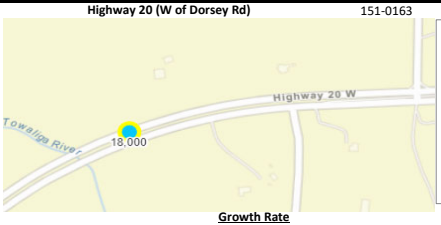
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
Highway 20 (W of Ivy Trce)	151-0167	00000020	24,000	26,000	26,200	28,400	25,200

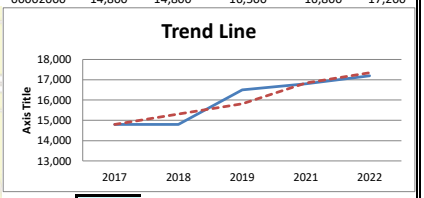




Growth Rate	1.8%	Intercept	-734,837	Slope	376.74
Trend Line	25,056	25,433	25,809	26,563	26,940

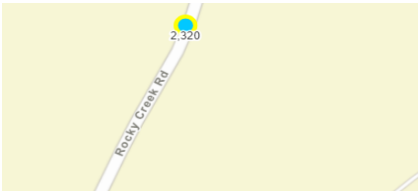
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
Highway 20 (W of Dorsey Rd)	151-0163	00002000	14,800	14,800	16,500	16,800	17,200

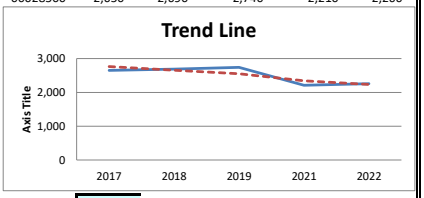




Growth Rate	4.0%	Intercept	-1,012,465	Slope	509.30
Trend Line	14,798	15,307	15,816	16,835	17,344

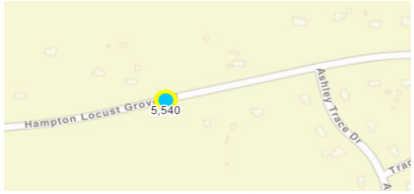
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
Rocky Creek Rd (S of Rocky Creek Dr)	151-8116	00028500	2,650	2,690	2,740	2,210	2,260

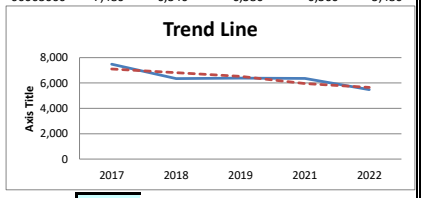




Growth Rate	-5.2%	Intercept	215,017	Slope	-105.23
Trend Line	2,763	2,657	2,552	2,342	2,236

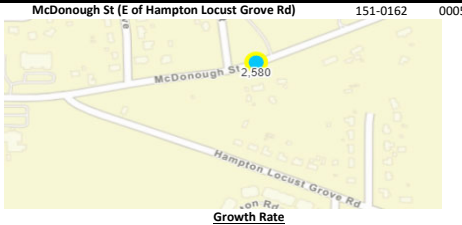
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
Hampton Locust Grove Rd (W of Ashley Trace Dr)	151-0372	00065000	7,480	6,340	6,380	6,360	5,480

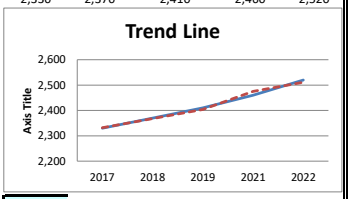




Growth Rate	-5.5%	Intercept	588,277	Slope	-288.14
Trend Line	7,100	6,811	6,523	5,947	5,659

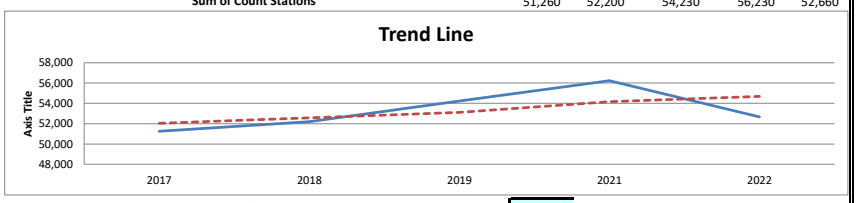
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
McDonough St (E of Hampton Locust Grove Rd)	151-0162	00055401	2,330	2,370	2,410	2,460	2,520





Growth Rate	1.9%	Intercept	-69,670	Slope	35.70
Trend Line	2,332	2,368	2,404	2,475	2,511

Weighted Average	2017	2018	2019	2021	2022
Sum of Count Stations	51,260	52,200	54,230	56,230	52,660



Growth Rate	1.2%	Intercept	-1,013,679	Slope	528.37
Trend Line	52,048	52,576	53,105	54,161	54,690

