TRAFFIC IMPACT STUDY
FOR
RESIDENTIAL DEVELOPMENT AT 3716 POWDER SPRINGS ROAD,

COBB COUNTY, GEORGIA

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A & R Project # 24-188

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1.0 INTRODUCTION

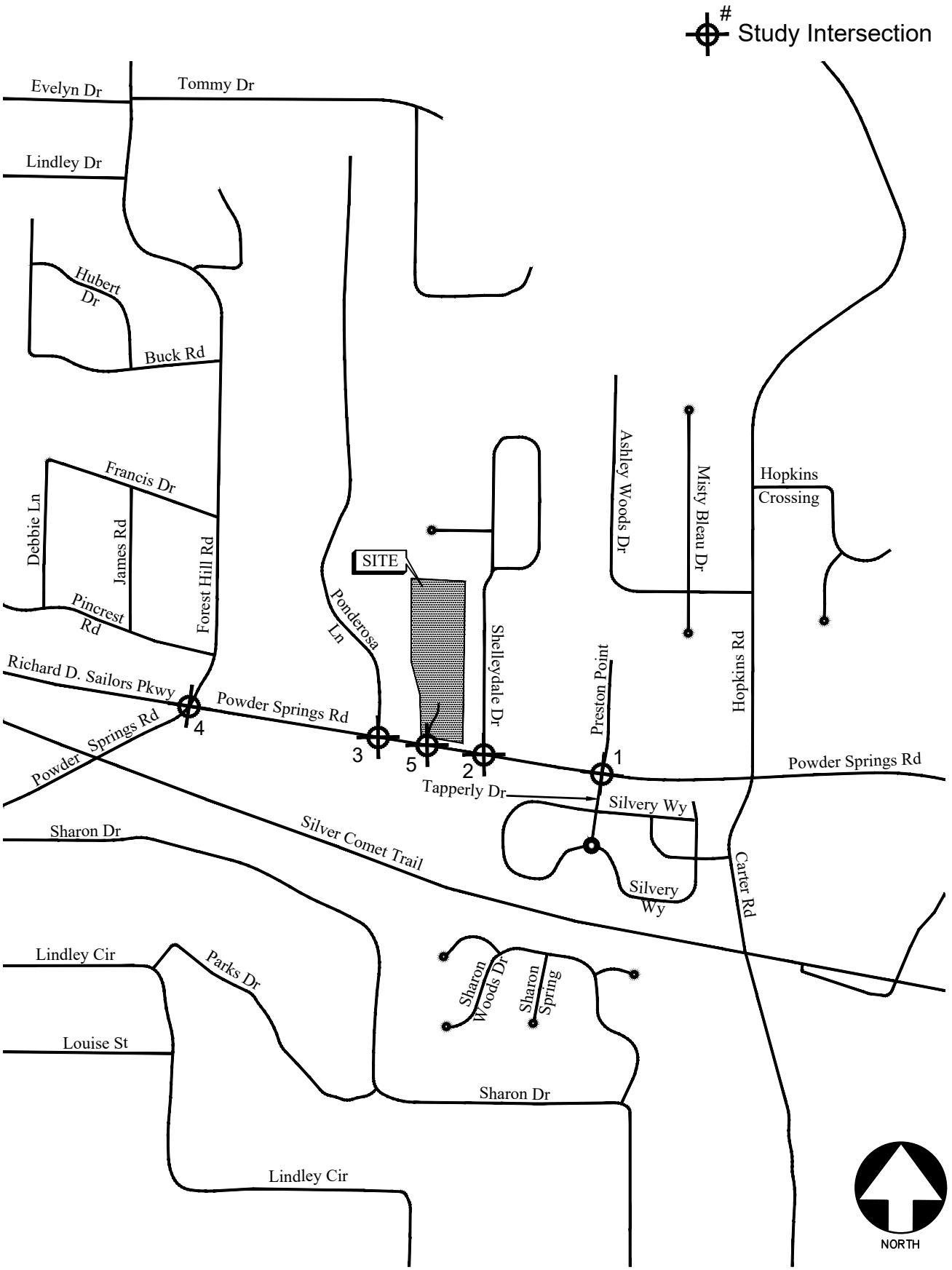
The purpose of this study is to determine the traffic impact from the proposed residential development that will be located at 3716 Powder Springs Road, in Cobb County, Georgia. The traffic analysis includes evaluation of the current operations and future conditions with the traffic generated by the development. The development will consist of 38 townhomes.

The development proposes one full access driveway on Powder Springs Road.

The AM and PM peak hours have been analyzed in this study. This study includes the evaluation of traffic operations at the intersections of:

1. Powder Springs Road at Tapperly Drive/ Preston point
2. Powder Springs Road at Shelleydale Drive
3. Powder Springs Road at Ponderosa Lane
4. Powder Springs Road/ Richard D. Sailors Parkway at Forest Hill Road

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report. The location of the development and the surrounding roadway network are shown in Figure 1.



LOCATION MAP FIGURE 1

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2.0 EXISTING FACILITIES / CONDITIONS

2.1 Roadway Facilities

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

2.1.1 Powder Springs Road

Powder Springs Road is an east-west, four-lane roadway with a two way left turns and posted speed limit of 45 mph in the vicinity of the site. It will become as southwest two-lane, undivided roadway with posted speed limit of 35 mph in the vicinity of the site at the intersection of Powder Springs Road/ Richard D. Sailors Parkway at Forest Hill Road. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 067-2221) indicate that the daily traffic volume on Powder Springs Road in 2023 was 31,100 vehicles per day east of Hopkins Road. Cobb County DOT classifies Powder Springs Road as an arterial roadway.

2.1.2 Richard D. Sailors Parkway

Richard D. Sailors Parkway is an east-west, four-lane, median divided roadway with a posted speed limit of 45 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 067-2576) indicate that the daily traffic volume on Richard D. Sailors Parkway in 2023 was 26,300 vehicles per day southeast of Old Lost Mountain Road. Cobb County DOT classifies Richard D. Sailors Parkway as an arterial roadway between New Macland Road and Forest Hill Road.

2.1.3 Ponderosa Lane

Ponderosa Lane is a north-south, two-lane, undivided roadway with a posted with a speed limit of 25 mph in the vicinity of the site. Cobb County DOT classifies Ponderosa Lane as a local roadway.

2.1.4 Shelleydale Drive

Shelleydale Drive is a north-south, two-lane, undivided roadway with the assumed speed limit of 25 mph in the vicinity of the site. Cobb County DOT classifies Shelleydale Drive as a local roadway.

2.1.5 Tapperly Drive

Tapperly Drive is a north-south, two-lane, undivided roadway with the assumed speed limit of 25 mph in the vicinity of the site. Cobb County DOT classifies Tapperly as a local roadway.

2.1.6 Preston Point

Preston Point is a north-south, two-lane, undivided roadway with the assumed speed limit of 25 mph in the vicinity of the site. Cobb County DOT classifies Preston Point as a local roadway.

3.0 STUDY METHODOLOGY

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

3.1 Unsignalized Intersections

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

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

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

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

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

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

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

3.2 Signalized Intersections

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

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

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

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

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

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

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

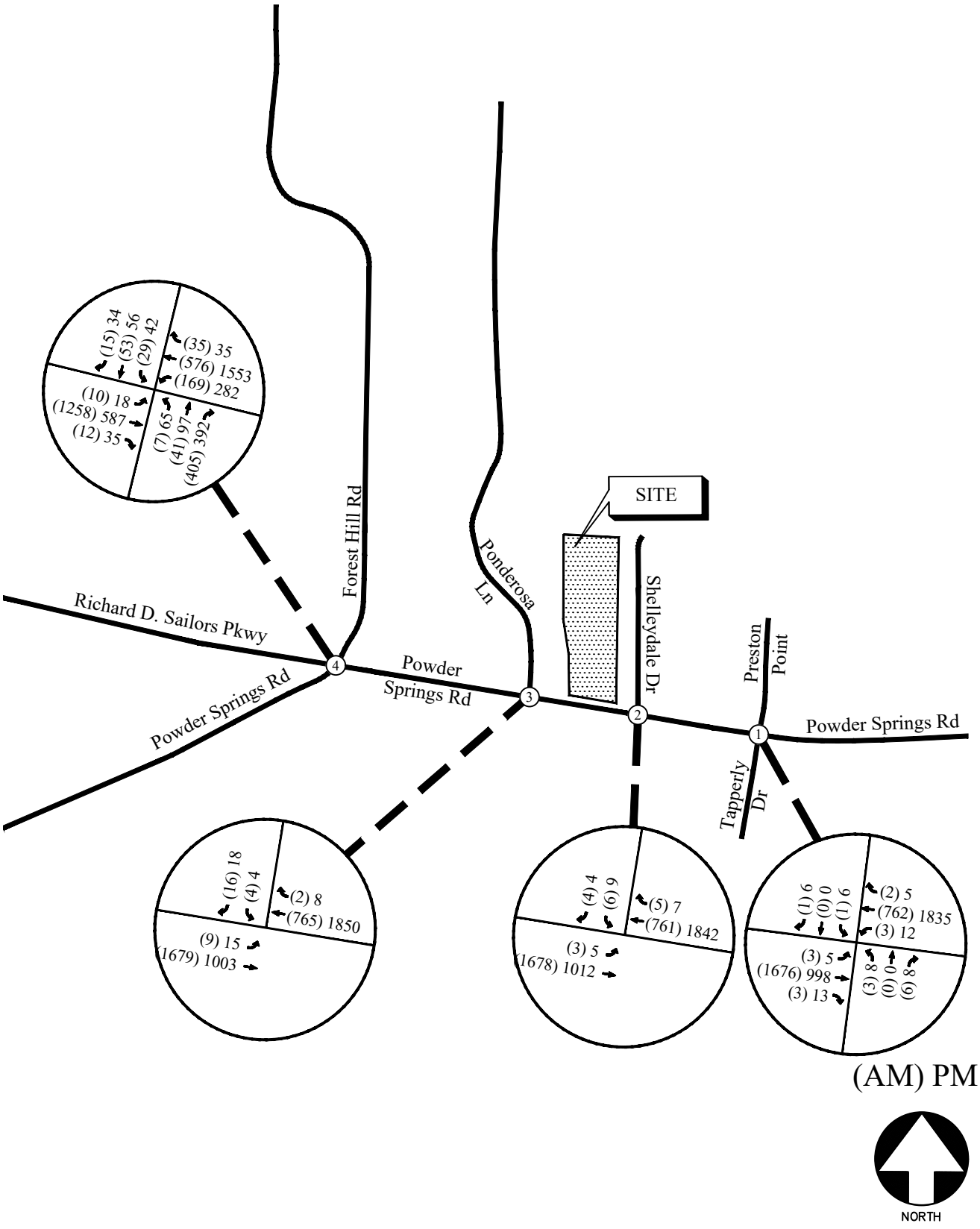
4.0 EXISTING 2024 TRAFFIC ANALYSIS

4.1 Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

1. Powder Springs Road at Tapperly Drive/ Preston point
2. Powder Springs Road at Shelleydale Drive
3. Powder Springs Road at Ponderosa Lane
4. Powder Springs Road/ Richard D. Sailors Parkway at Forest Hill Road

Turning movement counts were collected on Tuesday, October 08, 2024. All turning movement counts were recorded during the AM and PM peak hours between 7:00am to 9:00am and 4:00pm to 6:00pm, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2. The existing traffic control and lane geometry for the intersections are shown in Figure 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES FIGURE 2

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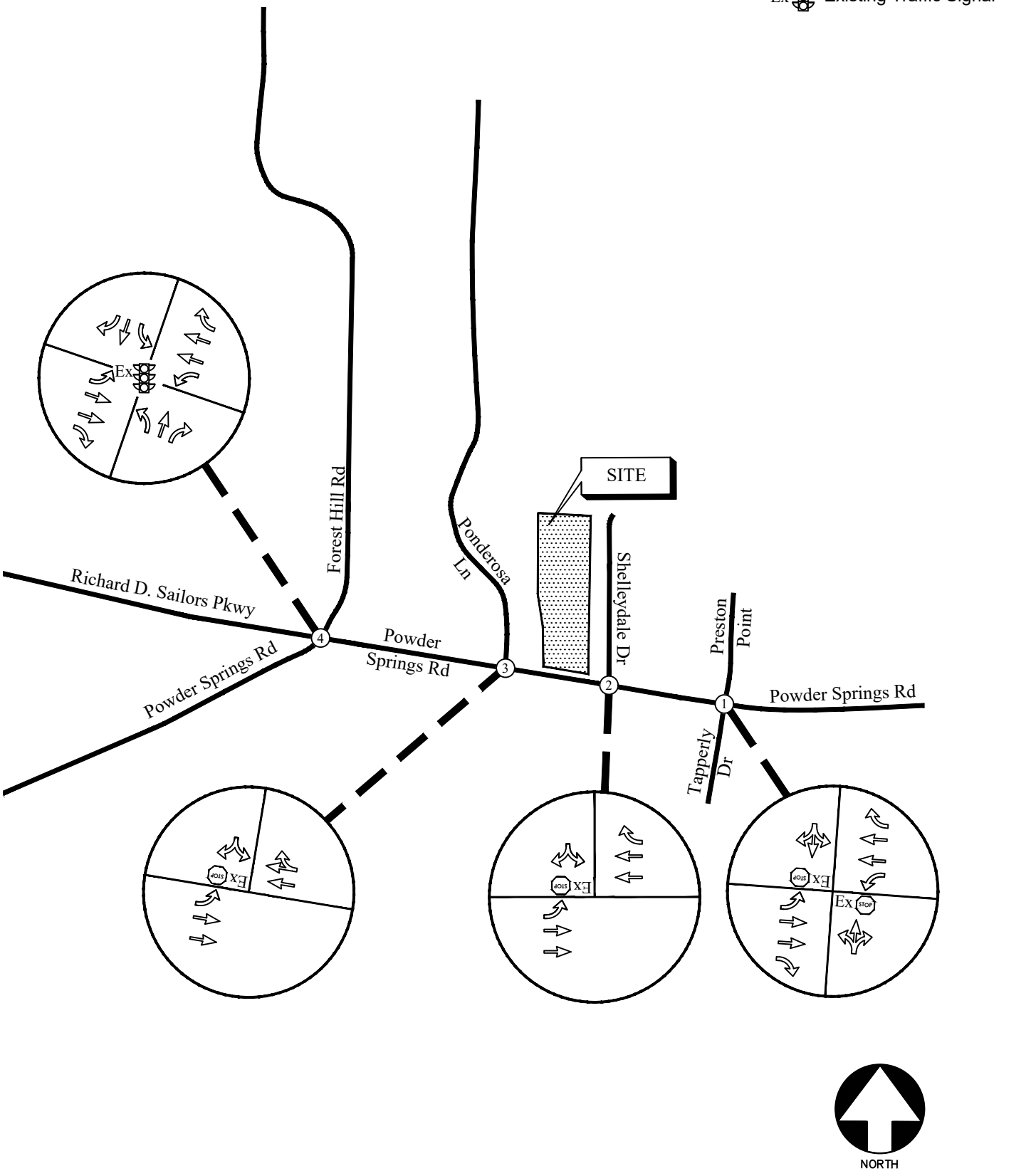

EXISTING TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 3

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4.2 Existing Traffic Operations

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

TABLE 3 – EXISTING INTERSECTION OPERATIONS

	Intersection	Traffic Control	LOS (Delay)	
			AM Peak Hour	PM Peak Hour
1	**Powder Springs Rd @ Tapperly Drive/ Preston Point** -Eastbound Left -Westbound Left -Northbound Approach (Tapperly Drive) -Southbound Approach (Preston Point)	Stop Controlled on NB and SB Approaches	 A (9.4) C (15.4) F (68.5) E (39.6)	 C (16.6) B (10.5) F (79.5) F (191.3)
2	**Powder Springs Road @ Shelleydale Drive** -Eastbound Left -Southbound Approach	Stop Controlled on SB Approach	 A (9.4) C (18.1)	 C (16.7) E (42.6)
3	**Powder Springs Road @ Ponderosa Lane** -Eastbound Left -Southbound Approach	Stop Controlled on SB Approach	 A (9.5) B (13.7)	 C (17.2) D (26.9)
4	**Powder Springs Road/ Richard D. Sailors Parkway @ Forest Hill Road** -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach (Forest Hill Road)	Signalized	**D (39.4)** C (32.1) C (33.1) E (61.9) E (77.1)	**D (36.9)** C (31.1) D (33.4) D (45.1) E (77.3)

The results of the existing traffic operations analysis indicate that the signalized study intersection is operating at an overall level of service "D" or better in both the AM and PM peak hours. The southbound approach of Forest Hill Road (intersection # 4) is operating at LOS "E" in both peak hours. The stop-controlled northbound and southbound approaches of Tapperly Drive and Preston Point (Intersection # 2) are operating at level-of- "E" and "F" in both peak hours. It is not unusual for stop-controlled side-streets along arterial roadways to have elevated delays during peak periods as delays caused by side-streets wait times to turn left onto the mainline.

5.0 PROPOSED DEVELOPMENT

The development that will be located at 3716 Powder Springs Road, in Cobb County, Georgia. The development will consist of 38 townhomes.

The development proposes one full access driveway on Powder Springs Road.

A site plan is shown in Figure 4.

Rezoning Plat

3716/3720 Powder Springs Road

City of Powder Springs, Georgia Land Lot 833 and 870, 19th District, 20th Section

prepared for:

Mr. Mike Nelson
Mike Nelson Homes
P.O. Box 7027
Marietta, Georgia 30065

DGM
LAND PLANNING CONSULTANTS, INC.

