

Transportation Analysis

Johns Creek Mixed-Use Development DRI #3742

City of Johns Creek, Georgia

September 2022

Prepared for:

Toro Development

Prepared by:

Kimley-Horn and Associates, Inc.
11720 Amber Park Drive, Suite 600
Alpharetta, Georgia 30009
014602005

Kimley»Horn

Transportation Analysis

Johns Creek Mixed-Use Development DRI #3742

City of Johns Creek, Georgia

September 2022

Prepared for:

Toro Development

Prepared by:

Kimley-Horn and Associates, Inc.
11720 Amber Park Drive, Suite 600
Alpharetta, Georgia 30009
014602005



TABLE OF CONTENTS

Executive Summary	1
1.0 Project Description	8
1.1 Introduction	8
1.2 Site Access	11
1.3 Internal Circulation Analysis	12
1.4 Parking	12
1.5 Alternative Transportation Facilities	12
1.6 Enhanced Focus Area for Dense Urban Environments	12
2.0 Traffic Analyses, Methodology and Assumptions	13
2.1 Study Network Determination	13
2.2 Existing Roadway Facilities	15
2.3 Traffic Data Collection and Calibration	15
2.4 Background Growth	16
2.5 Programmed and Planned Projects	17
2.6 Level-of-Service Overview	18
2.7 Level-of-Service Standards	18
3.0 Trip Generation	19
4.0 Trip Distribution and Assignment	20
5.0 Traffic Analysis	20
5.1 Medlock Bridge Road (SR 141) at Bell Road/Johns Creek Commons (Intersection 1)	24
5.2 Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 2)	25
5.3 Johns Creek Parkway at Lakefield Drive (Intersection 3)	27
5.4 Lakefield Drive at Lakefield Place/Site Driveway A (Intersection 4)	28
5.5 McGinnis Ferry Road at Lakefield Drive (Intersection 5)	29
5.6 McGinnis Ferry Road at Site Driveway B/Private Driveway (Intersection 6)	31
5.7 McGinnis Ferry Road at Johns Creek Parkway (Intersection 7)	32
5.8 Johns Creek Parkway at Site Driveway C/Private Driveway (Intersection 8)	34
5.9 Johns Creek Parkway at Johns Crossing/Site Driveway D (Intersection 9)	35
5.10 Medlock Bridge Road (SR 141) at Hospital Parkway/Johns Crossing (Intersection 10)	37
5.11 Medlock Bridge Road (SR 141) at McGinnis Ferry Road (Intersection 11)	39
5.12 McGinnis Ferry Road at Hospital Parkway/Private Driveway (Intersection 12)	40
5.13 McGinnis Ferry Road at Sargent Road (Intersection 13)	42
5.14 Johns Creek Parkway at Site Driveway E (Intersection 14)	43
5.15 Johns Creek Parkway at Site Driveway F/Private Driveway (Intersection 15)	43
5.16 McGinnis Ferry Road at Site Driveway G (Intersection 16)	44
5.17 McGinnis Ferry Road at Site Driveway H (Intersection 17)	44

LIST OF TABLES

Table 1: Proposed Land Use and Density	1
Table 2: Proposed Land Use and Density	8
Table 3: Proposed Parking.....	12
Table 4: Intersection Control Summary	13
Table 5: Roadway Classifications.....	15
Table 6: Traffic Count Summary.....	16
Table 7: Programmed Projects.....	17
Table 8: Trip Generation	19

LIST OF FIGURES

Figure 1: Site Location Map	9
Figure 2: Site Aerial	10
Figure 3: Study Intersections.....	14
Figure 4: Residential Trip Distribution.....	21
Figure 5: Non-Residential Trip Distribution	22
Figure 6: Project Trips.....	23
Figure 7: Existing 2022 Traffic Conditions	45
Figure 8: Projected 2027 No-Build Traffic Conditions.....	46
Figure 9: Projected 2027 Build Traffic Conditions	47

LIST OF APPENDICES

Appendix A	Proposed Site Plan
Appendix B	Trip Generation Analysis
Appendix C	Intersection Volume Worksheets
Appendix D	Programmed Project Fact Sheets

Available Upon Request

Raw Traffic Count Data
Synchro Capacity Analyses

EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Johns Creek Mixed-Use Development* located in the City of Johns Creek, Georgia. The approximately 41.7-acre site is located east of Johns Creek Parkway, south of McGinnis Ferry Road, and northwest of Lakefield Drive. The site currently consists of two (2) vacant existing office buildings, and their associated surface parking.

The proposed expansion will consist of the following land uses and densities contained in **Table 1**. The project is expected to be completed by 2027 (approximately 5 years).

Table 1: Proposed Land Use and Density	
Land Use	Proposed
Townhomes	150 units
Multi-Family Housing (Mid-Rise)	750 units
Office*	110,000 SF
Retail	140,000 SF
Restaurant	60,000 SF

*Existing building, currently vacant.

**Approximately 360,000 SF of vacant office to be demolished.

The DRI analysis includes an estimation of the overall vehicle trips projected to be generated by the development, also known as gross trips. Mixed-use, alternative mode, and pass-by reductions to gross trips are included in the trip generation, as outlined in the Georgia Regional Transportation Authority (GRTA) Letter of Understanding (dated August 12, 2022).

Capacity analyses were performed for the study intersections under the Existing 2022, Projected 2027 No-Build, and Projected 2027 Build conditions.

- Existing 2022 conditions represent traffic volumes that were collected in January 2022, May 2022 and August 2022 with no COVID adjustment factor applied (NOTE: Traffic Count methodology was outlined in the Methodology Meeting Packet).
- Projected 2027 No-Build Conditions represent the Existing 2022 traffic volumes grown at a 1.5% per year growth rate for five (5) years, plus Phase 1 project trips associated with the *Emory Johns Creek Hospital Expansion DRI #3542*.
- Projected 2027 Build Conditions represent the Projected 2027 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the *Johns Creek Mixed-Use Development DRI #3742*.

Projected 2027 No-Build (System Improvements)

Due to the low level-of-service (LOS) at the following intersections under the Existing 2022, Projected 2027 No-Build conditions, the following intersection improvements are recommended (NOTE: These improvements are required to serve the traffic based on the existing conditions plus background growth, and NOT the proposed development):

- Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 2)
 - System Improvements (needed to serve background traffic, without the development)
 - Provide one (1) additional westbound left-turn lane (creating triple lefts) along Johns Creek Parkway. A third receiving will be provided as part of the programmed City of Johns Creek project.
- McGinnis Ferry Road at Lakefield Drive (Intersection 5)
 - System Improvements (needed to serve background traffic, without the development)
 - Provide a northbound right-turn overlap phase along Lakefield Drive.
- McGinnis Ferry Road at Johns Creek Parkway (Intersection 7)
 - System Improvements (needed to serve background traffic, without the development)
 - Provide an exclusive southbound right-turn lane along Johns Creek Parkway.
- Medlock Bridge Road (SR 141) at Hospital Parkway/Johns Crossing (Intersection 10)
 - System Improvements (needed to serve background traffic, without the development)
 - Provide an eastbound right-turn overlap phase along Hospital Parkway.
 - Provide an exclusive westbound right-turn lane along Johns Crossing.
- McGinnis Ferry Road at Hospital Parkway (Intersection 12)
 - System Improvements (needed to serve background traffic, without the development)
 - Restripe the northbound approach of Hospital Parkway as an exclusive left-turn lane and shared through/right-turn lane. Provide a protected/permissive northbound left-turn phase.

NOTE: These system improvements are consistent with the *Emory Johns Creek Hospital Expansion DRI #3542*.

Projected 2027 Build (Site Access Improvements)

Under Projected 2027 Build conditions, all site driveways are projected to operate at an acceptable LOS under the Projected 2027 Build conditions. Additional site access improvements needed to serve the site are listed below:

- Lakefield Drive at Site Driveway A/Lakefield Place (Intersection 4)
 - On the site, construct a conventional two-lane driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site.
- McGinnis Ferry Road at Site Driveway B/Private Driveway (Intersection 6)
 - On the site, construct a conventional two-lane driveway with one (1) ingress lane entering the site and two (2) egress lanes exiting the site (left-turn/through lane, and exclusive right-turn lane).
- Johns Creek Parkway at Johns Crossing/Site Driveway D (Intersection 9)
 - On the site, construct an exclusive westbound left-turn lane in addition to the existing westbound through and right-turn lanes exiting the site. Retain the one (1) existing ingress lane entering the site.
 - Alternatively, construct an all-way stop-controlled intersection, pending City of Johns Creek approval.
- Johns Creek Parkway at Site Driveway E (Intersection 14)
 - On the site, construct a right-in/right-out driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site.
 - If the median along Johns Creek Parkway is removed, then consider a full-movement driveway at this location.
- Johns Creek Parkway at Site Driveway F/Private Driveway (Intersection 15)
 - On the site, construct a full-movement driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site.
- McGinnis Ferry Road at Site Driveway G (Intersection 16)
 - On the site, construct a right-in/right-out driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site.
 - Utilize the existing pavement to provide an exclusive westbound right-turn lane along McGinnis Ferry Road entering the site.
- McGinnis Ferry Road at Site Driveway H (Intersection 17)
 - On the site, construct a right-in/right-out driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site.

Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 2) LOS Summary

Overall LOS Standard: E
Approach LOS Standard: E

		Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Johns Creek Parkway			Johns Creek Parkway		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (30.1)										
		Approach LOS	B (19.1)			C (30.9)			E (77.9)			E (73.6)	
		Storage	780			135			65		30		
		50th Queue	9	798		16	768		22	14	0	162	18
		95th Queue	48	683		46	852		44	40	2	203	58
	PM	Overall LOS	D (53.6)										
		Approach LOS	D (53.6)			D (45.0)			E (78.1)			E (71.5)	
		Storage	780			135			65		30		
		50th Queue	70	695		26	634		34	27	0	265	16
		95th Queue	124	827		44	639		60	62	0	314	55
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (32.4)										
		Approach LOS	C (22.9)			C (30.9)			E (77.9)			E (76.2)	
		Storage	780			135			65		30		
		50th Queue	12	926		17	827		22	14	0	192	18
		95th Queue	58	1,048		36	880		44	40	2	236	58
	PM	Overall LOS	E (57.8)										
		Approach LOS	E (61.6)			D (45.7)			E (78.1)			E (73.3)	
		Storage	780			135			65		30		
		50th Queue	71	827		26	669		34	27	0	285	16
		95th Queue	116	899		40	697		60	62	0	336	55

McGinnis Ferry Road at Lakefield Drive (Intersection 5) LOS Summary

Overall LOS Standard: E
Approach LOS Standard: E

		Lakefield Drive			Lakefield Drive			McGinnis Ferry Road			McGinnis Ferry Road		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	B (17.3)										
		Approach LOS	E (66.4)			E (72.7)			A (9.5)			B (18.8)	
		Storage	110		80	190		170	400		250	345	240
		50th Queue	9	18	0	12	1	0	15	179	0	77	921
		95th Queue	29	46	29	35	8	0	42	201	0	108	1,030
	PM	Overall LOS	C (28.4)										
		Approach LOS	E (64.8)			E (72.6)			C (24.6)			C (23.9)	
		Storage	110		80	190		170	400		250	345	240
		50th Queue	32	12	152	72	23	0	11	603	0	181	501
		95th Queue	69	35	241	129	55	39	14	790	0	323	566
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	B (19.3)										
		Approach LOS	E (66.8)			E (73.6)			B (10.4)			C (21.3)	
		Storage	110		80	190		170	400		250	345	240
		50th Queue	9	19	0	12	1	0	14	180	0	78	1,047
		95th Queue	29	47	44	36	8	0	50	201	0	110	1,172
	PM	Overall LOS	C (29.6)										
		Approach LOS	E (66.0)			E (72.6)			C (24.9)			C (26.4)	
		Storage	110		80	190		170	400		250	345	240
		50th Queue	32	12	160	72	23	0	10	578	0	189	541
		95th Queue	69	35	253	129	55	39	14	700	0	372	611

McGinnis Ferry Road at Johns Creek Parkway (Intersection 7) LOS Summary

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Johns Creek Parkway			Johns Creek Parkway			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (28.4)											
		Approach LOS	E (68.4)			E (76.0)			B (13.4)			C (23.6)		
		Storage	150		145	150		100	285		305	300		110
		50th Queue	17	49	0	168	154	0	10	121	0	47	273	212
		95th Queue	42	83	0	217	234	0	40	137	2	71	432	344
	PM	Overall LOS	D (46.7)											
		Approach LOS	E (74.0)			E (74.6)			D (45.6)			C (25.5)		
		Storage	150		145	150		100	285		305	300		110
		50th Queue	53	90	67	403	144	0	9	881	0	35	395	77
		95th Queue	92	133	168	476	220	0	14	979	1	96	466	170
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (30.7)											
		Approach LOS	E (68.4)			E (76.4)			B (15.0)			C (24.0)		
		Storage	150		145	150		100	285		305	300		110
		50th Queue	86	86	0	168	249	0	9	113	0	52	284	206
		95th Queue	141	132	0	217	350	0	40	167	1	75	521	329
	PM	Overall LOS	D (48.8)											
		Approach LOS	E (74.5)			E (75.6)			D (48.6)			C (26.0)		
		Storage	150		145	150		100	285		305	300		110
		50th Queue	92	117	68	402	206	0	10	938	0	54	480	116
		95th Queue	144	166	168	480	304	0	13	1,029	0	149	527	251

Medlock Bridge Road (SR 141) at Hospital Parkway/Johns Crossing (Intersection 10) LOS Summary

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Hospital Parkway			Johns Crossing		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (29.2)											
		Approach LOS	C (26.2)			B (19.5)			E (69.7)			E (78.3)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	135	756	14	21	903	5	48	77	214	65	51	0
		95th Queue	310	894	23	37	1,051	12	86	132	337	116	98	2
	PM	Overall LOS	D (38.3)											
		Approach LOS	D (38.3)			B (13.4)			E (76.7)			E (79.4)		
		Storage	450		130	350		120	140		100	175		
		50th Queue	271	650	0	20	330	0	170	148	245	117	100	0
95th Queue	354	758	0	73	155	0	242	227	370	179	162	1		
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (37.0)											
		Approach LOS	D (36.8)			C (20.8)			E (73.3)			E (79.7)		
		Storage	450		130	350		120	140		100	175		
		50th Queue	197	826	81	31	880	5	45	146	271	181	112	0
		95th Queue	305	914	89	80	1,010	12	86	221	392	314	178	6
	PM	Overall LOS	D (43.6)											
		Approach LOS	D (46.0)			B (15.2)			E (78.0)			E (79.8)		
		Storage	450		130	350		120	140		100	175		
		50th Queue	276	678	21	38	289	0	166	191	289	173	129	0
95th Queue	337	777	42	99	222	0	240	277	412	261	202	1		

McGinnis Ferry Road at Hospital Parkway (Intersection 12) LOS Summary

Overall LOS Standard: E
Approach LOS Standard: E

		Hospital Parkway			Private Driveway			McGinnis Ferry Road			McGinnis Ferry Road		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (32.4)										
		Approach LOS	E (77.2)			F (88.4)			C (20.9)			D (39.3)	
		Storage							200		305	430	65
		50th Queue	161	0			0		0	350	106	150	527
		95th Queue	219	0			0		1	530	210	243	645
	PM	Overall LOS	C (26.7)										
		Approach LOS	E (58.7)			D (44.9)			B (17.1)			C (27.6)	
		Storage							200		305	430	65
		50th Queue	208	1		2	1		2	196	0	4	581
		95th Queue	249	40		12	9		9	538	65	22	746
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (35.1)										
		Approach LOS	E (79.0)			F (88.4)			C (21.0)			D (44.4)	
		Storage							200		305	430	65
		50th Queue	227	0			0		0	467	113	151	554
		95th Queue	293	0			0		1	704	283	213	675
	PM	Overall LOS	C (31.6)										
		Approach LOS	E (66.4)			D (44.9)			B (17.6)			D (36.7)	
		Storage							200		305	430	65
		50th Queue	234	21		2	1		2	228	0	10	630
		95th Queue	285	58		12	9		9	570	49	36	769

Impacted Queue Lengths Exceeding Storage

Intersection	Movement	Storage Length	Projected Build Queue Length (AM / PM)	Recommendation
5. McGinnis Ferry Road at Lakefield Drive	WBL**	345	76 / 187 (50 th) 107 / 384 (95 th)	System Improvement: Consider extending WBL lane storage.
7. McGinnis Ferry Road at Johns Creek Parkway	NBR**	145	0 / 70 (50 th) 0 / 168 (95 th)	System Improvement: Consider extending NBR lane storage.
	NBL	150	92 / 103 (50 th) 174 / 157 (95 th)	Consider extending NBL lane storage.
	SBL*	150	168 / 461 (50 th) 219 / 593 (95 th)	System Improvement: Consider extending SBL lane storage.
	WBR*	110	166 / 114 (50 th) 285 / 276 (95 th)	System Improvement: Consider extending WBR lane storage.
10. Medlock Bridge Road (SR 141) at Hospital Parkway	WBL**	175	190 / 177 (50 th) 364 / 266 (95 th)	System Improvement: Consider extending WBL lane storage.
	EBL*	140	47 / 171 (50 th) 89 / 274 (95 th)	System Improvement: Provide one (1) additional EBL lane along Hospital Parkway (creating 2 left-turn lanes)***
	EBR*	100	221 / 246 (50 th) 431 / 461 (95 th)	System Improvement: Consider extending EBR lane storage.***
11. Medlock Bridge Road (SR 141) at McGinnis Ferry Road	WBR*	120	12 / 70 (50 th) 15 / 146 (95 th)	System Improvement: Consider extending WBR lane storage.

* Exceeds available storage in Existing 2022 conditions

** Exceeds available storage in No-Build 2027 conditions

*** Recommendation from the Emory Johns Creek Hospital Expansion DRI #3542

1.0 PROJECT DESCRIPTION

1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of the proposed *Johns Creek Mixed-Use Development* located in the City of Johns Creek, Georgia. The approximately 41.7-acre site is located east of Johns Creek Parkway, south of McGinnis Ferry Road, and northwest of Lakefield Drive. The site currently consists of two (2) vacant existing office buildings, and their associated surface parking.

The project site is currently zoned M-1A (Industrial Park District). The site is proposed to be rezoned to TC-X with a town center overlay. The rezoning application was submitted to the City of Johns Creek on September 13, 2022. **Figure 1** provides a location map of the project site. **Figure 2** provides an aerial view of the project site and surrounding area.

The site currently consists of two (2) vacant office buildings and their associated surface parking. One (1) building will be renovated, while one (1) building and most of the surface parking will be demolished and redeveloped with a mix of uses. The proposed development will consist of the following land uses and densities contained in **Table 2**. The project is expected to be completed by 2027 (approximately 5 years).

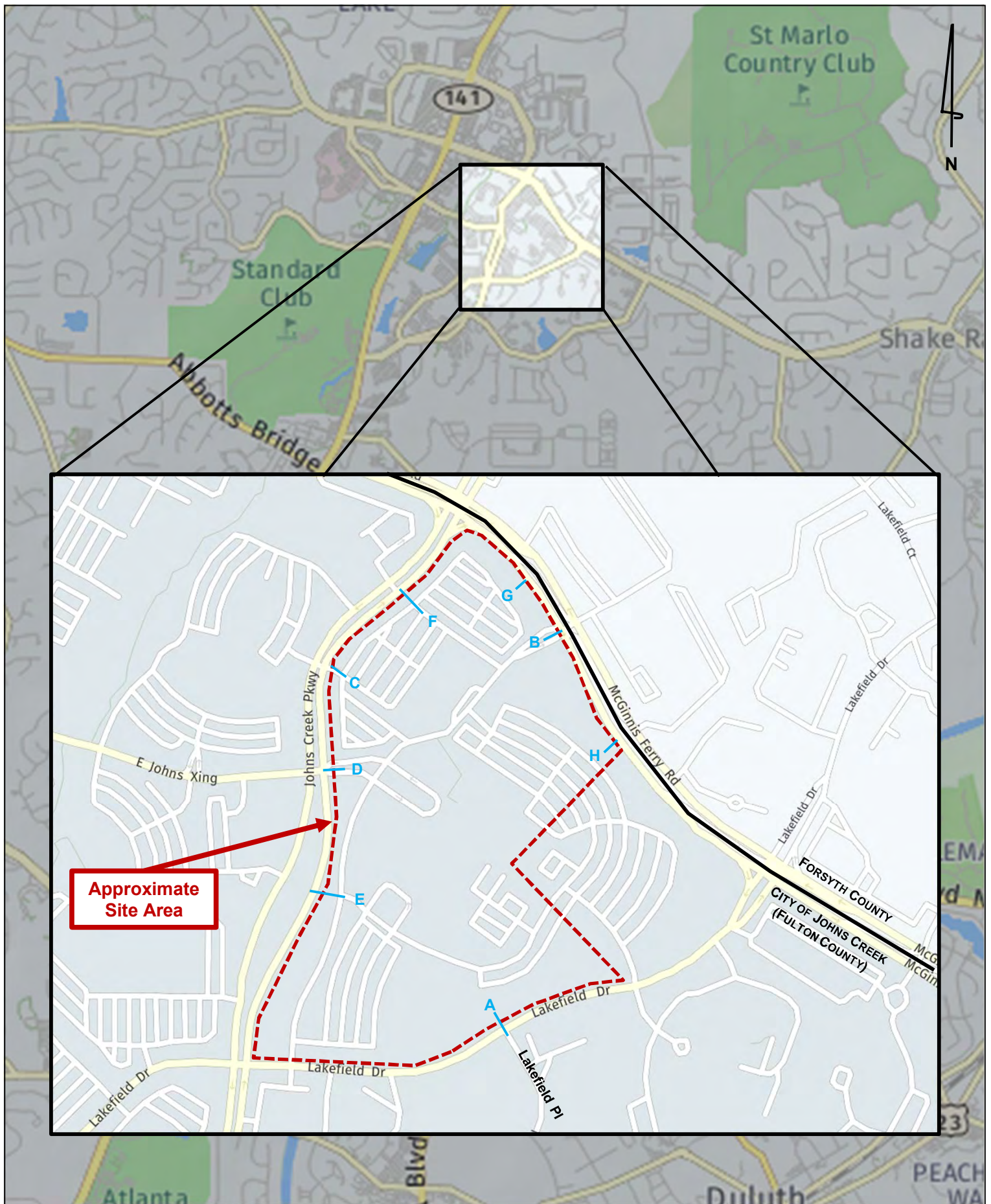
Table 2: Proposed Land Use and Density	
Land Use	Proposed
Townhomes	150 units
Multi-Family Housing (Mid-Rise)	750 units
Office*	110,000 SF
Retail	140,000 SF
Restaurant	60,000 SF

*Existing building, currently vacant.

**Approximately 360,000 SF of vacant office to be demolished.

A reference of the proposed site plan is provided in **Appendix A**. A full-sized site plan consistent with GRTA's Site Plan Guidelines is also being submitted as part of the review package.

The project is considered a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review due to the project size exceeding 600,000 square feet in a Regional Center. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on June 21, 2022 by the City of Johns Creek. This transportation analysis includes all inputs and methodologies discussed at the DRI Methodology Meeting with GRTA, ARC, and other stakeholders. The inputs and methodologies are outlined in the GRTA Letter of Understanding (LOU), dated August 12, 2022.