Fact Sheets for Planned and Programmed Improvements

HE-126A1

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	HAMPTON LOCUST GROVE ROAD WIDENING FROM SR 20 (MCDONOUGH ROAD) TO SR 155
GDOT Project No.	N/A
Federal ID No.	
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	Henry County
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2040
Planned Thru Lane	4	**Flex**		**Corridor Length**	5.8 miles

Detailed Description and Justification

This portion of Hampton/Locust Grove Road consists of narrow pavement. This project will provide widening from 2 to 4 lanes between SR20 and SR155. This is likely the second phase of the project with the first phase being HE-126B.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Local Jurisdiction/Municipality Funds		LR 2031-2040	**$18,000,000**	$0,000	$0,000	$0,000	$18,000,000
				$18,000,000	**$0,000**	**$0,000**	**$0,000**	**$18,000,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 10/6/2020

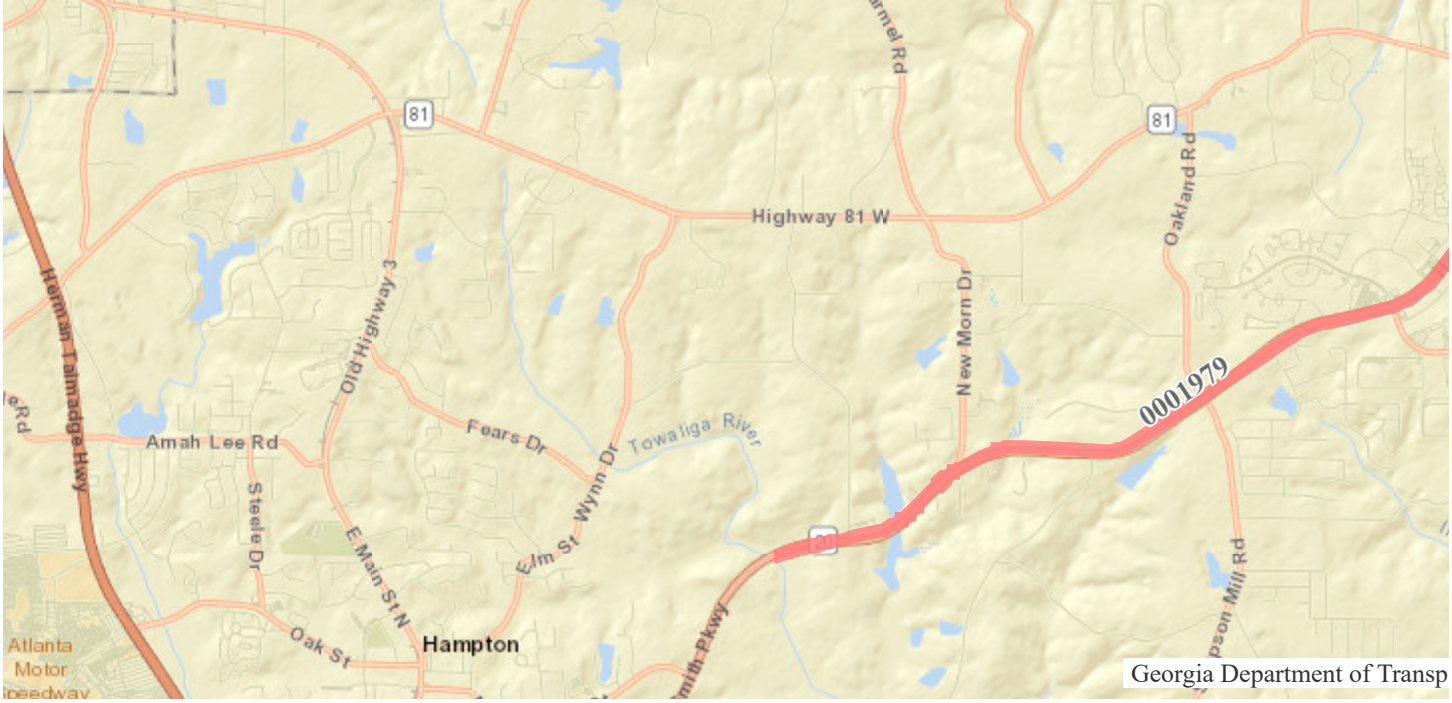
SR 20 FM JUST WEST OF THE TOWALIGA RIVER TO SR 81

Project ID:	**0001979**	Notice to Proceed Date:	11/13/2002
Project Manager:	Jason L. McCook	Construction Percent Complete:	98.98%
Office:		Current Completion Date:	9/30/2005
County:	Henry	Work Completion Date:	4/27/2007
Congressional District:	008	Construction Contract Amount:	
State Senate District.:	010, 025	Construction Contractor:	PURYEAR & SON'S GRADING CO., INC.
State House District:	074, 116	**Preconstruction Status Report**	
Project Type:	Reconstruction/Rehabilitation	**Construction Status Report**	
Project Status:	Under Construction		
Right of Way Authorization:		Contact Us	

Project Description:

This project is the widening of SR 20 from the terminus of the southern bypass around the the City of Hampton to State Route 81. (The bypass project is in Project 343060-.) The widening begins at the western approach of the Towaliga River bridge and extends 4.83 miles to State Route 81. This project includes 2 parallel bridges over the Towaliga River. SR 20 will be widened to four lanes separated by a 44-foot wide grass median.