1635 OLD HWY 41
SUITE 112–314
KENNESAW, GA 30152

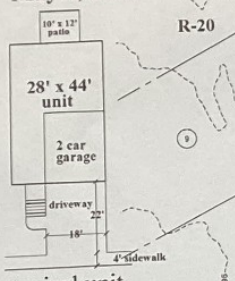
770–514–9006
DGMLPC.COM

north

0 25 50 100 200

Scale: 1" = 50'

May 3, 2024



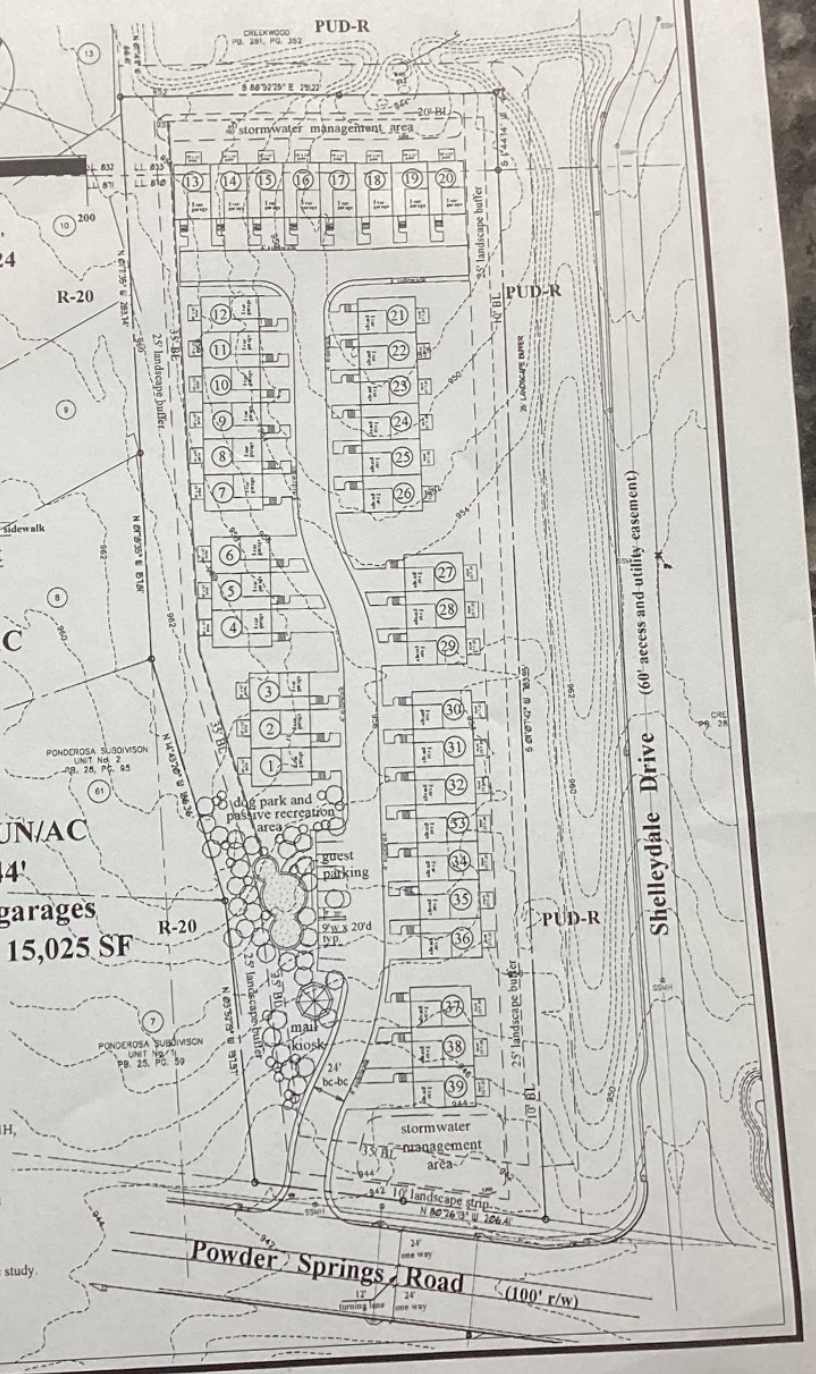
typical unit
(not to scale)

Site Data

Total Site Area: 4.90 AC
Present Zoning: R-20
Proposed Zoning: MDR

Townhome Community

Total Units Shown: 38
Density: 7.75 UN/AC
Unit Size: 28'x 44'
w/2 car garages
Passive Recreation Area: 15,025 SF



General Notes:

1. Boundary and topography from Taso and Associates, dated January 19, 2024
2. According to Flood Insurance Rate Map (FIRM) #13067C0181H, March 4, 2013, no portion of this site contains floodplain.
3. No cemeteries are known to exist on site.
4. No streams and/or wetlands are known to exist on site.
5. No archeological or architectural landmarks are known to exist on site.
6. No utility easements are known to exist on site.
7. Stormwater management and water quality structures are conceptual in size and will be revised based on hydrologic study.

5.1 Trip Generation

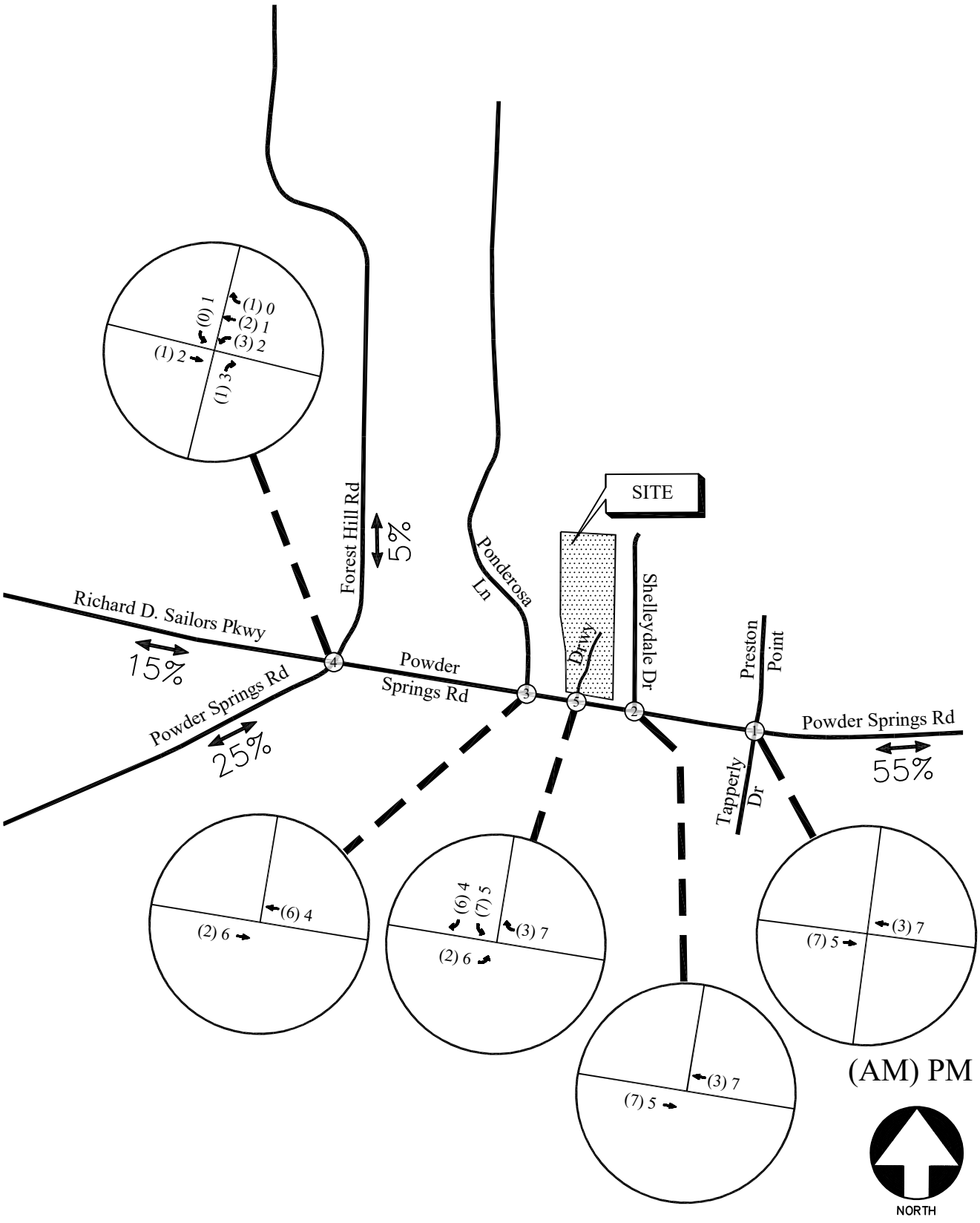
Trip generation estimates for the project were based on the rates and equations published in the 11th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE Land Uses: *215 – Single-Family Attached Housing.* The calculated total trip generation for the proposed development is shown in Table 4.

TABLE 4 – TRIP GENERATION

Land Use	Size	AM Peak Hour			PM Peak Hour			24 Hour
		Enter	Exit	Total	Enter	Exit	Total	Two-Way
ITE 215 – Single-Family Attached Housing	38 units	5	13	18	13	9	22	274

5.2 Trip Distribution

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



TRIP DISTRIBUTION AND NEW SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 5

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6.0 FUTURE 2026 TRAFFIC ANALYSIS

The future 2026 traffic operations are analyzed for the "Build" and "No-Build" conditions.

6.1 Future "No-Build" Conditions

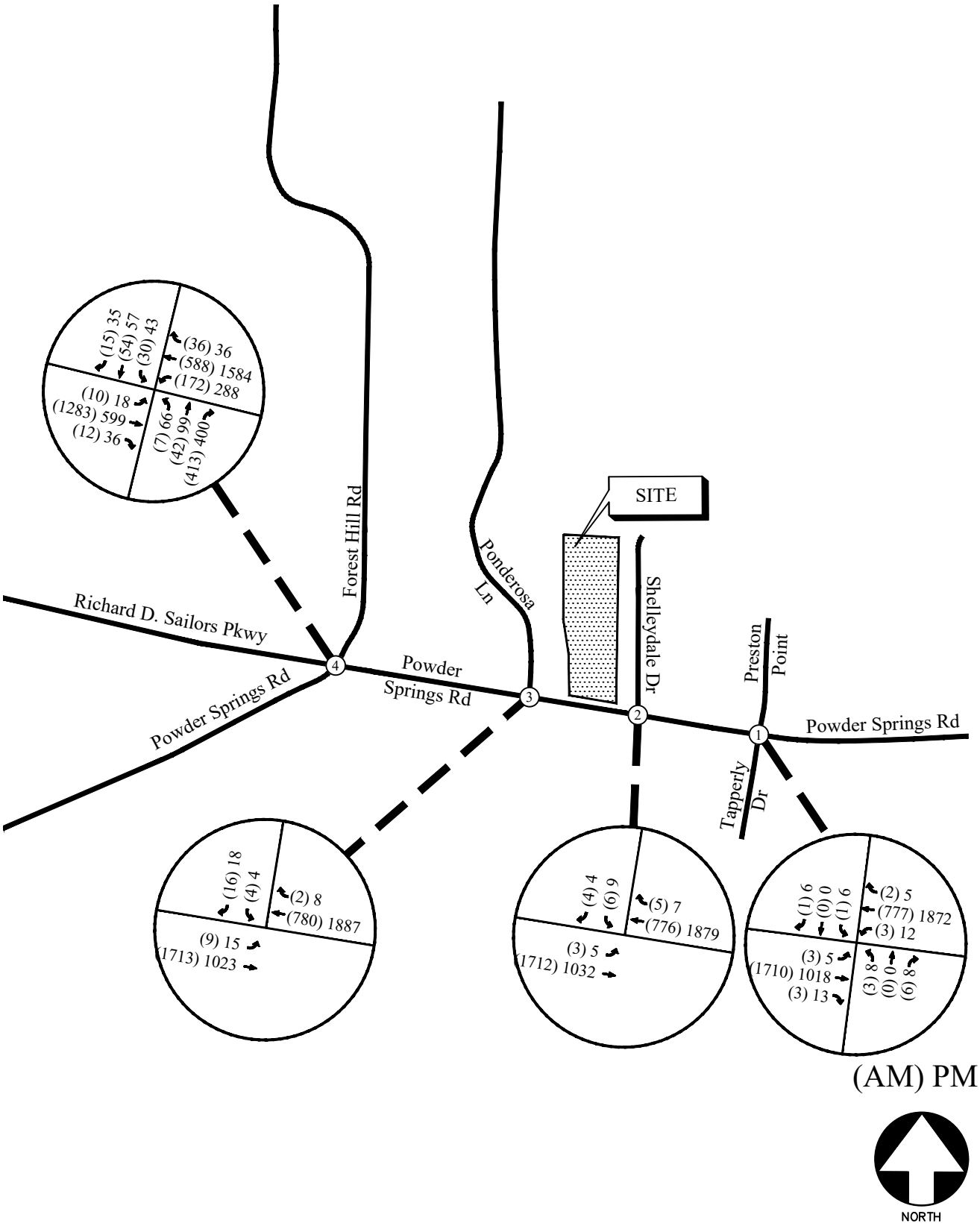
The "No-Build" (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future "No-Build" volumes consist of the existing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

6.1.1 Annual Traffic Growth

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 (between 2018-2019 & 2021-2023) years revealed growth of approximately 1% in the area. This growth factor was applied to the existing traffic volumes between collector and arterial roadways to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting future "No-Build" volumes on the roadway are shown in Figure 6.

6.2 Future "Build" Conditions

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



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

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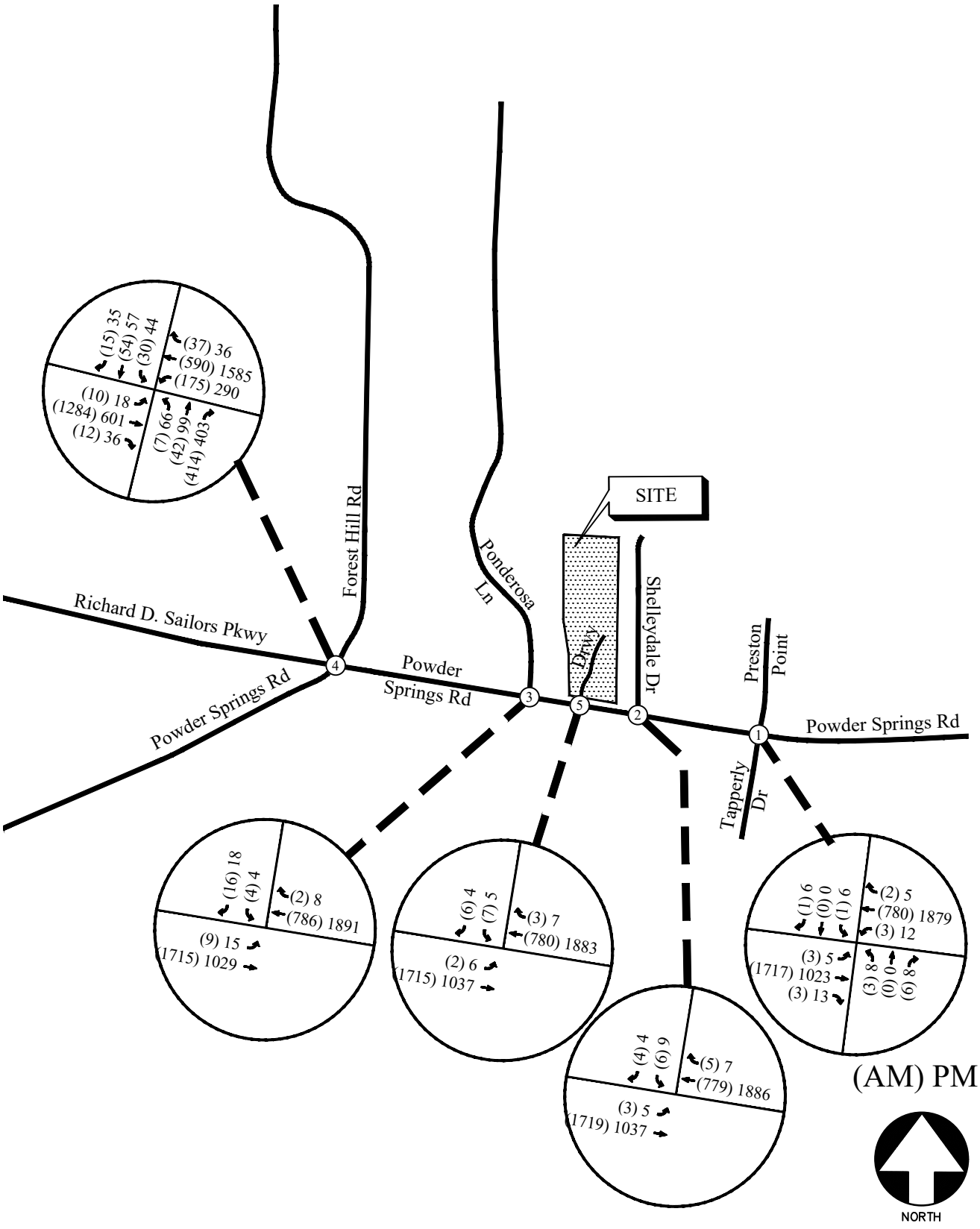


FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 7

A&R Engineering Inc.

6.3 Auxiliary Lane Analysis

Included below are analyses for left turn lanes and right turn lanes for all site driveways (per Cobb County Standards). The analyses below are based off the trip distribution included in Section 5.2. According to the trip distribution, the overall 24-hour two-way volume for traffic entering and exiting the site are 274 vehicles.

6.3.1 Left Turn Lane Analysis

Per Cobb County Development Standards, (402.10), a left turn lane may require for residential and commercial developments on two-lane thoroughfare roads. Since Powder Springs Road is among the roadways classified in the county's major thoroughfare plan, a left turn lane is required. There is an existing left turn lane at site driveway. Therefore, left turn lane analysis was not prepared.

6.3.2 Deceleration Turn Lane Analysis

Per Cobb County Development Standards, (402.9), right turn lanes are required on any roadway that is included in the county's major thoroughfare plan network. Since Powder Springs Road is among the roadways classified in the county's major thoroughfare plan a right turn lane is required. Therefore, a deceleration lane is warranted at the site driveway.