1.2 Site Access

As currently envisioned, the proposed development will be accessible via eight (8) access points (3 existing, 5 proposed):

1. **Site Driveway A (Intersection 4)** – a proposed full-movement driveway located along Lakefield Drive that aligns with Lakefield Place, approximately 700 feet south of the intersection of McGinnis Ferry Road at Lakefield Drive (Intersection 5) that will operate under side-street stop control. Site Driveway A is proposed to align with Lakefield Place and will provide vehicular access to all buildings in the development.
2. **Site Driveway B (Intersection 6)** – an existing full-movement driveway located along McGinnis Ferry Road, approximately 675 feet east of the intersection of McGinnis Ferry Road at Johns Creek Parkway (Intersection 7) which currently operates under side-street stop control. Site Driveway B will provide vehicular access to all buildings in the development.
3. **Site Driveway C (Intersection 8)** – an existing full-movement driveway located along Johns Creek Parkway, approximately 850 feet south of the intersection of McGinnis Ferry Road at Johns Creek Parkway (Intersection 7) which currently operates under side-street stop control. Site Driveway C will provide vehicular access to all buildings in the development.
4. **Site Driveway D (Intersection 9)** – an existing full-movement driveway located along Johns Creek Parkway that aligns with Johns Crossing (Intersection 9), which currently operates under side-street stop control. Site Driveway D will provide vehicular access to all buildings in the development.
5. **Site Driveway E (Intersection 14)** – a proposed right-in/right-out driveway located along Johns Creek Parkway Hospital Parkway approximately 500 feet south of the intersection of Johns Creek Parkway at Johns Crossing (Intersection 9) that will operate under side-street stop control. Site Driveway E will provide vehicular access to all buildings in the development.
6. **Site Driveway F (Intersection 15)** – a proposed full-movement driveway located along Johns Creek Parkway, approximately 400 feet south of the intersection of McGinnis Ferry Road at Johns Creek Parkway (Intersection 7) that will operate under side-street stop control. Site Driveway F will provide vehicular access to all buildings in the development.
7. **Site Driveway G (Intersection 16)** – a proposed right-in/right-out driveway located along McGinnis Ferry Road approximately 300 feet east of the intersection of McGinnis Ferry Road at Johns Creek Parkway (Intersection 7) that will operate under side-street stop control. Site Driveway G will provide vehicular access to all buildings in the development.
8. **Site Driveway H (Intersection 17)** – a proposed right-in/right-out driveway located along McGinnis Ferry Road approximately 1,100 feet east of the intersection of McGinnis Ferry Road at Johns Creek Parkway (Intersection 7) that will operate under side-street stop control. Site Driveway H will provide vehicular access to all buildings in the development.

1.3 Internal Circulation Analysis

Internal roadways throughout the site provide vehicular access to all buildings and parking on the site. See referenced site plan in **Appendix A** for a visual representation of vehicular access and circulation throughout the development. Pedestrian facilities will be provided throughout the development between the various land uses.

1.4 Parking

Parking will be provided on-site in a mixture of existing and proposed surface lots and parking decks.

The required number of total site parking spaces to be provided are listed below in **Table 3**. The site development is currently in progress and the number of parking provided is subject to change.

Table 3: Proposed Parking		
Land Use	Minimum	Maximum
Offices, General	330 <i>3 per 1,000 SF</i>	N/A
Residential, Multi-Family	1,200 <i>1/bed +0.2/unit</i>	N/A
Residential, Single-Family	330 <i>2.2 per dwelling unit</i>	N/A
Restaurants, Nightclubs and Taverns, Freestanding (including outdoor seating)	120 <i>1 per 500 SF</i>	N/A
Retail Establishments	280 <i>1 per 500 SF</i>	N/A
Total	2,260 spaces	N/A

A total of 2,706 parking spaces are proposed located in a mixture of existing surface lots, proposed surface lots, and three proposed parking decks. The parking numbers are not final and are subject to change as the site design evolves.

Additional parking details are provided on the proposed site plan in **Appendix A**.

1.5 Alternative Transportation Facilities

Pedestrian sidewalk facilities are currently provided along Johns Creek Parkway, McGinnis Ferry Road, Lakefield Drive, Hospital Parkway, and Medlock Bridge Road (SR 141). On-street bike lanes are currently provided along Hospital Parkway. Pedestrian facilities will be provided throughout the development. Additionally, the City of Johns Creek plans to install a multi-use trail along Medlock Bridge Road (SR 141) and Johns Creek Parkway using [SPLOST funds](#).

1.6 Enhanced Focus Area for Dense Urban Environments

Per Section 3.2.4.2 of the GRTA *Development of Regional Impact Review Procedures* the *Johns Creek Mixed-Use Development* does not qualify for a “Dense Urban Environment Enhanced Focus Area” review, due to its location in the City of Johns Creek.

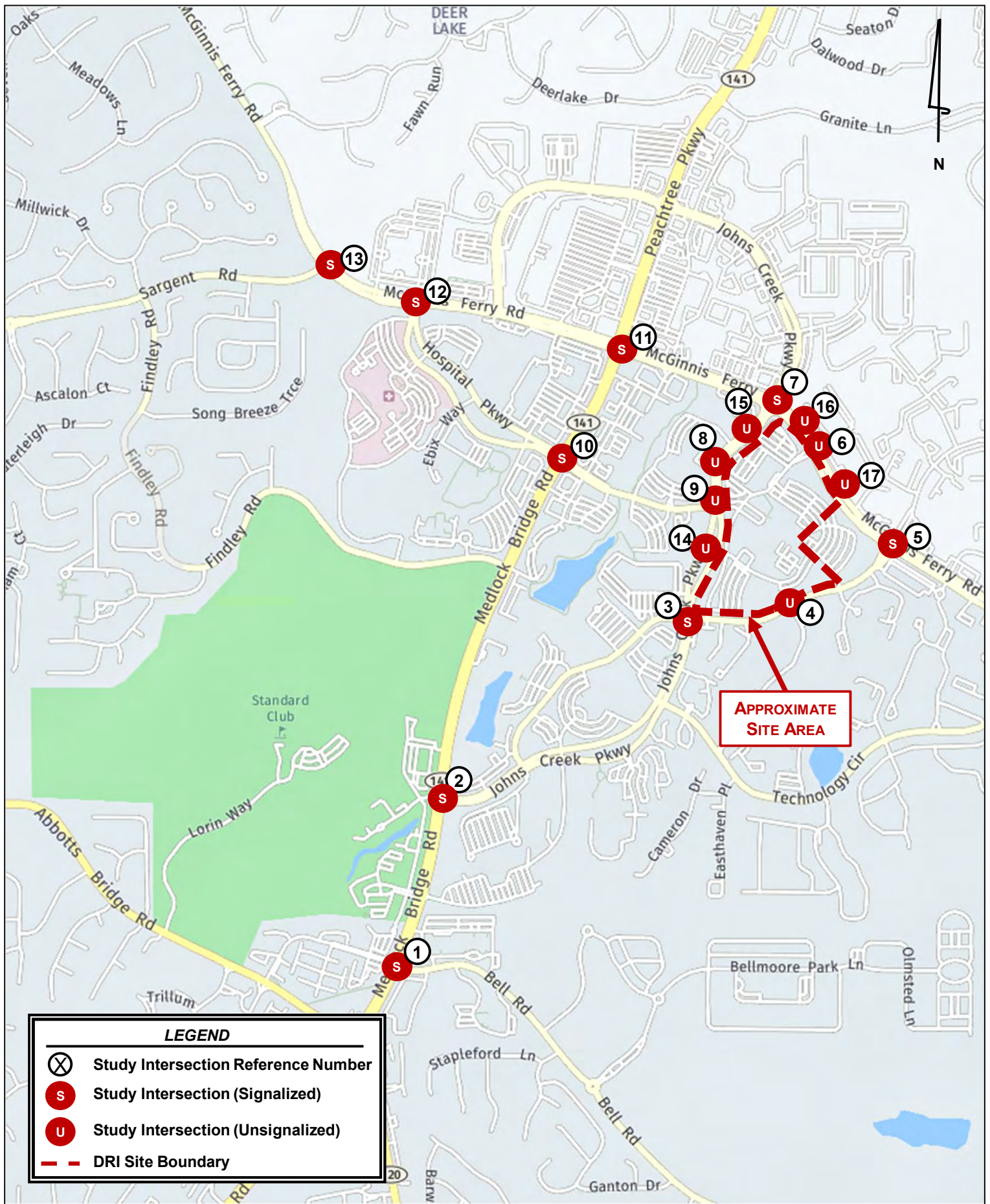
2.0 TRAFFIC ANALYSES, METHODOLOGY AND ASSUMPTIONS

2.1 Study Network Determination

The study area was determined at the methodology meeting with input from GRTA, ARC, and other local agency stakeholders. The study includes the following nine (9) off-site intersections and eight (8) site driveways (5 proposed, 3 existing) described in **Table 4** and shown visually in **Figure 3**.

Table 4: Intersection Control Summary

Intersection	Jurisdiction	Control
1. Medlock Bridge Road (SR 141) at Bell Road/Johns Creek Commons	City of Johns Creek/ GDOT	Signalized
2. Medlock Bridge Road (SR 141) at Johns Creek Parkway/Private Driveway	City of Johns Creek/ GDOT	Signalized
3. Johns Creek Parkway at Lakefield Drive	City of Johns Creek	Signalized, Programmed Roundabout
4. Lakefield Drive at Lakefield Place/Site Driveway A	City of Johns Creek	Unsignalized
5. McGinnis Ferry Road at Lakefield Drive	City of Johns Creek/ Forsyth County	Signalized
6. McGinnis Ferry Road at Site Driveway B	City of Johns Creek/ Forsyth County	Unsignalized
7. McGinnis Ferry Road at Johns Creek Parkway	City of Johns Creek/ Forsyth County	Signalized
8. Johns Creek Parkway at Site Driveway C/Private Driveway	City of Johns Creek	Unsignalized
9. Johns Creek Parkway at Johns Crossing/Site Driveway D	City of Johns Creek	Unsignalized
10. Medlock Bridge Road (SR 141) at Johns Crossing	City of Johns Creek/ GDOT	Signalized
11. Medlock Bridge Road (SR 141) at McGinnis Ferry Road	City of Johns Creek/ Forsyth County/GDOT	Signalized
12. McGinnis Ferry Road at Hospital Parkway/Private Driveway	City of Johns Creek/ Forsyth County	Signalized
13. McGinnis Ferry Road at Sargent Road	City of Johns Creek/ Forsyth County	Signalized
14. Johns Creek Parkway at Site Driveway E	City of Johns Creek	Unsignalized
15. Johns Creek Parkway at Site Driveway F/Private Driveway	City of Johns Creek	Unsignalized
16. McGinnis Ferry Road at Site Driveway G	City of Johns Creek	Unsignalized
17. McGinnis Ferry Road at Site Driveway H	City of Johns Creek	Unsignalized



2.2 Existing Roadway Facilities

Roadway classification descriptions and estimated Annual Average Daily Traffic (AADT) for roadway segments within the study network are provided in **Table 5** (bolded roadways are adjacent to the site).

Table 5: Roadway Classifications				
Roadway	Lanes	Speed Limit	AADT	GDOT Functional Classification
McGinnis Ferry Road	2/4*	45 MPH	19,100** 35,600***	Minor Arterial
Johns Creek Parkway	4	35 MPH	-	Major Collector
Lakefield Drive	2	35 MPH	-	Local
Hospital Parkway	2	25 MPH	-	Local
Medlock Bridge Road (SR 141)	4	55 MPH	41,400	Principal Arterial
Sargent Road	2	40 MPH	-	Major Collector
Bell Road	2	45 MPH	8,060	Major Collector

*McGinnis Ferry Road is 4 lanes east of Sargent Road and 2 lanes west of Sargent Road

**West of 7 Oaks Parkway.

***East of Lakefield Drive

2.3 Traffic Data Collection and Calibration

New traffic counts were collected at the study intersections on Wednesday, August 17, 2022 (Intersection 1), Tuesday, May 3, 2022 (Intersections 2-11), and Thursday, January 20, 2022 (Intersections 12-13). The intersections were not calibrated per request by the City of Johns Creek. The traffic count methodologies used in this analysis were outlined in the Methodology Meeting Packet.

Traffic count peak hours for all the study intersections are shown in **Table 6**.

Table 6: Traffic Count Summary

Intersection	Collection Date	AM Peak Hour	PM Peak Hour
1. Medlock Bridge Road (SR 141) at Johns Creek Commons/Bell Road	8/2022	7:30 – 8:30 AM	4:45 – 5:45 PM
2. Medlock Bridge Road (SR 141) at Johns Creek Parkway	5/2022	7:45 – 8:45 AM	5:00 – 6:00 PM
3. Johns Creek Parkway at Lakefield Drive	5/2022	8:00 – 9:00 AM	4:45 – 5:45 PM
4. Lakefield Drive at Lakefield Place/Site Driveway A	5/2022	8:00 – 9:00 AM	4:45 – 5:45 PM
5. McGinnis Ferry Road at Lakefield Drive	5/2022	7:45 – 8:45 AM	4:45 – 5:45 PM
6. McGinnis Ferry Road at Site Driveway B/Private Driveway	5/2022	7:45 – 8:45 AM	4:45 – 5:45 PM
7. McGinnis Ferry Road at Johns Creek Parkway	5/2022	7:45 – 8:45 AM	4:45 – 5:45 PM
8. Johns Creek Parkway at Site Driveway C/Private Driveway	5/2022	8:00 – 9:00 AM	4:45 – 5:45 PM
9. Johns Creek Parkway at Johns Crossing/Site Driveway D	5/2022	8:00 – 9:00 AM	4:45 – 5:45 PM
10. Medlock Bridge Road (SR 141) at Hospital Parkway/Johns Crossing	5/2022	7:30 – 8:30 AM	4:45 – 5:45 PM
11. Medlock Bridge Road (SR 141) at McGinnis Ferry Road	5/2022	7:30 – 8:30 AM	5:00 – 6:00 PM
12. McGinnis Ferry Road at Hospital Parkway	1/2022	7:45 – 8:45 AM	4:45 – 5:45 PM
13. McGinnis Ferry Road at Sargent Road	1/2022	7:30 – 8:30 AM	4:45 – 5:45 PM

The collected peak hour turning movement traffic counts are available upon request.

2.4 Background Growth

Background traffic is defined as expected traffic on the roadway network in future year(s) absent the construction and opening of the proposed *Johns Creek Mixed-Use Development*. Background traffic can include a base growth rate based on historical count data and population growth data as well as trips anticipated from nearby or adjacent other projects.

Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 1.5% per year background traffic growth rate from 2022 to 2027 (5 years) was used for all roadways. Additionally, project trips associated with Phase 1 of the *Emory Johns Creek Hospital Expansion DRI #3542* were included in the background growth.

The Projected 2027 No-Build conditions represent the Existing 2022 traffic volumes grown for five (5) years at 1.5% per year throughout the study network, plus Phase 1 project trips associated with the *Emory Johns Creek Hospital Expansion DRI #3542*. The Projected 2027 Build conditions represent the project trips generated by the *Johns Creek Mixed-Use Development* (discussed in Section 3.0 and 4.0) added to the Projected 2027 No-Build Conditions.

2.5 Programmed and Planned Projects

Programmed and planned projects near the project site were researched to account for any improvements or modifications within the study network before or by the build-out year of the development. The programmed and planned projects were discussed in the methodology meeting with GRTA, ARC, and other local stakeholders.

Three projects were identified to include in the capacity analyses. These projects are highlighted in yellow below. These projects are taken into consideration in the analysis of the No-Build 2027 and Build 2027 conditions. The project details are outlined in **Table 7**.

Project Name	From / To Points:	Sponsor	GDOT PI #	ARC ID # (TIP)	Design FY	ROW / UTL FY	CST FY
SR 141 Widening**	Grove Point Road to McGinnis Ferry Road	City of Johns Creek	N/A	FN-178C	2022	2023	2024
SR 141 Widening	Johns Creek Parkway to Hospital Parkway	City of Johns Creek/GDOT	0019136	N/A	2023	2027	2027
McGinnis Ferry Widening	Big Creek to Seven Oaks Parkway	Forsyth County	0004634	FN-233A	2018	2020	2022
McGinnis Ferry Widening	Seven Oaks Parkway to Sargent Road	City of Johns Creek /Forsyth County	N/A	FN-233-1J	2018	2020	2022
SR 120 Widening/ Restriping	Jones Bridge Road to SR 141	City of Johns Creek	0012788	FN-265	N/A	N/A	2022
SR 120 Widening	SR 141 to Peachtree Industrial	GDOT	721000-	FN-264	2012	2023	2023
Off System Safety Improvement	Hospital Parkway	GDOT	0016930	N/A	N/A	N/A	2021
Off System Safety Improvement	Johns Creek Parkway	GDOT	0018212	N/A	N/A	N/A	2022
RCUT Construction	SR 141 at Findley Road	GDOT	S015541	N/A	N/A	N/A	2021
Medlock Bridge Road Intersection Improvements	McGinnis Ferry to SR 120	City of Johns Creek	N/A	N/A	2021	2022	2022
Town Center Roundabout	Lakefield Drive at Johns Creek Parkway	City of Johns Creek	N/A	N/A	2022	N/A	N/A

*Project information was obtained from GeoPI (GDOT), the Atlanta Region's Plan (ARC), the North Fulton CID, and the City of Johns Creek SPLOST List.

**SR 141 Widening Project will focus on intersection capacity projects rather than a full corridor widening.

Available fact sheets for projects listed in the table above can be found in **Appendix D**. The additional capacity provided by these programmed projects are noted with green arrows on **Figure 8** and **Figure 9**.

2.6 Level-of-Service Overview

Level-of-service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels-of-service, LOS A through LOS F, with A being the best and F being the worst. LOS analyses were conducted at all intersections within the study network using *Synchro 11*. Existing traffic signal phasing and timing data were retrieved for available intersections.

LOS for signalized intersections, all-way stop-controlled intersections and roundabouts are reported for the intersection as a whole. One or more movements at an intersection may experience a low LOS, while the intersection as a whole may operate acceptably.

LOS for unsignalized intersections, with stop control on the minor street only, is reported for the side street approaches and the major street left-turn movements. Low LOS for side street approaches is not uncommon, as vehicles may experience delays in turning onto a major roadway.

2.7 Level-of-Service Standards

For the purposes of this traffic analysis, a LOS standard of E was assumed for the following study intersections, due to their location within a *Regional Center* area per the ARC Unified Growth Policy Map, per section 3.2.2.1 of the *GRTA Development of Regional Impact Review Procedures*:

- Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 2)
- Johns Creek Parkway at Lakefield Drive (Intersection 3)
- Lakefield Drive at Lakefield Place/Site Driveway A (Intersection 4)
- McGinnis Ferry Road at Lakefield Drive (Intersection 5)
- McGinnis Ferry Road at Site Driveway B/Private Driveway (Intersection 6)
- McGinnis Ferry Road at Johns Creek Parkway (Intersection 7)
- Johns Creek Parkway at Site Driveway C/Private Driveway (Intersection 8)
- Johns Creek Parkway at Johns Crossing/Site Driveway D (Intersection 9)
- Medlock Bridge Road (SR 141) at Hospital Parkway (Intersection 10)
- Medlock Bridge Road (SR 141) at McGinnis Ferry Road (Intersection 11)
- McGinnis Ferry Road at Hospital Parkway/Private Driveway (Intersection 12)
- Johns Creek Parkway at Site Driveway E (Intersection 14)
- Johns Creek Parkway at Site Driveway F/Private Driveway (Intersection 15)
- McGinnis Ferry Road at Site Driveway G (Intersection 16)
- McGinnis Ferry Road at Site Driveway H (Intersection 17)

A LOS standard of D was assumed for other remaining study intersections.

3.0 TRIP GENERATION

Gross trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition, 2021*, using equations where available. Reductions to gross trips are also considered in the analysis, including mixed-use reductions and alternative transportation mode reductions.

Mixed-use reductions occur when a site has a combination of different land uses that interact with one another. For example, people living in a residential development may walk to the restaurants and retail instead of driving off-site or to the site. This reduces the number of vehicle trips that will be made on the roadway, thus reducing traffic congestion.

Alternative mode reductions are taken when a site can be accessed by modes other than vehicles (walking, bicycling, transit, etc.). Alternative mode reductions were taken at 5% per the LOU.

Pass-by reductions are taken for a site when traffic normally traveling along a roadway may choose to visit a retail or restaurant establishment that is along the vehicle's path. These trips were already on the road and would therefore only be new trips on the driveways.

Table 8 summarizes the gross trip generation, reductions, net trip generation, and driveway volumes for the proposed *Johns Creek Mixed-Use Development*.

Table 8: Trip Generation								
Land Use	Density	Daily Traffic			AM Peak Hour		PM Peak Hour	
		Total	Enter	Exit	Enter	Exit	Enter	Exit
215 – Single-Family Attached Housing	150 d.u.	1,092	546	546	22	50	49	37
221 – Multi-Family Housing (Mid-Rise)	750 d.u.	3,532	1,766	1,766	73	245	179	114
710 – General Office Building (Existing, Vacant))	110,000 SF	1,260	630	630	160	22	31	149
821 – Shopping Center (40k-150k)	140,000 SF	9,452	4,726	4,726	150	92	356	371
932 – High-Turnover (Sit-Down) Restaurant	60,000 SF	6,432	3,216	3,216	316	258	331	212
Gross Project Trips		21,768	10,884	10,884	721	667	946	883
<i>Mixed-Use Reductions</i>		-3,452	-1,726	-1,726	-146	-146	-439	-439
<i>Alternative Mode Reductions (5%)</i>		-914	-457	-457	-28	-26	-26	-23
<i>Pass-By Reductions</i>		-5,068	-2,534	2,534	-0	-0	-118	-118
Net New Trips		12,334	6,167	6,167	547	495	363	303

A more detailed trip generation analysis summary table is provided in **Appendix B**.

4.0 TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of new project trips was based on the project land uses, a review of land use densities and road facilities in the area, engineering judgement, and methodology discussions with GRTA, ARC, and other local stakeholders.

The anticipated distribution and assignment of the trips throughout the study roadway network are shown for residential trips in **Figure 4**. The anticipated distribution and assignment of the trips throughout the study roadway network are shown for non-residential trips in **Figure 5**. These trip assignment percentages were applied to the net project trips expected to be generated by the development, and the volumes were assigned to the roadway network. The peak hour project trips are shown by turning movement throughout the study network in and **Figure 6**.

Detailed intersection volume worksheets are provided in **Appendix C**.

5.0 TRAFFIC ANALYSIS

Capacity analyses were performed using *Synchro 11* for the AM and PM peak hours under the Existing 2022 conditions, Projected 2027 No-Build Conditions, and Projected 2027 Build Conditions. The capacity analyses were performed using methodologies from the *Highway Capacity Manual (HCM)*, 6th Edition unless otherwise noted.

These analyses included existing roadway laneage and signal timing data for each of the scenarios. The traffic volumes and roadway laneage used for each scenario are shown visually in **Figure 7** for Existing 2022 conditions, **Figure 8** for Projected 2027 No-Build Conditions, and **Figure 9** for Projected 2027 Build Conditions.

Sections 5.1 – 5.17 provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.