Activity	Program Year	Cost Estimate	Date of Last Estimate
CST (Construction)	2003		6/20/2001



Project Documents
There are no items to show in this view.

Georgia Department of Transportation

Georgia Department of Transportation
One Georgia Center
600 West Peachtree NW
Atlanta, GA 30308
(404) 631-1990 Main Office

Contact Us

Employment

Privacy Policy

SR 155 FM I-75 TO HAMPTON-LOCUST GROVE RD/BILL GARDNER PKWY

Project ID:	**0015284**	Notice to Proceed Date:	
Project Manager:	Michael Vincent Hamilton	Construction Percent Complete:	%
Office:	Program Delivery	Current Completion Date:	
County:	Henry	Work Completion Date:	
Congressional District:	010	Construction Contract Amount:	
State Senate District.:	025	Construction Contractor:	
State House District:	116, 117	**Preconstruction Status Report**	
Project Type:	Reconstruction/Rehabilitation	**Construction Status Report**	
Project Status:	Construction Work Program		
Right of Way Authorization:		Contact Us	

Project Description:

The project begins at the intersection of SR 155 and Hampton Locust Grove Rd/Bill Gardner Parkway, MP 1.95, and extends 3.75 miles along SR 155 in a northeasterly direction to the intersection of SR 155 and I-75, 5.70 MP. The project ends just south of the City of McDonough city limits in Henry County, GA.

Activity	Program Year	Cost Estimate	Date of Last Estimate
SCP (Scoping)	2022	$500,000.00	
PE (Preliminary Engineering)	2026	$3,184,000.00	
ROW (Right of Way)	2028	$24,419,000.00	
UTL (Utilities)	2030	$4,492,000.00	
CST (Construction)	2030	$39,799,000.00	

Project Documents
There are no items to show in this view.

Georgia Department of Transportation

Georgia Department of Transportation
One Georgia Center
600 West Peachtree NW
Atlanta, GA 30308
(404) 631-1990 Main Office

Contact Us

Employment

Privacy Policy

Existing Intersection Analysis

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	156	1037	54	114	645	110	0	0	293	0	0	104
Future Vol, veh/h	156	1037	54	114	645	110	0	0	293	0	0	104
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	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	310	-	360	435	-	435	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	171	1140	59	125	709	121	0	0	322	0	0	114

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	709	0	0	1140	0	0	-	-	570	-	-	355
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	886	-	-	609	-	-	0	0	465	0	0	641
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	886	-	-	609	-	-	-	-	465	-	-	641
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	1.6	28.4	11.8
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	465	886	-	-	609	-	-	641
HCM Lane V/C Ratio	0.692	0.193	-	-	0.206	-	-	0.178
HCM Control Delay (s)	28.4	10	-	-	12.4	-	-	11.8
HCM Lane LOS	D	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	5.2	0.7	-	-	0.8	-	-	0.6

Intersection	
Int Delay, s/veh	0.6

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	5	4	1194	31	714	3	11	6
Future Vol, veh/h	5	4	1194	31	714	3	11	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	Yield
Storage Length	-	390	-	340	-	300	0	-
Veh in Median Storage, #	-	-	0	-	0	-	1	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	5	2	2	2
Mvmt Flow	5	4	1298	34	776	3	12	7

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	776	776	0	1298	-	0	1511	388
Stage 1	-	-	-	-	-	-	844	-
Stage 2	-	-	-	-	-	-	667	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	462	836	-	213	-	-	111	611
Stage 1	-	-	-	-	-	-	382	-
Stage 2	-	-	-	-	-	-	472	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	572	572	-	213	-	-	92	611
Mov Cap-2 Maneuver	-	-	-	-	-	-	210	-
Stage 1	-	-	-	-	-	-	376	-
Stage 2	-	-	-	-	-	-	396	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	1	16.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBU	WBT	WBR	SBLn1
Capacity (veh/h)	572	-	213	-	-	325
HCM Lane V/C Ratio	0.017	-	0.158	-	-	0.057
HCM Control Delay (s)	11.4	-	25.1	-	-	16.7
HCM Lane LOS	B	-	D	-	-	C
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-	0.2

Intersection	
Int Delay, s/veh	3.3

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	0	972	14	140	585	0	231
Future Vol, veh/h	0	972	14	140	585	0	231
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	Yield	-	None	-	Yield
Storage Length	485	-	400	535	-	-	0
Veh in Median Storage, #	-	0	-	-	0	0	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	92	91	91	91	91	91	91
Heavy Vehicles, %	2	5	5	5	5	5	5
Mvmt Flow	0	1068	15	154	643	0	254