6.4 Future Traffic Operations

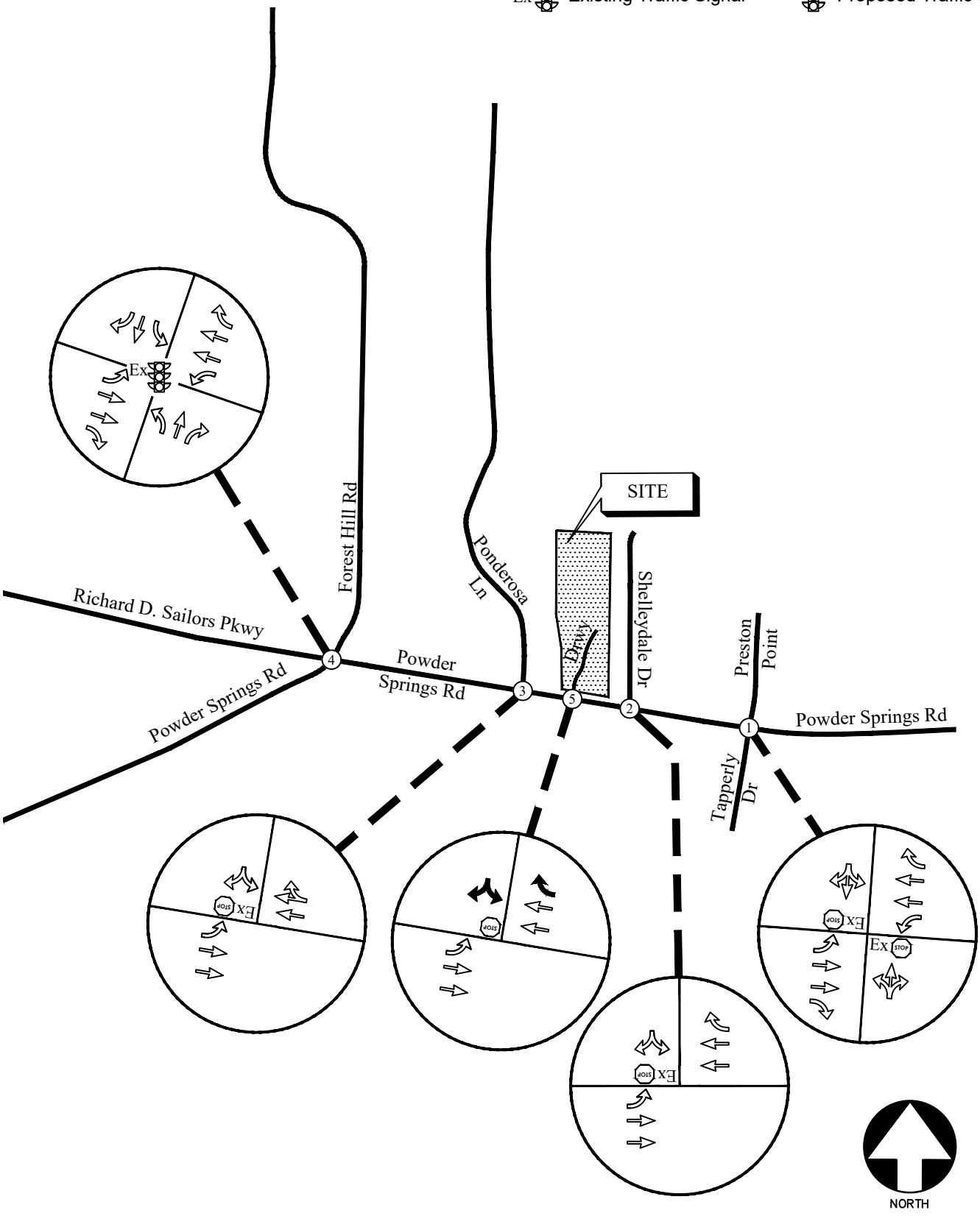
The future "No-Build" and "Build" traffic operations were analysed using the volumes in Figures 7 and 8, respectively. The results of the future traffic operations analysis are shown below in Table 5. Recommendations on traffic control and lane geometry are shown in Figure 9.

TABLE 5 – FUTURE INTERSECTION OPERATIONS

	Intersection	LOS (Delay)			
		NO BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
1	**Powder Springs Rd @ Tapperly Dr/Preston Pt.**				
	-Eastbound Left	A (9.5)	C (17.0)	A (9.5)	C (17.0)
	-Westbound Left	C (15.8)	B (10.6)	C (15.8)	B (10.6)
	-Northbound Approach (Tapperly Drive)	F (73.3)	F (86.1)	F (74.6)	F (89.8)
	-Southbound Approach (Preston Point	E (41.4)	F (210.3)	E (42.2)	F (221.1)
2	**Powder Springs Road @ Shelleydale Drive**				
	-Eastbound Left	A (9.5)	C (17.1)	A (9.5)	C (17.2)
	-Southbound Approach	C (18.4)	E (44.6)	C (18.5)	E (45.1)
3	**Powder Springs Road @ Ponderosa Lane**				
	-Eastbound Left	A (9.5)	C (17.6)	A (9.6)	C (17.7)
	-Southbound Approach	B (13.9)	D (27.8)	B (13.9)	D (27.8)
4	**Powder Springs Road/ Richard D. Sailors Parkway @ Forest Hill Road**	**D (40.6)**	**D (37.4)**	**D (40.6)**	**D (38.3)**
	-Eastbound Approach	C (33.7)	C (31.7)	C (35.2)	C (33.2)
	-Westbound Approach	D (35.4)	C (34.0)	C (34.9)	D (35.7)
	-Northbound Approach	E (60.9)	D (45.1)	E (57.3)	D (43.0)
	-Southbound Approach	E (77.0)	E (77.3)	E (77.0)	E (77.4)
5	**Powder Springs Road @ Site Driveway**				
	-Eastbound Left	-	-	A (9.6)	C (18.7)
	-Southbound Approach			C (18.4)	E (44.0)

The results of the future "No-Build" traffic operations analysis indicate that the signalized study intersection will continue to operate at an overall level of service "D" or better in both the AM and PM peak hours. The southbound approach of Forest Hill Road (intersection # 4) will continue to operate at LOS "E" in both peak hours. The stop-controlled northbound and southbound approaches of Tapperly Drive and Preston Point (Intersection # 2) will also continue to operate at level-of- "E" and "F" in both peak hours with marginally increased delays. Left-turn volumes at these stop-controlled side streets do not meet thresholds for warranting a traffic signal and no other improvements will aid in reducing the delays.

The results of the future "Build" conditions traffic analysis indicate that all study intersections will continue to operate at similar levels-of-service as in "No-Build" conditions. The impact of the proposed site's traffic on the traffic operations in the study network is minimal.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 8

A&R Engineering Inc.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed residential development that will be located at 3716 Powder Springs Road, in Cobb County, Georgia. The traffic analysis includes evaluation of the current operations and future conditions with the traffic generated by the development. The development will consist of 38 townhomes. The development proposes one full access driveway on Powder Springs Road

Existing and future operations after completion of the project were analyzed at the intersections of:

1. Powder Springs Road at Tapperly Drive/ Preston point
2. Powder Springs Road at Shelleydale Drive
3. Powder Springs Road at Ponderosa Lane
4. Powder Springs Road/ Richard D. Sailors Parkway at Forest Hill Road
5. Powder Springs Road at Site Driveway

The analysis included the evaluation of future operations for "No-Build" and "Build" conditions, with the differences between "No-Build" and "Build" accounting for an increase in traffic due to the proposed development.

The results of the future "No-Build" traffic operations analysis indicate that the signalized study intersection will continue to operate at an overall level of service "D" or better in both the AM and PM peak hours. The southbound approach of Forest Hill Road (intersection # 4) will continue to operate at LOS "E" in both peak hours. The stop-controlled northbound and southbound approaches of Tapperly Drive and Preston Point (Intersection # 2) will also continue to operate at level-of- "E" and "F" in both peak hours with marginally increased delays. Left-turn volumes at these stop-controlled side streets do not meet thresholds for warranting a traffic signal and no other improvements will aid in reducing the delays.

The results of the future "Build" conditions traffic analysis indicate that all study intersections will continue to operate at similar levels-of-service as in "No-Build" conditions. The impact of the proposed site's traffic on the traffic operations in the study network is minimal.

7.1 Recommendation for Site Access Configuration

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

- Site Driveway: Full access driveway on Powder Springs Road
    - One entering and one exiting lanes.
    - Stop-sign controlled on the driveway approach with Powder Springs Road remaining free flow.
    - Right-turn turn lane for entering traffic.
    - Provide adequate sight distance per AASHTO standards.

Appendix

Existing Intersection Traffic Counts .....
Linear Regression of Daily Traffic.....
Existing Intersection Analysis.....
Future “No-Build” Intersection Analysis.....
Future “Build” Intersection Analysis.....
Traffic Volume Worksheets .....

EXISTING INTERSECTION TRAFFIC COUNTS

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Richard D Sailors Pkwy @ Powder Springs Rd / Forest Hill Rd
7-9 am | 4-6 pm

File Name : 20240381
Site Code : 20240381
Start Date : 10-08-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Powder Springs Rd Northbound				Forest Hill Rd Southbound				Richard D Sailors Pkwy Eastbound				Richard D Sailors Pkwy 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	2	6	109	117	13	5	1	19	0	333	1	334	34	97	4	135	605
07:15 AM	1	8	111	120	6	8	2	16	2	347	1	350	48	131	7	186	672
07:30 AM	1	6	101	108	9	18	5	32	3	317	1	321	43	154	7	204	665
07:45 AM	2	11	87	100	7	16	5	28	4	276	5	285	37	142	12	191	604
Total	6	31	408	445	35	47	13	95	9	1273	8	1290	162	524	30	716	2546
08:00 AM	3	16	106	125	7	11	3	21	1	318	5	324	41	149	9	199	669
08:15 AM	4	9	118	131	11	11	5	27	3	348	1	352	32	118	6	156	666
08:30 AM	3	3	121	127	14	11	2	27	2	311	0	313	43	121	11	175	642
08:45 AM	5	7	112	124	9	10	5	24	4	254	2	260	35	113	9	157	565
Total	15	35	457	507	41	43	15	99	10	1231	8	1249	151	501	35	687	2542
*** BREAK ***																	
04:00 PM	8	12	84	104	5	9	8	22	11	148	2	161	87	342	18	447	734
04:15 PM	11	19	89	119	15	22	8	45	11	151	11	173	69	348	12	429	766
04:30 PM	12	27	87	126	15	18	7	40	8	129	9	146	78	382	15	475	787
04:45 PM	15	28	93	136	10	12	6	28	3	151	7	161	82	376	9	467	792
Total	46	86	353	485	45	61	29	135	33	579	29	641	316	1448	54	1818	3079
05:00 PM	16	23	104	143	8	16	9	33	10	149	9	168	80	384	6	470	814
05:15 PM	21	21	93	135	11	17	10	38	1	129	8	138	69	394	11	474	785
05:30 PM	13	25	102	140	13	11	9	33	4	158	11	173	51	399	9	459	805
05:45 PM	9	11	98	118	9	8	6	23	3	162	7	172	47	396	8	451	764
Total	59	80	397	536	41	52	34	127	18	598	35	651	247	1573	34	1854	3168
Grand Total	126	232	1615	1973	162	203	91	456	70	3681	80	3831	876	4046	153	5075	11335
Apprch %	6.4	11.8	81.9		35.5	44.5	20		1.8	96.1	2.1		17.3	79.7	3		
Total %	1.1	2	14.2	17.4	1.4	1.8	0.8	4	0.6	32.5	0.7	33.8	7.7	35.7	1.3	44.8	

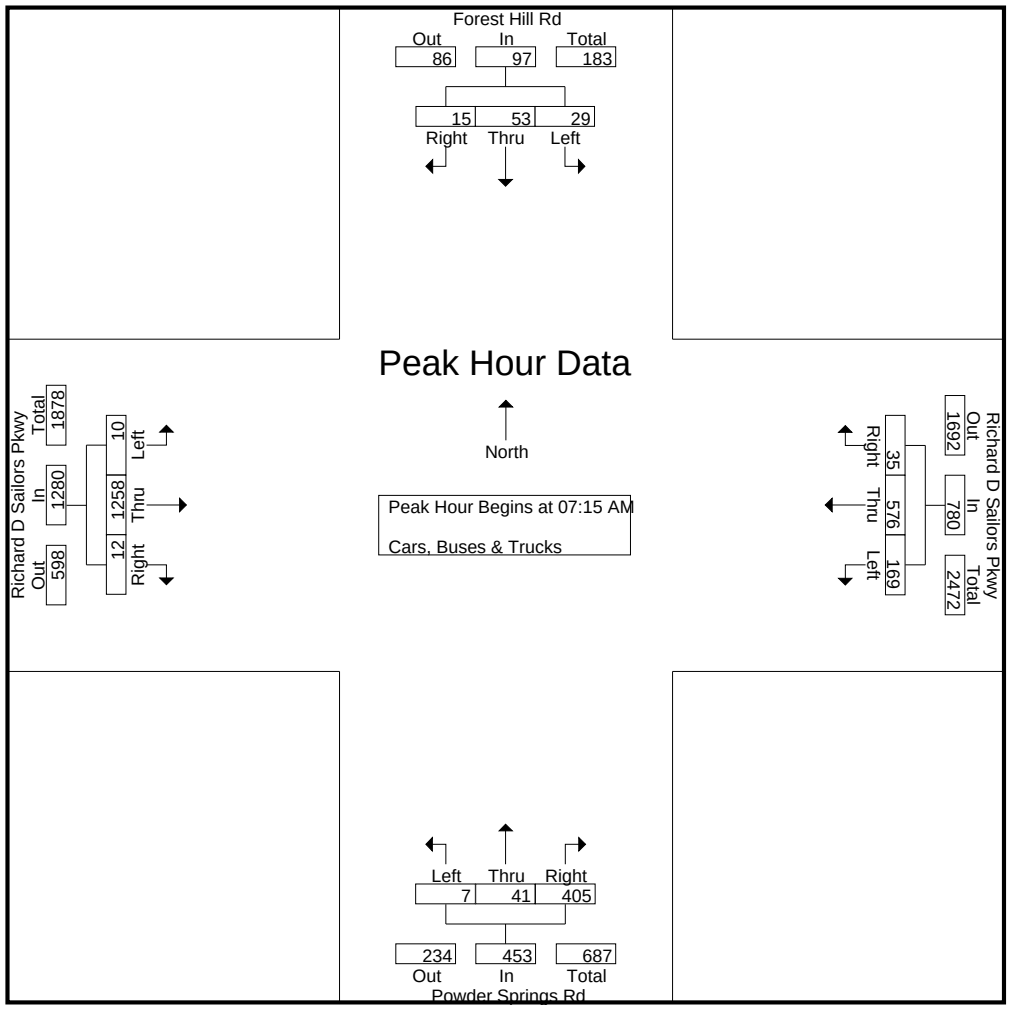
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Richard D Sailors Pkwy @ Powder Springs Rd / Forest Hill Rd
7-9 am | 4-6 pm

File Name : 20240381
Site Code : 20240381
Start Date : 10-08-2024

	Powder Springs Rd Northbound				Forest Hill Rd Southbound				Richard D Sailors Pkwy Eastbound				Richard D Sailors Pkwy 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	1	8	**111**	120	6	8	2	16	2	**347**	1	**350**	**48**	131	7	186	**672**
07:30 AM	1	6	101	108	**9**	**18**	**5**	**32**	3	317	1	321	43	**154**	7	**204**	665
07:45 AM	2	11	87	100	7	16	5	28	**4**	276	**5**	285	37	142	**12**	191	604
08:00 AM	**3**	**16**	106	**125**	7	11	3	21	1	318	5	324	41	149	9	199	669
Total Volume	7	41	405	453	29	53	15	97	10	1258	12	1280	169	576	35	780	2610
% App. Total	1.5	9.1	89.4		29.9	54.6	15.5		0.8	98.3	0.9		21.7	73.8	4.5		
PHF	.583	.641	.912	.906	.806	.736	.750	.758	.625	.906	.600	.914	.880	.935	.729	.956	.971



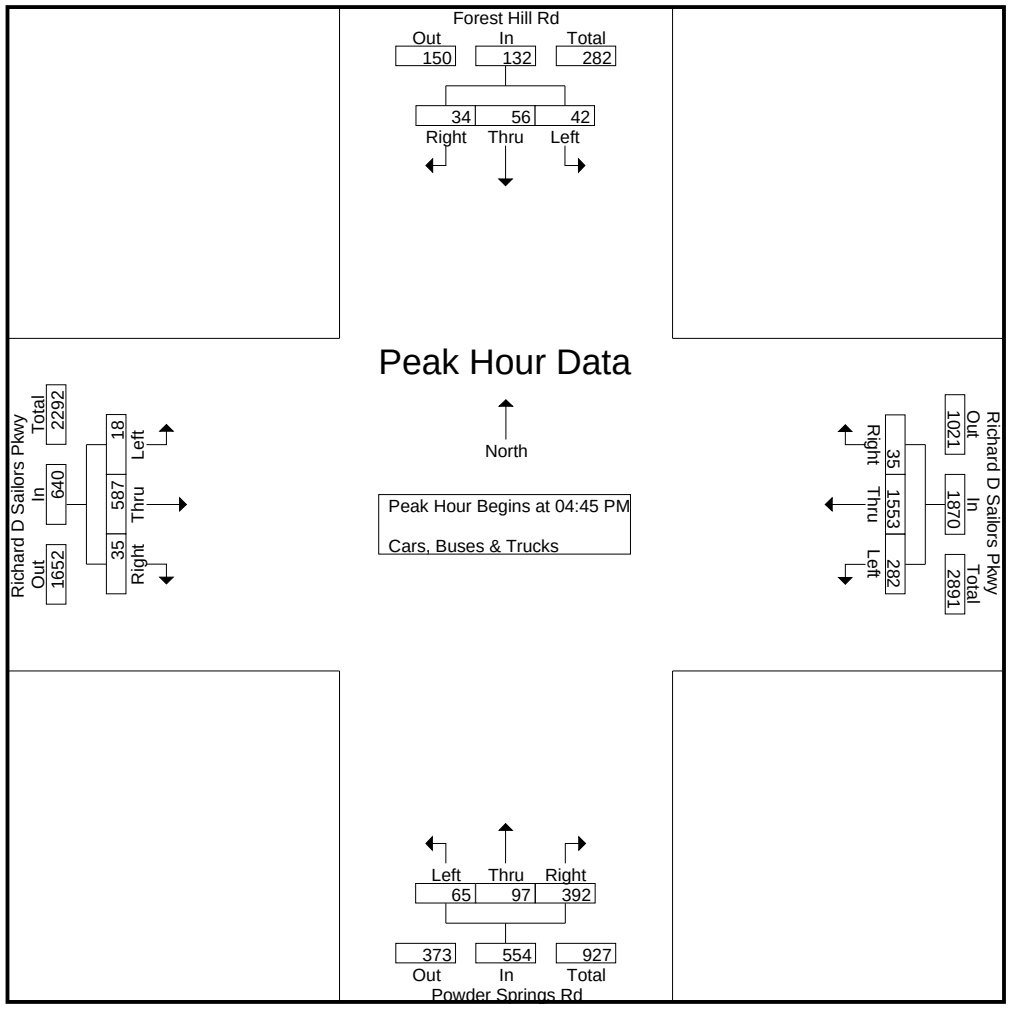
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Richard D Sailors Pkwy @ Powder Springs Rd / Forest Hill Rd
7-9 am | 4-6 pm

File Name : 20240381
Site Code : 20240381
Start Date : 10-08-2024

	Powder Springs Rd Northbound				Forest Hill Rd Southbound				Richard D Sailors Pkwy Eastbound				Richard D Sailors Pkwy 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 04:45 PM																	
04:45 PM	15	**28**	93	136	10	12	6	28	3	151	7	161	**82**	376	9	467	792
05:00 PM	16	23	**104**	**143**	8	16	9	33	**10**	149	9	168	80	384	6	470	**814**
05:15 PM	**21**	21	93	135	11	**17**	**10**	**38**	1	129	8	138	69	394	**11**	**474**	785
05:30 PM	13	25	102	140	**13**	11	9	33	4	**158**	**11**	**173**	51	**399**	9	459	805
Total Volume	65	97	392	554	42	56	34	132	18	587	35	640	282	1553	35	1870	3196
% App. Total	11.7	17.5	70.8		31.8	42.4	25.8		2.8	91.7	5.5		15.1	83	1.9		
PHF	.774	.866	.942	.969	.808	.824	.850	.868	.450	.929	.795	.925	.860	.973	.795	.986	.982