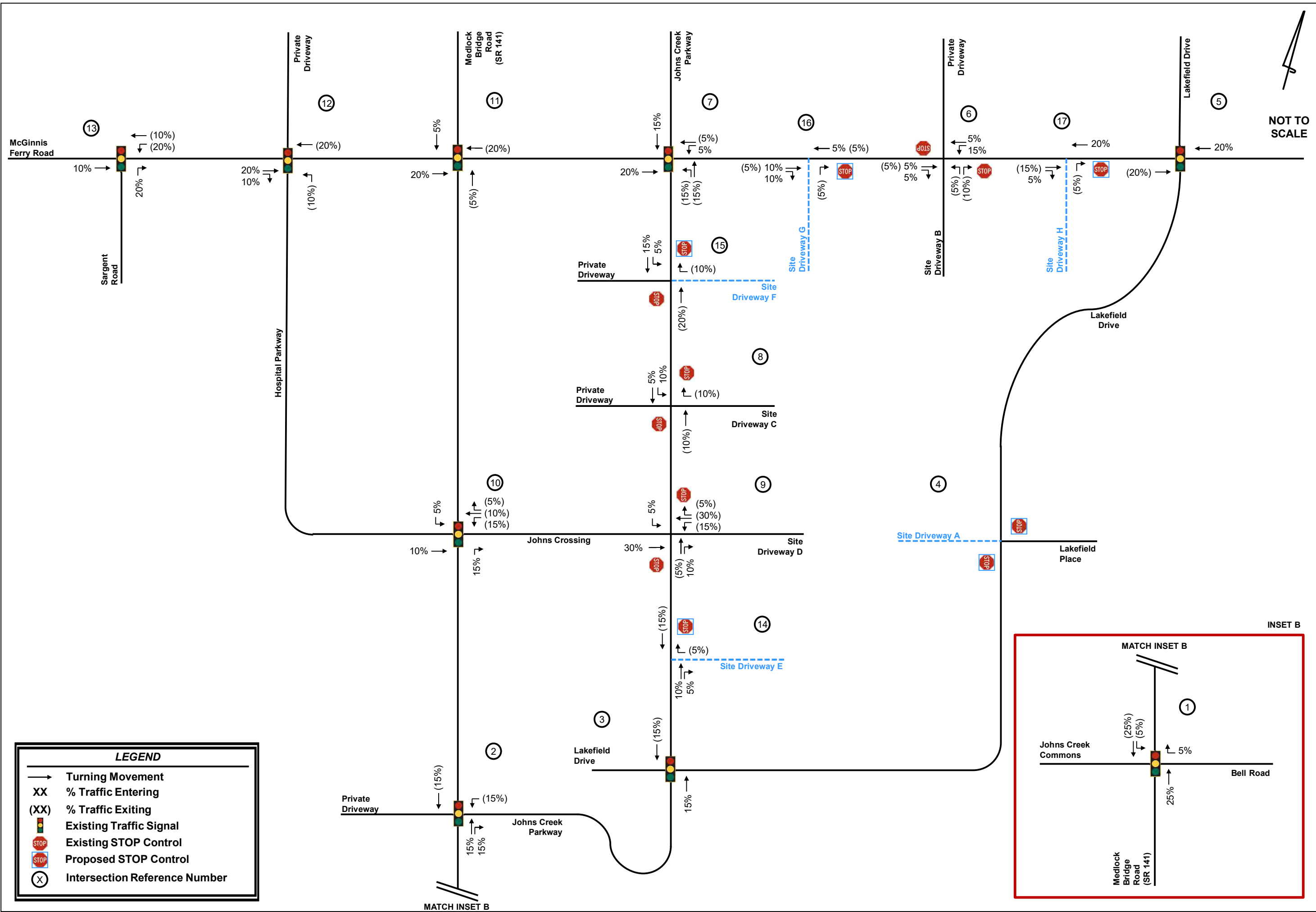


Figure 5

Non-Residential Trip Distribution

Johns Creek Mixed-Use Development DRI #3742 Transportation Analysis

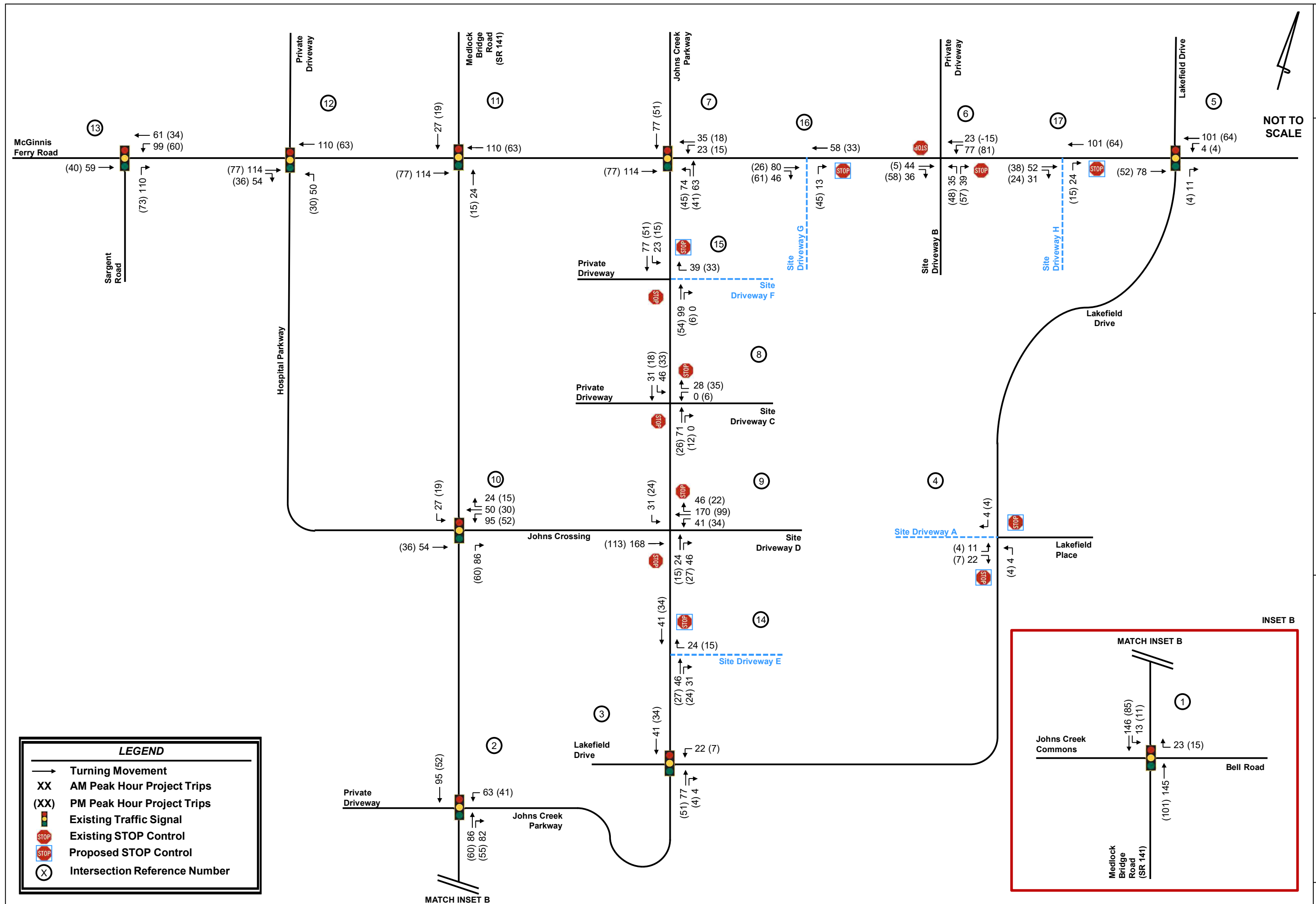


Figure 6

Project Trips

Johns Creek Mixed-Use Development DRI #3742 Transportation Analysis

5.1 Medlock Bridge Road (SR 141) at Bell Road/Johns Creek Commons (Intersection 1)

Overall LOS Standard: D
Approach LOS Standard: D/E

Overall LOS Standard: D Approach LOS Standard: D/E			Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Johns Creek Commons			Bell Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	C (22.3)											
		Approach LOS	C (23.9)			A (8.7)			F (84.7)			E (77.0)		
		Storage	145		380	460		290	120		80	560		415
		50th Queue	13	807	8	19	295	0	28	13	0	129	9	28
		95th Queue	31	1,040	40	35	321	0	63	37	0	174	27	95
	PM	Overall LOS	C (33.0)											
		Approach LOS	C (24.7)			C (33.2)			F (82.6)			E (76.0)		
		Storage	145		380	460		290	120		80	560		415
		50th Queue	47	856	7	105	1,384	0	41	25	0	81	14	25
		95th Queue	134	1,016	37	158	1,409	0	84	59	0	122	38	90
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	C (20.4)											
		Approach LOS	B (19.6)			A (8.6)			F (84.8)			E (77.3)		
		Storage	145		380	460		290	120		80	560		415
		50th Queue	15	531	0	34	255		30	14	0	139	11	31
		95th Queue	34	634	32	85	260		68	38	0	187	31	103
	PM	Overall LOS	C (28.6)											
		Approach LOS	B (19.1)			C (29.0)			F (83.0)			E (78.0)		
		Storage	145		380	460		290	120		80	560		415
		50th Queue	54	524	0	119	771		44	28	0	88	15	31
		95th Queue	151	574	30	190	780		90	63	0	130	40	103
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	C (22.3)											
		Approach LOS	C (20.9)			B (11.9)			F (84.8)			E (77.3)		
		Storage	145		380	460		290	120		80	560		415
		50th Queue	15	602	0	66	319		30	14	0	139	11	59
		95th Queue	37	715	32	114	312		68	38	0	187	31	141
	PM	Overall LOS	C (30.5)											
		Approach LOS	B (19.1)			C (33.2)			F (83.8)			E (78.0)		
		Storage	145		380	460		290	120		80	560		415
		50th Queue	54	569	0	144	812		44	28	0	88	15	50
		95th Queue	120	611	30	245	795		90	63	0	130	40	130

Note: This intersection was modeled using HCM 2000 methodology due to limitations in HCM 6th Edition methodology.

The City of Johns Creek has programmed the following roadway improvements at the intersection (shown in green on **Figure 8** and **Figure 9**):

- Provide an additional northbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).
- Restripe the southbound right-turn lane as a shared through/right-turn lane along Medlock Bridge Road (SR 141).

Under the Existing 2022 conditions, the eastbound and westbound approaches of Medlock Bridge Road (SR 141) at Bell Road/Johns Creek Commons (Intersection 1) are projected to operate at an unacceptable LOS during the AM and PM peak hours. After the implementation of the City of Johns Creek project, the eastbound and westbound approaches of Medlock Bridge Road (SR 141) at Bell Road/Johns Creek Commons (Intersection 1) are projected to continue to operate at an unacceptable LOS during the AM and PM peak hours under all studied scenarios. Although the approaches are projected to operate at LOS F, no feasible improvements exist, as the failing LOS is due to the existing signal timing. The signal timings at this intersection prioritize vehicle progression on the mainline (SR 141), and the long cycle length at this intersection results in vehicles waiting a significant period of time between green indications. The intersection is projected to operate at an acceptable overall LOS.

5.2 Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 2)

Overall LOS Standard: E
Approach LOS Standard: E

		Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Johns Creek Parkway			Johns Creek Parkway		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	C (25.5)										
		Approach LOS	A (2.9)			C (22.8)			F (84.9)			F (138.6)	
		Storage	780		265	135		200	65		30		
		50th Queue	4	73	0	13	989	0	20	14	0	253	18
		95th Queue	6	92	0	10	1,058	0	41	39	0	367	61
	PM	Overall LOS	D (52.1)										
		Approach LOS	D (40.7)			D (35.7)			F (85.6)			F (122.5)	
		Storage	780		265	135		200	65		30		
		50th Queue	46	691	222	19	836	0	31	27	0	409	16
		95th Queue	61	808	350	32	960	0	57	61	0	539	57
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	C (28.6)										
		Approach LOS	A (5.4)			B (17.6)			F (85.5)			F (186.5)	
		Storage	780			135			65		30		
		50th Queue	4	51		20	670		22	15	0	301	19
		95th Queue	22	69		32	591		45	42	0	418	62
	PM	Overall LOS	D (52.6)										
		Approach LOS	C (34.1)			D (36.0)			F (85.7)			F (149.0)	
		Storage	780			135			65		30		
		50th Queue	53	608		24	605		34	29	0	470	17
		95th Queue	104	699		40	654		60	66	0	601	59
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	D (39.5)										
		Approach LOS	A (9.9)			B (18.2)			F (85.5)			F (262.8)	
		Storage	780			135			65		30		
		50th Queue	4	781		17	695		22	15	0	386	19
		95th Queue	24	65		38	674		45	42	0	508	62
	PM	Overall LOS	E (57.9)										
		Approach LOS	D (36.4)			D (36.8)			F (85.7)			F (175.6)	
		Storage	780			135			65		30		
		50th Queue	55	667		25	650		34	29	0	523	17
		95th Queue	101	754		37	675		60	66	0	657	59

Note: This intersection was modeled using HCM 2000 methodology due to limitations in HCM 6th Edition methodology.

The City of Johns Creek has programmed the following roadway improvements at the intersection (shown in green on **Figure 8** and **Figure 9**):

- Restripe the northbound right-turn lane as a shared through/right-turn lane along Medlock Bridge Road (SR 141).
- Restripe the southbound right-turn lane as a shared through/right-turn lane along Medlock Bridge Road (SR 141).

Under the Existing 2022 conditions, the eastbound and westbound approaches of Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 2) are projected to operate at an unacceptable LOS during the AM and PM peak hours.

After the implementation of the City of Johns Creek project, the eastbound and westbound approaches of Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 2) are projected to operate at an unacceptable LOS during the AM and PM peak hours.

In order to improve the overall and approach LOS under the No-Build 2027 and Build 2027 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8** and **Figure 9**):

- Provide one (1) additional westbound left-turn lane (creating triple lefts) along Johns Creek Parkway. A third receiving will be provided as part of the programmed City of Johns Creek project.

The analysis results for the improved conditions at Intersection 2 are shown below:

		Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Johns Creek Parkway			Johns Creek Parkway		
Overall LOS Standard: E		Northbound			Southbound			Eastbound			Westbound		
Approach LOS Standard: E		L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (30.1)										
		Approach LOS	B (19.1)			C (30.9)			E (77.9)			E (73.6)	
		Storage	780			135			65		30		
		50th Queue	9	798		16	768		22	14	0	162	18
		95th Queue	48	683		46	852		44	40	2	203	58
	PM	Overall LOS	D (53.6)										
		Approach LOS	D (53.6)			D (45.0)			E (78.1)			E (71.5)	
		Storage	780			135			65		30		
		50th Queue	70	695		26	634		34	27	0	265	16
		95th Queue	124	827		44	639		60	62	0	314	55
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (32.4)										
		Approach LOS	C (22.9)			C (30.9)			E (77.9)			E (76.2)	
		Storage	780			135			65		30		
		50th Queue	12	926		17	827		22	14	0	192	18
		95th Queue	58	1,048		36	880		44	40	2	236	58
	PM	Overall LOS	E (57.8)										
		Approach LOS	E (61.6)			D (45.7)			E (78.1)			E (73.3)	
		Storage	780			135			65		30		
		50th Queue	71	827		26	669		34	27	0	285	16
		95th Queue	116	899		40	697		60	62	0	336	55

With the improvements listed above, the intersection of Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 2) is projected to operate at or above its overall and approach LOS standards under both Existing 2022, No-Build 2027, and Build 2027 conditions.

5.3 Johns Creek Parkway at Lakefield Drive (Intersection 3)

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Johns Creek Parkway			Johns Creek Parkway			Lakefield Drive			Lakefield Drive		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	A (8.2)											
		Approach LOS	A (6.7)			A (6.8)			B (10.2)			B (10.4)		
		Storage							100			75		
		50th Queue		8			10		7	4		23	25	
		95th Queue		24			26		23	18		54	56	
	PM	Overall LOS	A (8.8)											
		Approach LOS	A (7.4)			A (7.0)			B (10.5)			B (11.1)		
		Storage							100			75		
		50th Queue		14			17		18	18		33	23	
		95th Queue		32			34		44	44		71	52	
PROJECTED 2027 NO-BUILD (ROUNDABOUT)	AM	Overall LOS	A (3.9)											
		Approach LOS	A (2.7)			A (3.0)			A (4.6)			A (5.9)		
		Storage												
		50th Queue												
		95th Queue		17			22			10			36	
	PM	Overall LOS	A (5.8)											
		Approach LOS	A (4.3)			A (5.2)			A (7.1)			A (7.4)		
		Storage												
		50th Queue												
		95th Queue		28			37			37			50	
PROJECTED 2027 BUILD (ROUNDABOUT)	AM	Overall LOS	A (4.5)											
		Approach LOS	A (3.4)			A (3.6)			A (4.9)			A (6.8)		
		Storage												
		50th Queue												
		95th Queue		28			29			11			43	
	PM	Overall LOS	A (6.2)											
		Approach LOS	A (4.7)			A (5.6)			A (7.6)			A (8.1)		
		Storage												
		50th Queue												
		95th Queue		37			45			40			55	

The City of Johns Creek has programmed the following roadway improvements at the intersection (shown in green on **Figure 8** and **Figure 9**):

- Construct a single-lane roundabout with right-turn slip lanes on the northbound and southbound approaches.

The intersection of Johns Creek Parkway at Lakefield Drive (Intersection 3) is projected to operate at an acceptable overall LOS under the Existing 2022, No-Build 2027, and Build 2027 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.4 Lakefield Drive at Lakefield Place/Site Driveway A (Intersection 4)

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Lakefield Drive			Lakefield Drive			Site Driveway A			Lakefield Place		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (TWSC)	AM	Overall LOS	(0.6)											
		Approach LOS	A (0.0)			A (7.4)						A (9.6)		
		Storage			120									
		50th Queue												
		95th Queue				0							3	
	PM	Overall LOS	(0.5)											
		Approach LOS	A (0.0)			A (7.7)						B (10.1)		
		Storage			120									
		50th Queue												
		95th Queue				0							3	
PROJECTED 2027 NO-BUILD (TWSC)	AM	Overall LOS	(0.6)											
		Approach LOS	A (0.0)			A (7.5)						A (9.7)		
		Storage			120									
		50th Queue												
		95th Queue				0							3	
	PM	Overall LOS	(0.6)											
		Approach LOS	A (0.0)			A (7.7)						B (10.3)		
		Storage			120									
		50th Queue												
		95th Queue				0							3	
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(1.5)											
		Approach LOS	A (7.7)			A (7.5)			A (9.8)			B (10.1)		
		Storage			120									
		50th Queue												
		95th Queue	0			0				5			3	
	PM	Overall LOS	(0.8)											
		Approach LOS	A (7.7)			A (7.7)			B (10.2)			B (11.0)		
		Storage			120									
		50th Queue												
		95th Queue	0			0				3			3	

The intersection of Lakefield Drive at Lakefield Place/Site Driveway A (Intersection 4) is projected to operate at an acceptable overall LOS under the Existing 2022, No-Build 2027, and Build 2027 conditions. Additionally, each approach of the intersection is projected to operate acceptably under all studied scenarios. The recommended lane configuration for Site Driveway A is one lane entering the site and one lane exiting the site. The recommended build improvements are shown in blue on **Figure 9**.

5.5 McGinnis Ferry Road at Lakefield Drive (Intersection 5)

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Lakefield Drive			Lakefield Drive			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	B (11.2)											
		Approach LOS	F (84.5)			F (84.4)			A (6.2)			B (10.3)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	8	19	0	12	1	0	15	177	0	60	625	0
		95th Queue	27	48	0	35	8	0	35	250	1	89	724	3
	PM	Overall LOS	C (23.4)											
		Approach LOS	F (82.7)			F (80.8)			B (18.1)			B (15.9)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	31	10	59	71	23	0	5	671	0	158	343	0
		95th Queue	65	30	151	121	52	31	15	829	0	250	471	0
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	B (14.2)											
		Approach LOS	F (84.6)			F (84.5)			A (6.9)			B (14.6)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	9	20	0	13	1	0	15	178	0	73	876	0
		95th Queue	30	49	0	38	8	0	28	195	1	106	1,005	4
	PM	Overall LOS	C (24.4)											
		Approach LOS	F (90.7)			F (80.8)			B (18.2)			B (17.5)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	33	12	87	76	24	0	8	601	0	176	352	0
		95th Queue	70	35	187	130	55	39	12	725	0	369	457	0
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	B (17.1)											
		Approach LOS	F (85.2)			F (85.2)			A (8.9)			B (18.0)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	9	20	0	13	1	0	14	175	0	76	1,022	0
		95th Queue	31	50	7	38	8	0	41	192	0	107	1,144	4
	PM	Overall LOS	C (25.4)											
		Approach LOS	F (96.4)			F (81.0)			B (18.5)			B (19.1)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	33	12	95	75	23	0	8	597	0	187	416	0
		95th Queue	70	35	220	132	56	40	12	676	0	384	493	0

Note: This intersection was modeled using HCM 2000 methodology due to limitations in HCM 6th Edition methodology.

Under the Existing 2022 conditions, the northbound and southbound approaches of McGinnis Ferry Road at Lakefield Drive (Intersection 5) are projected to operate at an unacceptable LOS during the AM and PM peak hours. These approaches are projected to continue to operate at an unacceptable LOS under all studied scenarios.

The intersection is projected to operate at an acceptable overall LOS under all studied scenarios.

In order to improve the approach LOS under the No-Build 2027 and Build 2027 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8** and **Figure 9**):

- Provide a northbound right-turn overlap phase along Lakefield Drive.

The analysis results for the improved conditions at Intersection 5 are shown in the table on the following page.

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Lakefield Drive			Lakefield Drive			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	B (17.3)											
		Approach LOS	E (66.4)			E (72.7)			A (9.5)			B (18.8)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	9	18	0	12	1	0	15	179	0	77	921	0
		95th Queue	29	46	29	35	8	0	42	201	0	108	1,030	4
	PM	Overall LOS	C (28.4)											
		Approach LOS	E (64.8)			E (72.6)			C (24.6)			C (23.9)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	32	12	152	72	23	0	11	603	0	181	501	0
95th Queue	69	35	241	129	55	39	14	790	0	323	566	0		
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	B (19.3)											
		Approach LOS	E (66.8)			E (73.6)			B (10.4)			C (21.3)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	9	19	0	12	1	0	14	180	0	78	1,047	0
		95th Queue	29	47	44	36	8	0	50	201	0	110	1,172	4
	PM	Overall LOS	C (29.6)											
		Approach LOS	E (66.0)			E (72.6)			C (24.9)			C (26.4)		
		Storage	110		80	190		170	400		250	345		240
		50th Queue	32	12	160	72	23	0	10	578	0	189	541	0
95th Queue	69	35	253	129	55	39	14	700	0	372	611	0		

With the improvements listed above, the intersection of McGinnis Ferry Road at Lakefield Drive (Intersection 5) is projected to operate at or above its overall and approach LOS standards under both Existing 2022, No-Build 2027, and Build 2027 conditions.