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	643	0	0	1068	0	-	534
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	6.44	-	-	4.2	-	-	7
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	-	-	2.25	-	-	3.35
Pot Cap-1 Maneuver	562	-	-	631	-	0	483
Stage 1	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	0	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	562	-	-	631	-	-	483
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	20.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	483	562	-	-	631	-
HCM Lane V/C Ratio	0.526	-	-	-	0.244	-
HCM Control Delay (s)	20.4	0	-	-	12.5	-
HCM Lane LOS	C	A	-	-	B	-
HCM 95th %tile Q(veh)	3	0	-	-	1	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	131	529	92	180	1183	169	0	0	230	0	0	195
Future Vol, veh/h	131	529	92	180	1183	169	0	0	230	0	0	195
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	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	310	-	360	435	-	435	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	135	545	95	186	1220	174	0	0	237	0	0	201

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1220	0	0	545	0	0	-	-	273	-	-	610
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	567	-	-	1020	-	-	0	0	725	0	0	437
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	567	-	-	1020	-	-	-	-	725	-	-	437
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	1.1	12.4	20.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	725	567	-	-	1020	-	-	437
HCM Lane V/C Ratio	0.327	0.238	-	-	0.182	-	-	0.46
HCM Control Delay (s)	12.4	13.3	-	-	9.3	-	-	20.1
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.4	0.9	-	-	0.7	-	-	2.4

Intersection	
Int Delay, s/veh	0.6

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	4	2	673	72	1301	5	7	0
Future Vol, veh/h	4	2	673	72	1301	5	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	Yield
Storage Length	-	390	-	340	-	300	0	-
Veh in Median Storage, #	-	-	0	-	0	-	1	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	92	96	96	92	96	96	96	96
Heavy Vehicles, %	2	2	5	2	5	2	2	2
Mvmt Flow	4	2	701	78	1355	5	7	0

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	1355	1355	0	701	-	0	1874	678
Stage 1	-	-	-	-	-	-	1511	-
Stage 2	-	-	-	-	-	-	363	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	196	504	-	516	-	-	63	395
Stage 1	-	-	-	-	-	-	169	-
Stage 2	-	-	-	-	-	-	674	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	244	244	-	516	-	-	52	395
Mov Cap-2 Maneuver	-	-	-	-	-	-	130	-
Stage 1	-	-	-	-	-	-	165	-
Stage 2	-	-	-	-	-	-	572	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0.7	34.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBU	WBT	WBR	SBLn1
Capacity (veh/h)	244	-	516	-	-	130
HCM Lane V/C Ratio	0.026	-	0.152	-	-	0.056
HCM Control Delay (s)	20.1	-	13.2	-	-	34.3
HCM Lane LOS	C	-	B	-	-	D
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-	0.2

Intersection	
Int Delay, s/veh	1.7

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	0	557	4	214	1091	0	122
Future Vol, veh/h	0	557	4	214	1091	0	122
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	Yield	-	None	-	Yield
Storage Length	485	-	400	535	-	-	0
Veh in Median Storage, #	-	0	-	-	0	0	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	92	96	96	96	96	96	96
Heavy Vehicles, %	2	5	5	5	5	5	5
Mvmt Flow	0	580	4	223	1136	0	127

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	1136	0	0	580	0	-	290
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	6.44	-	-	4.2	-	-	7
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	-	-	2.25	-	-	3.35
Pot Cap-1 Maneuver	271	-	-	970	-	0	698
Stage 1	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	0	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	271	-	-	970	-	-	698
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	698	271	-	-	970	-
HCM Lane V/C Ratio	0.182	-	-	-	0.23	-
HCM Control Delay (s)	11.3	0	-	-	9.8	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.7	0	-	-	0.9	-

Future “No-Build” Intersection Analysis

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	1087	57	119	676	115	0	0	307	0	0	109
Future Vol, veh/h	163	1087	57	119	676	115	0	0	307	0	0	109
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	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	310	-	360	435	-	435	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	179	1195	63	131	743	126	0	0	337	0	0	120

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	743	0	0	1195	0	0	-	-	598	-	-	372
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	860	-	-	580	-	-	0	0	445	0	0	625
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	860	-	-	580	-	-	-	-	445	-	-	625
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	1.7	34.3	12.1
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	445	860	-	-	580	-	-	625
HCM Lane V/C Ratio	0.758	0.208	-	-	0.225	-	-	0.192
HCM Control Delay (s)	34.3	10.3	-	-	13	-	-	12.1
HCM Lane LOS	D	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	6.4	0.8	-	-	0.9	-	-	0.7

Intersection	
Int Delay, s/veh	0.6

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	5	4	1251	32	748	3	12	6
Future Vol, veh/h	5	4	1251	32	748	3	12	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	Yield
Storage Length	-	390	-	340	-	300	0	-
Veh in Median Storage, #	-	-	0	-	0	-	1	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	5	2	2	2
Mvmt Flow	5	4	1360	35	813	3	13	7