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Powder Springs Rd @ Ponderosa Ln
7-9 am | 4-6 pm

File Name : 20240382
Site Code : 20240382
Start Date : 10-08-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Northbound				Ponderosa Ln Southbound				Powder Springs Rd Eastbound				Powder Springs Rd 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	0	0	5	0	3	8	1	452	0	453	0	131	1	132	593
07:15 AM	0	0	0	0	0	0	5	5	1	460	0	461	0	183	0	183	649
07:30 AM	0	0	0	0	1	0	6	7	1	424	0	425	0	199	1	200	632
07:45 AM	0	0	0	0	2	0	4	6	3	367	0	370	0	187	1	188	564
Total	0	0	0	0	8	0	18	26	6	1703	0	1709	0	700	3	703	2438
08:00 AM	0	0	0	0	1	0	1	2	4	428	0	432	0	196	0	196	630
08:15 AM	0	0	0	0	1	0	1	2	1	477	0	478	0	155	0	155	635
08:30 AM	0	0	0	0	1	0	1	2	1	444	0	445	0	173	2	175	622
08:45 AM	0	0	0	0	3	0	0	3	0	376	0	376	0	156	0	156	535
Total	0	0	0	0	6	0	3	9	6	1725	0	1731	0	680	2	682	2422
*** BREAK ***																	
04:00 PM	0	0	0	0	3	0	1	4	4	232	0	236	0	446	1	447	687
04:15 PM	0	0	0	0	0	0	4	4	5	248	0	253	0	424	0	424	681
04:30 PM	0	0	0	0	0	0	1	1	5	227	0	232	0	475	2	477	710
04:45 PM	0	0	0	0	0	0	6	6	3	251	0	254	0	463	2	465	725
Total	0	0	0	0	3	0	12	15	17	958	0	975	0	1808	5	1813	2803
05:00 PM	0	0	0	0	3	0	2	5	2	257	0	259	0	467	1	468	732
05:15 PM	0	0	0	0	0	0	4	4	8	222	0	230	0	469	2	471	705
05:30 PM	0	0	0	0	1	0	6	7	2	273	0	275	0	451	3	454	736
05:45 PM	0	0	0	0	1	0	2	3	3	265	0	268	0	449	3	452	723
Total	0	0	0	0	5	0	14	19	15	1017	0	1032	0	1836	9	1845	2896
Grand Total	0	0	0	0	22	0	47	69	44	5403	0	5447	0	5024	19	5043	10559
Apprch %	0	0	0		31.9	0	68.1		0.8	99.2	0		0	99.6	0.4		
Total %	0	0	0	0	0.2	0	0.4	0.7	0.4	51.2	0	51.6	0	47.6	0.2	47.8	

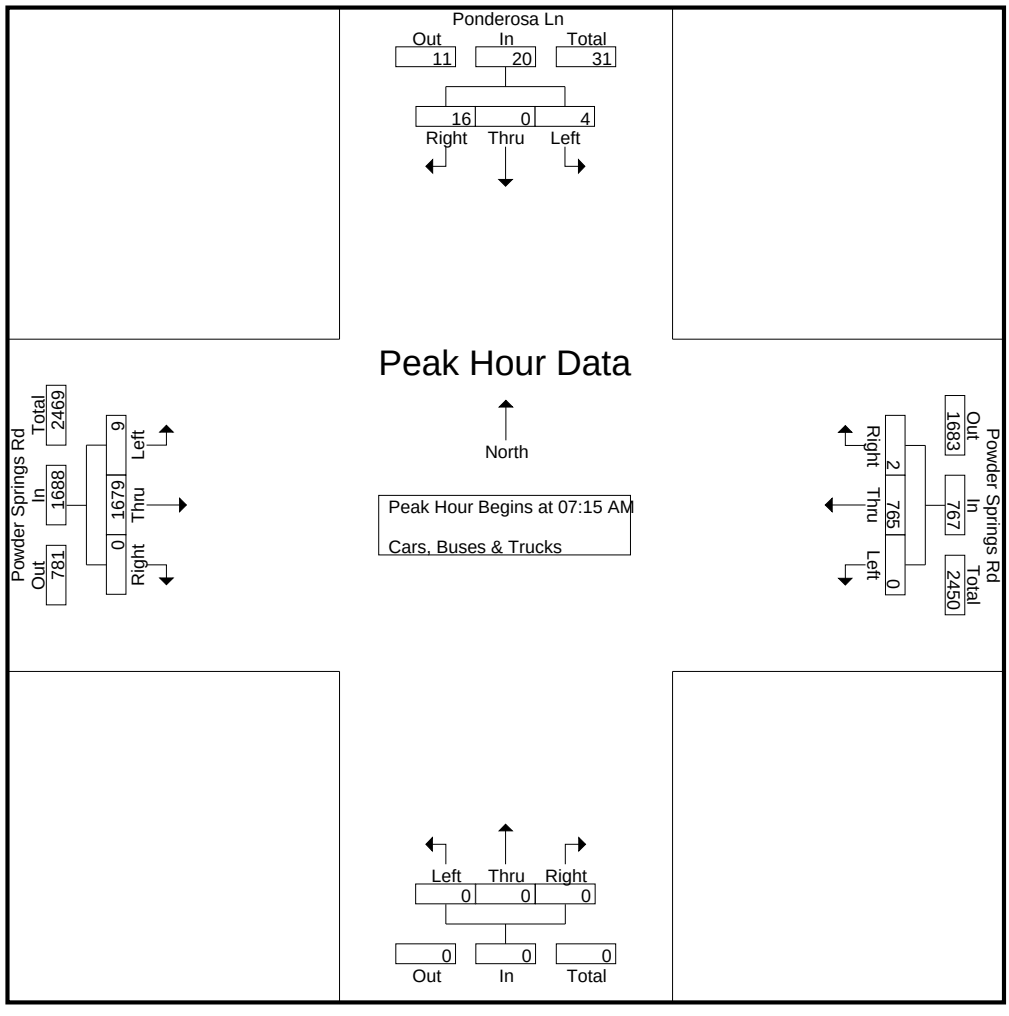
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Powder Springs Rd @ Ponderosa Ln
7-9 am | 4-6 pm

File Name : 20240382
Site Code : 20240382
Start Date : 10-08-2024
Page No : 2

	Northbound				Ponderosa Ln Southbound				Powder Springs Rd Eastbound				Powder Springs Rd 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	0	0	0	0	5	5	1	**460**	0	**461**	0	183	0	183	**649**
07:30 AM	0	0	0	0	1	0	**6**	**7**	1	424	0	425	0	**199**	**1**	**200**	632
07:45 AM	0	0	0	0	**2**	0	4	6	3	367	0	370	0	187	1	188	564
08:00 AM	0	0	0	0	1	0	1	2	**4**	428	0	432	0	196	0	196	630
Total Volume	0	0	0	0	4	0	16	20	9	1679	0	1688	0	765	2	767	2475
% App. Total	0	0	0		20	0	80		0.5	99.5	0		0	99.7	0.3		
PHF	.000	.000	.000	.000	.500	.000	.667	.714	.563	.913	.000	.915	.000	.961	.500	.959	.953



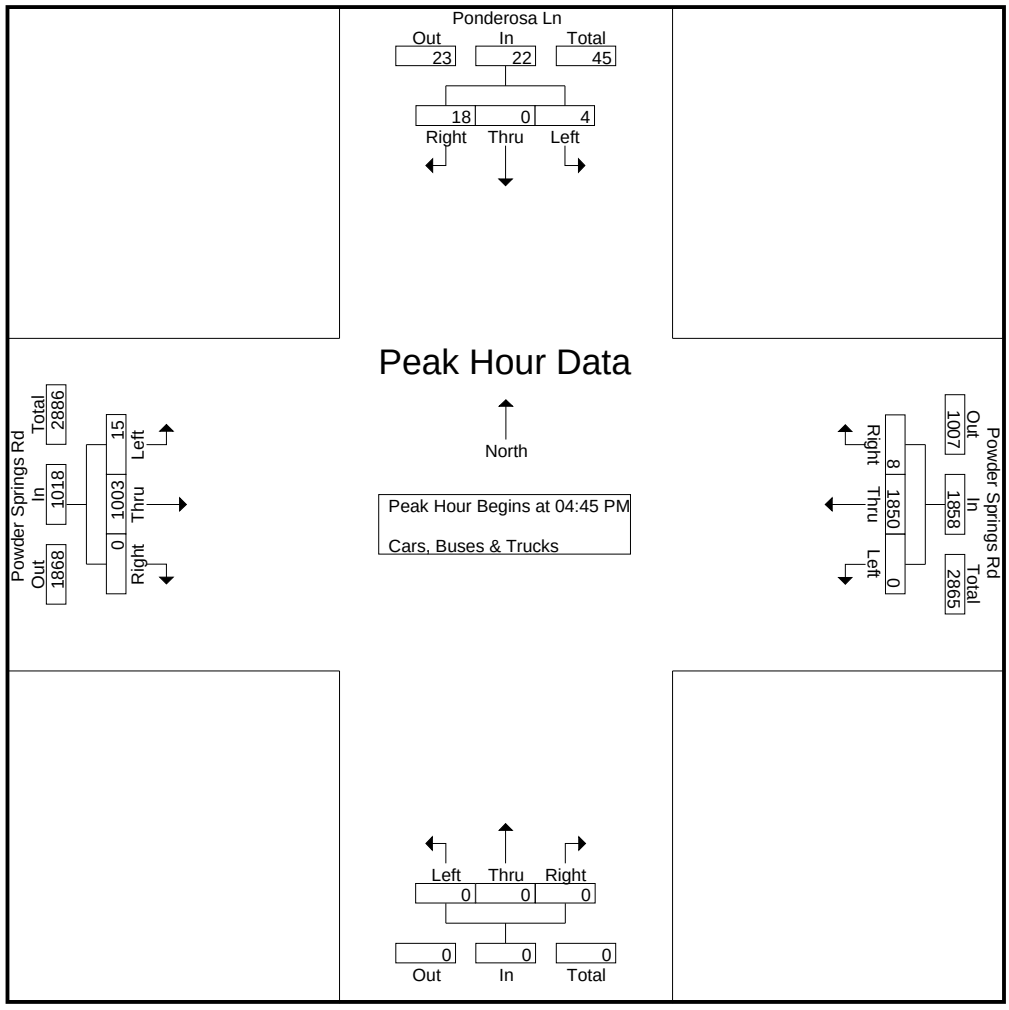
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Powder Springs Rd @ Ponderosa Ln
7-9 am | 4-6 pm

File Name : 20240382
Site Code : 20240382
Start Date : 10-08-2024
Page No : 3

	Northbound				Ponderosa Ln Southbound				Powder Springs Rd Eastbound				Powder Springs Rd 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 04:45 PM																	
04:45 PM	0	0	0	0	0	0	**6**	6	3	251	0	254	0	463	2	465	725
05:00 PM	0	0	0	0	**3**	0	2	5	2	257	0	259	0	467	1	468	732
05:15 PM	0	0	0	0	0	0	4	4	**8**	222	0	230	0	**469**	2	**471**	705
05:30 PM	0	0	0	0	1	0	6	**7**	2	**273**	0	**275**	0	451	**3**	454	**736**
Total Volume	0	0	0	0	4	0	18	22	15	1003	0	1018	0	1850	8	1858	2898
% App. Total	0	0	0		18.2	0	81.8		1.5	98.5	0		0	99.6	0.4		
PHF	.000	.000	.000	.000	.333	.000	.750	.786	.469	.918	.000	.925	.000	.986	.667	.986	.984



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Powder Springs Road @ Shelleydale Drive
7-9 am | 4-6 pm

File Name : 20240383
Site Code : 20240383
Start Date : 10-08-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Northbound				Shelleydale Drive Southbound				Powder Springs Road Eastbound				Powder Springs 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	0	0	3	0	2	5	0	458	0	458	0	130	2	132	595
07:15 AM	0	0	0	0	2	0	1	3	0	461	0	461	0	182	2	184	648
07:30 AM	0	0	0	0	2	0	1	3	1	422	0	423	0	199	2	201	627
07:45 AM	0	0	0	0	2	0	1	3	1	366	0	367	0	184	1	185	555
Total	0	0	0	0	9	0	5	14	2	1707	0	1709	0	695	7	702	2425
08:00 AM	0	0	0	0	0	0	1	1	1	429	0	430	0	196	0	196	627
08:15 AM	0	0	0	0	4	0	1	5	2	474	0	476	0	153	4	157	638
08:30 AM	0	0	0	0	3	0	3	6	4	438	0	442	0	170	2	172	620
08:45 AM	0	0	0	0	2	0	0	2	0	379	0	379	0	153	1	154	535
Total	0	0	0	0	9	0	5	14	7	1720	0	1727	0	672	7	679	2420
*** BREAK ***																	
04:00 PM	0	0	0	0	0	0	4	4	1	232	0	233	0	441	2	443	680
04:15 PM	0	0	0	0	1	0	1	2	4	242	0	246	0	423	2	425	673
04:30 PM	0	0	0	0	5	0	2	7	3	226	0	229	0	474	2	476	712
04:45 PM	0	0	0	0	0	0	3	3	4	244	0	248	0	460	2	462	713
Total	0	0	0	0	6	0	10	16	12	944	0	956	0	1798	8	1806	2778
05:00 PM	0	0	0	0	1	0	1	2	2	255	0	257	0	469	3	472	731
05:15 PM	0	0	0	0	1	0	1	2	0	224	0	224	0	469	0	469	695
05:30 PM	0	0	0	0	5	0	1	6	3	269	0	272	0	455	3	458	736
05:45 PM	0	0	0	0	2	0	1	3	0	264	0	264	0	449	1	450	717
Total	0	0	0	0	9	0	4	13	5	1012	0	1017	0	1842	7	1849	2879
Grand Total	0	0	0	0	33	0	24	57	26	5383	0	5409	0	5007	29	5036	10502
Apprch %	0	0	0		57.9	0	42.1		0.5	99.5	0		0	99.4	0.6		
Total %	0	0	0	0	0.3	0	0.2	0.5	0.2	51.3	0	51.5	0	47.7	0.3	48	

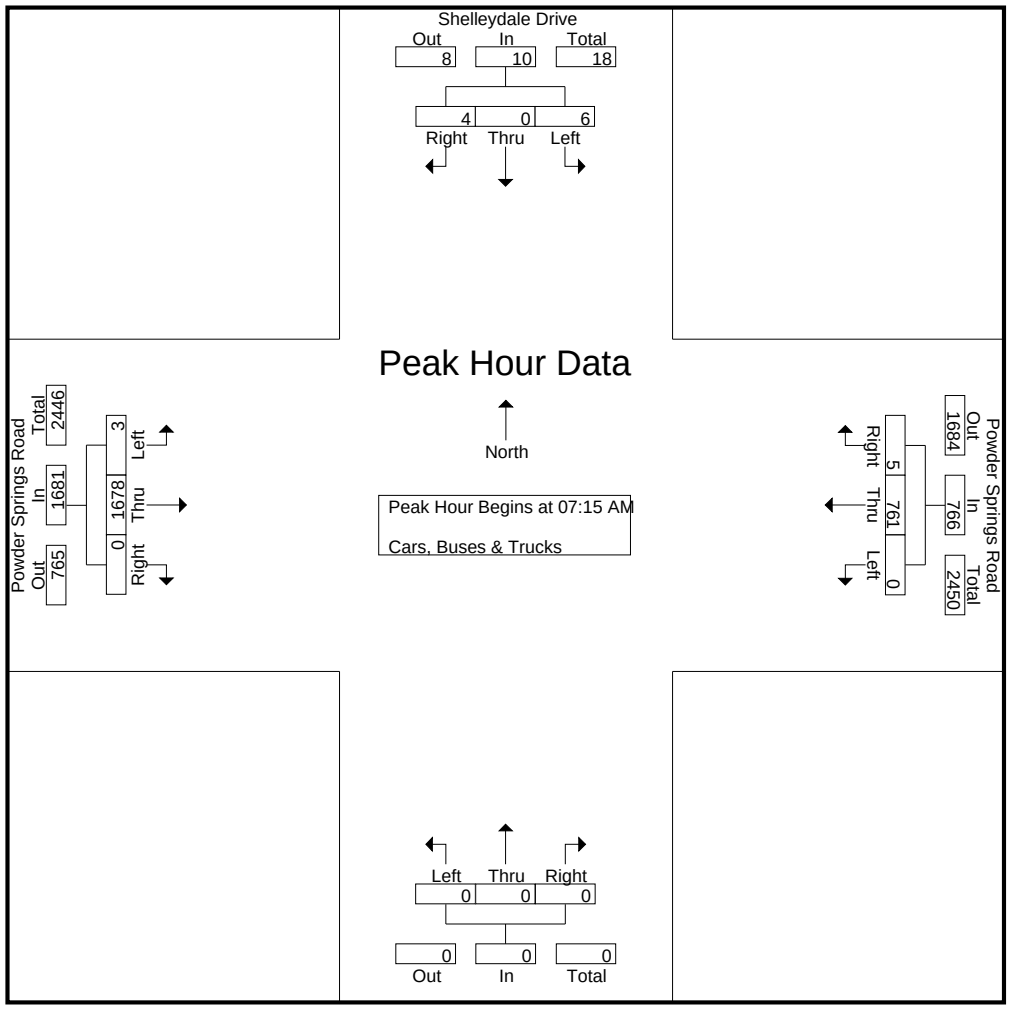
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Powder Springs Road @ Shelleydale Drive
7-9 am | 4-6 pm

File Name : 20240383
Site Code : 20240383
Start Date : 10-08-2024
Page No : 2

	Northbound				Shelleydale Drive Southbound				Powder Springs Road Eastbound				Powder Springs 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	0	0	**2**	0	**1**	**3**	0	**461**	0	**461**	0	182	**2**	184	**648**
07:30 AM	0	0	0	0	2	0	1	3	**1**	422	0	423	0	**199**	2	**201**	627
07:45 AM	0	0	0	0	2	0	1	3	1	366	0	367	0	184	1	185	555
08:00 AM	0	0	0	0	0	0	1	1	1	429	0	430	0	196	0	196	627
Total Volume	0	0	0	0	6	0	4	10	3	1678	0	1681	0	761	5	766	2457
% App. Total	0	0	0		60	0	40		0.2	99.8	0		0	99.3	0.7		
PHF	.000	.000	.000	.000	.750	.000	1.00	.833	.750	.910	.000	.912	.000	.956	.625	.953	.948