5.6 McGinnis Ferry Road at Site Driveway B/Private Driveway (Intersection 6)

Overall LOS Standard: E
Approach LOS Standard: E

			Site Driveway B			Private Driveway			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (TWSC)	AM	Overall LOS	(0.1)											
		Approach LOS	A (0.0)			A (0.0)			C (19.8)			A (8.9)		
		Storage							250		205	450		
		50th Queue												
		95th Queue							3			0		
	PM	Overall LOS	(0.8)											
		Approach LOS	C (18.8)			E (47.4)			B (14.2)			B (14.9)		
		Storage							250		205	450		
		50th Queue												
		95th Queue		0			33		13			3		
PROJECTED 2027 NO-BUILD (TWSC)	AM	Overall LOS	(0.1)											
		Approach LOS	A (0.0)			A (0.0)			C (22.8)			A (9.1)		
		Storage							250		205	450		
		50th Queue												
		95th Queue							5			0		
	PM	Overall LOS	(1.2)											
		Approach LOS	D (25.5)			F (83.5)			C (15.7)			C (19.8)		
		Storage							250		205	450		
		50th Queue												
		95th Queue		0			53		15			3		
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(0.9)											
		Approach LOS	D (33.7)			A (0.0)			C (23.2)			A (9.7)		
		Storage							250		205	450		
		50th Queue												
		95th Queue	35		5				5			8		
	PM	Overall LOS	(65.0)											
		Approach LOS	F (118.1)			F (\$)			C (15.5)			D (27.4)		
		Storage							250		205	450		
		50th Queue												
		95th Queue	100		35		175		15			40		

(\$) = delay exceeds 300s

The unsignalized intersection of McGinnis Ferry Road at Site Driveway B/Private Driveway (Intersection 6) is projected to operate at an acceptable overall LOS under the Existing 2022, No-Build 2027 AM and Build 2027 AM conditions. Under No-Build 2027 and Build 2027 PM conditions, the northbound and southbound approaches operate at LOS F. A signal would likely not be permitted at this intersection based on the location of adjacent signals to the east and west (less than 1,000'). As the southbound approach is a private driveway, no additional improvements are recommended to be conditioned as low LOS are not uncommon for side street approaches, as vehicles may experience significant delay turning onto a major roadway.

5.7 McGinnis Ferry Road at Johns Creek Parkway (Intersection 7)

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Johns Creek Parkway			Johns Creek Parkway			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	C (20.7)											
		Approach LOS	E (79.4)			F (81.2)			A (5.5)			B (12.3)		
		Storage	150		145	150			285		305	300		110
		50th Queue	19	50	0	156	181		8	76	0	31	194	143
		95th Queue	43	81	0	204	260		13	97	0	44	214	174
	PM	Overall LOS	D (37.6)											
		Approach LOS	F (80.4)			F (93.9)			B (16.7)			B (14.4)		
		Storage	150		145	150			285		305	300		110
		50th Queue	56	88	42	387	198		3	654	0	10	368	210
		95th Queue	94	125	129	519	283		3	651	0	17	475	277
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	C (24.2)											
		Approach LOS	E (79.5)			F (81.4)			A (9.6)			B (16.4)		
		Storage	150		145	150			285		305	300		110
		50th Queue	19	54	0	168	193		10	98	0	41	242	181
		95th Queue	45	86	0	220	273		24	130	2	65	322	290
	PM	Overall LOS	D (48.1)											
		Approach LOS	F (82.3)			F (110.5)			C (33.5)			B (18.5)		
		Storage	150		145	150			285		305	300		110
		50th Queue	60	95	71	449	216		5	738	0	21	362	73
		95th Queue	100	133	168	581	306		12	921	1	42	460	152
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	C (28.4)											
		Approach LOS	F (82.6)			F (91.6)			A (9.6)			B (17.2)		
		Storage	150		145	150			285		305	300		110
		50th Queue	92	91	0	168	289		9	104	0	43	218	166
		95th Queue	174	136	0	219	415		22	125	1	66	418	285
	PM	Overall LOS	D (51.7)											
		Approach LOS	F (82.3)			F (117.5)			D (36.1)			B (19.7)		
		Storage	150		145	150			285		305	300		110
		50th Queue	103	121	70	461	279		6	905	0	19	436	114
		95th Queue	157	166	168	593	377		12	998	0	104	543	276

Note: This intersection was modeled using HCM 2000 methodology due to limitations in HCM 6th Edition methodology.

Under the Existing 2022 conditions, the southbound approach of McGinnis Ferry Road at Johns Creek Parkway (Intersection 7) is projected to operate at an unacceptable LOS during the AM and PM peak hours. Additionally, the northbound approach is LOS F under the PM peak conditions. These approaches are projected to continue to operate at an unacceptable LOS under all studied scenarios.

The intersection is projected to operate at an acceptable overall LOS under all studied scenarios.

In order to improve the approach LOS under the No-Build 2027 and Build 2027 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8** and **Figure 9**):

- Provide an exclusive southbound right-turn lane along Johns Creek Parkway.

The analysis results for the improved conditions at Intersection 7 are shown in the table on the following page.

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Johns Creek Parkway			Johns Creek Parkway			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (28.4)											
		Approach LOS	E (68.4)			E (76.0)			B (13.4)			C (23.6)		
		Storage	150		145	150		100	285		305	300		110
		50th Queue	17	49	0	168	154	0	10	121	0	47	273	212
		95th Queue	42	83	0	217	234	0	40	137	2	71	432	344
	PM	Overall LOS	D (46.7)											
		Approach LOS	E (74.0)			E (74.6)			D (45.6)			C (25.5)		
		Storage	150		145	150		100	285		305	300		110
		50th Queue	53	90	67	403	144	0	9	881	0	35	395	77
		95th Queue	92	133	168	476	220	0	14	979	1	96	466	170
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (30.7)											
		Approach LOS	E (68.4)			E (76.4)			B (15.0)			C (24.0)		
		Storage	150		145	150		100	285		305	300		110
		50th Queue	86	86	0	168	249	0	9	113	0	52	284	206
		95th Queue	141	132	0	217	350	0	40	167	1	75	521	329
	PM	Overall LOS	D (48.8)											
		Approach LOS	E (74.5)			E (75.6)			D (48.6)			C (26.0)		
		Storage	150		145	150		100	285		305	300		110
		50th Queue	92	117	68	402	206	0	10	938	0	54	480	116
		95th Queue	144	166	168	480	304	0	13	1,029	0	149	527	251

With the improvements listed above, the intersection of McGinnis Ferry Road at Johns Creek Parkway (Intersection 7) is projected to operate at or above its overall and approach LOS standards under both Existing 2022, No-Build 2027, and Build 2027 conditions.

5.8 Johns Creek Parkway at Site Driveway C/Private Driveway (Intersection 8)

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Johns Creek Parkway			Johns Creek Parkway			Private Driveway			Site Driveway C		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (TWSC)	AM	Overall LOS	(0.2)											
		Approach LOS	A (7.7)			A (0.0)			A (0.0)			A (9.0)		
		Storage	100			70		80						
		50th Queue												
		95th Queue	0			0			0			0		
	PM	Overall LOS	(0.7)											
		Approach LOS	A (7.5)			A (8.1)			A (9.8)			A (9.4)		
		Storage	100			70		80						
		50th Queue												
		95th Queue	0			0			3			0		
PROJECTED 2027 NO-BUILD (TWSC)	AM	Overall LOS	(0.2)											
		Approach LOS	A (7.7)			A (0.0)			A (0.0)			A (9.1)		
		Storage	100			70		80						
		50th Queue												
		95th Queue	0			0						0		
	PM	Overall LOS	(0.7)											
		Approach LOS	A (7.5)			A (8.2)			B (10.0)			A (9.5)		
		Storage	100			70		80						
		50th Queue												
		95th Queue	0			0			5			0		
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(1.1)											
		Approach LOS	A (7.7)			A (7.9)			A (0.0)			A (9.3)		
		Storage	100			70		80						
		50th Queue												
		95th Queue	0			3						3		
	PM	Overall LOS	(1.6)											
		Approach LOS	A (7.5)			A (8.4)			B (10.9)			B (10.6)		
		Storage	100			70		80						
		50th Queue												
		95th Queue	0			3			5			5		

The intersection of Johns Creek Parkway at Site Driveway C/Private Driveway (Intersection 8) is projected to operate at an acceptable overall and approach LOS under the Existing 2022, No-Build 2027, and Build 2027 conditions. Additionally, each approach of the intersection is projected to operate acceptably under all studied scenarios.

5.9 Johns Creek Parkway at Johns Crossing/Site Driveway D (Intersection 9)

Overall LOS Standard: E
Approach LOS Standard: E

		Johns Creek Parkway			Johns Creek Parkway			Johns Crossing			Site Driveway D		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (TWSC)	AM	Overall LOS	(1.8)										
		Approach LOS	A (7.7)			A (0.0)			A (8.4)			B (11.6)	
		Storage											
		50th Queue											
		95th Queue	3			0			5		0		0
	PM	Overall LOS	(3.3)										
		Approach LOS	A (7.6)			A (0.0)			A (9.3)			B (10.5)	
		Storage											
		50th Queue											
		95th Queue	3			0			20		0		0
PROJECTED 2027 NO-BUILD (TWSC)	AM	Overall LOS	(1.8)										
		Approach LOS	A (7.8)			A (0.0)			A (8.2)			B (12.0)	
		Storage											
		50th Queue											
		95th Queue	3			0			8		0		0
	PM	Overall LOS	(3.5)										
		Approach LOS	A (7.6)			A (0.0)			A (9.8)			B (10.7)	
		Storage											
		50th Queue											
		95th Queue	3			0			25		0		0
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(7.8)										
		Approach LOS	A (7.8)			A (7.8)			C (15.3)			C (16.4)	
		Storage											
		50th Queue											
		95th Queue	3			3			58		10	53	5
	PM	Overall LOS	(9.6)										
		Approach LOS	A (7.6)			A (8.0)			C (22.3)			B (14.6)	
		Storage											
		50th Queue											
		95th Queue	3			3			120		8	25	3

The intersection of Johns Creek Parkway at Johns Crossing/Site Driveway D (Intersection 9) is projected to operate at an acceptable overall and approach LOS under the Existing 2022, No-Build 2027, and Build 2027 conditions. Additionally, each approach of the intersection is projected to operate acceptably under all studied scenarios.

Alternative forms of intersection control, such as an all-way stop-controlled intersection, may be considered at this location. The results of the LOS analysis under Projected 2027 Build conditions for an all-way stop-controlled intersection are presented below.

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Johns Creek Parkway			Johns Creek Parkway			Johns Crossing			Site Driveway D		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD ALTERNATIVE (AWSC)	AM	Overall LOS	C (16.2)											
		Approach LOS	B (14.1)			C (15.8)			C (21.5)			B (13.7)		
		Storage												
		50th Queue												
		95th Queue	33		33	35		65		98		8	48	8
	PM	Overall LOS	C (21.7)											
		Approach LOS	C (15.9)			B (15.0)			E (36.8)			B (12.5)		
		Storage												
		50th Queue												
		95th Queue	53		40	38		38		195		8	25	5

With the build alternative all-way stop-control intersection listed above, the intersection of Johns Creek Parkway at Johns Crossing/Site Driveway D (Intersection 9) is projected to operate at acceptable overall and approach LOS standards under Build 2027 conditions.

5.10 Medlock Bridge Road (SR 141) at Hospital Parkway/Johns Crossing (Intersection 10)

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Hospital Parkway			Johns Crossing		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	C (22.8)											
		Approach LOS	C (23.3)			A (6.0)			F (86.1)			E (74.4)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	78	620	12	5	163	2	32	64	58	62	36	
		95th Queue	163	764	29	15	203	5	63	113	171	105	79	
	PM	Overall LOS	C (31.4)											
		Approach LOS	C (23.0)			A (10.0)			F (85.9)			F (87.2)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	162	350	0	14	108	0	137	125	91	109	129	
		95th Queue	269	487	0	31	222	0	207	197	235	173	208	
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	D (39.3)											
		Approach LOS	D (36.9)			C (20.8)			F (119.1)			E (76.8)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	159	751	21	25	925	5	47	74	168	66	60	
		95th Queue	359	869	34	47	1,033	12	89	130	373	120	114	
	PM	Overall LOS	D (41.0)											
		Approach LOS	C (32.3)			B (12.8)			F (109.3)			F (88.7)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	219	566	0	20	238	0	171	147	188	117	151	
		95th Queue	377	700	0	70	99	0	269	227	412	184	277	
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	D (46.1)											
		Approach LOS	D (38.9)			C (22.3)			F (124.4)			F (109.8)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	176	760	89	32	929	5	47	145	221	190	154	
		95th Queue	368	878	108	86	1,035	12	89	223	431	364	248	
	PM	Overall LOS	D (53.3)											
		Approach LOS	C (34.9)			B (13.6)			F (144.0)			F (137.8)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	222	588	10	36	152	0	171	194	246	177	229	
95th Queue	380	717	35	95	95	0	274	331	461	266	407			

Note: This intersection was modeled using HCM 2000 methodology due to limitations in HCM 6th Edition methodology.

Under the Existing 2022 conditions, the eastbound approach of Medlock Bridge Road (SR 141) at Hospital Parkway (Intersection 10) is projected to operate at an unacceptable LOS during the AM and PM peak hours, and the westbound approach is projected to operate at an unacceptable LOS during the PM peak hour. These approaches are projected to continue to operate at an unacceptable LOS during both the AM and PM peak hours under all studied scenarios.

In order to improve the approach LOS under the No-Build 2027 and Build 2027 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8** and **Figure 9**):

- Provide an eastbound right-turn overlap phase along Hospital Parkway.
- Provide an exclusive westbound right-turn lane along Johns Crossing.

The analysis results for the improved conditions at Intersection 10 are shown in the table on the following page.

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Hospital Parkway			Johns Crossing		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (29.2)											
		Approach LOS	C (26.2)			B (19.5)			E (69.7)			E (78.3)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	135	756	14	21	903	5	48	77	214	65	51	0
		95th Queue	310	894	23	37	1,051	12	86	132	337	116	98	2
	PM	Overall LOS	D (38.3)											
		Approach LOS	D (38.3)			B (13.4)			E (76.7)			E (79.4)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	271	650	0	20	330	0	170	148	245	117	100	0
		95th Queue	354	758	0	73	155	0	242	227	370	179	162	1
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (37.0)											
		Approach LOS	D (36.8)			C (20.8)			E (73.3)			E (79.7)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	197	826	81	31	880	5	45	146	271	181	112	0
		95th Queue	305	914	89	80	1,010	12	86	221	392	314	178	6
	PM	Overall LOS	D (43.6)											
		Approach LOS	D (46.0)			B (15.2)			E (78.0)			E (79.8)		
		Storage	450		130	330		120	140		100	175		
		50th Queue	276	678	21	38	289	0	166	191	289	173	129	0
		95th Queue	337	777	42	99	222	0	240	277	412	261	202	1

With the improvements listed above, the intersection of Medlock Bridge Road (SR 141) at Hospital Parkway (Intersection 10) is projected to operate at or above its overall and approach LOS standards under both Existing 2022, No-Build 2027, and Build 2027 conditions.

NOTE: Additional improvements at this intersection have been conditioned on the *Emory Johns Creek Hospital Expansion DRI #3542*.

5.11 Medlock Bridge Road (SR 141) at McGinnis Ferry Road (Intersection 11)

Overall LOS Standard: E
Approach LOS Standard: E

			Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	D (49.6)											
		Approach LOS	D (44.0)			D (48.2)			E (58.0)			D (50.9)		
		Storage	370		100	335		120	370		275	760		120
		50th Queue	191	78	0	118	728	0	42	435	26	100	598	9
		95th Queue	299	260	12	181	892	0	74	347	4	163	745	21
	PM	Overall LOS	D (50.7)											
		Approach LOS	B (17.5)			D (44.5)			E (69.3)			F (88.3)		
		Storage	370		100	335		120	370		275	760		120
		50th Queue	133	440	41	304	532	0	98	564	25	142	441	50
		95th Queue	187	636	74	512	627	0	141	703	63	255	589	136
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	D (42.8)											
		Approach LOS	C (28.7)			C (31.0)			E (73.9)			D (49.4)		
		Storage	370		100	335		120	370		275	760		120
		50th Queue	39	102		55	410	0	57	210	2	113	417	12
		95th Queue	90	189		86	517	0	97	239	46	160	447	19
	PM	Overall LOS	D (46.3)											
		Approach LOS	C (24.9)			C (31.4)			E (73.8)			E (70.9)		
		Storage	370		100	335		120	370		275	760		120
		50th Queue	44	549		102	356	0	112	386	29	170	365	74
		95th Queue	59	632		159	435	0	158	408	62	228	414	154
PROJECTED BUILD 2027 (SIGNAL)	AM	Overall LOS	D (44.9)											
		Approach LOS	C (30.8)			C (33.1)			E (74.6)			D (49.6)		
		Storage	370		100	335		120	370		275	760		120
		50th Queue	32	75		57	433	0	53	254	4	117	475	12
		95th Queue	84	166		80	498	0	105	290	32	200	552	15
	PM	Overall LOS	D (49.1)											
		Approach LOS	C (27.0)			C (33.2)			E (74.3)			E (75.6)		
		Storage	370		100	335		120	370		275	760		120
		50th Queue	46	576		111	377	0	112	413	26	170	393	70
		95th Queue	57	653		163	439	0	158	460	53	229	443	146

The City of Johns Creek has programmed the following roadway improvements at the intersection (shown in green on **Figure 8** and **Figure 9**):

- Provide an additional northbound exclusive left-turn lane (creating dual lefts) and restripe the existing right-turn lane into a through/right-lane along Medlock Bridge Road (SR 141).
- Provide an additional southbound exclusive left-turn lane (creating dual lefts) and through lane (creating triple throughs) along Medlock Bridge Road (SR 141).
- Provide an additional eastbound through lane (creating triple throughs) along McGinnis Ferry Road.
- Provide an additional westbound through lane (creating triple throughs) along McGinnis Ferry Road.

The intersection of Medlock Bridge Road (SR 141) at McGinnis Ferry Road (Intersection 11) is projected to operate at an acceptable overall LOS under the Existing 2022, No-Build 2027, and Build 2027 conditions, with the programmed improvements to be completed by the City of Johns Creek. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No additional improvements are recommended to be conditioned.

5.12 McGinnis Ferry Road at Hospital Parkway/Private Driveway (Intersection 12)

Overall LOS Standard: E
Approach LOS Standard: E

Overall LOS Standard: E Approach LOS Standard: E			Hospital Parkway			Private Driveway			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	B (15.4)											
		Approach LOS	F (97.3)			E (74.3)			B (15.7)			A (6.0)		
		Storage			120				200		305	430		65
		50th Queue		117	0		0		0	224	0	23	126	0
		95th Queue		204	13		0		2	445	140	35	199	0
	PM	Overall LOS	C (22.4)											
		Approach LOS	D (50.3)			C (29.4)			C (20.3)			B (18.0)		
		Storage			120				200		305	430		65
		50th Queue		122	0	2	0		6	392	41	4	547	0
		95th Queue		240	16	11	8		7	455	55	3	722	0
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	C (31.8)											
		Approach LOS	F (145.8)			E (74.3)			C (31.8)			B (15.6)		
		Storage			120				200		305	430		65
		50th Queue		177	1		0		1	355	58	78	146	0
		95th Queue		326	52		0		2	528	225	162	231	0
	PM	Overall LOS	D (35.1)											
		Approach LOS	F (89.5)			C (29.4)			C (20.9)			C (34.6)		
		Storage			120				200		305	430		65
		50th Queue		181	0	2	0		3	459	74	28	658	0
		95th Queue		335	7	11	8		7	534	111	34	738	0
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	D (51.2)											
		Approach LOS	F (275.6)			E (74.3)			D (44.7)			C (21.2)		
		Storage			120				200		305	430		65
		50th Queue		314	1		0		1	520	161	99	232	0
		95th Queue		485	52		0		1	596	247	172	317	0
	PM	Overall LOS	D (40.8)											
		Approach LOS	F (122.5)			C (29.4)			C (22.2)			D (37.0)		
		Storage			120				200		305	430		65
		50th Queue		219	0	2	0		3	502	81	27	710	0
			381	7	11	8		6	581	120	32	788	0	

Note: This intersection was modeled using HCM 2000 methodology due to limitations in HCM 6th Edition methodology.

Under the Existing 2022 conditions, the northbound approach of McGinnis Ferry Road at Hospital Parkway (Intersection 12) is projected to operate at an unacceptable LOS during the AM peak hours. This approach is projected to continue to operate at an unacceptable LOS during both the AM and PM peak hours under all studied scenarios.

In order to improve the approach LOS under the No-Build 2027 and Build 2027 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8** and **Figure 9**):

- Restripe the northbound approach of Hospital Parkway as an exclusive left-turn lane and shared through/right-turn lane. Provide a protected/permissive northbound left-turn phase.

The analysis results for the improved conditions at Intersection 12 are shown in the table on the following page.

Overall LOS Standard: E
Approach LOS Standard: E

		Hospital Parkway Northbound			Private Driveway Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (32.4)										
		Approach LOS	E (77.2)			F (88.4)			C (20.9)			D (39.3)	
		Storage							200		305	430	65
		50th Queue	161	0			0		0	350	106	150	527
		95th Queue	219	0			0		1	530	210	243	645
	PM	Overall LOS	C (26.7)										
		Approach LOS	E (58.7)			D (44.9)			B (17.1)			C (27.6)	
		Storage							200		305	430	65
		50th Queue	208	1		2	1		2	196	0	4	581
		95th Queue	249	40		12	9		9	538	65	22	746
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (35.1)										
		Approach LOS	E (79.0)			F (88.4)			C (21.0)			D (44.4)	
		Storage							200		305	430	65
		50th Queue	227	0			0		0	467	113	151	554
		95th Queue	293	0			0		1	704	283	213	675
	PM	Overall LOS	C (31.6)										
		Approach LOS	E (66.4)			D (44.9)			B (17.6)			D (36.7)	
		Storage							200		305	430	65
		50th Queue	234	21		2	1		2	228	0	10	630
		95th Queue	285	58		12	9		9	570	49	36	769

With the improvements listed above, the intersection of McGinnis Ferry Road at Hospital Parkway (Intersection 12) is projected to operate at or above its overall and approach LOS standards under both Existing 2022, No-Build 2027, and Build 2027 conditions.

It should be noted that the southbound approach exiting the private driveway is projected to operate at LOS F during the AM peak under improved conditions. This is due to the existing signal timing. The signal timings at this intersection prioritize other higher volume movements, and the long cycle length at this intersection results in vehicles waiting a significant period of time between green indications.

5.13 McGinnis Ferry Road at Sargent Road (Intersection 13)

Overall LOS Standard: D
Approach LOS Standard: D

		Sargent Road						McGinnis Ferry Road			McGinnis Ferry Road		
		Northbound						Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL GREEN-T)	AM	Overall LOS	B (15.2)										
		Approach LOS	A (9.7)						A (9.3)			C (22.3)	
		Storage	330							415	670		
		50th Queue	77		0				156	0	234	8	
		95th Queue	132		0				287	17	253	33	
	PM	Overall LOS	B (15.2)										
		Approach LOS	A (4.7)						B (11.4)			C (21.9)	
		Storage	330							415	670		
		50th Queue	34		0				175	0	407	19	
		95th Queue	73		0				301	17	616	0	
PROJECTED 2027 NO-BUILD (SIGNAL GREEN-T)	AM	Overall LOS	B (16.7)										
		Approach LOS	A (9.7)						B (11.0)			C (24.6)	
		Storage	330							415	670		
		50th Queue	83		0				208	0	282	47	
		95th Queue	142		0				323	18	246	29	
	PM	Overall LOS	B (18.8)										
		Approach LOS	A (4.7)						C (20.5)			C (24.1)	
		Storage	330							415	670		
		50th Queue	36		0				284	0	558	21	
		95th Queue	76		0				335	18	687	0	
PROJECTED 2027 BUILD (SIGNAL GREEN-T)	AM	Overall LOS	C (22.8)										
		Approach LOS	B (10.3)						B (16.9)			C (33.7)	
		Storage	330							415	670		
		50th Queue	84		0				313	0	259	22	
		95th Queue	168		0				365	19	370	0	
	PM	Overall LOS	C (23.2)										
		Approach LOS	A (4.8)						C (20.5)			C (33.0)	
		Storage	330							415	670		
		50th Queue	37		0				295	0	634	7	
		95th Queue	78		0				347	17	768	0	

Note: This intersection was modeled using HCM 2000 methodology due to limitations in HCM 6th Edition when modeling a Continuous Green-T intersection.