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	813	813	0	1360	-	0	1581	407
Stage 1	-	-	-	-	-	-	883	-
Stage 2	-	-	-	-	-	-	698	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	438	810	-	194	-	-	100	593
Stage 1	-	-	-	-	-	-	365	-
Stage 2	-	-	-	-	-	-	455	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	547	547	-	194	-	-	81	593
Mov Cap-2 Maneuver	-	-	-	-	-	-	196	-
Stage 1	-	-	-	-	-	-	358	-
Stage 2	-	-	-	-	-	-	373	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	1.1	18.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBU	WBT	WBR	SBLn1
Capacity (veh/h)	547	-	194	-	-	294
HCM Lane V/C Ratio	0.018	-	0.179	-	-	0.067
HCM Control Delay (s)	11.7	-	27.6	-	-	18.1
HCM Lane LOS	B	-	D	-	-	C
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-	0.2

Intersection	
Int Delay, s/veh	3.6

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	0	1019	15	147	613	0	242
Future Vol, veh/h	0	1019	15	147	613	0	242
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	Yield	-	None	-	Yield
Storage Length	485	-	400	535	-	-	0
Veh in Median Storage, #	-	0	-	-	0	0	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	92	91	91	91	91	91	91
Heavy Vehicles, %	2	5	5	5	5	5	5
Mvmt Flow	0	1120	16	162	674	0	266

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	674	0	0	1120	0	-	560
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	6.44	-	-	4.2	-	-	7
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	-	-	2.25	-	-	3.35
Pot Cap-1 Maneuver	537	-	-	602	-	0	464
Stage 1	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	0	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	537	-	-	602	-	-	464
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.5	22.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	464	537	-	-	602	-
HCM Lane V/C Ratio	0.573	-	-	-	0.268	-
HCM Control Delay (s)	22.7	0	-	-	13.2	-
HCM Lane LOS	C	A	-	-	B	-
HCM 95th %tile Q(veh)	3.5	0	-	-	1.1	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	554	96	189	1240	177	0	0	241	0	0	204
Future Vol, veh/h	137	554	96	189	1240	177	0	0	241	0	0	204
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	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	310	-	360	435	-	435	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	141	571	99	195	1278	182	0	0	248	0	0	210

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1278	0	0	571	0	0	-	-	286	-	-	639
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	539	-	-	998	-	-	0	0	711	0	0	419
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	539	-	-	998	-	-	-	-	711	-	-	419
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	1.1	12.8	21.9
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	711	539	-	-	998	-	-	419
HCM Lane V/C Ratio	0.349	0.262	-	-	0.195	-	-	0.502
HCM Control Delay (s)	12.8	14	-	-	9.5	-	-	21.9
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.6	1	-	-	0.7	-	-	2.7

Intersection	
Int Delay, s/veh	0.7

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	4	2	705	75	1363	5	7	0
Future Vol, veh/h	4	2	705	75	1363	5	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	Yield
Storage Length	-	390	-	340	-	300	0	-
Veh in Median Storage, #	-	-	0	-	0	-	1	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	92	96	96	92	96	96	96	96
Heavy Vehicles, %	2	2	5	2	5	2	2	2
Mvmt Flow	4	2	734	82	1420	5	7	0

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	1420	1420	0	734	-	0	1963	710
Stage 1	-	-	-	-	-	-	1584	-
Stage 2	-	-	-	-	-	-	379	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3.52	3.32
Pot Cap-1 Maneuver	178	475	-	491	-	-	55	376
Stage 1	-	-	-	-	-	-	154	-
Stage 2	-	-	-	-	-	-	662	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	223	223	-	491	-	-	45	376
Mov Cap-2 Maneuver	-	-	-	-	-	-	118	-
Stage 1	-	-	-	-	-	-	150	-
Stage 2	-	-	-	-	-	-	551	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0.7	37.5
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBU	WBT	WBR	SBLn1
Capacity (veh/h)	223	-	491	-	-	118
HCM Lane V/C Ratio	0.029	-	0.166	-	-	0.062
HCM Control Delay (s)	21.6	-	13.8	-	-	37.5
HCM Lane LOS	C	-	B	-	-	E
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-	0.2

Intersection	
Int Delay, s/veh	1.8

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	0	584	4	224	1143	0	128
Future Vol, veh/h	0	584	4	224	1143	0	128
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	Yield	-	None	-	Yield
Storage Length	485	-	400	535	-	-	0
Veh in Median Storage, #	-	0	-	-	0	0	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	92	96	96	96	96	96	96
Heavy Vehicles, %	2	5	5	5	5	5	5
Mvmt Flow	0	608	4	233	1191	0	133

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	1191	0	0	608	0	-	304
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	6.44	-	-	4.2	-	-	7
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	-	-	2.25	-	-	3.35
Pot Cap-1 Maneuver	250	-	-	946	-	0	683
Stage 1	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	0	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	250	-	-	946	-	-	683
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	683	250	-	-	946	-
HCM Lane V/C Ratio	0.195	-	-	-	0.247	-
HCM Control Delay (s)	11.5	0	-	-	10	-
HCM Lane LOS	B	A	-	-	B	-
HCM 95th %tile Q(veh)	0.7	0	-	-	1	-