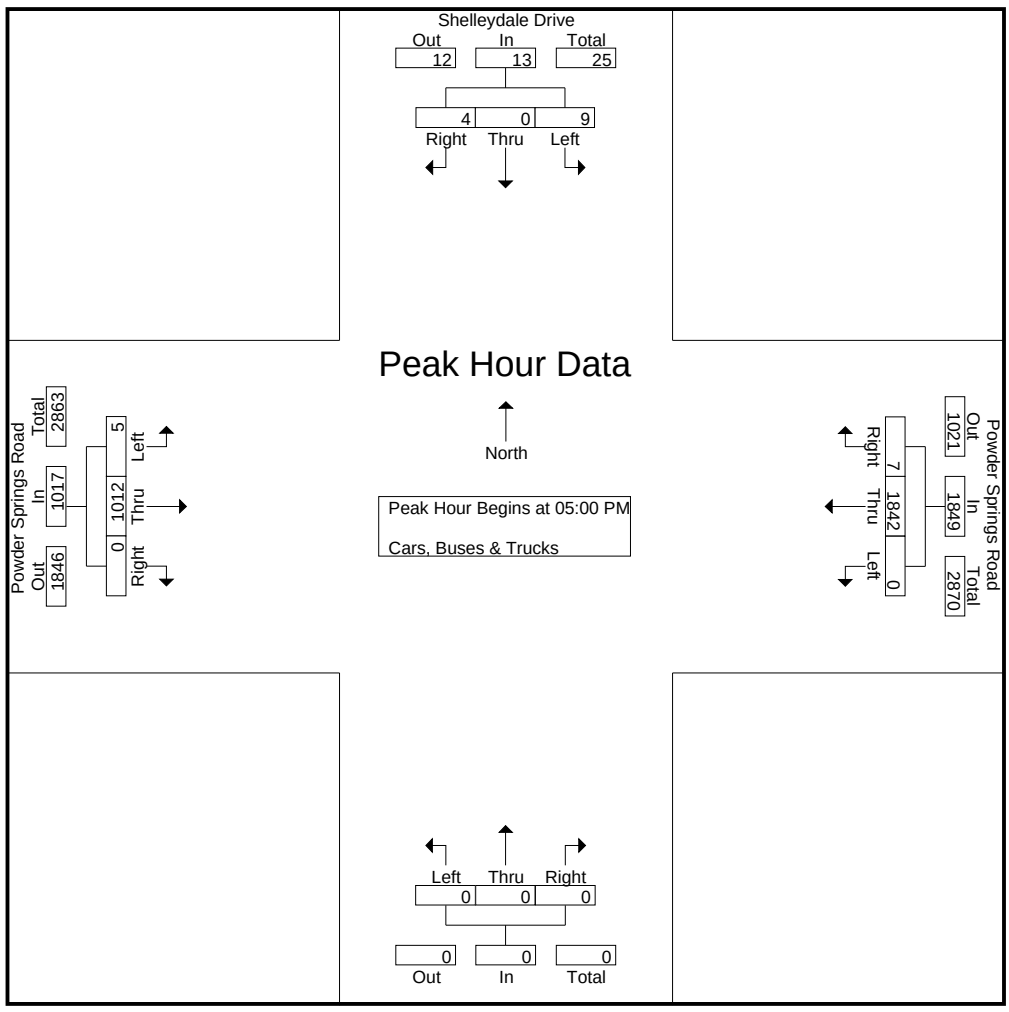
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Powder Springs Road @ Shelleydale Drive
7-9 am | 4-6 pm

File Name : 20240383
Site Code : 20240383
Start Date : 10-08-2024
Page No : 3

	Northbound				Shelleydale Drive Southbound				Powder Springs Road Eastbound				Powder Springs 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 05:00 PM																	
05:00 PM	0	0	0	0	1	0	**1**	2	2	255	0	257	0	**469**	**3**	**472**	731
05:15 PM	0	0	0	0	1	0	1	2	0	224	0	224	0	469	0	469	695
05:30 PM	0	0	0	0	**5**	0	1	**6**	**3**	**269**	0	**272**	0	455	3	458	**736**
05:45 PM	0	0	0	0	2	0	1	3	0	264	0	264	0	449	1	450	717
Total Volume	0	0	0	0	9	0	4	13	5	1012	0	1017	0	1842	7	1849	2879
% App. Total	0	0	0		69.2	0	30.8		0.5	99.5	0		0	99.6	0.4		
PHF	.000	.000	.000	.000	.450	.000	1.00	.542	.417	.941	.000	.935	.000	.982	.583	.979	.978



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Power Springs Rd @ Tapperly Drive -
Preston Point
7-9 am | 4-6 pm

File Name : 20240384
Site Code : 20240384
Start Date : 10-08-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Tapperly Drive Northbound				Preston Point Southbound				Power Springs Road Eastbound				Power Springs 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	0	0	0	0	0	0	0	460	0	460	0	132	0	132	592
07:15 AM	0	0	0	0	0	0	0	0	0	462	0	462	0	184	0	184	646
07:30 AM	0	0	0	0	0	0	0	0	0	423	0	423	0	201	0	201	624
07:45 AM	1	0	4	5	1	0	0	1	2	363	2	367	1	184	1	186	559
Total	1	0	4	5	1	0	0	1	2	1708	2	1712	1	701	1	703	2421
08:00 AM	2	0	2	4	0	0	1	1	1	428	1	430	2	193	1	196	631
08:15 AM	3	0	3	6	2	0	0	2	1	471	3	475	2	154	1	157	640
08:30 AM	0	1	4	5	1	0	1	2	2	433	6	441	2	171	1	174	622
08:45 AM	1	0	2	3	2	0	1	3	1	377	1	379	0	152	1	153	538
Total	6	1	11	18	5	0	3	8	5	1709	11	1725	6	670	4	680	2431
*** BREAK ***																	
04:00 PM	1	0	1	2	0	0	6	6	2	231	3	236	4	436	0	440	684
04:15 PM	3	0	1	4	1	0	2	3	1	240	2	243	1	420	1	422	672
04:30 PM	2	0	1	3	0	0	0	0	5	218	5	228	1	474	0	475	706
04:45 PM	1	0	3	4	1	0	1	2	3	240	4	247	2	460	0	462	715
Total	7	0	6	13	2	0	9	11	11	929	14	954	8	1790	1	1799	2777
05:00 PM	3	0	2	5	1	0	0	1	2	252	2	256	2	469	1	472	734
05:15 PM	3	0	4	7	0	0	1	1	0	220	5	225	3	465	2	470	703
05:30 PM	1	0	1	2	4	0	0	4	1	263	6	270	5	457	1	463	739
05:45 PM	1	0	1	2	1	0	5	6	2	263	0	265	2	444	1	447	720
Total	8	0	8	16	6	0	6	12	5	998	13	1016	12	1835	5	1852	2896
Grand Total	22	1	29	52	14	0	18	32	23	5344	40	5407	27	4996	11	5034	10525
Apprch %	42.3	1.9	55.8		43.8	0	56.2		0.4	98.8	0.7		0.5	99.2	0.2		
Total %	0.2	0	0.3	0.5	0.1	0	0.2	0.3	0.2	50.8	0.4	51.4	0.3	47.5	0.1	47.8	

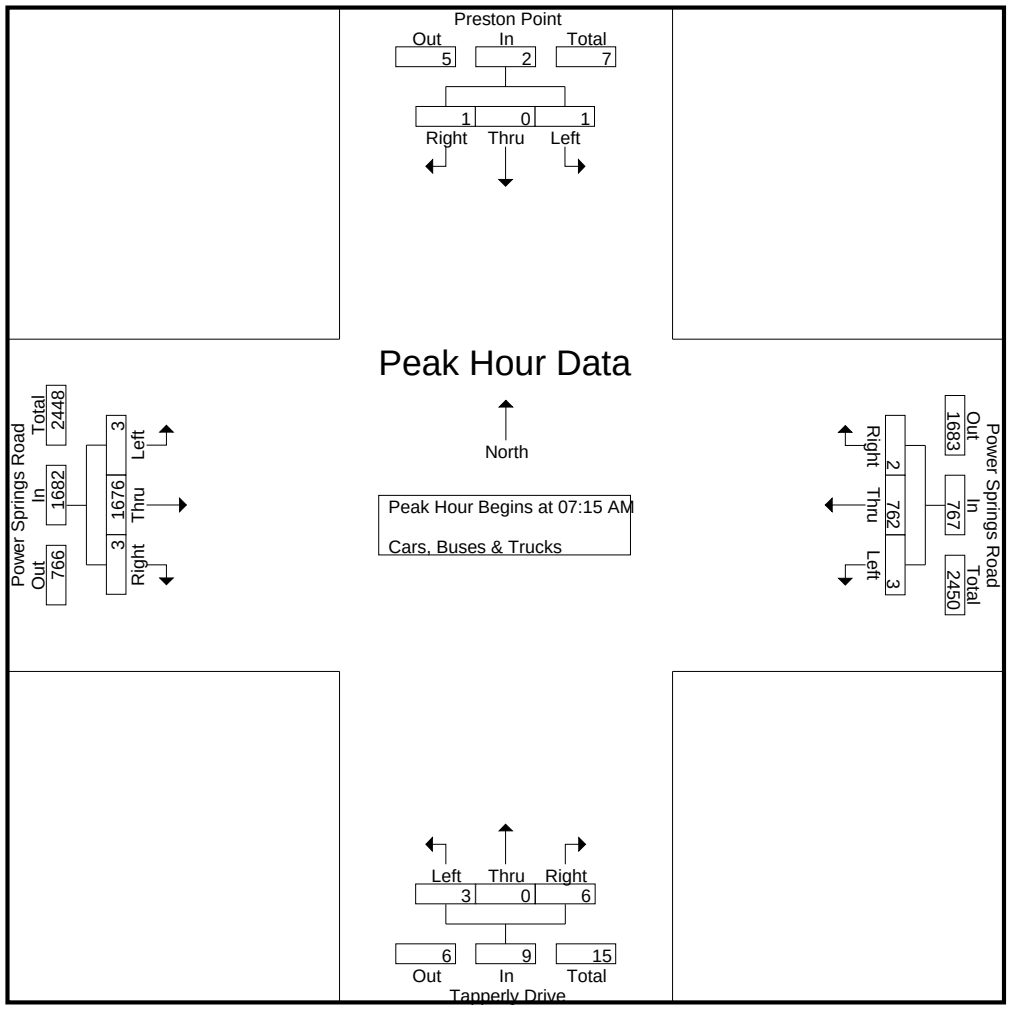
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Power Springs Rd @ Tapperly Drive -
Preston Point
7-9 am | 4-6 pm

File Name : 20240384
Site Code : 20240384
Start Date : 10-08-2024
Page No : 2

	Tapperly Drive Northbound				Preston Point Southbound				Power Springs Road Eastbound				Power Springs 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	0	0	0	0	0	0	0	**462**	0	**462**	0	184	0	184	**646**
07:30 AM	0	0	0	0	0	0	0	0	0	423	0	423	0	**201**	0	**201**	624
07:45 AM	1	0	**4**	**5**	**1**	0	0	**1**	**2**	363	**2**	367	1	184	**1**	186	559
08:00 AM	**2**	0	2	4	0	0	**1**	1	1	428	1	430	**2**	193	1	196	631
Total Volume	3	0	6	9	1	0	1	2	3	1676	3	1682	3	762	2	767	2460
% App. Total	33.3	0	66.7		50	0	50		0.2	99.6	0.2		0.4	99.3	0.3		
PHF	.375	.000	.375	.450	.250	.000	.250	.500	.375	.907	.375	.910	.375	.948	.500	.954	.952



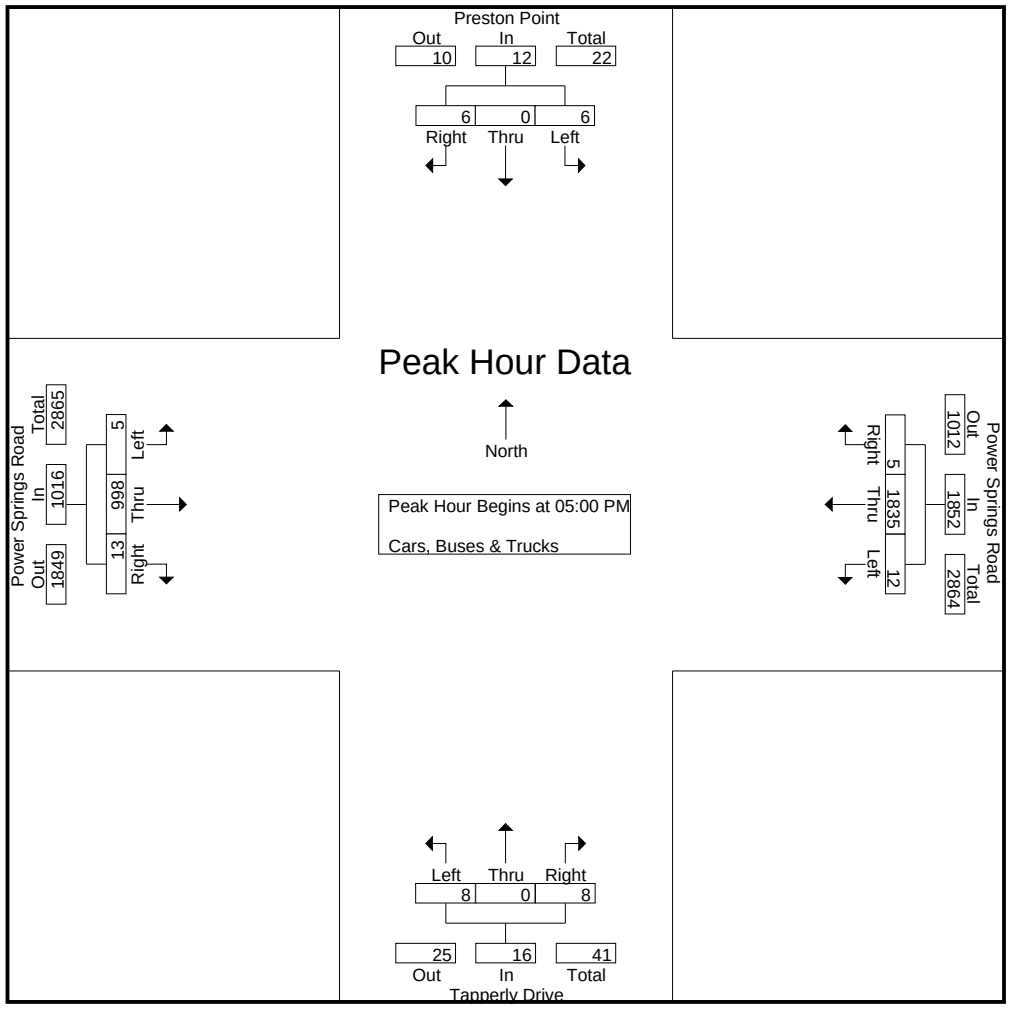
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Power Springs Rd @ Tapperly Drive -
Preston Point
7-9 am | 4-6 pm

File Name : 20240384
Site Code : 20240384
Start Date : 10-08-2024
Page No : 3

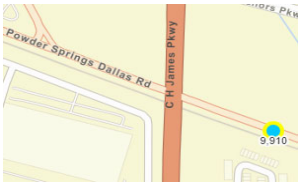
	Tapperly Drive Northbound				Preston Point Southbound				Power Springs Road Eastbound				Power Springs Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**3**	0	2	5	1	0	0	1	**2**	252	2	256	2	**469**	1	**472**	734
05:15 PM	3	0	**4**	**7**	0	0	1	1	0	220	5	225	3	465	**2**	470	703
05:30 PM	1	0	1	2	**4**	0	0	4	1	**263**	**6**	**270**	**5**	457	1	463	**739**
05:45 PM	1	0	1	2	1	0	**5**	**6**	2	263	0	265	2	444	1	447	720
Total Volume	8	0	8	16	6	0	6	12	5	998	13	1016	12	1835	5	1852	2896
% App. Total	50	0	50		50	0	50		0.5	98.2	1.3		0.6	99.1	0.3		
PHF	.667	.000	.500	.571	.375	.000	.300	.500	.625	.949	.542	.941	.600	.978	.625	.981	.980

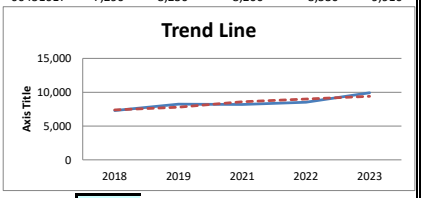


LINEAR REGRESSION OF DAILY TRAFFIC

Location	Growth Rate	R Squared	Station ID	Route	2018	2019	2021	2022	2023
Powder Springs Dallas Rd (SE of	6.2%	0.77	067-0261	00451617	7,290	8,230	8,200	8,530	9,910
Richard D. Sailors Pkwy (SE of O	-1.0%	0.61	067-2576	00095317	27,100	27,300	27,200	26,100	26,300
Powder Springs Rd (W of Hopkii	-0.5%	0.43	067-2221	00451000	31,400	31,600	31,500	30,700	31,100
Austell Powder Springs Rd (S of	1.3%	0.69	067-2218	00451600	10,600	10,700	10,600	11,100	11,200
Powder Springs Rd (W of Austel	1.3%	0.70	067-2267	00451617	14,200	14,300	14,200	14,800	15,000
Weighted Average	**0.5%**	0.42	Sum of Count Stations =		90,590	92,130	91,700	91,230	93,510

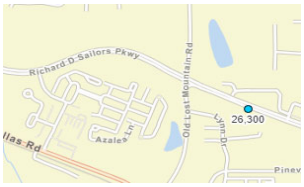
Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Powder Springs Dallas Rd (SE of Ch James Pkwy)	067-0261	00451617	7,290	8,230	8,200	8,530	9,910

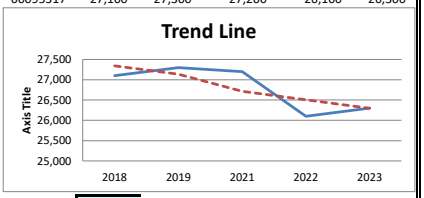




Growth Rate						
	6.2%	Intercept	-8,00,278	Slope	400.23	
Trend Line	7,391	7,792	8,592	8,992	9,393	

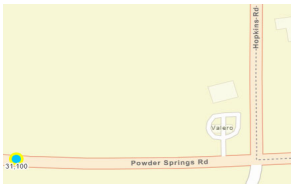
Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Richard D. Sailors Pkwy (SE of Old Lost Mountain Rd)	067-2576	00095317	27,100	27,300	27,200	26,100	26,300