The intersection of McGinnis Ferry Road at Sargent Road (Intersection 13) is projected to operate at an acceptable overall LOS under all studied scenarios. No additional improvements are recommended to be conditioned.

5.14 Johns Creek Parkway at Site Driveway E (Intersection 14)

Overall LOS Standard: E
Approach LOS Standard: E

		Johns Creek Parkway			Johns Creek Parkway						Site Driveway E		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (RIRO)	AM	Overall LOS	(0.4)										
		Approach LOS	A (0.0)			A (0.0)						A (9.3)	
		Storage											
		50th Queue											
		95th Queue											3
	PM	Overall LOS	(0.2)										
		Approach LOS	A (0.0)			A (0.0)						A (9.6)	
		Storage											
		50th Queue											
		95th Queue											3

The intersection of Johns Creek Parkway at Site Driveway E (Intersection 14) is projected to operate at an acceptable overall and approach LOS under the Build 2027 conditions. The recommended lane configuration is a right-in/right-out driveway with one lane entering the site and one lane exiting the site. The recommended Build improvements are shown in blue on **Figure 9**. NOTE: If the median along Johns Creek Parkway is removed, a full movement driveway should be considered at this location.

5.15 Johns Creek Parkway at Site Driveway F/Private Driveway (Intersection 15)

Overall LOS Standard: E
Approach LOS Standard: E

		Johns Creek Parkway			Johns Creek Parkway			Private Driveway			Site Driveway F		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(0.8)										
		Approach LOS	A (0.0)			A (7.9)			A (0.0)			A (9.4)	
		Storage	125					85					
		50th Queue											
		95th Queue	0			3						5	
	PM	Overall LOS	(0.6)										
		Approach LOS	A (0.0)			A (8.5)			A (0.0)			B (10.1)	
		Storage	125					85					
		50th Queue											
		95th Queue	0			3						5	

The intersection of Johns Creek Parkway at Site Driveway F/Private Driveway (Intersection 15) is projected to operate at an acceptable overall and approach LOS under the Build 2027 conditions. The recommended lane configuration is a full-movement driveway with one lane entering the site and one lane exiting the site. The recommended Build improvements are shown in blue on **Figure 9**.

5.16 McGinnis Ferry Road at Site Driveway G (Intersection 16)

Overall LOS Standard: E
Approach LOS Standard: E

			Site Driveway G						McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (RIRO)	AM	Overall LOS	(0.0)											
		Approach LOS	B (11.7)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue			3									
	PM	Overall LOS	(0.4)											
		Approach LOS	E (36.3)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue			28									

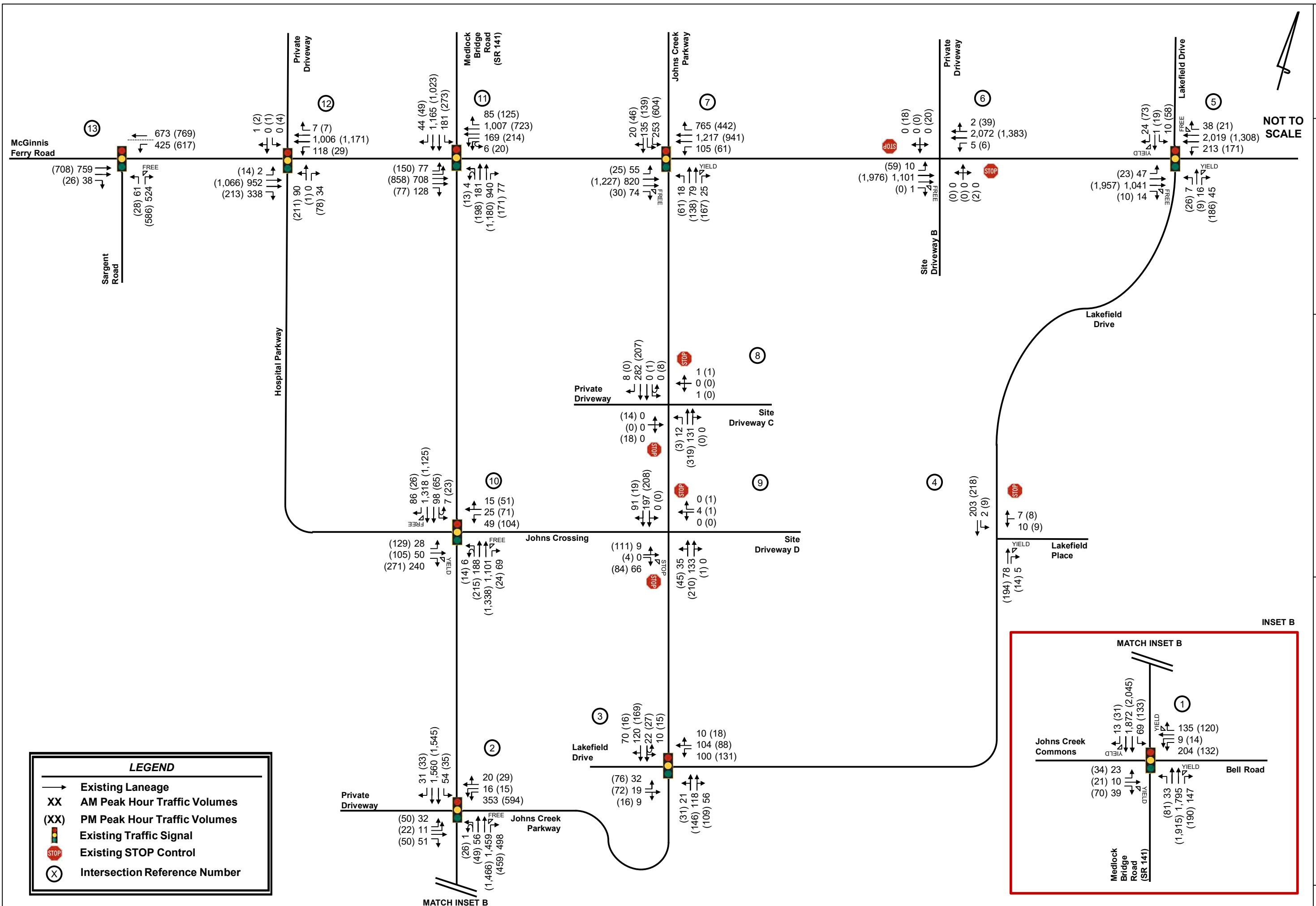
The intersection of McGinnis Ferry Road at Site Driveway G (Intersection 16) is projected to operate at an acceptable overall and approach LOS under the Build 2027 conditions. The recommended lane configuration is a right-in/right-out driveway with one lane entering the site and one lane exiting the site. Additionally, it is recommended to utilize the existing pavement to provide an exclusive right-turn lane along McGinnis Ferry Road entering the site. The recommended Build improvements are shown in blue on **Figure 9**.

5.17 McGinnis Ferry Road at Site Driveway H (Intersection 17)

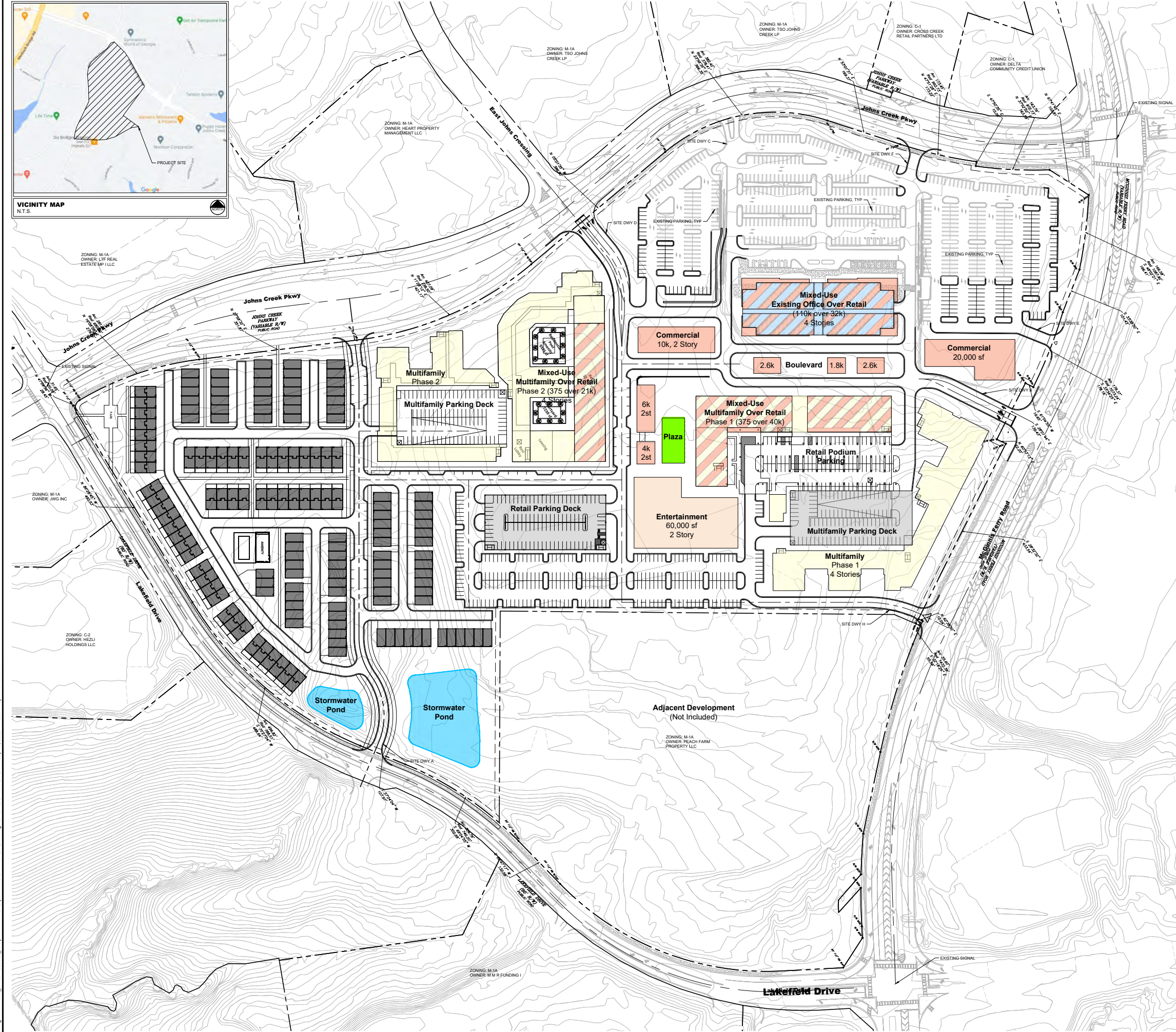
Overall LOS Standard: E
Approach LOS Standard: E

			Site Driveway H						McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (RIRO)	AM	Overall LOS	(0.1)											
		Approach LOS	B (11.6)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue			3									
	PM	Overall LOS	(0.1)											
		Approach LOS	D (33.0)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue			10									

The intersection of McGinnis Ferry Road at Site Driveway H (Intersection 17) is projected to operate at an acceptable overall and approach LOS under the Build 2027 conditions. The recommended lane configuration is a right-in/right-out driveway with one lane entering the site and one lane exiting the site. The recommended Build improvements are shown in blue on **Figure 9**.



Proposed Site Plan



Drawing name: K:\at\csl\014602003_toro-pkwy-creek\CAD\plansheets\DR1 - SITE PLAN.dwg DB3742.DRI SITE PLAN Sep 16, 2022 11:33am by: rohan.com

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

SITE LEGEND

- PROPERTY LINE
- FRONT SETBACK
- COMMERCIAL BUILDING
- ENTERTAINMENT
- TOWNHOME
- MULTIFAMILY BUILDING
- MULTIFAMILY OVER RETAIL
- OFFICE OVER RETAIL
- PARKING DECK

SITE DEVELOPMENT SUMMARY

SITE SUMMARY

CURRENT ZONING	M1
PROPOSED ZONING	TC-X
OVERLAY DISTRICT	TOWN CENTER OVERLAY
DRI CASE NUMBER	DRI 3742

SITE AREA:
SITE AREA 41.71 ACRES
PROPOSED REZONED AREA 41.71 ACRES

SETBACKS & BUFFERS:
FRONT SETBACKS 10'
SIDE SETBACKS NONE

LAND USES & DENSITIES

TOTAL RESIDENTIAL: 900 UNITS (21.58 UNITS/ACRE)
TOTAL NON-RESIDENTIAL: 310,000 SF (7,433 SF/ACRE)

CIVIC USE: Developer will consider proposals to incorporate a civic use within the development subject to mutually agreeable terms and conditions.

PARKING SUMMARY

MINIMUM REQUIRED PARKING:	2,260 SPACES (TOTAL)
RETAIL	160 SPACES (1 / 500 SF)
RESTAURANT	120 SPACES (1 / 500 SF)
ENTERTAINMENT	120 SPACES (1 / 500 SF)
OFFICE	300 SPACES (1 / 1000 SF)
MULTIFAMILY	1,200 SPACES (1800 + 0.2 UNIT)
TOWNHOMES	300 SPACES (2.2 / UNIT)

PROPOSED PARKING:

EXIST. COMMERCIAL SURFACE PARKING	402 SPACES
PROCP. COMMERCIAL SURFACE PARKING	378 SPACES
COMMERCIAL PARKING DECK	195 SPACES
COMMERCIAL PODIUM PARKING	99 SPACES
MULTIFAMILY PARKING DECKS	1,200 SPACES
TOWNHOMES	300 SPACES
ON STREET PARKING	52 SPACES

BUILDING HEIGHTS

MAXIMUM ALLOWABLE

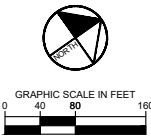
COMMERCIAL	4 STORIES OR 60'
OFFICE	4 STORIES OR 60'
MULTIFAMILY	4 STORIES OR 60'
TOWNHOME	4 STORIES OR 60'

PROPOSED MAXIMUM

COMMERCIAL	4 STORIES OR 60'
OFFICE (EXISTING)	4 STORIES OR 75' (EXISTING)
MULTIFAMILY	4 STORIES OR 60'
TOWNHOME	4 STORIES OR 60'

CONTACTS

TRAFFIC CONSULTANT HARRISON FORDE P.E. KIMLEY-HORN & ASSOCIATES 11720 AMBER PARK DRIVE, SUITE 600 ALPHARETTA, GA 30009 770-619-4280	APPLICANT CONSULTANT JOHN KELLEY TORO DEVELOPMENT COMPANY 6200 AVOLON BOULEVARD ALPHARETTA, GA 30009 470-681-3716
CIVIL CONSULTANT TYLER ROSSEK P.E. KIMLEY-HORN & ASSOCIATES 3950 JONES BRIDGE ROAD, SUITE 350 NORCROSS, GA 30092 770-625-0744	



Kimley»Horn

© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
3850 EAST JONES BRIDGE ROAD
NORCROSS, GEORGIA 30092
PHONE (770) 825-0744
WWW.KIMLEY-HORN.COM

TORO DEVELOPMENT COMPANY

6200 AVOLON BOULEVARD
ALPHARETTA, GA 30009
PHONE: 470.681.3716

**JOHNS CREEK TOWN CENTER
MIXED-USE DEVELOPMENT
DRI #3742**

11350 JOHNS CREEK PARKWAY, JOHNS CREEK, GEORGIA
LAND LOT 366, 400, 403, 404, & 405, 1ST DISTRICT

GSWCC CERT. 000007289
LEVEL: B
DRAWN BY: NRC
DESIGNED BY: CMC
REVIEWED BY: JTR
DATE: 09.12.2022
PROJECT NO: 014602003
TITLE: DRI SITE PLAN
SHEET NUMBER: DRI.00

Drawing name: K:\at\014602003_toro-horn-creek\CAD\plansheets\ZP.01 - ZONING SITE PLAN.dwg, ZP.01 - OPEN SPACE PLAN, Sep. 13, 2022, 1:30pm, by: tyler rosear



OPEN SPACE LEGEND

CIVIC SPACE

AMENITY SPACE

SITE DEVELOPMENT SUMMARY

SITE SUMMARY

CURRENT ZONING	M1
PROPOSED ZONING	TC-X
OVERLAY DISTRICT	TOWN CENTER OVERLAY

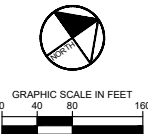
SITE AREA:	
SITE AREA	41.71 ACRES
PROPOSED REZONED AREA	41.71 ACRES

SETBACKS & BUFFERS:	
FRONT SETBACKS	10'
SIDE SETBACKS	NONE

LAND USES & DENSITIES	
RETAIL	80,000 SF (1,918 SFI/ACRE)
RESTAURANT	60,000 SF (1,439 SFI/ACRE)
ENTERTAINMENT	60,000 SF (1,439 SFI/ACRE)
OFFICE (EXISTING)	110,000 SF (2,637 SFI/ACRE)
MULTIFAMILY	750 UNITS (17.58 UNITS/ACRE)
TOWNHOMES	150 UNITS (3.60 UNITS/ACRE)

OPEN SPACE REQUIREMENTS	
CIVIC SPACE:	6.89 ACRES (15.8% SITE AREA)
AMENITY SPACE:	2.09 ACRES (5% SITE AREA)

PROPOSED OPEN SPACE	
CIVIC SPACE:	10.05 ACRES (437,778 SF)
Examples of Civic Spaces utilized include the following:	
SQUARE	
PLAZA	
POCKET PARKS	
PARK	
AMENITY SPACE:	2.23 ACRES (97,000 SF)
Examples of Amenity Spaces utilized include the following:	
OUTDOOR DINING	
PATIOS AND PORCHES	
YARDS AND LAWNS	
ENHANCE HARDSCAPE	
BALCONIES	
POOL AREA	



Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
3850 EAST JONES BRIDGE ROAD
ALPHARETTA, GA 30009
NORCROSS, GEORGIA 30092
PHONE (770) 825-0744
WWW.KIMLEY-HORN.COM

TORO DEVELOPMENT COMPANY
6200 AVALON BOULEVARD
ALPHARETTA, GA 30009
PHONE: 470.881.2716

**JOHNS CREEK TOWN CENTER
MIXED-USE**
11350 JOHNS CREEK PARKWAY, JOHNS CREEK, GEORGIA
LAND LOT _____, TH DISTRICT _____

GSWCC CERT. LEVEL: 00000XXXXX
DRAWN BY: ABC
DESIGNED BY: XYZ
REVIEWED BY: PDQ
DATE: _____
PROJECT NO: 014602003
TITLE: OPEN SPACE PLAN
SHEET NUMBER: ZP.01

Trip Generation Analysis

Trip Generation Analysis (11th Ed. with *2nd Edition Handbook Daily IC & 3rd Edition AM/PM IC*)
Johns Creek Mixed Used Development DRI #3742
City of Johns Creek, GA

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Proposed Site Traffic								
215 Single-Family Attached Housing	150 d.u.	1,092	72	22	50	86	49	37
221 Multi-Family Housing (Mid-Rise)	750 d.u.	3,532	318	73	245	293	179	114
710 General Office Building	110,000 s.f.	1,260	182	160	22	180	31	149
821 Shopping Center (40K-150k)	140,000 s.f. gross leasable area	9,452	242	150	92	727	356	371
932 High-Turnover (Sit-Down) Restaurant	60,000 s.f.	6,432	574	316	258	543	331	212
Gross Trips		21,768	1,388	721	667	1,829	946	883
Residential Trips		4,624	390	95	295	379	228	151
Mixed-Use Reductions		-1,492	-74	-7	-67	-209	-135	-74
Alternative Mode Reductions		-156	-16	-4	-11	-9	-5	-4
Adjusted Residential Trips		2,976	300	84	217	161	88	73
Office Trips		1,260	182	160	22	180	31	149
Mixed-Use Reductions		-248	-53	-33	-20	-56	-19	-37
Alternative Mode Reductions		-50	-6	-6	0	-7	-1	-6
Adjusted Office Trips		962	123	121	2	117	11	106
Retail Trips		9,452	242	150	92	727	356	371
Mixed-Use Reductions		-1,018	-41	-21	-20	-350	-151	-199
Alternative Mode Reductions		-422	-10	-6	-4	-19	-10	-9
Pass By Reductions (Based on ITE Rates)		-2,724	0	0	0	-122	-61	-61
Adjusted Retail Trips		5,288	191	123	68	236	134	102
Restaurant Trips		6,432	574	316	258	543	331	212
Mixed-Use Reductions		-694	-124	-85	-39	-263	-134	-129
Alternative Mode Reductions		-286	-23	-12	-11	-14	-10	-4
Pass By Reductions (Based on ITE Rates)		-2,344	0	0	0	-114	-57	-57
Adjusted Restaurant Trips		3,108	427	219	208	152	130	22
Mixed-Use Reductions - TOTAL		-3,452	-292	-146	-146	-878	-439	-439
Alternative Mode Reductions - TOTAL		-914	-54	-28	-26	-49	-26	-23
Pass-By Reductions - TOTAL		-5,068	0	0	0	-236	-118	-118
New Trips		12,334	1,042	547	495	665	363	303
Driveway Volumes		17,402	1,042	547	495	901	481	421
k:\alp_tpto\014602005_johns creek mixed-use dri - johns creek - june 2022_dri phase 2\analysis\johns creek mixed-use analysis.xls\trip generation								

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

Intersection #1: Medlock Bridge Road (SR 141) @ Johns Creek Commons / Bell Road AM PEAK HOUR

Description	Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Johns Creek Commons			Bell Road		
	<u>Northbound</u>			<u>Southbound</u>			<u>Eastbound</u>			<u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	33	1,795	147	69	1,872	13	23	10	39	204	9	135
Pedestrians	0			1			1			0		
Conflicting Pedestrians	1		0	0		1	1		0	0		1
Heavy Vehicles	0	68	2	6	51	0	0	0	0	5	1	3
Heavy Vehicle %	2%	4%	2%	9%	3%	2%	2%	2%	2%	2%	11%	2%
Peak Hour Factor	0.95			0.95			0.95			0.95		
Adjustment												
Adjusted 2022 Volumes	33	1795	147	69	1872	13	23	10	39	204	9	135
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments		66		7	37							11
2027 Background Traffic	36	2,000	158	81	2,054	14	25	11	42	220	10	156
Project Trips												
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Residential Trips	0	29	0	0	76	0	0	0	0	0	0	0
Trip Distribution IN		25%										5%
Trip Distribution OUT					5%	25%						
Office Trips	0	30	0	0	1	0	0	0	0	0	0	6
Trip Distribution IN		25%										5%
Trip Distribution OUT					5%	25%						
Retail Trips	0	31	0	3	17	0	0	0	0	0	0	6
Trip Distribution IN		25%										5%
Trip Distribution OUT					5%	25%						
Restaurant Trips	0	55	0	10	52	0	0	0	0	0	0	11
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	145	0	13	146	0	0	0	0	0	0	23
2027 Buildout Total	36	2,145	158	94	2,200	14	25	11	42	220	10	179