Future “Build” Intersections Analysis

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	167	1126	64	119	733	115	0	0	316	0	0	113
Future Vol, veh/h	167	1126	64	119	733	115	0	0	316	0	0	113
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	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	310	-	360	435	-	435	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	184	1237	70	131	805	126	0	0	347	0	0	124

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	805	0	0	1237	0	0	-	-	619	-	-	403
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	815	-	-	559	-	-	0	0	432	0	0	597
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	815	-	-	559	-	-	-	-	432	-	-	597
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	1.6	39.6	12.6
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	432	815	-	-	559	-	-	597
HCM Lane V/C Ratio	0.804	0.225	-	-	0.234	-	-	0.208
HCM Control Delay (s)	39.6	10.7	-	-	13.4	-	-	12.6
HCM Lane LOS	E	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	7.3	0.9	-	-	0.9	-	-	0.8

Intersection	
Int Delay, s/veh	2.3

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	5	4	1251	26	32	61	748	3	21	0	49	12	0	6
Future Vol, veh/h	5	4	1251	26	32	61	748	3	21	0	49	12	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	Yield	-	-	None	-	-	Yield
Storage Length	-	390	-	300	-	340	-	300	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	1	-	-	1	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	5	4	1360	28	35	66	813	3	23	0	53	13	0	7

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	813	813	0	0	1360	1388	0	0	1987	2393	680	1713	2421	407
Stage 1	-	-	-	-	-	-	-	-	1378	1378	-	1015	1015	-
Stage 2	-	-	-	-	-	-	-	-	609	1015	-	698	1406	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	438	810	-	-	194	489	-	-	36	33	393	58	32	593
Stage 1	-	-	-	-	-	-	-	-	152	210	-	255	314	-
Stage 2	-	-	-	-	-	-	-	-	449	314	-	397	204	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	547	547	-	-	297	297	-	-	26	21	393	36	21	593
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	100	101	-	127	69	-
Stage 1	-	-	-	-	-	-	-	-	149	206	-	250	207	-
Stage 2	-	-	-	-	-	-	-	-	293	207	-	337	200	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.6	31.8	26
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	209	547	-	-	297	-	-	191
HCM Lane V/C Ratio	0.364	0.018	-	-	0.34	-	-	0.102
HCM Control Delay (s)	31.8	11.7	-	-	23.2	-	-	26
HCM Lane LOS	D	B	-	-	C	-	-	D
HCM 95th %tile Q(veh)	1.6	0.1	-	-	1.5	-	-	0.3

Intersection	
Int Delay, s/veh	3.8

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	0	1042	15	149	632	0	245
Future Vol, veh/h	0	1042	15	149	632	0	245
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	Yield	-	None	-	Yield
Storage Length	485	-	400	535	-	-	0
Veh in Median Storage, #	-	0	-	-	0	0	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	92	91	91	91	91	91	91
Heavy Vehicles, %	2	5	5	5	5	5	5
Mvmt Flow	0	1145	16	164	695	0	269

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	695	0	0	1145	0	-	573
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	6.44	-	-	4.2	-	-	7
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	-	-	2.25	-	-	3.35
Pot Cap-1 Maneuver	520	-	-	589	-	0	455
Stage 1	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	0	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	520	-	-	589	-	-	455
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	23.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	455	520	-	-	589	-
HCM Lane V/C Ratio	0.592	-	-	-	0.278	-
HCM Control Delay (s)	23.7	0	-	-	13.4	-
HCM Lane LOS	C	A	-	-	B	-
HCM 95th %tile Q(veh)	3.7	0	-	-	1.1	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	142	605	105	189	1266	177	0	0	245	0	0	206
Future Vol, veh/h	142	605	105	189	1266	177	0	0	245	0	0	206
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	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	310	-	360	435	-	435	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	146	624	108	195	1305	182	0	0	253	0	0	212

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1305	0	0	624	0	0	-	-	312	-	-	653
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	526	-	-	953	-	-	0	0	684	0	0	410
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	526	-	-	953	-	-	-	-	684	-	-	410
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	1.1	13.3	22.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	684	526	-	-	953	-	-	410
HCM Lane V/C Ratio	0.369	0.278	-	-	0.204	-	-	0.518
HCM Control Delay (s)	13.3	14.5	-	-	9.7	-	-	22.8
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.7	1.1	-	-	0.8	-	-	2.9

Intersection	
Int Delay, s/veh	1.8

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	4	2	705	12	75	28	1363	5	28	0	64	7	0	0
Future Vol, veh/h	4	2	705	12	75	28	1363	5	28	0	64	7	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	Yield	-	-	None	-	-	Yield
Storage Length	-	390	-	300	-	340	-	300	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	1	-	-	1	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	92	92	92	96	96	92	92	92	96	92	96
Heavy Vehicles, %	2	2	5	2	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	4	2	734	13	82	30	1420	5	30	0	70	7	0	0

Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	1420	1420	0	0	734	747	0	0	1680	2390	367	2023	2403	710
Stage 1	-	-	-	-	-	-	-	-	746	746	-	1644	1644	-
Stage 2	-	-	-	-	-	-	-	-	934	1644	-	379	759	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	178	475	-	-	491	857	-	-	62	33	630	34	33	376
Stage 1	-	-	-	-	-	-	-	-	372	419	-	104	156	-
Stage 2	-	-	-	-	-	-	-	-	286	156	-	615	413	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	223	223	-	-	508	508	-	-	50	25	630	25	25	376
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	145	90	-	81	88	-
Stage 1	-	-	-	-	-	-	-	-	362	408	-	101	122	-
Stage 2	-	-	-	-	-	-	-	-	223	122	-	532	402	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1	21.9	53.8
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	312	223	-	-	508	-	-	81
HCM Lane V/C Ratio	0.321	0.029	-	-	0.22	-	-	0.09
HCM Control Delay (s)	21.9	21.6	-	-	14.1	-	-	53.8
HCM Lane LOS	C	C	-	-	B	-	-	F
HCM 95th %tile Q(veh)	1.3	0.1	-	-	0.8	-	-	0.3

Intersection	
Int Delay, s/veh	1.8

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	0	595	4	227	1168	0	129
Future Vol, veh/h	0	595	4	227	1168	0	129
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	Yield	-	None	-	Yield
Storage Length	485	-	400	535	-	-	0
Veh in Median Storage, #	-	0	-	-	0	0	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	92	96	96	96	96	96	96
Heavy Vehicles, %	2	5	5	5	5	5	5
Mvmt Flow	0	620	4	236	1217	0	134

Major/Minor	Major1			Major2		Minor1	
Conflicting Flow All	1217	0	0	620	0	-	310
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	6.44	-	-	4.2	-	-	7
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	-	-	2.25	-	-	3.35
Pot Cap-1 Maneuver	241	-	-	936	-	0	677
Stage 1	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	0	-
Platoon blocked, %		-	-		-		
Mov Cap-1 Maneuver	241	-	-	936	-	-	677
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	677	241	-	-	936	-
HCM Lane V/C Ratio	0.198	-	-	-	0.253	-
HCM Control Delay (s)	11.6	0	-	-	10.1	-
HCM Lane LOS	B	A	-	-	B	-
HCM 95th %tile Q(veh)	0.7	0	-	-	1	-

Traffic Volume Worksheets

23-196 - 0 Rocky Creek Data Center (DRI # 4198) - Henry County, GA

Traffic Volumes

A&R Engineering
July 2024

1. SR 20 @ Simpson Mill Rd

A.M. Peak Hour

	Simpson Mill Road Northbound					Oakland Road Southbound					SR 20 (McDonough Hampton Road) Eastbound					SR 20 (McDonough Hampton Road) Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	293	293	0	0	0	104	104	0	156	1037	54	1247	0	114	645	110	869
Growth Factor (%):	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2	
No-Build 2028 Volumes:	0	0	0	307	307	0	0	0	109	109	0	163	1087	57	1307	0	119	676	115	910
Total New Trips:	0	0	0	9	9	0	0	0	4	4	0	4	39	7	50	0	0	57	0	57
Future 2028 Traffic Volumes:	0	0	0	316	316	0	0	0	113	113	0	167	1126	64	1357	0	119	733	115	967

P.M. Peak Hour

	Simpson Mill Road Northbound					Oakland Road Southbound					SR 20 (McDonough Hampton Road) Eastbound					SR 20 (McDonough Hampton Road) Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	230	230	0	0	0	195	195	0	131	529	92	752	0	180	1183	169	1532
Growth Factor (%):	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2	
No-Build 2028 Volumes:	0	0	0	241	241	0	0	0	204	204	0	137	554	96	787	0	189	1240	177	1606
Total New Trips:	0	0	0	4	4	0	0	0	2	2	0	5	51	9	65	0	0	26	0	26
Future 2028 Traffic Volumes:	0	0	0	245	245	0	0	0	206	206	0	142	605	105	852	0	189	1266	177	1632

23-196 - 0 Rocky Creek Data Center (DRI # 4198) - Henry County, GA

Traffic Volumes

A&R Engineering
July 2024

2. SR 20 @ Bridget Dr-Site Drwy

A.M. Peak Hour

	Site Driveway Northbound					Bridget Drive Southbound					SR 20 (McDonough Hampton Road) Eastbound					SR 20 (McDonough Hampton Road) Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0	0	0	11	0	6	17	5	4	1194	0	1203	31	0	714	3	748
Growth Factor (%):	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2	
No-Build 2028 Volumes:	0	0	0	0	0	0	12	0	6	18	5	4	1251	0	1260	32	0	748	3	783
Total New Trips:	0	21	0	49	70	0	0	0	0	0	0	0	0	26	26	0	61	0	0	61
Future 2028 Traffic Volumes:	0	21	0	49	70	0	12	0	6	18	5	4	1251	26	1286	32	61	748	3	844