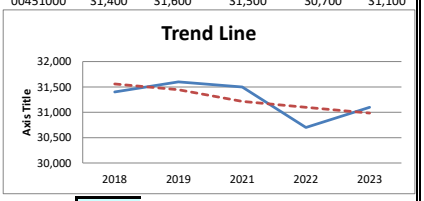




Growth Rate						
	-1.0%	Intercept	4,49,716	Slope	-209.30	
Trend Line	27,344	27,135	26,716	26,507	26,298	

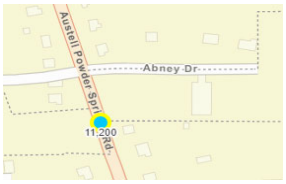
Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Powder Springs Rd (W of Hopkins Rd)	067-2221	00451000	31,400	31,600	31,500	30,700	31,100

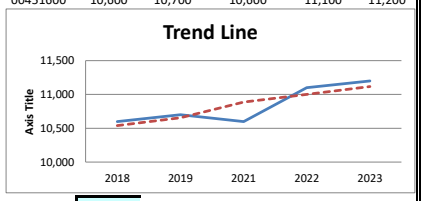




Growth Rate						
	-0.5%	Intercept	2,63,864	Slope	-115.12	
Trend Line	31,559	31,444	31,214	31,099	30,984	

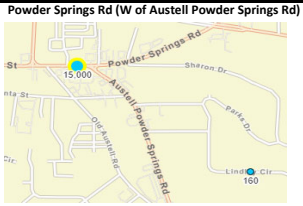
Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Austell Powder Springs Rd (S of Abney Dr)	067-2218	00451600	10,600	10,700	10,600	11,100	11,200

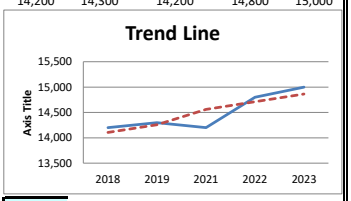




Growth Rate						
	1.3%	Intercept	-2,21,764	Slope	115.12	
Trend Line	10,541	10,656	10,886	11,001	11,116	

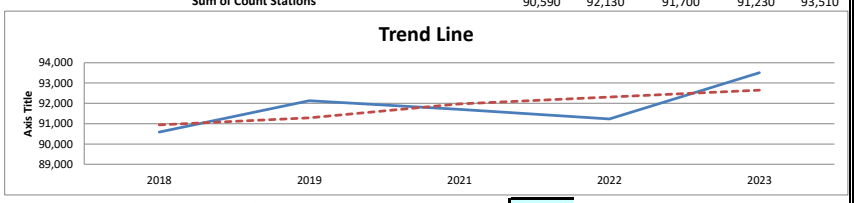
Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Powder Springs Rd (W of Austell Powder Springs Rd)	067-2267	00451617	14,200	14,300	14,200	14,800	15,000





Growth Rate						
	1.3%	Intercept	-2,90,940	Slope	151.16	
Trend Line	14,107	14,258	14,560	14,712	14,863	

Weighted Average	2018	2019	2021	2022	2023
Sum of Count Stations	90,590	92,130	91,700	91,230	93,510



Growth Rate						
	0.5%	Intercept	-5,99,401	Slope	342.09	
Trend Line	90,943	91,285	91,969	92,311	92,653	

EXISTING INTERSECTION ANALYSIS

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1676	3	3	762	2	3	0	6	1	0	1
Future Vol, veh/h	3	1676	3	3	762	2	3	0	6	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	235	-	205	235	-	175	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1764	3	3	802	2	3	0	6	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	804	0	0	1767	0	0	2177	2580	882	1696	2581	401
Stage 1	-	-	-	-	-	-	1770	1770	-	808	808	-
Stage 2	-	-	-	-	-	-	407	810	-	888	1773	-
Critical Hdwy	4.14	-	-	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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	816	-	-	349	-	-	26	25	289	60	25	599
Stage 1	-	-	-	-	-	-	86	135	-	341	392	-
Stage 2	-	-	-	-	-	-	592	391	-	305	134	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	816	-	-	349	-	-	26	25	289	58	25	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	26	25	-	58	25	-
Stage 1	-	-	-	-	-	-	86	134	-	340	388	-
Stage 2	-	-	-	-	-	-	586	387	-	297	133	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	68.5	39.6
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	66	816	-	-	349	-	-	106
HCM Lane V/C Ratio	0.144	0.004	-	-	0.009	-	-	0.02
HCM Control Delay (s)	68.5	9.4	-	-	15.4	-	-	39.6
HCM Lane LOS	F	A	-	-	C	-	-	E
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1678	761	5	6	4
Future Vol, veh/h	3	1678	761	5	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	105	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	1766	801	5	6	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	806	0	-	0	1690	401
Stage 1	-	-	-	-	801	-
Stage 2	-	-	-	-	889	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	814	-	-	-	84	599
Stage 1	-	-	-	-	402	-
Stage 2	-	-	-	-	362	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	814	-	-	-	84	599
Mov Cap-2 Maneuver	-	-	-	-	212	-
Stage 1	-	-	-	-	400	-
Stage 2	-	-	-	-	362	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	814	-	-	-	286
HCM Lane V/C Ratio	0.004	-	-	-	0.037
HCM Control Delay (s)	9.4	-	-	-	18.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	1679	765	2	4	16
Future Vol, veh/h	9	1679	765	2	4	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	140	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1767	805	2	4	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	807	0	-	0	1708	404
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	902	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	814	-	-	-	82	596
Stage 1	-	-	-	-	400	-
Stage 2	-	-	-	-	356	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	814	-	-	-	81	596
Mov Cap-2 Maneuver	-	-	-	-	208	-
Stage 1	-	-	-	-	396	-
Stage 2	-	-	-	-	356	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.7
HCM LOS			B

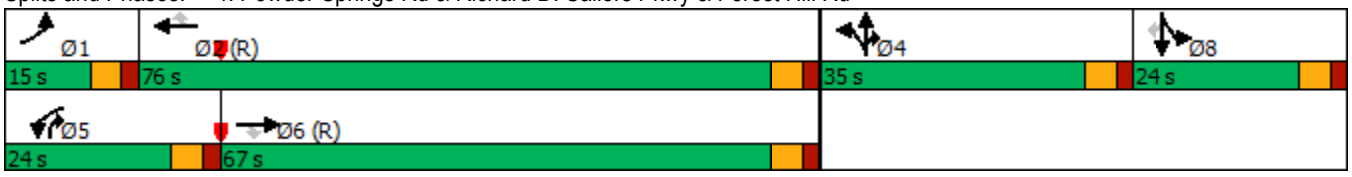
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	814	-	-	-	434
HCM Lane V/C Ratio	0.012	-	-	-	0.049
HCM Control Delay (s)	9.5	-	-	-	13.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

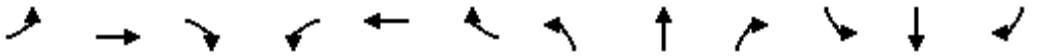
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1258	12	169	576	35	7	41	405	29	53	15
Future Volume (vph)	10	1258	12	169	576	35	7	41	405	29	53	15
Lane Group Flow (vph)	10	1297	12	174	594	36	7	42	418	30	55	15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	4 5	8	8	
Permitted Phases			6			2						8
Detector Phase	1	6	6	5	2	2	4	4	4 5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	15.0	30.5	30.5	15.0	35.5	35.5	35.5	35.5		23.5	23.5	23.5
Total Split (s)	15.0	67.0	67.0	24.0	76.0	76.0	35.0	35.0		24.0	24.0	24.0
Total Split (%)	10.0%	44.7%	44.7%	16.0%	50.7%	50.7%	23.3%	23.3%		16.0%	16.0%	16.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
v/c Ratio	0.13	0.77	0.01	0.74	0.28	0.04	0.02	0.11	0.79	0.26	0.45	0.06
Control Delay	72.3	38.4	0.0	81.3	15.8	0.1	49.0	50.7	44.0	71.0	78.5	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.3	38.4	0.0	81.3	15.8	0.1	49.0	50.7	44.0	71.0	78.5	0.5
Queue Length 50th (ft)	10	568	0	165	130	0	6	34	288	28	53	0
Queue Length 95th (ft)	31	722	0	246	217	0	20	71	363	63	100	0
Internal Link Dist (ft)		447			420			403			184	
Turn Bay Length (ft)	285		150	335		150	75		85	75		150
Base Capacity (vph)	112	1678	823	247	2155	1002	348	366	543	218	229	316
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.77	0.01	0.70	0.28	0.04	0.02	0.11	0.77	0.14	0.24	0.05

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 4: Powder Springs Rd & Richard D. Sailors Pkwy & Forest Hill Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1258	12	169	576	35	7	41	405	29	53	15
Future Volume (veh/h)	10	1258	12	169	576	35	7	41	405	29	53	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	1297	0	174	594	0	7	42	418	30	55	15
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	1790		196	2141		350	368	486	76	80	68
Arrive On Green	0.01	0.50	0.00	0.11	0.60	0.00	0.20	0.20	0.20	0.04	0.04	0.04
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	10	1297	0	174	594	0	7	42	418	30	55	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.8	42.8	0.0	14.5	12.0	0.0	0.5	2.8	29.5	2.5	4.4	1.4
Cycle Q Clear(g_c), s	0.8	42.8	0.0	14.5	12.0	0.0	0.5	2.8	29.5	2.5	4.4	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	20	1790		196	2141		350	368	486	76	80	68
V/C Ratio(X)	0.49	0.72		0.89	0.28		0.02	0.11	0.86	0.39	0.69	0.22
Avail Cap(c_a), veh/h	113	1790		220	2141		350	368	486	220	231	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.7	29.1	0.0	65.8	14.2	0.0	48.6	49.5	49.0	69.9	70.8	69.4
Incr Delay (d2), s/veh	17.4	2.6	0.0	30.4	0.3	0.0	0.0	0.1	14.4	3.3	10.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	18.1	0.0	8.1	4.7	0.0	0.2	1.3	16.6	1.2	2.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	31.7	0.0	96.2	14.5	0.0	48.6	49.6	63.4	73.2	80.8	71.0
LnGrp LOS	F	C		F	B		D	D	E	E	F	E
Approach Vol, veh/h		1307			768			467			100	
Approach Delay, s/veh		32.1			33.1			61.9			77.1	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	95.9		35.0	22.0	81.1		11.9				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	70.5		29.5	18.5	61.5		18.5				
Max Q Clear Time (g_c+I1), s	2.8	14.0		31.5	16.5	44.8		6.4				
Green Ext Time (p_c), s	0.0	5.9		0.0	0.1	10.2		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		39.4	
HCM 6th LOS		D	

Notes

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

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

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	998	13	12	1835	5	8	0	8	6	0	6
Future Vol, veh/h	5	998	13	12	1835	5	8	0	8	6	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	235	-	205	235	-	175	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1018	13	12	1872	5	8	0	8	6	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1877	0	0	1031	0	0	1988	2929	509	2415	2937	936
Stage 1	-	-	-	-	-	-	1028	1028	-	1896	1896	-
Stage 2	-	-	-	-	-	-	960	1901	-	519	1041	-
Critical Hdwy	4.14	-	-	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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	316	-	-	670	-	-	36	15	509	17	15	266
Stage 1	-	-	-	-	-	-	251	310	-	72	117	-
Stage 2	-	-	-	-	-	-	276	116	-	508	305	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	316	-	-	670	-	-	34	14	509	16	14	266
Mov Cap-2 Maneuver	-	-	-	-	-	-	34	14	-	16	14	-
Stage 1	-	-	-	-	-	-	247	305	-	71	115	-
Stage 2	-	-	-	-	-	-	265	114	-	492	300	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	79.5	191.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	64	316	-	-	670	-	-	30
HCM Lane V/C Ratio	0.255	0.016	-	-	0.018	-	-	0.408
HCM Control Delay (s)	79.5	16.6	-	-	10.5	-	-	191.3
HCM Lane LOS	F	C	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.9	0	-	-	0.1	-	-	1.3

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1012	1842	7	9	4
Future Vol, veh/h	5	1012	1842	7	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	105	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	1033	1880	7	9	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1887	0	-	0	2407	940
Stage 1	-	-	-	-	1880	-
Stage 2	-	-	-	-	527	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	313	-	-	-	27	265
Stage 1	-	-	-	-	106	-
Stage 2	-	-	-	-	557	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	313	-	-	-	27	265
Mov Cap-2 Maneuver	-	-	-	-	86	-
Stage 1	-	-	-	-	104	-
Stage 2	-	-	-	-	557	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	42.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	313	-	-	-	109
HCM Lane V/C Ratio	0.016	-	-	-	0.122
HCM Control Delay (s)	16.7	-	-	-	42.6
HCM Lane LOS	C	-	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1003	1850	8	4	18
Future Vol, veh/h	15	1003	1850	8	4	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	140	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	1023	1888	8	4	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1896	0	-	0	2434	948
Stage 1	-	-	-	-	1892	-
Stage 2	-	-	-	-	542	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	311	-	-	-	26	262
Stage 1	-	-	-	-	104	-
Stage 2	-	-	-	-	547	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	311	-	-	-	25	262
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	547	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	26.9
HCM LOS			D

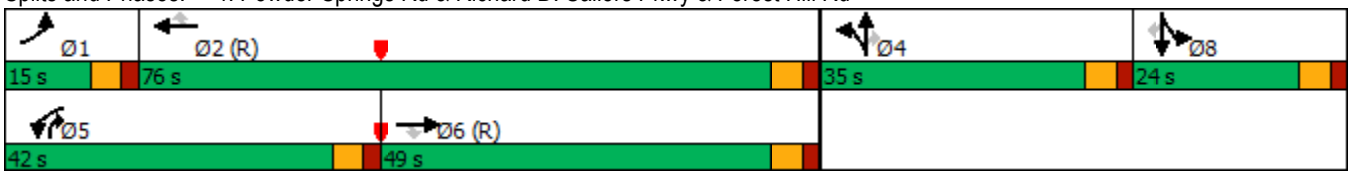
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	311	-	-	-	187
HCM Lane V/C Ratio	0.049	-	-	-	0.12
HCM Control Delay (s)	17.2	-	-	-	26.9
HCM Lane LOS	C	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

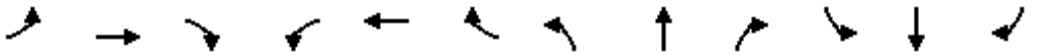
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	587	35	282	1553	35	65	97	392	42	56	34
Future Volume (vph)	18	587	35	282	1553	35	65	97	392	42	56	34
Lane Group Flow (vph)	18	599	36	288	1585	36	66	99	400	43	57	35
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	8	8	
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	4	4	5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0	6.0	6.0
Minimum Split (s)	15.0	30.5	30.5	15.0	35.5	35.5	35.5	35.5	15.0	23.5	23.5	23.5
Total Split (s)	15.0	49.0	49.0	42.0	76.0	76.0	35.0	35.0	42.0	24.0	24.0	24.0
Total Split (%)	10.0%	32.7%	32.7%	28.0%	50.7%	50.7%	23.3%	23.3%	28.0%	16.0%	16.0%	16.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag			Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes			Yes			
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
v/c Ratio	0.22	0.33	0.04	0.80	0.64	0.03	0.42	0.60	0.85	0.37	0.46	0.15
Control Delay	74.2	24.9	0.1	73.4	17.1	0.1	71.8	80.1	58.5	74.7	78.6	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.2	24.9	0.1	73.4	17.1	0.1	71.8	80.1	58.5	74.7	78.6	1.4
Queue Length 50th (ft)	17	181	0	273	485	0	62	95	297	41	55	0
Queue Length 95th (ft)	45	284	0	357	696	0	110	154	320	82	102	0
Internal Link Dist (ft)		447			420			403			184	
Turn Bay Length (ft)	285		150	335		150	75		85	75		150
Base Capacity (vph)	112	1806	875	435	2463	1131	348	366	542	218	229	316
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.33	0.04	0.66	0.64	0.03	0.19	0.27	0.74	0.20	0.25	0.11

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 4: Powder Springs Rd & Richard D. Sailors Pkwy & Forest Hill Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	587	35	282	1553	35	65	97	392	42	56	34
Future Volume (veh/h)	18	587	35	282	1553	35	65	97	392	42	56	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	599	0	288	1585	0	66	99	400	43	57	35
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	1550		313	2112		350	368	590	80	84	71
Arrive On Green	0.02	0.44	0.00	0.18	0.59	0.00	0.20	0.20	0.20	0.04	0.04	0.04
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	18	599	0	288	1585	0	66	99	400	43	57	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	17.1	0.0	23.8	49.0	0.0	4.6	6.7	29.5	3.5	4.5	3.2
Cycle Q Clear(g_c), s	1.5	17.1	0.0	23.8	49.0	0.0	4.6	6.7	29.5	3.5	4.5	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	1550		313	2112		350	368	590	80	84	71
V/C Ratio(X)	0.57	0.39		0.92	0.75		0.19	0.27	0.68	0.54	0.68	0.49
Avail Cap(c_a), veh/h	113	1550		433	2112		350	368	590	220	231	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.1	28.7	0.0	60.8	22.3	0.0	50.3	51.1	39.5	70.1	70.6	70.0
Incr Delay (d2), s/veh	15.5	0.7	0.0	20.0	2.5	0.0	0.3	0.4	3.1	5.6	9.3	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.3	0.0	12.3	19.8	0.0	2.1	3.2	12.8	1.7	2.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.6	29.4	0.0	80.8	24.8	0.0	50.5	51.5	42.6	75.7	79.9	75.2
LnGrp LOS	F	C		F	C		D	D	D	E	E	E
Approach Vol, veh/h		617			1873			565			135	
Approach Delay, s/veh		31.1			33.4			45.1			77.3	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	94.6		35.0	31.9	70.9		12.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	70.5		29.5	36.5	43.5		18.5				
Max Q Clear Time (g_c+I1), s	3.5	51.0		31.5	25.8	19.1		6.5				
Green Ext Time (p_c), s	0.0	13.7		0.0	0.5	5.2		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		36.9	
HCM 6th LOS		D	