PM PEAK HOUR

Description	Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Johns Creek Commons			Bell Road		
	<u>Northbound</u>			<u>Southbound</u>			<u>Eastbound</u>			<u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	81	1,915	190	133	2,045	31	34	21	70	132	14	120
Pedestrians	0			2			3			0		
Conflicting Pedestrians	3		0	0		3	2		0	0		2
Heavy Vehicles	1	15	1	0	36	0	0	1	0	7	0	1
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	5%	2%	5%	2%	2%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Adjustment												
Adjusted 2022 Volumes	81	1915	190	133	2045	31	34	21	70	132	14	120
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments		37		9	61							7
2027 Background Traffic	87	2,100	205	152	2,264	33	37	23	75	142	15	136
Project Trips												
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Residential Trips	0	31	0	0	26	0	0	0	0	0	0	0
Trip Distribution IN		25%										5%
Trip Distribution OUT					5%	25%						
Office Trips	0	3	0	5	27	0	0	0	0	0	0	1
Trip Distribution IN		25%										5%
Trip Distribution OUT					5%	25%						
Retail Trips	0	34	0	5	26	0	0	0	0	0	0	7
Trip Distribution IN		25%										5%
Trip Distribution OUT					5%	25%						
Restaurant Trips	0	33	0	1	6	0	0	0	0	0	0	7
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	101	0	11	85	0	0	0	0	0	0	15
2027 Buildout Total	87	2,201	205	163	2,349	33	37	23	75	142	15	151

INTERSECTION VOLUME DEVELOPMENT

Intersection #2: Medlock Bridge Road (SR 141) @ Johns Creek Parkway AM PEAK HOUR

Description	Medlock Bridge Road (SR 141)				Medlock Bridge Road (SR 141)			Johns Creek Parkway			Johns Creek Parkway		
	<u>Northbound</u>				<u>Southbound</u>			<u>Eastbound</u>			<u>Westbound</u>		
	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	1	56	1,459	498	54	1,560	31	32	11	51	353	16	20
Pedestrians	0				0			8			0		
Conflicting Pedestrians	8				0			0			0		
Heavy Vehicles	0	1	51	7	1	40	0	0	0	1	0	0	0
Heavy Vehicle %	2%	2%	3%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.93				0.93			0.93			0.93		
Adjustment													
Adjusted 2022 Volumes	1	56	1459	498	54	1560	31	32	11	51	353	16	20
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment													
Other Proposed Developments			77			44							
2027 Background Traffic	1	60	1,649	536	58	1,725	33	34	12	55	380	17	22
Project Trips													
Trip Distribution IN			20%	15%									
Trip Distribution OUT						25%					10%		
Residential Trips	0	0	17	13	0	54	0	0	0	0	22	0	0
Trip Distribution IN			15%	15%									
Trip Distribution OUT						15%					15%		
Office Trips	0	0	18	18	0	0	0	0	0	0	0	0	0
Trip Distribution IN			15%	15%									
Trip Distribution OUT						15%					15%		
Retail Trips	0	0	18	18	0	10	0	0	0	0	10	0	0
Trip Distribution IN			15%	15%									
Trip Distribution OUT						15%					15%		
Restaurant Trips	0	0	33	33	0	31	0	0	0	0	31	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	86	82	0	95	0	0	0	0	63	0	0
2027 Buildout Total	1	60	1,735	618	58	1,820	33	34	12	55	443	17	22

PM PEAK HOUR

Description	Medlock Bridge Road (SR 141)				Medlock Bridge Road (SR 141)			Johns Creek Parkway			Johns Creek Parkway		
	<u>Northbound</u>				<u>Southbound</u>			<u>Eastbound</u>			<u>Westbound</u>		
	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	26	49	1,466	459	35	1,545	33	50	22	50	594	15	29
Pedestrians	0				1			8			0		
Conflicting Pedestrians	8				0			1			0		
Heavy Vehicles	0	0	20	0	1	46	0	0	0	0	3	0	0
Heavy Vehicle %	2%	2%	2%	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.96				0.96			0.96			0.96		
Adjustment													
Adjusted 2022 Volumes	26	49	1466	459	35	1545	33	50	22	50	594	15	29
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment													
Other Proposed Developments			44			72							
2027 Background Traffic	28	53	1,623	494	38	1,736	36	54	24	54	640	16	31
Project Trips													
Trip Distribution IN			20%	15%									
Trip Distribution OUT						25%					10%		
Residential Trips	0	0	18	13	0	18	0	0	0	0	7	0	0
Trip Distribution IN			15%	15%									
Trip Distribution OUT						15%					15%		
Office Trips	0	0	2	2	0	16	0	0	0	0	16	0	0
Trip Distribution IN			15%	15%									
Trip Distribution OUT						15%					15%		
Retail Trips	0	0	20	20	0	15	0	0	0	0	15	0	0
Trip Distribution IN			15%	15%									
Trip Distribution OUT						15%					15%		
Restaurant Trips	0	0	20	20	0	3	0	0	0	0	3	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	60	55	0	52	0	0	0	0	41	0	0
2027 Buildout Total	28	53	1,683	549	38	1,788	36	54	24	54	681	16	31

INTERSECTION VOLUME DEVELOPMENT

Intersection #3: Johns Creek Parkway @ Lakefield Drive AM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>				Lakefield Drive <u>Eastbound</u>			Lakefield Drive <u>Westbound</u>		
	Left	Through	Right	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	21	118	56	10	22	120	70	32	19	9	100	104	10
Pedestrians	5			0				0			4		
Conflicting Pedestrians	0		4	4				0		5	5		0
Heavy Vehicles	3	3	2	0	0	0	0	2	0	0	1	1	0
Heavy Vehicle %	14%	3%	4%	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%
Peak Hour Factor	0.93			0.93				0.93			0.93		
Adjustment													
Adjusted 2022 Volumes	21	118	56	10	22	120	70	32	19	9	100	104	10
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment													
Other Proposed Developments													
2027 Background Traffic	23	127	60	11	24	129	75	34	20	10	108	112	11
Project Trips													
Trip Distribution IN		10%	5%										
Trip Distribution OUT											10%		
Residential Trips	0	8	4	0	0	0	0	0	0	0	22	0	0
Trip Distribution IN		15%											
Trip Distribution OUT						15%							
Office Trips	0	18	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		15%											
Trip Distribution OUT						15%							
Retail Trips	0	18	0	0	0	10	0	0	0	0	0	0	0
Trip Distribution IN		15%											
Trip Distribution OUT						15%							
Restaurant Trips	0	33	0	0	0	31	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	77	4	0	0	41	0	0	0	0	22	0	0
2027 Buildout Total	23	204	64	11	24	170	75	34	20	10	130	112	11

PM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>				Lakefield Drive <u>Eastbound</u>			Lakefield Drive <u>Westbound</u>		
	Left	Through	Right	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	31	146	109	15	27	169	16	76	72	16	131	88	18
Pedestrians	2			0				0			0		
Conflicting Pedestrians	0		0	0				0		2	2		0
Heavy Vehicles	0	0	3	0	0	0	0	0	0	3	4	1	0
Heavy Vehicle %	2%	2%	3%	2%	2%	2%	2%	2%	2%	19%	3%	2%	2%
Peak Hour Factor	0.87			0.87				0.87			0.87		
Adjustment													
Adjusted 2022 Volumes	31	146	109	15	27	169	16	76	72	16	131	88	18
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment													
Other Proposed Developments													
2027 Background Traffic	33	157	117	16	29	182	17	82	78	17	141	95	19
Project Trips													
Trip Distribution IN		10%	5%										
Trip Distribution OUT											10%		
Residential Trips	0	9	4	0	0	0	0	0	0	0	7	0	0
Trip Distribution IN		15%											
Trip Distribution OUT						15%							
Office Trips	0	2	0	0	0	16	0	0	0	0	0	0	0
Trip Distribution IN		15%											
Trip Distribution OUT						15%							
Retail Trips	0	20	0	0	0	15	0	0	0	0	0	0	0
Trip Distribution IN		15%											
Trip Distribution OUT						15%							
Restaurant Trips	0	20	0	0	0	3	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	51	4	0	0	34	0	0	0	0	7	0	0
2027 Buildout Total	33	208	121	16	29	216	17	82	78	17	148	95	19

INTERSECTION VOLUME DEVELOPMENT

Intersection #4: Lakefield Drive @ Site Driveway A / Lakefield Place AM PEAK HOUR

Description	Lakefield Drive <u>Northbound</u>			Lakefield Drive <u>Southbound</u>			Site Driveway A <u>Eastbound</u>			Lakefield Place <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	78	5	2	203	0	0	0	0	10	0	7
Pedestrians	0			0			0			9		
Conflicting Pedestrians	0	9	9	9	0	0	0	0	0	0	0	0
Heavy Vehicles	0	2	0	0	2	0	0	0	0	0	0	0
Heavy Vehicle %	0%	3%	2%	2%	2%	0%	0%	0%	0%	2%	0%	2%
Peak Hour Factor	0.85			0.85			0.85			0.85		
Adjustment												
Adjusted 2022 Volumes	0	78	5	2	203	0	0	0	0	10	0	7
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments												
2027 Background Traffic	0	84	5	2	219	0	0	0	0	11	0	8
Project Trips												
Trip Distribution IN	5%					5%						
Trip Distribution OUT							5%		10%			
Residential Trips	4	0	0	0	0	4	11	0	22	0	0	0
Trip Distribution IN												
Trip Distribution OUT												
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN												
Trip Distribution OUT												
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN												
Trip Distribution OUT												
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	0	0	0	0	4	11	0	22	0	0	0
2027 Buildout Total	4	84	5	2	219	4	11	0	22	11	0	8

PM PEAK HOUR

Description	Lakefield Drive <u>Northbound</u>			Lakefield Drive <u>Southbound</u>			Site Driveway A <u>Eastbound</u>			Lakefield Place <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	194	14	9	218	0	0	0	0	9	0	8
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	6	1	0	4	0	0	0	0	0	0	0
Heavy Vehicle %	0%	3%	7%	2%	2%	0%	0%	0%	0%	2%	0%	2%
Peak Hour Factor	0.90			0.90			0.90			0.90		
Adjustment												
Adjusted 2022 Volumes	0	194	14	9	218	0	0	0	0	9	0	8
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments												
2027 Background Traffic	0	209	15	10	235	0	0	0	0	10	0	9
Project Trips												
Trip Distribution IN	5%					5%						
Trip Distribution OUT							5%		10%			
Residential Trips	4	0	0	0	0	4	4	0	7	0	0	0
Trip Distribution IN												
Trip Distribution OUT												
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN												
Trip Distribution OUT												
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN												
Trip Distribution OUT												
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	0	0	0	0	4	4	0	7	0	0	0
2027 Buildout Total	4	209	15	10	235	4	4	0	7	10	0	9

INTERSECTION VOLUME DEVELOPMENT

Intersection #5: McGinnis Ferry Road @ Lakefield Drive AM PEAK HOUR

Description	Lakefield Drive <u>Northbound</u>			Lakefield Drive <u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	7	16	45	10	1	24	47	1,041	14	213	2,019	38
Pedestrians	4			9			0			0		
Conflicting Pedestrians	0		0	0		0	9		4	4		9
Heavy Vehicles	0	0	1	0	0	2	1	45	0	3	66	1
Heavy Vehicle %	2%	2%	2%	2%	2%	8%	2%	4%	2%	2%	3%	3%
Peak Hour Factor	0.99			0.99			0.99			0.99		
Adjustment												
Adjusted 2022 Volumes	7	16	45	10	1	24	47	1041	14	213	2019	38
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments							19			33		
2027 Background Traffic	8	17	48	11	1	26	51	1,140	15	229	2,208	41
Project Trips												
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Residential Trips	0	0	11	0	0	0	0	22	0	4	8	0
Trip Distribution IN											20%	
Trip Distribution OUT								20%				
Office Trips	0	0	0	0	0	0	0	0	0	0	24	0
Trip Distribution IN											20%	
Trip Distribution OUT								20%				
Retail Trips	0	0	0	0	0	0	0	14	0	0	25	0
Trip Distribution IN											20%	
Trip Distribution OUT								20%				
Restaurant Trips	0	0	0	0	0	0	0	42	0	0	44	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	11	0	0	0	0	78	0	4	101	0
2027 Buildout Total	8	17	59	11	1	26	51	1,218	15	233	2,309	41

PM PEAK HOUR

Description	Lakefield Drive <u>Northbound</u>			Lakefield Drive <u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	26	9	186	58	19	73	23	1,957	10	171	1,308	21
Pedestrians	1			0			2			0		
Conflicting Pedestrians	2		0	0		2	0		1	1		0
Heavy Vehicles	1	0	5	1	0	0	1	46	0	4	40	2
Heavy Vehicle %	4%	2%	3%	2%	2%	2%	4%	2%	2%	2%	3%	10%
Peak Hour Factor	0.95			0.95			0.95			0.95		
Adjustment												
Adjusted 2022 Volumes	26	9	186	58	19	73	23	1957	10	171	1308	21
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments							30			18		
2027 Background Traffic	28	10	200	62	20	79	25	2,138	11	184	1,427	23
Project Trips												
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Residential Trips	0	0	4	0	0	0	0	7	0	4	9	0
Trip Distribution IN											20%	
Trip Distribution OUT								20%				
Office Trips	0	0	0	0	0	0	0	21	0	0	2	0
Trip Distribution IN											20%	
Trip Distribution OUT								20%				
Retail Trips	0	0	0	0	0	0	0	20	0	0	27	0
Trip Distribution IN											20%	
Trip Distribution OUT								20%				
Restaurant Trips	0	0	0	0	0	0	0	4	0	0	26	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	4	0	0	0	0	52	0	4	64	0
2027 Buildout Total	28	10	204	62	20	79	25	2,190	11	188	1,491	23

INTERSECTION VOLUME DEVELOPMENT

Intersection #6: McGinnis Ferry Road @ Site Driveway B / Private Driveway AM PEAK HOUR

Description	Site Driveway B <u>Northbound</u>			Private Driveway <u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	10	1,101	1	5	2,072	2
Pedestrians	0			12			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	12	0	0	0	62	0
Heavy Vehicles	0	0	0	0	0	0	0	51	0	0	62	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	2%	5%	2%	2%	3%	2%
Peak Hour Factor	0.99			0.99			0.99			0.99		
Adjustment												
Adjusted 2022 Volumes	0	0	0	0	0	0	10	1101	1	5	2072	2
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments							18			33		
2027 Background Traffic	0	0	0	0	0	0	11	1,204	1	5	2,265	2
Project Trips												
Trip Distribution IN								10%	15%	10%		
Trip Distribution OUT	10%		5%									
Residential Trips	22	0	11	0	0	0	0	8	13	8	0	0
Trip Distribution IN								5%	5%	15%	5%	
Trip Distribution OUT	5%		10%					5%				
Office Trips	0	0	0	0	0	0	0	6	6	18	6	0
Trip Distribution IN								5%	5%	15%	5%	
Trip Distribution OUT	5%		10%					5%				
Retail Trips	3	0	7	0	0	0	0	9	6	18	6	0
Trip Distribution IN								5%	5%	15%	5%	
Trip Distribution OUT	5%		10%					5%				
Restaurant Trips	10	0	21	0	0	0	0	21	11	33	11	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	35	0	39	0	0	0	0	44	36	77	23	0
2027 Buildout Total	35	0	39	0	0	0	11	1,248	37	82	2,288	2

PM PEAK HOUR

Description	Site Driveway B <u>Northbound</u>			Private Driveway <u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	2	20	0	18	59	1,976	0	6	1,383	39
Pedestrians	0			4			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	4	0	0	0	36	4
Heavy Vehicles	0	0	0	0	0	0	0	51	0	1	36	0
Heavy Vehicle %	0%	0%	2%	2%	0%	2%	2%	3%	0%	17%	3%	2%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Adjustment												
Adjusted 2022 Volumes	0	0	2	20	0	18	59	1976	0	6	1383	39
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments							31			19		
2027 Background Traffic	0	0	2	22	0	19	64	2,160	0	6	1,509	42
Project Trips												
Trip Distribution IN								10%	15%	10%		
Trip Distribution OUT	10%		5%									
Residential Trips	7	0	4	0	0	0	0	9	13	9	0	0
Trip Distribution IN								5%	5%	15%	5%	
Trip Distribution OUT	5%		10%					5%				
Office Trips	5	0	11	0	0	0	0	6	1	2	1	0
Trip Distribution IN								5%	5%	15%	5%	
Trip Distribution OUT	5%		10%					5%				
Retail Trips	5	0	10	0	0	0	0	12	7	20	7	0
Trip Distribution IN								5%	5%	15%	5%	
Trip Distribution OUT	5%		10%					5%				
Restaurant Trips	1	0	2	0	0	0	0	8	7	20	7	0
Pass-By Trips	30	0	30	0	0	0	0	-30	30	30	-30	0
Total Project Trips	48	0	57	0	0	0	0	5	58	81	-15	0
2027 Buildout Total	48	0	59	22	0	19	64	2,165	58	87	1,494	42

INTERSECTION VOLUME DEVELOPMENT

Intersection #7: McGinnis Ferry Road @ Johns Creek Parkway AM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	18	79	25	253	135	20	55	820	74	105	1,217	765
Pedestrians	1			7			0			2		
Conflicting Pedestrians	0		2	2		0	7		1	1		7
Heavy Vehicles	1	3	0	6	1	0	2	44	1	1	41	22
Heavy Vehicle %	6%	4%	2%	2%	2%	2%	4%	5%	2%	2%	3%	3%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Adjustment												
Adjusted 2022 Volumes	18	79	25	253	135	20	55	820	74	105	1217	765
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments			6					12		11	22	
2027 Background Traffic	19	85	33	273	145	22	59	895	80	124	1,333	824
Project Trips												
Trip Distribution IN					10%			25%				
Trip Distribution OUT	15%	10%									10%	
Residential Trips	33	22	0	0	8	0	0	21	0	0	22	0
Trip Distribution IN					15%			20%		5%		
Trip Distribution OUT	15%	15%									5%	
Office Trips	0	0	0	0	18	0	0	24	0	6	0	0
Trip Distribution IN					15%			20%		5%		
Trip Distribution OUT	15%	15%									5%	
Retail Trips	10	10	0	0	18	0	0	25	0	6	3	0
Trip Distribution IN					15%			20%		5%		
Trip Distribution OUT	15%	15%									5%	
Restaurant Trips	31	31	0	0	33	0	0	44	0	11	10	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	74	63	0	0	77	0	0	114	0	23	35	0
2027 Buildout Total	93	148	33	273	222	22	59	1,009	80	147	1,368	824

PM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	61	138	167	604	139	46	25	1,227	30	61	941	442
Pedestrians	1			2			1			0		
Conflicting Pedestrians	1		0	0		1	2		1	1		2
Heavy Vehicles	0	0	0	10	1	0	1	43	0	0	30	8
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	4%	4%	2%	2%	3%	2%
Peak Hour Factor	0.96			0.96			0.96			0.96		
Adjustment												
Adjusted 2022 Volumes	61	138	167	604	139	46	25	1227	30	61	941	442
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments			10					21		6	13	
2027 Background Traffic	66	149	190	651	150	50	27	1,343	32	72	1,027	476
Project Trips												
Trip Distribution IN					10%			25%				
Trip Distribution OUT	15%	10%									10%	
Residential Trips	11	7	0	0	9	0	0	22	0	0	7	0
Trip Distribution IN					15%			20%		5%		
Trip Distribution OUT	15%	15%									5%	
Office Trips	16	16	0	0	2	0	0	2	0	1	5	0
Trip Distribution IN					15%			20%		5%		
Trip Distribution OUT	15%	15%									5%	
Retail Trips	15	15	0	0	20	0	0	27	0	7	5	0
Trip Distribution IN					15%			20%		5%		
Trip Distribution OUT	15%	15%									5%	
Restaurant Trips	3	3	0	0	20	0	0	26	0	7	1	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	45	41	0	0	51	0	0	77	0	15	18	0
2027 Buildout Total	111	190	190	651	201	50	27	1,420	32	87	1,045	476

INTERSECTION VOLUME DEVELOPMENT

Intersection #8: Johns Creek Parkway @ Private Driveway / Site Driveway C AM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			U-Turn	Johns Creek Parkway <u>Southbound</u>			Left	Private Driveway <u>Eastbound</u>			Left	Site Driveway C <u>Westbound</u>		
	Left	Through	Right		Left	Through	Right		Left	Through	Right		Left	Through	Right
Observed 2022 Traffic Volumes	12	131	0	0	0	282	8	0	0	0	0	1	0	1	
Pedestrians	0				0				0				0		
Conflicting Pedestrians	0	0	0		0	0	0		0	0	0		0	0	0
Heavy Vehicles	1	3	0	0	0	2	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	8%	2%	0%	0%	0%	2%	2%	0%	0%	0%	0%	2%	0%	2%	
Peak Hour Factor	0.84				0.84				0.84				0.84		
Adjustment															
Adjusted 2022 Volumes	12	131	0	0	0	282	8	0	0	0	0	1	0	1	
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment															
Other Proposed Developments		6				11									
2027 Background Traffic	13	147	0	0	0	315	9	0	0	0	0	1	0	1	
Project Trips															
Trip Distribution IN						10%									
Trip Distribution OUT		20%													
Residential Trips	0	43	0	0	0	8	0	0	0	0	0	0	0	0	
Trip Distribution IN						10%	5%								
Trip Distribution OUT		10%													10%
Office Trips	0	0	0	0	12	6	0	0	0	0	0	0	0	0	
Trip Distribution IN						10%	5%								
Trip Distribution OUT		10%													10%
Retail Trips	0	7	0	0	12	6	0	0	0	0	0	0	0	0	7
Trip Distribution IN						10%	5%								
Trip Distribution OUT		10%													10%
Restaurant Trips	0	21	0	0	22	11	0	0	0	0	0	0	0	0	21
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	71	0	0	46	31	0	0	0	0	0	0	0	0	28
2027 Buildout Total	13	218	0	0	46	346	9	0	0	0	0	1	0	29	

PM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			U-Turn	Johns Creek Parkway <u>Southbound</u>			Left	Private Driveway <u>Eastbound</u>			Left	Site Driveway C <u>Westbound</u>		
	Left	Through	Right		Left	Through	Right		Left	Through	Right		Left	Through	Right
Observed 2022 Traffic Volumes	3	319	0	8	1	207	0	14	0	18	0	0	0	1	
Pedestrians	0				0				1				0		
Conflicting Pedestrians	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Heavy Vehicle %	2%	2%	0%	2%	2%	2%	0%	2%	0%	6%	0%	0%	0%	2%	
Peak Hour Factor	0.87				0.87				0.87				0.87		
Adjustment															
Adjusted 2022 Volumes	3	319	0	8	1	207	0	14	0	18	0	0	0	1	
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment															
Other Proposed Developments		10				6									
2027 Background Traffic	3	354	0	9	1	229	0	15	0	19	0	0	0	1	
Project Trips															
Trip Distribution IN						10%									
Trip Distribution OUT		20%													
Residential Trips	0	15	0	0	0	9	0	0	0	0	0	0	0	0	
Trip Distribution IN						10%	5%								
Trip Distribution OUT		10%													10%
Office Trips	0	11	0	0	1	1	0	0	0	0	0	0	0	0	11
Trip Distribution IN						10%	5%								
Trip Distribution OUT		10%													10%
Retail Trips	0	10	0	0	13	7	0	0	0	0	0	0	0	0	10
Trip Distribution IN						10%	5%								
Trip Distribution OUT		10%													10%
Restaurant Trips	0	2	0	0	13	7	0	0	0	0	0	0	0	0	2
Pass-By Trips	0	-12	12	0	6	-6	0	0	0	0	0	6	0	12	
Total Project Trips	0	26	12	0	33	18	0	0	0	0	0	6	0	35	
2027 Buildout Total	3	380	12	9	34	247	0	15	0	19	0	6	0	36	