P.M. Peak Hour

	Site Driveway Northbound					Bridget Drive Southbound					SR 20 (McDonough Hampton Road) Eastbound					SR 20 (McDonough Hampton Road) Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0	0	0	7	0	0	7	4	2	673	0	679	72	0	1301	5	1378
Growth Factor (%):	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2	
No-Build 2028 Volumes:	0	0	0	0	0	0	7	0	0	7	4	2	705	0	711	75	0	1363	5	1443
Total New Trips:	0	28	0	64	92	0	0	0	0	0	0	0	0	12	12	0	28	0	0	28
Future 2028 Traffic Volumes:	0	28	0	64	92	0	7	0	0	7	4	2	705	12	723	75	28	1363	5	1471

23-196 - 0 Rocky Creek Data Center (DRI # 4198) - Henry County, GA

Traffic Volumes

A&R Engineering
July 2024

3. SR 20 @ Rocky Creek Rd

A.M. Peak Hour

	Rocky Creek Road Northbound					- Southbound					SR 20 (McDonough Hampton Road) Eastbound					SR 20 (McDonough Hampton Road) Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	231	231	0	0	0	0	0	0	0	972	14	986	0	140	585	0	725
Growth Factor (%):	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2	
No-Build 2028 Volumes:	0	0	0	242	242	0	0	0	0	0	0	0	1019	15	1034	0	147	613	0	760
Total New Trips:	0	0	0	3	3	0	0	0	0	0	0	0	23	0	23	0	2	19	0	21
Future 2028 Traffic Volumes:	0	0	0	245	245	0	0	0	0	0	0	0	1042	15	1057	0	149	632	0	781

P.M. Peak Hour

	Rocky Creek Road Northbound					- Southbound					SR 20 (McDonough Hampton Road) Eastbound					SR 20 (McDonough Hampton Road) Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	122	122	0	0	0	0	0	0	0	557	4	561	0	214	1091	0	1305
Growth Factor (%):	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2	
No-Build 2028 Volumes:	0	0	0	128	128	0	0	0	0	0	0	0	584	4	588	0	224	1143	0	1367
Total New Trips:	0	0	0	1	1	0	0	0	0	0	0	0	11	0	11	0	3	25	0	28
Future 2028 Traffic Volumes:	0	0	0	129	129	0	0	0	0	0	0	0	595	4	599	0	227	1168	0	1395

Water & Service Availability Letter

Henry County Water Authority
Engineering Division

January 25, 2024

Re: Water and Sewer Services - Availability

Proposed Development:	**Commercial**
Property Information:	**0 Rocky Creek Road Parcel No. 058-01006000**
	LLs 211 & 238; District 6; 148.20+/- acres
Proposed Zoning:	**OI**
Sewer Basin:	**Indian Creek**
Watershed Basin:	**Towaliga**

TO WHOM IT MAY CONCERN:

You have requested that this Authority provide you with information concerning the present availability of water and sewer services to the above-described property. This letter is being provided for informational purposes only and will not act to reserve water or sewer capacity to you or the property and will not create any liability to the Authority. The information contained in this letter will remain in effect for a period of **365** days from the date of this letter unless subsequently notified in writing by the Authority. The information provided herein is based upon the above-stated property data. Any deviation in data that would increase density or usage above that evaluated by the Authority will automatically void the information provided herein and will require a separate re-evaluation by this Authority.

Water service is available to the property described above. A fire flow test conducted in the area revealed the following data:

Static:	96	psi
Residual:	80	psi
Flow	1350	gpm
Calculated Flow @ 20 psi:	3131	gpm

As shown, these results are above the minimum adopted standards of 20 psi residual pressure at 100 gpm for said commercial development as established by the Henry County Board of Commissioners.

Based on the preliminary plan submitted, sewage **treatment** and sewer line **capacity** are available for the property. Connecting to the existing sewer line near sheets C1.4 and C1.5 is required by HCWA to avoid parallel sewer lines. ***Furthermore, the offsite sanitary sewer line extension will***

be at the developer's expense. The offsite sewer line extension may require the acquisition of easements at the developer's expense.

The Authority provides water and sewer services where capacity is available on a first-come, first served basis. Each customer, developer, and property owner must also comply with the rules, regulations, and ordinances of the Authority. The Authority will reevaluate the availability of

Please note this property is in the Towaliga River Watershed Area and must meet the guidelines set forth by the Henry County Watershed Protection Ordinance. A copy of the Ordinance is available to you upon request.

This letter was prepared with information submitted to HCWA on a Conceptual Site Plan dated 01/12/2024 prepared by Thomas & Hutton.

Scott Sage, P. E.
Engineering Division Manager
Henry County Water Authority