Notes

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

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

FUTURE "NO-BUILD" INTERSECTION ANALYSIS

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1710	3	3	777	2	3	0	6	1	0	1
Future Vol, veh/h	3	1710	3	3	777	2	3	0	6	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	235	-	205	235	-	175	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1800	3	3	818	2	3	0	6	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	820	0	0	1803	0	0	2221	2632	900	1730	2633	409
Stage 1	-	-	-	-	-	-	1806	1806	-	824	824	-
Stage 2	-	-	-	-	-	-	415	826	-	906	1809	-
Critical Hdwy	4.14	-	-	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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	805	-	-	338	-	-	24	23	282	57	23	592
Stage 1	-	-	-	-	-	-	82	129	-	333	385	-
Stage 2	-	-	-	-	-	-	585	385	-	297	129	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	805	-	-	338	-	-	24	23	282	55	23	592
Mov Cap-2 Maneuver	-	-	-	-	-	-	24	23	-	55	23	-
Stage 1	-	-	-	-	-	-	82	128	-	332	382	-
Stage 2	-	-	-	-	-	-	579	382	-	289	128	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	73.3	41.4
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	62	805	-	-	338	-	-	101
HCM Lane V/C Ratio	0.153	0.004	-	-	0.009	-	-	0.021
HCM Control Delay (s)	73.3	9.5	-	-	15.8	-	-	41.4
HCM Lane LOS	F	A	-	-	C	-	-	E
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1712	776	5	6	4
Future Vol, veh/h	3	1712	776	5	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	105	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	1802	817	5	6	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	822	0	-	0	1724	409
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	907	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	803	-	-	-	80	592
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	354	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	803	-	-	-	80	592
Mov Cap-2 Maneuver	-	-	-	-	206	-
Stage 1	-	-	-	-	393	-
Stage 2	-	-	-	-	354	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	803	-	-	-	279
HCM Lane V/C Ratio	0.004	-	-	-	0.038
HCM Control Delay (s)	9.5	-	-	-	18.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	1713	780	2	4	16
Future Vol, veh/h	9	1713	780	2	4	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	140	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1803	821	2	4	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	823	0	-	0	1742	412
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	920	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	803	-	-	-	78	589
Stage 1	-	-	-	-	392	-
Stage 2	-	-	-	-	349	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	803	-	-	-	77	589
Mov Cap-2 Maneuver	-	-	-	-	203	-
Stage 1	-	-	-	-	388	-
Stage 2	-	-	-	-	349	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.9
HCM LOS			B

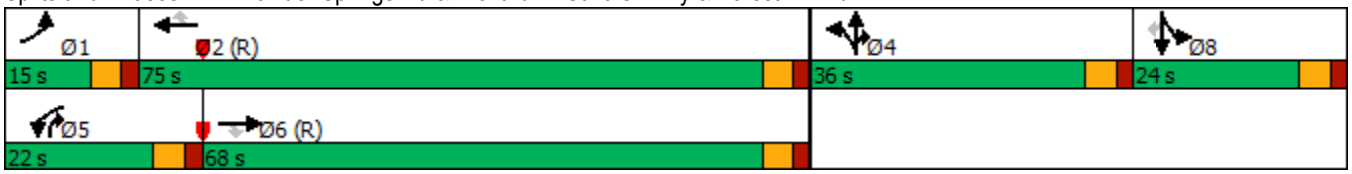
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	803	-	-	-	427
HCM Lane V/C Ratio	0.012	-	-	-	0.049
HCM Control Delay (s)	9.5	-	-	-	13.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

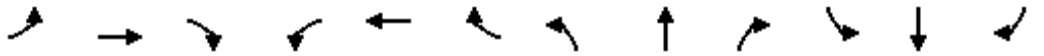
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1283	12	172	588	36	7	42	413	30	54	15
Future Volume (vph)	10	1283	12	172	588	36	7	42	413	30	54	15
Lane Group Flow (vph)	10	1323	12	177	606	37	7	43	426	31	56	15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	4 5	8	8	
Permitted Phases			6			2						8
Detector Phase	1	6	6	5	2	2	4	4	4 5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	15.0	30.5	30.5	15.0	35.5	35.5	35.5	35.5		23.5	23.5	23.5
Total Split (s)	15.0	68.0	68.0	22.0	75.0	75.0	36.0	36.0		24.0	24.0	24.0
Total Split (%)	10.0%	45.3%	45.3%	14.7%	50.0%	50.0%	24.0%	24.0%		16.0%	16.0%	16.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
v/c Ratio	0.13	0.81	0.01	0.73	0.28	0.04	0.02	0.11	0.77	0.27	0.46	0.06
Control Delay	72.3	41.1	0.0	79.0	16.5	0.1	48.1	49.8	42.0	71.0	78.6	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.3	41.1	0.0	79.0	16.5	0.1	48.1	49.8	42.0	71.0	78.6	0.5
Queue Length 50th (ft)	10	608	0	166	136	0	6	35	284	29	54	0
Queue Length 95th (ft)	31	735	0	#259	226	0	20	71	377	64	100	0
Internal Link Dist (ft)		447			420			403			184	
Turn Bay Length (ft)	285		150	335		150	75		85	75		150
Base Capacity (vph)	112	1632	805	245	2129	991	359	378	553	218	229	316
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.81	0.01	0.72	0.28	0.04	0.02	0.11	0.77	0.14	0.24	0.05

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Powder Springs Rd & Richard D. Sailors Pkwy & Forest Hill Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1283	12	172	588	36	7	42	413	30	54	15
Future Volume (veh/h)	10	1283	12	172	588	36	7	42	413	30	54	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	1323	0	177	606	0	7	43	426	31	56	15
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	1765		196	2116		362	380	497	77	81	69
Arrive On Green	0.01	0.50	0.00	0.11	0.60	0.00	0.20	0.20	0.20	0.04	0.04	0.04
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	10	1323	0	177	606	0	7	43	426	31	56	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.8	44.8	0.0	14.7	12.5	0.0	0.5	2.8	30.5	2.5	4.4	1.4
Cycle Q Clear(g_c), s	0.8	44.8	0.0	14.7	12.5	0.0	0.5	2.8	30.5	2.5	4.4	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	20	1765		196	2116		362	380	497	77	81	69
V/C Ratio(X)	0.49	0.75		0.90	0.29		0.02	0.11	0.86	0.40	0.69	0.22
Avail Cap(c_a), veh/h	113	1765		196	2116		362	380	497	220	231	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.7	30.3	0.0	66.0	14.8	0.0	47.8	48.7	48.4	69.9	70.8	69.3
Incr Delay (d2), s/veh	17.4	3.0	0.0	38.6	0.3	0.0	0.0	0.1	13.9	3.3	10.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	19.1	0.0	8.7	5.0	0.0	0.2	1.3	16.8	1.2	2.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	33.2	0.0	104.6	15.1	0.0	47.8	48.9	62.3	73.2	80.8	70.9
LnGrp LOS	F	C		F	B		D	D	E	E	F	E
Approach Vol, veh/h		1333			783			476			102	
Approach Delay, s/veh		33.7			35.4			60.9			77.0	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	94.8		36.0	22.0	80.0		12.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	69.5		30.5	16.5	62.5		18.5				
Max Q Clear Time (g_c+I1), s	2.8	14.5		32.5	16.7	46.8		6.4				
Green Ext Time (p_c), s	0.0	6.1		0.0	0.0	9.9		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		40.6	
HCM 6th LOS		D	

Notes

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

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

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1018	13	12	1872	5	8	0	8	6	0	6
Future Vol, veh/h	5	1018	13	12	1872	5	8	0	8	6	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	235	-	205	235	-	175	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1039	13	12	1910	5	8	0	8	6	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1915	0	0	1052	0	0	2028	2988	520	2464	2996	955
Stage 1	-	-	-	-	-	-	1049	1049	-	1934	1934	-
Stage 2	-	-	-	-	-	-	979	1939	-	530	1062	-
Critical Hdwy	4.14	-	-	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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	305	-	-	657	-	-	34	14	501	16	13	259
Stage 1	-	-	-	-	-	-	243	303	-	68	111	-
Stage 2	-	-	-	-	-	-	268	111	-	500	298	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	305	-	-	657	-	-	32	14	501	15	13	259
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	14	-	15	13	-
Stage 1	-	-	-	-	-	-	239	298	-	67	109	-
Stage 2	-	-	-	-	-	-	257	109	-	484	293	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	86.1	210.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	60	305	-	-	657	-	-	28
HCM Lane V/C Ratio	0.272	0.017	-	-	0.019	-	-	0.437
HCM Control Delay (s)	86.1	17	-	-	10.6	-	-	210.3
HCM Lane LOS	F	C	-	-	B	-	-	F
HCM 95th %tile Q(veh)	1	0.1	-	-	0.1	-	-	1.4

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1032	1879	7	9	4
Future Vol, veh/h	5	1032	1879	7	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	105	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	1053	1917	7	9	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1924	0	-	0	2454	959
Stage 1	-	-	-	-	1917	-
Stage 2	-	-	-	-	537	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	303	-	-	-	25	257
Stage 1	-	-	-	-	101	-
Stage 2	-	-	-	-	550	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	303	-	-	-	25	257
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	550	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	44.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	303	-	-	-	104
HCM Lane V/C Ratio	0.017	-	-	-	0.128
HCM Control Delay (s)	17.1	-	-	-	44.6
HCM Lane LOS	C	-	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1023	1887	8	4	18
Future Vol, veh/h	15	1023	1887	8	4	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	140	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	1044	1926	8	4	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1934	0	-	0	2482	967
Stage 1	-	-	-	-	1930	-
Stage 2	-	-	-	-	552	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	300	-	-	-	24	254
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	541	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	300	-	-	-	23	254
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	541	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	27.8
HCM LOS			D

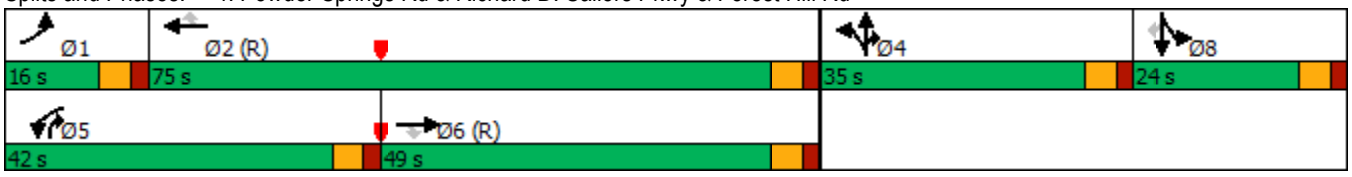
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	300	-	-	-	180
HCM Lane V/C Ratio	0.051	-	-	-	0.125
HCM Control Delay (s)	17.6	-	-	-	27.8
HCM Lane LOS	C	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

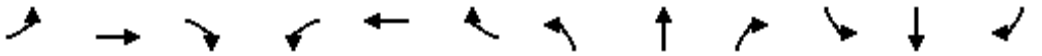
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	599	36	288	1584	36	66	99	400	43	57	35
Future Volume (vph)	18	599	36	288	1584	36	66	99	400	43	57	35
Lane Group Flow (vph)	18	611	37	294	1616	37	67	101	408	44	58	36
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	4 5	8	8	
Permitted Phases			6			2						8
Detector Phase	1	6	6	5	2	2	4	4	4 5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	15.0	30.5	30.5	15.0	35.5	35.5	35.5	35.5		23.5	23.5	23.5
Total Split (s)	16.0	49.0	49.0	42.0	75.0	75.0	35.0	35.0		24.0	24.0	24.0
Total Split (%)	10.7%	32.7%	32.7%	28.0%	50.0%	50.0%	23.3%	23.3%		16.0%	16.0%	16.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
v/c Ratio	0.22	0.43	0.05	0.83	0.78	0.04	0.19	0.28	0.64	0.37	0.47	0.15
Control Delay	74.2	35.7	0.1	76.1	29.1	0.1	52.1	53.7	28.9	74.9	78.8	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.2	35.7	0.1	76.1	29.1	0.1	52.1	53.7	28.9	74.9	78.8	1.4
Queue Length 50th (ft)	17	231	0	279	678	0	55	85	242	42	56	0
Queue Length 95th (ft)	45	331	0	362	863	0	102	143	266	83	103	0
Internal Link Dist (ft)		447			420			403			184	
Turn Bay Length (ft)	285		150	335		150	75		85	75		150
Base Capacity (vph)	123	1434	723	437	2084	972	348	366	702	218	229	316
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.43	0.05	0.67	0.78	0.04	0.19	0.28	0.58	0.20	0.25	0.11

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 4: Powder Springs Rd & Richard D. Sailors Pkwy & Forest Hill Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	599	36	288	1584	36	66	99	400	43	57	35
Future Volume (veh/h)	18	599	36	288	1584	36	66	99	400	43	57	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	611	0	294	1616	0	67	101	408	44	58	36
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	1536		319	2110		350	368	596	81	85	72
Arrive On Green	0.02	0.43	0.00	0.18	0.59	0.00	0.20	0.20	0.20	0.05	0.05	0.05
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	18	611	0	294	1616	0	67	101	408	44	58	36
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	17.7	0.0	24.3	50.8	0.0	4.7	6.9	29.5	3.6	4.6	3.3
Cycle Q Clear(g_c), s	1.5	17.7	0.0	24.3	50.8	0.0	4.7	6.9	29.5	3.6	4.6	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	1536		319	2110		350	368	596	81	85	72
V/C Ratio(X)	0.57	0.40		0.92	0.77		0.19	0.27	0.68	0.54	0.68	0.50
Avail Cap(c_a), veh/h	125	1536		433	2110		350	368	596	220	231	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.1	29.2	0.0	60.5	22.7	0.0	50.3	51.2	39.3	70.1	70.5	69.9
Incr Delay (d2), s/veh	15.5	0.8	0.0	20.7	2.7	0.0	0.3	0.4	3.2	5.6	9.3	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.6	0.0	12.6	20.6	0.0	2.1	3.3	13.1	1.8	2.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.6	30.0	0.0	81.2	25.4	0.0	50.6	51.6	42.6	75.7	79.8	75.2
LnGrp LOS	F	C		F	C		D	D	D	E	E	E
Approach Vol, veh/h		629			1910			576			138	
Approach Delay, s/veh		31.7			34.0			45.1			77.3	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	94.6		35.0	32.4	70.3		12.3				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	10.5	69.5		29.5	36.5	43.5		18.5				
Max Q Clear Time (g_c+I1), s	3.5	52.8		31.5	26.3	19.7		6.6				
Green Ext Time (p_c), s	0.0	12.3		0.0	0.5	5.3		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		37.4	
HCM 6th LOS		D	

Notes

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

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

FUTURE "BUILD" INTERSECTION ANALYSIS

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1717	3	3	780	2	3	0	6	1	0	1
Future Vol, veh/h	3	1717	3	3	780	2	3	0	6	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	235	-	205	235	-	175	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1807	3	3	821	2	3	0	6	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	823	0	0	1810	0	0	2230	2642	904	1737	2643	411
Stage 1	-	-	-	-	-	-	1813	1813	-	827	827	-
Stage 2	-	-	-	-	-	-	417	829	-	910	1816	-
Critical Hdwy	4.14	-	-	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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	803	-	-	336	-	-	24	23	280	56	23	590
Stage 1	-	-	-	-	-	-	81	128	-	332	384	-
Stage 2	-	-	-	-	-	-	584	383	-	296	128	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	803	-	-	336	-	-	24	23	280	54	23	590
Mov Cap-2 Maneuver	-	-	-	-	-	-	24	23	-	54	23	-
Stage 1	-	-	-	-	-	-	81	127	-	331	381	-
Stage 2	-	-	-	-	-	-	578	380	-	288	127	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	74.6	42.2
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	61	803	-	-	336	-	-	99
HCM Lane V/C Ratio	0.155	0.004	-	-	0.009	-	-	0.021
HCM Control Delay (s)	74.6	9.5	-	-	15.8	-	-	42.2
HCM Lane LOS	F	A	-	-	C	-	-	E
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1719	779	5	6	4
Future Vol, veh/h	3	1719	779	5	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	105	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	1809	820	5	6	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	825	0	-	0	1731	410
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	911	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	801	-	-	-	79	591
Stage 1	-	-	-	-	393	-
Stage 2	-	-	-	-	352	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	801	-	-	-	79	591
Mov Cap-2 Maneuver	-	-	-	-	205	-
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	352	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	801	-	-	-	277
HCM Lane V/C Ratio	0.004	-	-	-	0.038
HCM Control Delay (s)	9.5	-	-	-	18.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	1715	786	2	4	16
Future Vol, veh/h	9	1715	786	2	4	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	140	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1805	827	2	4	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	829	0	-	0	1749	415
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	921	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	798	-	-	-	77	586
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	348	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	798	-	-	-	76	586
Mov Cap-2 Maneuver	-	-	-	-	201	-
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	348	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.9
HCM LOS			B

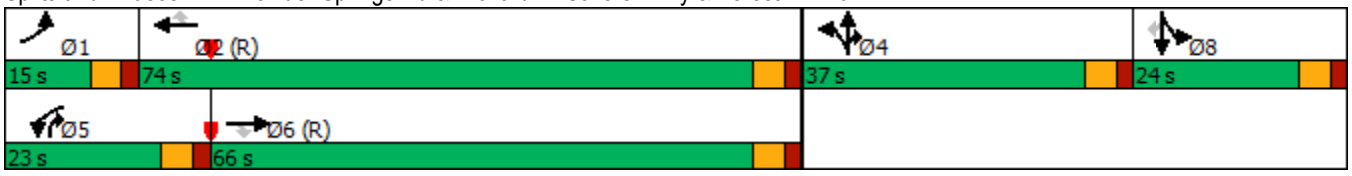
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	798	-	-	-	424
HCM Lane V/C Ratio	0.012	-	-	-	0.05
HCM Control Delay (s)	9.6	-	-	-	13.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

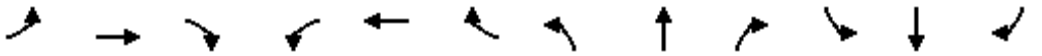
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1284	12	175	590	37	7	42	414	30	54	15
Future Volume (vph)	10	1284	12	175	590	37	7	42	414	30	54	15
Lane Group Flow (vph)	10	1324	12	180	608	38	7	43	427	31	56	15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	4 5	8	8	
Permitted Phases			6			2						8
Detector Phase	1	6	6	5	2	2	4	4	4 5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	15.0	30.5	30.5	15.0	35.5	35.5	35.5	35.5		23.5	23.5	23.5
Total Split (s)	15.0	66.0	66.0	23.0	74.0	74.0	37.0	37.0		24.0	24.0	24.0
Total Split (%)	10.0%	44.0%	44.0%	15.3%	49.3%	49.3%	24.7%	24.7%		16.0%	16.0%	16.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
v/c Ratio	0.13	0.82	0.02	0.74	0.29	0.04	0.02	0.11	0.76	0.27	0.46	0.06
Control Delay	72.3	42.4	0.0	79.8	17.0	0.1	47.4	49.0	40.2	71.0	78.6	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.3	42.4	0.0	79.8	17.0	0.1	47.4	49.0	40.2	71.0	78.6	0.5
Queue Length 50th (ft)	10	615	0	169	139	0	5	34	282	29	54	0
Queue Length 95th (ft)	31	#791	0	256	230	0	20	70	368	64	100	0
Internal Link Dist (ft)		447			420			403			184	
Turn Bay Length (ft)	285		150	335		150	75		85	75		150
Base Capacity (vph)	112	1610	795	250	2108	982	371	391	556	218	229	316
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.82	0.02	0.72	0.29	0.04	0.02	0.11	0.77	0.14	0.24	0.05