INTERSECTION VOLUME DEVELOPMENT

Intersection #9: Johns Creek Parkway @ East Johns Crossing / Site Driveway D AM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>			East Johns Crossing <u>Eastbound</u>			Site Driveway D <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	35	133	0	0	197	91	9	0	66	0	4	0
Pedestrians	2			0			0			6		
Conflicting Pedestrians	0		6	6		0	0		2	2		0
Heavy Vehicles	1	4	0	0	1	2	0	0	0	0	0	0
Heavy Vehicle %	3%	3%	0%	0%	2%	2%	2%	0%	2%	0%	2%	0%
Peak Hour Factor	0.91			0.91			0.91			0.91		
Adjustment												
Adjusted 2022 Volumes	35	133	0	0	197	91	9	0	66	0	4	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments						11	6					
2027 Background Traffic	38	143	0	0	212	109	16	0	71	0	4	0
Project Trips												
Trip Distribution IN				10%				35%				
Trip Distribution OUT		5%									40%	15%
Residential Trips	0	11	0	8	0	0	0	29	0	0	87	33
Trip Distribution IN			10%	5%				30%				
Trip Distribution OUT		5%								15%	30%	5%
Office Trips	0	0	12	6	0	0	0	36	0	0	1	0
Trip Distribution IN			10%	5%				30%				
Trip Distribution OUT		5%								15%	30%	5%
Retail Trips	0	3	12	6	0	0	0	37	0	10	20	3
Trip Distribution IN			10%	5%				30%				
Trip Distribution OUT		5%								15%	30%	5%
Restaurant Trips	0	10	22	11	0	0	0	66	0	31	62	10
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	24	46	31	0	0	0	168	0	41	170	46
2027 Buildout Total	38	167	46	31	212	109	16	168	71	41	174	46

PM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>			East Johns Crossing <u>Eastbound</u>			Site Driveway D <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	45	210	1	0	208	19	111	4	84	0	1	1
Pedestrians	4			0			0			3		
Conflicting Pedestrians	0		3	3		0	0		4	4		0
Heavy Vehicles	0	0	0	0	1	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	0%	2%	2%	2%	2%	2%	0%	2%	2%
Peak Hour Factor	0.88			0.88			0.88			0.88		
Adjustment												
Adjusted 2022 Volumes	45	210	1	0	208	19	111	4	84	0	1	1
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments						6	10					
2027 Background Traffic	48	226	1	0	224	26	130	4	90	0	1	1
Project Trips												
Trip Distribution IN				10%				35%				
Trip Distribution OUT		5%									40%	15%
Residential Trips	0	4	0	9	0	0	0	31	0	0	29	11
Trip Distribution IN			10%	5%				30%				
Trip Distribution OUT		5%								15%	30%	5%
Office Trips	0	5	1	1	0	0	0	3	0	16	32	5
Trip Distribution IN			10%	5%				30%				
Trip Distribution OUT		5%								15%	30%	5%
Trip Distribution IN			10%	5%				30%				
Trip Distribution OUT		5%								15%	30%	5%
Restaurant Trips	0	1	13	7	0	0	0	39	0	3	7	1
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	15	27	24	0	0	0	113	0	34	99	22
2027 Buildout Total	48	241	28	24	224	26	130	117	90	34	100	23

\\kimley-horn.com\se_alp1\alp1_pto\014602005_johns creek mixed-use dri - johns creek - june 2022_dri phase 2\analysis\johns creek mixed-use analysis.xls\jnt 9

9/14/2022 17:00

INTERSECTION VOLUME DEVELOPMENT

Intersection #10: Medlock Bridge Road (SR 141) @ Hospital Parkway / East Johns Crossing AM PEAK HOUR

Description	Medlock Bridge Road (SR 141)				Medlock Bridge Road (SR 141)				Hospital Parkway			East Johns Crossing		
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	6	188	1,101	69	7	98	1,318	86	28	50	240	49	25	15
Pedestrians	0				1				2			0		
Conflicting Pedestrians	2			0	0			2	1		0	0		1
Heavy Vehicles	0	1	47	1	0	1	38	0	1	0	6	0	0	0
Heavy Vehicle %	2%	2%	4%	2%	2%	2%	3%	2%	4%	2%	3%	2%	2%	2%
Peak Hour Factor	0.91				0.91				0.91			0.91		
Adjustment														
Adjusted 2022 Volumes	6	188	1101	69	7	98	1318	86	28	50	240	49	25	15
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment														
Other Proposed Developments		33						22	12	6	19		11	
2027 Background Traffic	6	236	1,186	74	8	106	1,420	115	42	60	278	53	38	16
Project Trips														
Trip Distribution IN				20%		5%				10%				
Trip Distribution OUT												25%	10%	5%
Residential Trips	0	0	0	17	0	4	0	0	0	8	0	54	22	11
Trip Distribution IN				15%		5%				10%				
Trip Distribution OUT												15%	10%	5%
Office Trips	0	0	0	18	0	6	0	0	0	12	0	0	0	0
Trip Distribution IN				15%		5%				10%				
Trip Distribution OUT												15%	10%	5%
Retail Trips	0	0	0	18	0	6	0	0	0	12	0	10	7	3
Trip Distribution IN				15%		5%				10%				
Trip Distribution OUT												15%	10%	5%
Restaurant Trips	0	0	0	33	0	11	0	0	0	22	0	31	21	10
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	86	0	27	0	0	0	54	0	95	50	24
2027 Buildout Total	6	236	1,186	160	8	133	1,420	115	42	114	278	148	88	40

PM PEAK HOUR

Description	Medlock Bridge Road (SR 141)				Medlock Bridge Road (SR 141)				Hospital Parkway			East Johns Crossing		
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	14	215	1,338	24	23	65	1,125	26	129	105	271	104	71	51
Pedestrians	0				4				2			0		
Conflicting Pedestrians	2			0	0			2	4		0	0		4
Heavy Vehicles	0	0	19	0	0	0	41	0	0	0	1	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.97				0.97				0.97			0.97		
Adjustment														
Adjusted 2022 Volumes	14	215	1338	24	23	65	1125	26	129	105	271	104	71	51
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment														
Other Proposed Developments		18						13	21	10	30		6	
2027 Background Traffic	15	250	1,441	26	25	70	1,212	41	160	123	322	112	82	55
Project Trips														
Trip Distribution IN				20%		5%				10%				
Trip Distribution OUT												25%	10%	5%
Residential Trips	0	0	0	18	0	4	0	0	0	9	0	18	7	4
Trip Distribution IN				15%		5%				10%				
Trip Distribution OUT												15%	10%	5%
Office Trips	0	0	0	2	0	1	0	0	0	1	0	16	11	5
Trip Distribution IN				15%		5%				10%				
Trip Distribution OUT												15%	10%	5%
Retail Trips	0	0	0	20	0	7	0	0	0	13	0	15	10	5
Trip Distribution IN				15%		5%				10%				
Trip Distribution OUT												15%	10%	5%
Restaurant Trips	0	0	0	20	0	7	0	0	0	13	0	3	2	1
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	60	0	19	0	0	0	36	0	52	30	15
2027 Buildout Total	15	250	1,441	86	25	89	1,212	41	160	159	322	164	112	70

INTERSECTION VOLUME DEVELOPMENT

Intersection #11: Medlock Bridge Road (SR 141) @ McGinnis Ferry Road AM PEAK HOUR

Description	Medlock Bridge Road (SR 141)				Medlock Bridge Road (SR 141)			McGinnis Ferry Road			McGinnis Ferry Road			
	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	4	181	940	77	181	1,165	44	77	708	128	6	169	1,007	85
Pedestrians	0				0			0			0			
Conflicting Pedestrians	0				0			0			0			
Heavy Vehicles	0	9	35	5	8	29	0	3	43	7	0	3	39	0
Heavy Vehicle %	2%	5%	4%	6%	4%	2%	2%	4%	6%	5%	2%	2%	4%	2%
Peak Hour Factor	0.97				0.97			0.97			0.97			
Adjustment														
Adjusted 2022 Volumes	4	181	940	77	181	1165	44	77	708	128	6	169	1007	85
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment														
Other Proposed Developments	6				22			6			11			
2027 Background Traffic	4	195	1,019	89	195	1,277	58	89	769	138	6	193	1,096	92
Project Trips														
Trip Distribution IN					5%			25%						
Trip Distribution OUT	5%										25%			
Residential Trips	0	0	11	0	0	4	0	0	21	0	0	0	54	0
Trip Distribution IN					5%			20%						
Trip Distribution OUT	5%										20%			
Office Trips	0	0	0	0	0	6	0	0	24	0	0	0	0	0
Trip Distribution IN					5%			20%						
Trip Distribution OUT	5%										20%			
Retail Trips	0	0	3	0	0	6	0	0	25	0	0	0	14	0
Trip Distribution IN					5%			20%						
Trip Distribution OUT	5%										20%			
Restaurant Trips	0	0	10	0	0	11	0	0	44	0	0	0	42	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	24	0	0	27	0	0	114	0	0	0	110	0
2027 Buildout Total	4	195	1,043	89	195	1,304	58	89	883	138	6	193	1,206	92

PM PEAK HOUR

Description	Medlock Bridge Road (SR 141)				Medlock Bridge Road (SR 141)			McGinnis Ferry Road			McGinnis Ferry Road			
	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	13	198	1,180	171	273	1,023	49	150	858	77	20	214	723	125
Pedestrians	1				0			0			0			
Conflicting Pedestrians	0			0	0		0	0		1	1			0
Heavy Vehicles	0	1	17	3	9	43	0	0	26	1	0	1	26	3
Heavy Vehicle %	2%	2%	2%	2%	3%	4%	2%	2%	3%	2%	2%	2%	4%	2%
Peak Hour Factor	0.98				0.98			0.98			0.98			
Adjustment														
Adjusted 2022 Volumes	13	198	1180	171	273	1023	49	150	858	77	20	214	723	125
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment														
Other Proposed Developments	10				13			10			6			
2027 Background Traffic	14	213	1,281	194	294	1,115	59	172	934	83	22	237	785	135
Project Trips														
Trip Distribution IN					5%			25%						
Trip Distribution OUT	5%										25%			
Residential Trips	0	0	4	0	0	4	0	0	22	0	0	0	18	0
Trip Distribution IN					5%			20%						
Trip Distribution OUT	5%										20%			
Office Trips	0	0	5	0	0	1	0	0	2	0	0	0	21	0
Trip Distribution IN					5%			20%						
Trip Distribution OUT	5%										20%			
Retail Trips	0	0	5	0	0	7	0	0	27	0	0	0	20	0
Trip Distribution IN					5%			20%						
Trip Distribution OUT	5%										20%			
Restaurant Trips	0	0	1	0	0	7	0	0	26	0	0	0	4	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	15	0	0	19	0	0	77	0	0	0	63	0
2027 Buildout Total	14	213	1,296	194	294	1,134	59	172	1,011	83	22	237	848	135

INTERSECTION VOLUME DEVELOPMENT

Intersection #12: McGinnis Ferry Road @ Hospital Parkway / Private Driveway AM PEAK HOUR

Description	Hospital Parkway <u>Northbound</u>			Private Driveway <u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	90	0	34	0	0	1	2	952	338	118	1,006	7
Pedestrians	0			1			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	1	0	0	0	0	1
Heavy Vehicles	1	0	1	0	0	0	0	38	6	1	33	1
Heavy Vehicle %	2%	0%	3%	0%	0%	2%	2%	4%	2%	2%	3%	14%
Peak Hour Factor	0.89			0.89			0.89			0.89		
Adjustment												
Adjusted 2022 Volumes	90	0	34	0	0	1	2	952	338	118	1006	7
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments	25		19						44	33		
2027 Background Traffic	122	0	56	0	0	1	2	1,026	408	160	1,084	8
Project Trips												
Trip Distribution IN								25%	10%			
Trip Distribution OUT	10%									25%		
Residential Trips	22	0	0	0	0	0	0	21	8	0	54	0
Trip Distribution IN								20%	10%			
Trip Distribution OUT	10%									20%		
Office Trips	0	0	0	0	0	0	0	24	12	0	0	0
Trip Distribution IN								20%	10%			
Trip Distribution OUT	10%									20%		
Retail Trips	7	0	0	0	0	0	0	25	12	0	14	0
Trip Distribution IN								20%	10%			
Trip Distribution OUT	10%									20%		
Restaurant Trips	21	0	0	0	0	0	0	44	22	0	42	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	50	0	0	0	0	0	0	114	54	0	110	0
2027 Buildout Total	172	0	56	0	0	1	2	1,140	462	160	1,194	8

PM PEAK HOUR

Description	Hospital Parkway <u>Northbound</u>			Private Driveway <u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	211	1	78	4	1	2	14	1,066	213	29	1,171	7
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	0	0	0	0	0	0	20	3	0	21	1
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	14%
Peak Hour Factor	0.95			0.95			0.95			0.95		
Adjustment												
Adjusted 2022 Volumes	211	1	78	4	1	2	14	1066	213	29	1171	7
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments	41		30						25	18		
2027 Background Traffic	268	1	114	4	1	2	15	1,148	254	49	1,261	8
Project Trips												
Trip Distribution IN								25%	10%			
Trip Distribution OUT	10%									25%		
Residential Trips	7	0	0	0	0	0	0	22	9	0	18	0
Trip Distribution IN								20%	10%			
Trip Distribution OUT	10%									20%		
Office Trips	11	0	0	0	0	0	0	2	1	0	21	0
Trip Distribution IN								20%	10%			
Trip Distribution OUT	10%									20%		
Retail Trips	10	0	0	0	0	0	0	27	13	0	20	0
Trip Distribution IN								20%	10%			
Trip Distribution OUT	10%									20%		
Restaurant Trips	2	0	0	0	0	0	0	26	13	0	4	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	30	0	0	0	0	0	0	77	36	0	63	0
2027 Buildout Total	298	1	114	4	1	2	15	1,225	290	49	1,324	8

INTERSECTION VOLUME DEVELOPMENT

Intersection #13: McGinnis Ferry Road @ Sargent Road AM PEAK HOUR

Description	Sargent Road <u>Northbound</u>			<u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	61	0	524	0	0	0	0	759	38	425	673	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	2	0	8	0	0	0	0	32	0	7	31	0
Heavy Vehicle %	3%	0%	2%	0%	0%	0%	0%	4%	2%	2%	5%	0%
Peak Hour Factor	0.93			0.93			0.93			0.93		
Adjustment												
Adjusted 2022 Volumes	61	0	524	0	0	0	0	759	38	425	673	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments			22					22		12	12	
2027 Background Traffic	66	0	586	0	0	0	0	840	41	470	737	0
Project Trips												
Trip Distribution IN			20%					15%				
Trip Distribution OUT										20%	15%	
Residential Trips	0	0	17	0	0	0	0	13	0	43	33	0
Trip Distribution IN			20%					10%				
Trip Distribution OUT										20%	10%	
Office Trips	0	0	24	0	0	0	0	12	0	0	0	0
Trip Distribution IN			20%					10%				
Trip Distribution OUT										20%	10%	
Retail Trips	0	0	25	0	0	0	0	12	0	14	7	0
Trip Distribution IN			20%					10%				
Trip Distribution OUT										20%	10%	
Restaurant Trips	0	0	44	0	0	0	0	22	0	42	21	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	110	0	0	0	0	59	0	99	61	0
2027 Buildout Total	66	0	696	0	0	0	0	899	41	569	798	0

PM PEAK HOUR

Description	Sargent Road <u>Northbound</u>			<u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	28	0	586	0	0	0	0	708	26	617	769	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	1	0	3	0	0	0	0	23	1	7	13	0
Heavy Vehicle %	4%	0%	2%	0%	0%	0%	0%	3%	4%	2%	2%	0%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Adjustment												
Adjusted 2022 Volumes	28	0	586	0	0	0	0	708	26	617	769	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments			13					13		21	21	
2027 Background Traffic	30	0	644	0	0	0	0	776	28	686	849	0
Project Trips												
Trip Distribution IN			20%					15%				
Trip Distribution OUT										20%	15%	
Residential Trips	0	0	18	0	0	0	0	13	0	15	11	0
Trip Distribution IN			20%					10%				
Trip Distribution OUT										20%	10%	
Office Trips	0	0	2	0	0	0	0	1	0	21	11	0
Trip Distribution IN			20%					10%				
Trip Distribution OUT										20%	10%	
Retail Trips	0	0	27	0	0	0	0	13	0	20	10	0
Trip Distribution IN			20%					10%				
Trip Distribution OUT										20%	10%	
Restaurant Trips	0	0	26	0	0	0	0	13	0	4	2	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	73	0	0	0	0	40	0	60	34	0
2027 Buildout Total	30	0	717	0	0	0	0	816	28	746	883	0

INTERSECTION VOLUME DEVELOPMENT

Intersection #14: Johns Creek Parkway @ Site Driveway E AM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>			<u>Eastbound</u>			Site Driveway E <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	237	0	0	222	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	4	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.93			0.93			0.93			0.93		
Adjustment												
Adjusted 2022 Volumes	0	237	0	0	222	0	0	0	0	0	0	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments												
2027 Background Traffic	0	255	0	0	239	0	0	0	0	0	0	0
Project Trips												
Trip Distribution IN			10%									
Trip Distribution OUT												5%
Residential Trips	0	0	8	0	0	0	0	0	0	0	0	11
Trip Distribution IN		10%	5%									
Trip Distribution OUT					15%							5%
Office Trips	0	12	6	0	0	0	0	0	0	0	0	0
Trip Distribution IN		10%	5%									
Trip Distribution OUT					15%							5%
Retail Trips	0	12	6	0	10	0	0	0	0	0	0	3
Trip Distribution IN		10%	5%									
Trip Distribution OUT					15%							5%
Restaurant Trips	0	22	11	0	31	0	0	0	0	0	0	10
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	46	31	0	41	0	0	0	0	0	0	24
2027 Buildout Total	0	301	31	0	280	0	0	0	0	0	0	24

PM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>			<u>Eastbound</u>			Site Driveway E <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	308	0	0	227	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	7	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.87			0.87			0.87			0.87		
Adjustment												
Adjusted 2022 Volumes	0	308	0	0	227	0	0	0	0	0	0	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments												
2027 Background Traffic	0	332	0	0	245	0	0	0	0	0	0	0
Project Trips												
Trip Distribution IN			10%									
Trip Distribution OUT												5%
Residential Trips	0	0	9	0	0	0	0	0	0	0	0	4
Trip Distribution IN		10%	5%									
Trip Distribution OUT					15%							5%
Office Trips	0	1	1	0	16	0	0	0	0	0	0	5
Trip Distribution IN		10%	5%									
Trip Distribution OUT					15%							5%
Retail Trips	0	13	7	0	15	0	0	0	0	0	0	5
Trip Distribution IN		10%	5%									
Trip Distribution OUT					15%							5%
Restaurant Trips	0	13	7	0	3	0	0	0	0	0	0	1
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	27	24	0	34	0	0	0	0	0	0	15
2027 Buildout Total	0	359	24	0	279	0	0	0	0	0	0	15

INTERSECTION VOLUME DEVELOPMENT

Intersection #15: Johns Creek Parkway @ Private Driveway / Site Driveway F AM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>			Private Driveway <u>Eastbound</u>			Site Driveway F <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	132	0	0	290	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	3	0	0	2	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.84			0.84			0.84			0.84		
Adjustment												
Adjusted 2022 Volumes	0	132	0	0	290	0	0	0	0	0	0	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments		6			11							
2027 Background Traffic	0	148	0	0	323	0	0	0	0	0	0	0
Project Trips												
Trip Distribution IN					10%							
Trip Distribution OUT		20%										5%
Residential Trips	0	43	0	0	8	0	0	0	0	0	0	11
Trip Distribution IN					5%	15%						
Trip Distribution OUT		20%										10%
Office Trips	0	0	0	6	18	0	0	0	0	0	0	0
Trip Distribution IN					5%	15%						
Trip Distribution OUT		20%										10%
Retail Trips	0	14	0	6	18	0	0	0	0	0	0	7
Trip Distribution IN					5%	15%						
Trip Distribution OUT		20%										10%
Restaurant Trips	0	42	0	11	33	0	0	0	0	0	0	21
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	99	0	23	77	0	0	0	0	0	0	39
2027 Buildout Total	0	247	0	23	400	0	0	0	0	0	0	39

PM PEAK HOUR

Description	Johns Creek Parkway <u>Northbound</u>			Johns Creek Parkway <u>Southbound</u>			Private Driveway <u>Eastbound</u>			Site Driveway F <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	342	0	0	216	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.87			0.87			0.87			0.87		
Adjustment												
Adjusted 2022 Volumes	0	342	0	0	216	0	0	0	0	0	0	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments		10			6							
2027 Background Traffic	0	378	0	0	239	0	0	0	0	0	0	0
Project Trips												
Trip Distribution IN					10%							
Trip Distribution OUT		20%										5%
Residential Trips	0	15	0	0	9	0	0	0	0	0	0	4
Trip Distribution IN					5%	15%						
Trip Distribution OUT		20%										10%
Office Trips	0	21	0	1	2	0	0	0	0	0	0	11
Trip Distribution IN					5%	15%						
Trip Distribution OUT		20%										10%
Retail Trips	0	20	0	7	20	0	0	0	0	0	0	10
Trip Distribution IN					5%	15%						
Trip Distribution OUT		20%										10%
Restaurant Trips	0	4	0	7	20	0	0	0	0	0	0	2
Pass-By Trips	0	-6	6	0	0	0	0	0	0	0	0	6
Total Project Trips	0	54	6	15	51	0	0	0	0	0	0	33
2027 Buildout Total	0	432	6	15	290	0	0	0	0	0	0	33

INTERSECTION VOLUME DEVELOPMENT

Intersection #16: McGinnis Ferry Road @ Site Driveway G AM PEAK HOUR

Description	Site Driveway G <u>Northbound</u>			<u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	1,098	0	0	2,087	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	0	0	0	0	0	0	50	0	0	64	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	3%	0%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Adjustment												
Adjusted 2022 Volumes	0	0	0	0	0	0	0	1098	0	0	2087	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments								18			33	
2027 Background Traffic	0	0	0	0	0	0	0	1,201	0	0	2,281	0
Project Trips												
Trip Distribution IN								25%				
Trip Distribution OUT											10%	
Residential Trips	0	0	0	0	0	0	0	21	0	0	22	0
Trip Distribution IN								10%	10%		5%	
Trip Distribution OUT			5%					5%			5%	
Office Trips	0	0	0	0	0	0	0	12	12	0	6	0
Trip Distribution IN								10%	10%		5%	
Trip Distribution OUT			5%					5%			5%	
Retail Trips	0	0	3	0	0	0	0	15	12	0	9	0
Trip Distribution IN								10%	10%		5%	
Trip Distribution OUT			5%					5%			5%	
Restaurant Trips	0	0	10	0	0	0	0	32	22	0	21	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	13	0	0	0	0	80	46	0	58	0
2027 Buildout Total	0	0	13	0	0	0	0	1,281	46	0	2,339	0