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Powder Springs Rd & Richard D. Sailors Pkwy & Forest Hill Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1284	12	175	590	37	7	42	414	30	54	15
Future Volume (veh/h)	10	1284	12	175	590	37	7	42	414	30	54	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	1324	0	180	608	0	7	43	427	31	56	15
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	1730		201	2092		374	393	512	77	81	69
Arrive On Green	0.01	0.49	0.00	0.11	0.59	0.00	0.21	0.21	0.21	0.04	0.04	0.04
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	10	1324	0	180	608	0	7	43	427	31	56	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.8	45.7	0.0	15.0	12.7	0.0	0.5	2.8	31.5	2.5	4.4	1.4
Cycle Q Clear(g_c), s	0.8	45.7	0.0	15.0	12.7	0.0	0.5	2.8	31.5	2.5	4.4	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	20	1730		201	2092		374	393	512	77	81	69
V/C Ratio(X)	0.49	0.77		0.89	0.29		0.02	0.11	0.83	0.40	0.69	0.22
Avail Cap(c_a), veh/h	113	1730		208	2092		374	393	512	220	231	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.7	31.5	0.0	65.6	15.3	0.0	47.0	47.9	47.0	69.9	70.8	69.3
Incr Delay (d2), s/veh	17.4	3.3	0.0	34.4	0.4	0.0	0.0	0.1	11.3	3.3	10.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	19.6	0.0	8.6	5.1	0.0	0.2	1.3	16.3	1.2	2.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	34.8	0.0	100.0	15.7	0.0	47.0	48.0	58.3	73.2	80.8	70.9
LnGrp LOS	F	C		F	B		D	D	E	E	F	E
Approach Vol, veh/h		1334			788			477			102	
Approach Delay, s/veh		35.2			34.9			57.3			77.0	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	93.8		37.0	22.5	78.5		12.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	68.5		31.5	17.5	60.5		18.5				
Max Q Clear Time (g_c+I1), s	2.8	14.7		33.5	17.0	47.7		6.4				
Green Ext Time (p_c), s	0.0	6.1		0.0	0.0	8.5		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		40.6	
HCM 6th LOS		D	

Notes

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

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

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1715	780	3	7	6
Future Vol, veh/h	2	1715	780	3	7	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	75	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1864	848	3	8	7

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	851	0	-	0	1784	424			
Stage 1	-	-	-	-	848	-			
Stage 2	-	-	-	-	936	-			
Critical Hdwy	4.14	-	-	-	6.84	6.94			
Critical Hdwy Stg 1	-	-	-	-	5.84	-			
Critical Hdwy Stg 2	-	-	-	-	5.84	-			
Follow-up Hdwy	2.22	-	-	-	3.52	3.32			
Pot Cap-1 Maneuver	783	-	-	-	73	579			
Stage 1	-	-	-	-	380	-			
Stage 2	-	-	-	-	342	-			
Platoon blocked, %		-	-	-					
Mov Cap-1 Maneuver	783	-	-	-	73	579			
Mov Cap-2 Maneuver	-	-	-	-	197	-			
Stage 1	-	-	-	-	379	-			
Stage 2	-	-	-	-	342	-			

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	783	-	-	-	283
HCM Lane V/C Ratio	0.003	-	-	-	0.05
HCM Control Delay (s)	9.6	-	-	-	18.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1023	13	12	1879	5	8	0	8	6	0	6
Future Vol, veh/h	5	1023	13	12	1879	5	8	0	8	6	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	235	-	205	235	-	175	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1044	13	12	1917	5	8	0	8	6	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1922	0	0	1057	0	0	2037	3000	522	2473	3008	959
Stage 1	-	-	-	-	-	-	1054	1054	-	1941	1941	-
Stage 2	-	-	-	-	-	-	983	1946	-	532	1067	-
Critical Hdwy	4.14	-	-	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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	304	-	-	655	-	-	33	13	499	15	13	257
Stage 1	-	-	-	-	-	-	242	301	-	67	111	-
Stage 2	-	-	-	-	-	-	267	110	-	499	297	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	304	-	-	655	-	-	31	13	499	14	13	257
Mov Cap-2 Maneuver	-	-	-	-	-	-	31	13	-	14	13	-
Stage 1	-	-	-	-	-	-	238	296	-	66	109	-
Stage 2	-	-	-	-	-	-	256	108	-	483	292	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	89.8	221.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	58	304	-	-	655	-	-	27
HCM Lane V/C Ratio	0.281	0.017	-	-	0.019	-	-	0.454
HCM Control Delay (s)	89.8	17	-	-	10.6	-	-	221.1
HCM Lane LOS	F	C	-	-	B	-	-	F
HCM 95th %tile Q(veh)	1	0.1	-	-	0.1	-	-	1.4

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1037	1886	7	9	4
Future Vol, veh/h	5	1037	1886	7	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	105	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	1058	1924	7	9	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1931	0	-	0	2463	962
Stage 1	-	-	-	-	1924	-
Stage 2	-	-	-	-	539	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	301	-	-	-	25	256
Stage 1	-	-	-	-	100	-
Stage 2	-	-	-	-	549	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	301	-	-	-	25	256
Mov Cap-2 Maneuver	-	-	-	-	81	-
Stage 1	-	-	-	-	98	-
Stage 2	-	-	-	-	549	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	45.1
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	301	-	-	-	103
HCM Lane V/C Ratio	0.017	-	-	-	0.129
HCM Control Delay (s)	17.2	-	-	-	45.1
HCM Lane LOS	C	-	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1029	1891	8	4	18
Future Vol, veh/h	15	1029	1891	8	4	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	140	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	1050	1930	8	4	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1938	0	-	0	2489	969
Stage 1	-	-	-	-	1934	-
Stage 2	-	-	-	-	555	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	299	-	-	-	24	253
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	539	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	299	-	-	-	23	253
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	27.8
HCM LOS			D

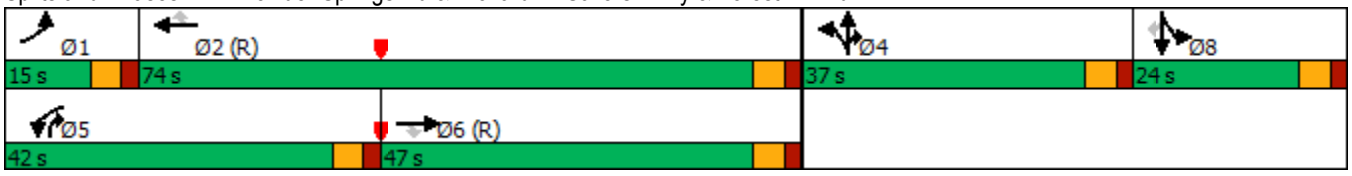
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	299	-	-	-	180
HCM Lane V/C Ratio	0.051	-	-	-	0.125
HCM Control Delay (s)	17.7	-	-	-	27.8
HCM Lane LOS	C	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

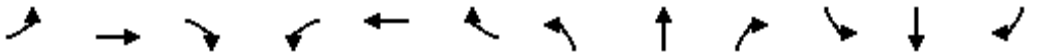
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	601	36	290	1585	36	66	99	403	44	57	35
Future Volume (vph)	18	601	36	290	1585	36	66	99	403	44	57	35
Lane Group Flow (vph)	18	613	37	296	1617	37	67	101	411	45	58	36
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	4 5	8	8	
Permitted Phases			6			2						8
Detector Phase	1	6	6	5	2	2	4	4	4 5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	15.0	30.5	30.5	15.0	35.5	35.5	35.5	35.5		23.5	23.5	23.5
Total Split (s)	15.0	47.0	47.0	42.0	74.0	74.0	37.0	37.0		24.0	24.0	24.0
Total Split (%)	10.0%	31.3%	31.3%	28.0%	49.3%	49.3%	24.7%	24.7%		16.0%	16.0%	16.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
v/c Ratio	0.22	0.44	0.05	0.82	0.79	0.04	0.18	0.26	0.62	0.38	0.47	0.15
Control Delay	74.2	37.3	0.1	75.3	30.6	0.1	50.5	52.0	27.4	75.3	78.8	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.2	37.3	0.1	75.3	30.6	0.1	50.5	52.0	27.4	75.3	78.8	1.4
Queue Length 50th (ft)	17	237	0	281	701	0	54	83	236	43	56	0
Queue Length 95th (ft)	45	340	0	366	#902	0	101	141	257	85	103	0
Internal Link Dist (ft)		447			420			403			184	
Turn Bay Length (ft)	285		150	335		150	75		85	75		150
Base Capacity (vph)	112	1392	706	437	2050	958	371	391	723	218	229	316
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.44	0.05	0.68	0.79	0.04	0.18	0.26	0.57	0.21	0.25	0.11

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Powder Springs Rd & Richard D. Sailors Pkwy & Forest Hill Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	601	36	290	1585	36	66	99	403	44	57	35
Future Volume (veh/h)	18	601	36	290	1585	36	66	99	403	44	57	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	613	0	296	1617	0	67	101	411	45	58	36
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	1484		321	2062		374	393	619	81	85	72
Arrive On Green	0.02	0.42	0.00	0.18	0.58	0.00	0.21	0.21	0.21	0.05	0.05	0.05
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	18	613	0	296	1617	0	67	101	411	45	58	36
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	18.2	0.0	24.5	52.6	0.0	4.6	6.8	31.5	3.7	4.6	3.3
Cycle Q Clear(g_c), s	1.5	18.2	0.0	24.5	52.6	0.0	4.6	6.8	31.5	3.7	4.6	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	1484		321	2062		374	393	619	81	85	72
V/C Ratio(X)	0.57	0.41		0.92	0.78		0.18	0.26	0.66	0.56	0.68	0.50
Avail Cap(c_a), veh/h	113	1484		433	2062		374	393	619	220	231	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.1	30.7	0.0	60.4	24.2	0.0	48.6	49.5	37.6	70.1	70.5	69.9
Incr Delay (d2), s/veh	15.5	0.9	0.0	20.9	3.1	0.0	0.2	0.3	2.7	5.9	9.3	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.8	0.0	12.7	21.6	0.0	2.1	3.2	12.8	1.8	2.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.6	31.6	0.0	81.3	27.3	0.0	48.9	49.8	40.3	76.0	79.8	75.2
LnGrp LOS	F	C		F	C		D	D	D	E	E	E
Approach Vol, veh/h		631			1913			579			139	
Approach Delay, s/veh		33.2			35.7			43.0			77.4	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	92.6		37.0	32.5	68.2		12.3				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	68.5		31.5	36.5	41.5		18.5				
Max Q Clear Time (g_c+I1), s	3.5	54.6		33.5	26.5	20.2		6.6				
Green Ext Time (p_c), s	0.0	10.7		0.0	0.5	5.1		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		38.3	
HCM 6th LOS		D	

Notes

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

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

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	1037	1883	7	5	4
Future Vol, veh/h	6	1037	1883	7	5	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	75	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	1127	2047	8	5	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2055	0	-	0	2625	1024
Stage 1	-	-	-	-	2047	-
Stage 2	-	-	-	-	578	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	269	-	-	-	19	233
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	524	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	269	-	-	-	19	233
Mov Cap-2 Maneuver	-	-	-	-	70	-
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	524	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	44
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	269	-	-	-	102
HCM Lane V/C Ratio	0.024	-	-	-	0.096
HCM Control Delay (s)	18.7	-	-	-	44
HCM Lane LOS	C	-	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

TRAFFIC VOLUME WORKSHEETS

24-188 Residential Development on Powder Springs Road, Powder Springs, GA

Traffic Volumes

A&R Engineering
October 2024

1.Powder S. Rd @ Tapperly Rd

A.M. Peak Hour

	Tapperly Drive **Northbound**					Preston Point **Southbound**					Powder Springs Road **Eastbound**					Powder Springs Road **Westbound**			
Condition	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing 2024 Traffic Counts:	3	0	6	9		1	0	1	2		3	1676	3	1682		3	762	2	767
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
No-Build 2026 Volumes:	3	0	6	9		1	0	1	2		3	1710	3	1716		3	777	2	782
Total New Trips:	0	0	0	0		0	0	0	0		0	7	0	7		0	3	0	3
Future 2026 Traffic Volumes:	3	0	6	9		1	0	1	2		3	1717	3	1723		3	780	2	785

P.M. Peak Hour

	Tapperly Drive **Northbound**					Preston Point **Southbound**					Powder Springs Road **Eastbound**					Powder Springs Road **Westbound**			
Condition	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing 2024 Traffic Counts:	8	0	8	16		6	0	6	12		5	998	13	1016		12	1835	5	1852
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
No-Build 2026 Volumes:	8	0	8	16		6	0	6	12		5	1018	13	1036		12	1872	5	1889
Total New Trips:	0	0	0	0		0	0	0	0		0	5	0	5		0	7	0	7
Future 2026 Traffic Volumes:	8	0	8	16		6	0	6	12		5	1023	13	1041		12	1879	5	1896

24-188 Residential Development on Powder Springs Road, Powder Springs, GA

Traffic Volumes

A&R Engineering
October 2024

2.Powder S. Rd @ Shelleydale Dr

A.M. Peak Hour

	- Northbound					Shelleydale Drive Southbound					Powder Springs Road Eastbound					Powder Springs Road Westbound			
Condition	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0		6	0	4	10		3	1678	0	1681		0	761	5	766
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
No-Build 2026 Volumes:	0	0	0	0		6	0	4	10		3	1712	0	1715		0	776	5	781
Total New Trips:	0	0	0	0		0	0	0	0		0	7	0	7		0	3	0	3
Future 2026 Traffic Volumes:	0	0	0	0		6	0	4	10		3	1719	0	1722		0	779	5	784

P.M. Peak Hour

	- Northbound					Shelleydale Drive Southbound					Powder Springs Road Eastbound					Powder Springs Road Westbound			
Condition	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0		9	0	4	13		5	1012	0	1017		0	1842	7	1849
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
No-Build 2026 Volumes:	0	0	0	0		9	0	4	13		5	1032	0	1037		0	1879	7	1886
Total New Trips:	0	0	0	0		0	0	0	0		0	5	0	5		0	7	0	7
Future 2026 Traffic Volumes:	0	0	0	0		9	0	4	13		5	1037	0	1042		0	1886	7	1893

24-188 Residential Development on Powder Springs Road, Powder Springs, GA

Traffic Volumes

A&R Engineering
October 2024

3.Powder S. Rd @ Ponderosa Ln

A.M. Peak Hour

	- Northbound					Ponderosa Lane Southbound				Powder Springs Road Eastbound				Powder Springs Road Westbound			
Condition	L	T	R	Tot		L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0		4	0	16	20	9	1679	0	1688	0	765	2	767
Growth Factor (%):	1	1	1			1	1	1		1	1	1		1	1	1	
No-Build 2026 Volumes:	0	0	0	0		4	0	16	20	9	1713	0	1722	0	780	2	782
Total New Trips:	0	0	0	0		0	0	0	0	0	2	0	2	0	6	0	6
Future 2026 Traffic Volumes:	0	0	0	0		4	0	16	20	9	1715	0	1724	0	786	2	788

P.M. Peak Hour

	- Northbound					Ponderosa Lane Southbound				Powder Springs Road Eastbound				Powder Springs Road Westbound			
Condition	L	T	R	Tot		L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0		4	0	18	22	15	1003	0	1018	0	1850	8	1858
Growth Factor (%):	1	1	1			1	1	1		1	1	1		1	1	1	
No-Build 2026 Volumes:	0	0	0	0		4	0	18	22	15	1023	0	1038	0	1887	8	1895
Total New Trips:	0	0	0	0		0	0	0	0	0	6	0	6	0	4	0	4
Future 2026 Traffic Volumes:	0	0	0	0		4	0	18	22	15	1029	0	1044	0	1891	8	1899

24-188 Residential Development on Powder Springs Road, Powder Springs, GA

Traffic Volumes

A&R Engineering
October 2024

4.Powder S. Rd @ Forest Hill Rd

A.M. Peak Hour

Condition	Powder Springs Road **Northbound**					Forest Hill Road **Southbound**					Richard D. Sailors Parkway **Eastbound**					Powder Springs Road **Westbound**			
	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing 2024 Traffic Counts:	7	41	405	453		29	53	15	97		10	1258	12	1280		169	576	35	780
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
No-Build 2026 Volumes:	7	42	413	462		30	54	15	99		10	1283	12	1305		172	588	36	796
Total New Trips:	0	0	1	1		0	0	0	0		0	1	0	1		3	2	1	6
Future 2026 Traffic Volumes:	7	42	414	463		30	54	15	99		10	1284	12	1306		175	590	37	802

P.M. Peak Hour

Condition	Powder Springs Road **Northbound**					Forest Hill Road **Southbound**					Richard D. Sailors Parkway **Eastbound**					Powder Springs Road **Westbound**			
	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing 2024 Traffic Counts:	65	97	392	554		42	56	34	132		18	587	35	640		282	1553	35	1870
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
No-Build 2026 Volumes:	66	99	400	565		43	57	35	135		18	599	36	653		288	1584	36	1908
Total New Trips:	0	0	3	3		1	0	0	1		0	2	0	2		2	1	0	3
Future 2026 Traffic Volumes:	66	99	403	568		44	57	35	136		18	601	36	655		290	1585	36	1911

24-188 Residential Development on Powder Springs Road, Powder Springs, GA

Traffic Volumes

A&R Engineering
October 2024

5.Powder S. Rd @ Site Drwy

A.M. Peak Hour

	- Northbound					Site Driveway Southbound					Powder Springs Road Eastbound					Powder Springs Road Westbound			
Condition	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0		0	0	0	0		0	1681	0	1681		0	765	0	765
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
No-Build 2026 Volumes:	0	0	0	0		0	0	0	0		0	1715	0	1715		0	780	0	780
Total New Trips:	0	0	0	0		7	0	6	13		2	0	0	2		0	0	3	3
Future 2026 Traffic Volumes:	0	0	0	0		7	0	6	13		2	1715	0	1717		0	780	3	783

P.M. Peak Hour

	- Northbound					Site Driveway Southbound					Powder Springs Road Eastbound					Powder Springs Road Westbound			
Condition	L	T	R	Tot		L	T	R	Tot		L	T	R	Tot		L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0		0	0	0	0		0	1017	0	1017		0	1846	0	1846
Growth Factor (%):	1	1	1			1	1	1			1	1	1			1	1	1	
No-Build 2026 Volumes:	0	0	0	0		0	0	0	0		0	1037	0	1037		0	1883	0	1883
Total New Trips:	0	0	0	0		5	0	4	9		6	0	0	6		0	0	7	7
Future 2026 Traffic Volumes:	0	0	0	0		5	0	4	9		6	1037	0	1043		0	1883	7	1890