PM PEAK HOUR

Description	Site Driveway G <u>Northbound</u>			<u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	1,998	0	0	1,444	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	0	0	0	0	0	0	53	0	0	38	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Peak Hour Factor	0.96			0.96			0.96			0.96		
Adjustment												
Adjusted 2022 Volumes	0	0	0	0	0	0	0	1998	0	0	1444	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments								31			19	
2027 Background Traffic	0	0	0	0	0	0	0	2,183	0	0	1,575	0
Project Trips												
Trip Distribution IN								25%				
Trip Distribution OUT											10%	
Residential Trips	0	0	0	0	0	0	0	22	0	0	7	0
Trip Distribution IN								10%	10%		5%	
Trip Distribution OUT			5%					5%			5%	
Office Trips	0	0	5	0	0	0	0	6	1	0	6	0
Trip Distribution IN								10%	10%		5%	
Trip Distribution OUT			5%					5%			5%	
Retail Trips	0	0	5	0	0	0	0	18	13	0	12	0
Trip Distribution IN								10%	10%		5%	
Trip Distribution OUT			5%					5%			5%	
Restaurant Trips	0	0	1	0	0	0	0	14	13	0	8	0
Pass-By Trips	0	0	34	0	0	0	0	-34	34	0	0	0
Total Project Trips	0	0	45	0	0	0	0	26	61	0	33	0
2027 Buildout Total	0	0	45	0	0	0	0	2,209	61	0	1,608	0

INTERSECTION VOLUME DEVELOPMENT

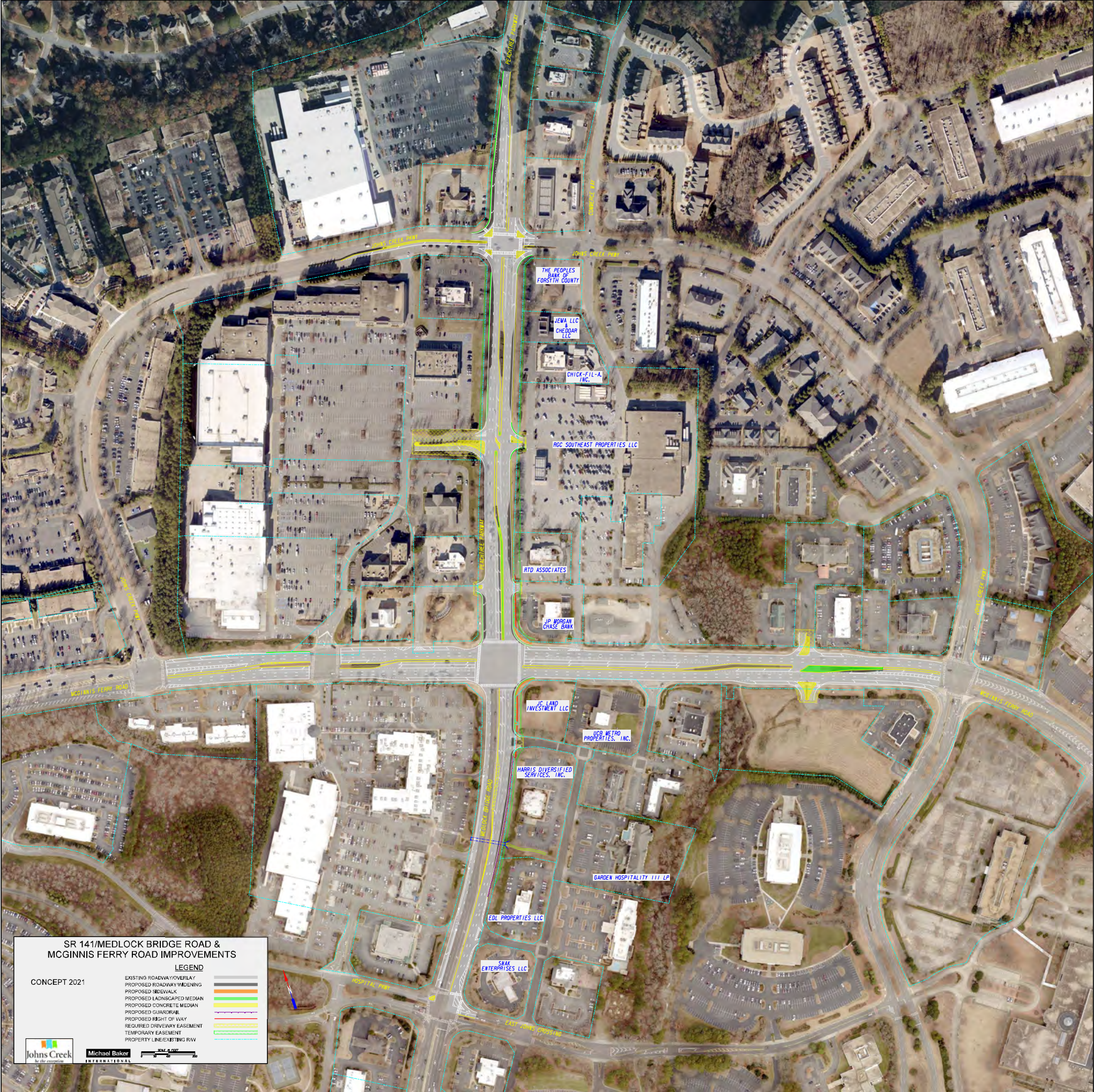
Intersection #17: McGinnis Ferry Road @ Site Driveway H AM PEAK HOUR

Description	Site Driveway H <u>Northbound</u>			<u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	1,101	0	0	2,079	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	0	0	0	0	0	0	51	0	0	62	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	3%	0%
Peak Hour Factor	0.99			0.99			0.99			0.99		
Adjustment												
Adjusted 2022 Volumes	0	0	0	0	0	0	0	1101	0	0	2079	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments								18			33	
2027 Background Traffic	0	0	0	0	0	0	0	1,204	0	0	2,273	0
Project Trips												
Trip Distribution IN									10%		10%	
Trip Distribution OUT			5%					5%				
Residential Trips	0	0	11	0	0	0	0	11	8	0	8	0
Trip Distribution IN									5%		20%	
Trip Distribution OUT			5%					15%				
Office Trips	0	0	0	0	0	0	0	0	6	0	24	0
Trip Distribution IN									5%		20%	
Trip Distribution OUT			5%					15%				
Retail Trips	0	0	3	0	0	0	0	10	6	0	25	0
Trip Distribution IN									5%		20%	
Trip Distribution OUT			5%					15%				
Restaurant Trips	0	0	10	0	0	0	0	31	11	0	44	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	24	0	0	0	0	52	31	0	101	0
2027 Buildout Total	0	0	24	0	0	0	0	1,256	31	0	2,374	0

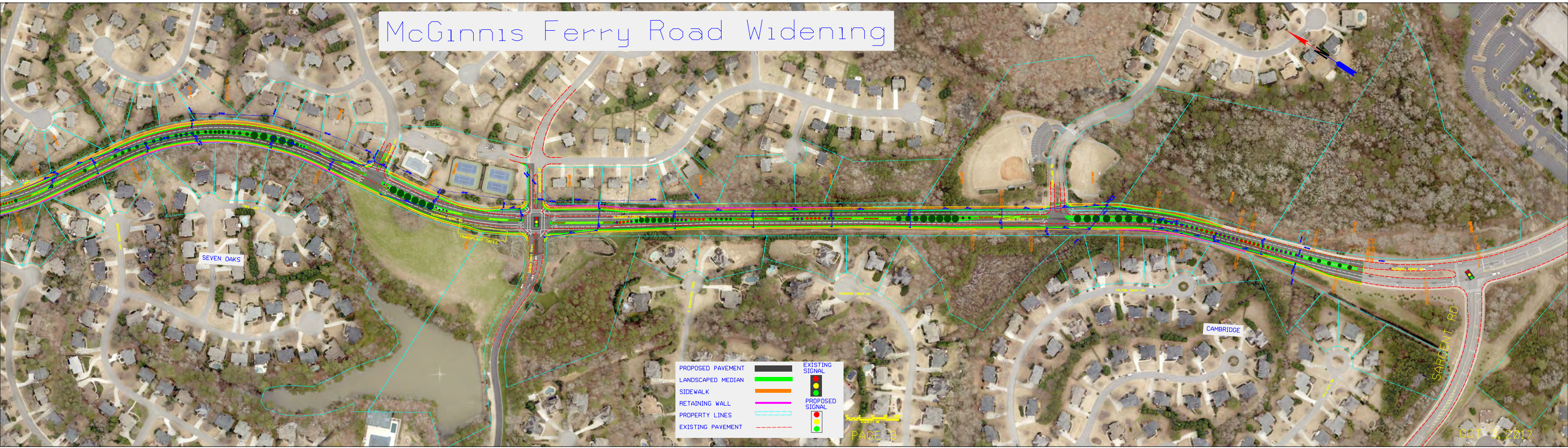
PM PEAK HOUR

Description	Site Driveway H <u>Northbound</u>			<u>Southbound</u>			McGinnis Ferry Road <u>Eastbound</u>			McGinnis Ferry Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	1,998	0	0	1,428	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	0	0	0	0	0	0	51	0	0	37	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Adjustment												
Adjusted 2022 Volumes	0	0	0	0	0	0	0	1998	0	0	1428	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
New Road Adjustment												
Other Proposed Developments								31			19	
2027 Background Traffic	0	0	0	0	0	0	0	2,183	0	0	1,557	0
Project Trips												
Trip Distribution IN									10%		10%	
Trip Distribution OUT			5%					5%				
Residential Trips	0	0	4	0	0	0	0	4	9	0	9	0
Trip Distribution IN									5%		20%	
Trip Distribution OUT			5%					15%				
Office Trips	0	0	5	0	0	0	0	16	1	0	2	0
Trip Distribution IN									5%		20%	
Trip Distribution OUT			5%					15%				
Retail Trips	0	0	5	0	0	0	0	15	7	0	27	0
Trip Distribution IN									5%		20%	
Trip Distribution OUT			5%					15%				
Restaurant Trips	0	0	1	0	0	0	0	3	7	0	26	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	15	0	0	0	0	38	24	0	64	0
2027 Buildout Total	0	0	15	0	0	0	0	2,221	24	0	1,621	0

Programmed Project Fact Sheets



McGinnis Ferry Road Widening



GEORGIA DEPARTMENT OF TRANSPORTATION
PROJECT STP00-189-01(010)
P. I. NO.: 721000
FULTON/GWINNETT COUNTIES
PROPOSED SR 120/ABBOTTS BRIDGE RD WIDENING
FROM SR 141/MEDLOCK BRIDGE RD TO PEACHTREE INDUSTRIAL BLVD
PHOH LAYOUT

LEGEND

PROPOSED PAVED MEDIAN	EXISTING WETLAND
PROPOSED ISLAND	PROPOSED GRASS MEDIAN
PROPOSED STRIPING	STREAM BUFFER
PROPOSED PAVEMENT	HISTORIC BOUNDARY
PROPOSED 10' SHARED-USE PATH	EXISTING PAVEMENT
PROPOSED 5' SIDEWALK	EXISTING SIGNALIZED INTERSECTION
PROPOSED BRIDGE AND APPROACH SLABS	EXISTING STREAM
STAMPED CONCRETE	EXISTING PROPERTY LINE
PROPOSED REQUIRED R/W	CITY LIMIT BOUNDARY
PROPOSED PERMANENT EASEMENT	
DISPLACEMENT	
PROPOSED MS4 AREA	

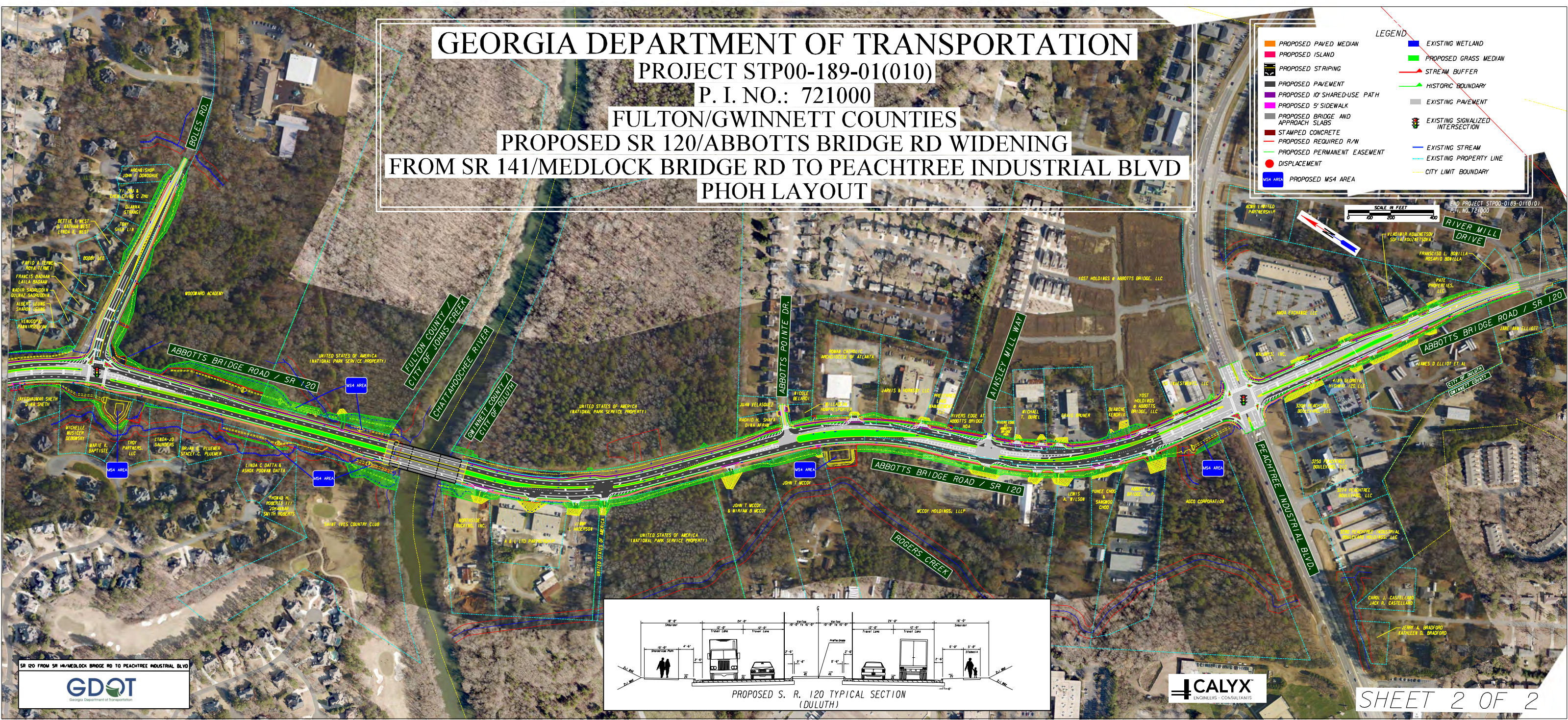


GEORGIA DEPARTMENT OF TRANSPORTATION
PROJECT STP00-189-01(010)
P. I. NO.: 721000
FULTON/GWINNETT COUNTIES
PROPOSED SR 120/ABBOTTS BRIDGE RD WIDENING
FROM SR 141/MEDLOCK BRIDGE RD TO PEACHTREE INDUSTRIAL BLVD
PHOH LAYOUT

LEGEND

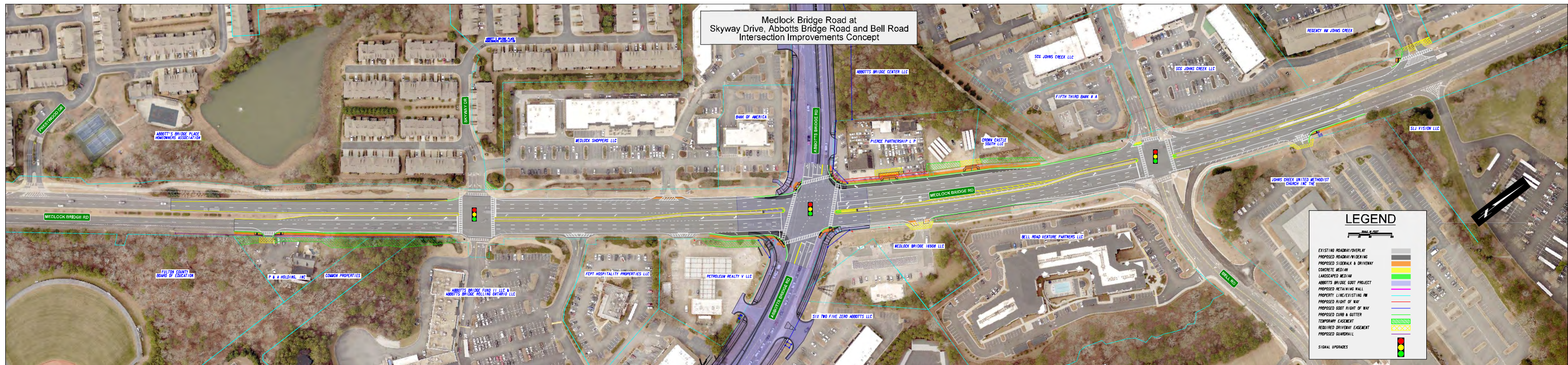
PROPOSED PAVED MEDIAN	EXISTING WETLAND
PROPOSED ISLAND	PROPOSED GRASS MEDIAN
PROPOSED STRIPING	STREAM BUFFER
PROPOSED PAVEMENT	HISTORIC BOUNDARY
PROPOSED 10' SHARED-USE PATH	EXISTING PAVEMENT
PROPOSED 5' SIDEWALK	EXISTING SIGNALIZED INTERSECTION
PROPOSED BRIDGE AND APPROACH SLABS	EXISTING STREAM
STAMPED CONCRETE	EXISTING PROPERTY LINE
PROPOSED REQUIRED R/W	CITY LIMIT BOUNDARY
PROPOSED PERMANENT EASEMENT	
DISPLACEMENT	
MS4 AREA	

SCALE IN FEET
0 100 200 400



CALYX
ENGINEERS - CONSULTANTS

Medlock Bridge Road at
Skyway Drive, Abbotts Bridge Road and Bell Road
Intersection Improvements Concept












LEGEND

0 100 FEET

- EXISTING ROADWAY/OVERLAY
- PROPOSED ROADWAY/OVERLAY
- PROPOSED SIDEWALK & DRIVEWAY
- CONCRETE MEDIAN
- LANDSCAPED MEDIAN
- PROPOSED BRIDGE FOOT PROJECT
- PROPERTY LINE/EXISTING RW
- PROPOSED RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED DITCH & GUTTER
- TEMPORARY EASEMENT
- REQUIRED DRIVEWAY EASEMENT
- PROPOSED GUARDRAIL
- SIGNAL UPGRADES

SR 141 / MEDLOCK BRIDGE ROAD
@ JOHNS CREEK PARKWAY
INTERSECTION IMPROVEMENTS

LEGEND

EXISTING ROADWAY/OVERLAY	
PROPOSED ROADWAY/WIDENING	
PROPOSED SIDEWALK	
CONCRETE MEDIAN	
LANDSCAPED MEDIAN	
PROPOSED RIGHT OF WAY	
REQUIRED DRIVEWAY EASEMENT	
TEMPORARY EASEMENT	
PROPERTY LINE/EXISTING R/W	

SCALE IN FEET
0 50 100 200



CONCEPTUAL LAYOUT
FOR
SR 141/MEDLOCK BRIDGE TRAIL -
JOHNS CREEK PARKWAY TO MCGINNIS FERRY ROAD



THOMAS
&
HUTTON

Johns Creek

LEGEND	
EXISTING INFORMATION	PROPOSED INFORMATION
PROPERTY LINE	PROPOSED TRAIL
EASEMENT	PROPOSED SIDEWALK
CONCRETE PAVEMENT	TEMPORARY EASEMENT
CONCRETE PAVEMENT	TEMPORARY EASEMENT
CONCRETE PAVEMENT	TEMPORARY EASEMENT



Town Center - Lakefield Dr at Johns Creek Parkway

Why: The Town Center Vision and Master Plan identifies a roundabout at the intersection of Lakefield Drive at Johns Creek Parkway (near Lifetime Fitness) to improve walkability and provide opportunity for landscaping and connectivity in Town Center. The project would anchor the northern end of Lakefield Drive (envisioned to become the Town Center Main Street) and connect the quadrants of the Town Center.

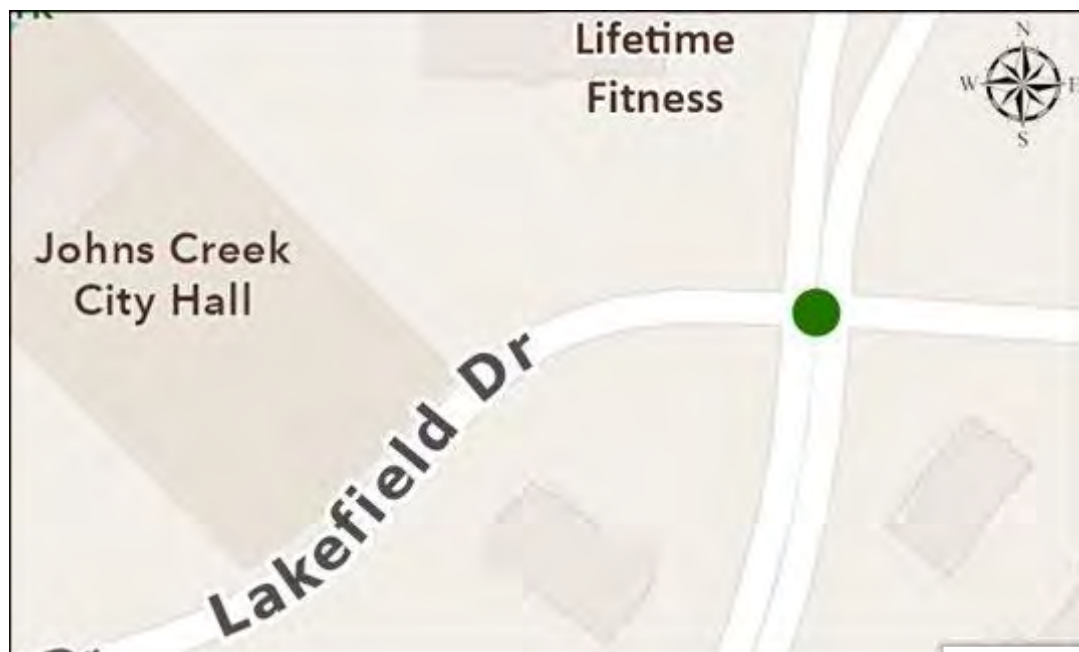
What: The project would reconstruct the intersection of Lakefield Drive at Johns Creek Parkway (near Lifetime Fitness) as a roundabout.

TSPLOST II Funds: \$3.5 million

Total Project Cost Estimate: \$3.5 million

Next Step: Engineering to begin in 2022

Map:



CreekBot



Public Works

678-512-3200

[Contact Us](#)

© 2006-2022 City of Johns Creek | 11360 Lakefield Drive, Johns Creek, GA 30097 | 678-512-3200 |
Contact Us | Privacy & Terms | Site Map | Using this Site / Accessibility | Employee Email | Munis ESS
Kentico CMS Development by Reason One | Powered by Kentico

