Transportation Analysis

Emory Johns Creek Hospital Expansion DRI #3542

City of Johns Creek, Georgia

May 2022

Prepared for:

Emory Johns Creek Hospital

Prepared by:

Kimley-Horn and Associates, Inc.
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Alpharetta, Georgia 30009
014384000

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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Emory Johns Creek Hospital Expansion* located in the City of Johns Creek, Georgia. The 65.06-acre site is primarily located west of Hospital Parkway, south of McGinnis Ferry Road, and north of Findley Road. The site currently consists of the existing hospital and medical office space in operation.

The proposed expansion will consist of the following land uses and densities contained in **Table 1**. The project is expected to be completed in two (2) phases. Phase 1 is expected to be completed by 2032 (approximately 10 years) and Phase 2 by 2042 (approximately 20 years). Phase 2 considers the full build-out of the site.

Table 1: Proposed Land Use and Density

Project Density	Hospital	Medical Office
EXISTING	351,088 SF	241,251 SF
Proposed Phase 1 Conversion	+ 241,251 SF	- 241,251 SF
Phase 1 Construction (0-10 years)	+ 127,922 SF	+ 210,000 SF
Total Phase 1 Density	***720,261 SF***	***210,000 SF***
Phase 2 Construction (10-20 years)	*+252,380 SF*	+ 490,000 SF
Total Future Density	***972,641 SF***	***700,000 SF***

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 and pass-by reductions to gross trips are not included in the trip generation, as outlined in the Georgia Regional Transportation Authority (GRTA) Letter of Understanding (dated January 25, 2022).

Capacity analyses were performed for the study intersections under the Estimated 2022, Projected 2032 No-Build (Phase 1), the Projected 2032 No-Build (Phase 2), the Projected 2042 Build (Phase 1), and the Projected 2042 Build (Phase 2) conditions.

- Estimated 2022 conditions represent traffic volumes that were collected in January 2022 with a COVID adjustment factor of 1.16 applied to the AM peak hour and an adjustment factor of 1.05 applied to the PM peak hour.
- Projected 2032 Phase 1 No-Build Conditions represent the Estimated 2022 traffic volumes grown for ten (10) years using a 1.5% per year growth rate.
- Projected 2042 Phase 2 No-Build Conditions represent the Projected 2032 Phase 1 No-Build traffic volumes grown for an additional ten (10) years using a 0.5% per year growth rate.
- Projected 2032 Phase 1 Build Conditions represent the Projected 2032 No-Build Phase conditions plus the addition of the project trips that are anticipated to be generated by Phase 1 of the *Emory Johns Creek Hospital Expansion*.
- Projected 2042 Build Conditions (Phase 2) represent the Projected 2042 No-Build Phase 2 conditions plus the addition of the project trips that are anticipated to be generated by the full-build out of the *Emory Johns Creek Hospital Expansion*.

No-Build (System Improvements)

Due to the low level-of-service (LOS) at the following intersections under the Estimated 2022, Projected 2032 No-Build, and Projected 2042 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):

- Jones Bridge Road at Sargent Road (Intersection 1)
  - System Improvements (needed to serve background traffic, without the development)
    - Provide an exclusive eastbound right-turn lane along the Private Driveway.
    - Provide one (1) additional westbound left turn lane (creating triple lefts) along Sargent Road. An additional southbound receiving lane would be required.
    - Provide one (1) exclusive westbound through lane along Sargent Road in order to remove split phasing at the intersection.
- McGinnis Ferry Road at Hospital Parkway (Intersection 4)
  - 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.
- McGinnis Ferry Road at Johns Creek Parkway (Intersection 6)
  - System Improvements (needed to serve background traffic, without the development)
    - Provide an exclusive southbound right-turn lane along Johns Creek Parkway.
- McGinnis Ferry Road at Lakefield Drive (Intersection 7)
  - System Improvements (needed to serve background traffic, without the development)
    - Provide a northbound right-turn overlap phase along Lakefield Drive.
- McGinnis Ferry Road at Bell Road/Old Atlanta Road (Intersection 8)
  - System Improvements (needed to serve background traffic, without the development)
    - Provide one (1) additional southbound left-turn lane (creating triple lefts) along Old Atlanta Road.
    - Provide one (1) additional northbound through lane (creating dual throughs) along Bell Road.
    - Provide one (1) additional eastbound through lane (creating quadruple throughs) along McGinnis Ferry Road
    - 2042 No-Build and Build Phase 2 Conditions Only: Provide one (1) additional eastbound left-turn lane (creating dual left-turns) along McGinnis Ferry Road.
- Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 9)
  - System Improvements (needed to serve background traffic, without the development)
    - Provide one (1) additional northbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).
    - Provide a westbound right-turn overlap phase 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.

- Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 12)
    - 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.
- Medlock Bridge Road (SR 141) at Abbotts Bridge Road (SR 120) (Intersection 13)
    - System Improvements (needed to serve background traffic, without the development)
        - Provide one (1) additional eastbound left-turn lane (creating triple lefts) along Abbotts Bridge Road (SR 120). A third receiving will be provided as part of the programmed City of Johns Creek project.
        - Provide one (1) additional southbound left turn lane (creating triple lefts) along Medlock Bridge Road (SR 141). An additional eastbound receiving lane would be required.
        - Provide a westbound right-turn overlap phase along Abbotts Bridge Road (SR 120).
        - Note: Other non-conventional intersection designs or grade separation should be considered in lieu of the above improvements, as the resulting large intersection footprint may not be desirable.
- Medlock Bridge Road (SR 141) at Parsons Road (Intersection 14)
    - System Improvements (needed to serve background traffic, without the development)
        - Provide one (1) additional eastbound through lane (creating dual throughs) along Parsons Road.
        - Provide one (1) additional westbound through lane (creating dual throughs) along Parsons Road.
        - 2042 No-Build and Build Phase 2 Conditions Only: Provide one (1) additional northbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).
        - 2042 No-Build and Build Phase 2 Conditions Only: Provide one (1) additional southbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).

Build Phase 1 2032 (Site Access Improvements)

No additional improvements are recommended to serve the Projected Build Phase 1 2032 conditions. All site driveways are projected to operate at an acceptable LOS under the Projected 2032 Build Phase 1 conditions.

Build Phase 2 2042 (Site Access Improvements)

In addition to the system improvements (2042 No-Build Improvements), the following improvements should be considered to serve the projected Build Phase 2 2042 Conditions:

- McGinnis Ferry Road at Sargent Road (Intersection 3)
  - Provide one (1) additional westbound left-turn lane (creating dual lefts) along McGinnis Ferry Road.
- McGinnis Ferry Road at Hospital Parkway (Intersection 4)
  - Provide one (1) additional northbound left-turn lane (creating dual lefts) along Hospital Parkway. Provide a protected-only left-turn phase.
  - Provide one (1) northbound exclusive right-turn lane along Hospital Parkway. Provide a northbound right-turn overlap phase.
- Medlock Bridge Road (SR 141) at Hospital Parkway (Intersection 10)
  - Provide one (1) additional northbound left-turn lane (creating dual lefts) along Medlock Bridge Road (SR 141). Provide a protected-only left-turn phase. An additional westbound receiving lane would be required (could be provided by removing free-flow southbound right-turn).
  - Provide one (1) additional eastbound left-turn lane (creating dual lefts) along Hospital Parkway. Provide a protected-only left-turn phase.
- Medlock Bridge Road (SR 141) at Findley Road (Intersection 11) – Programmed RCUT
  - Install a traffic signal at the intersection.
  - Provide one (1) additional westbound right-turn lane (creating dual rights) along Findley Road.
- Hospital Parkway at Site Driveway B (Intersection 16)
  - Reconfigure the two all-way stop controlled intersections into one signalized intersection.
  - Provide an exclusive left-turn lane along all four approaches.

Jones Bridge Road at Sargent Road (Intersection 1) LOS Summary

Overall LOS Standard: D
Approach LOS Standard: D

			Jones Bridge Road Northbound			Jones Bridge Road Southbound			Private Driveway Eastbound			Sargent Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (46.5)											
		Approach LOS	D (39.3)			D (51.9)			E (71.5)			D (48.0)		
		Storage	175		350	225						350		800
		50th Queue	77	435	0	43	592		20	19	0	356	16	0
		95th Queue	180	483	53	71	643		48	47	14	384	35	36
	PM	Overall LOS	D (50.4)											
		Approach LOS	D (49.1)			D (50.2)			E (67.8)			D (51.8)		
		Storage	175		350	225						350		800
		50th Queue	73	500	46	106	521		9	40	0	255	33	0
		95th Queue	116	607	245	158	604		29	80	0	300	63	40
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (48.2)											
		Approach LOS	D (40.0)			D (54.2)			E (71.7)			D (49.7)		
		Storage	175		350	225						350		800
		50th Queue	86	461	0	45	633		21	20	0	383	17	0
		95th Queue	200	510	52	74	684		50	48	18	412	36	37
	PM	Overall LOS	D (52.3)											
		Approach LOS	D (51.4)			D (52.8)			E (67.9)			D (52.3)		
		Storage	175		350	225						350		800
		50th Queue	79	555	126	114	568		10	41	0	270	34	0
		95th Queue	154	658	378	203	658		31	83	5	317	63	39
PH 1 BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (46.6)											
		Approach LOS	D (39.3)			D (51.9)			E (71.6)			D (48.0)		
		Storage	175		350	225						350		800
		50th Queue	**77**	435	0	43	592		20	19	0	365	16	0
		95th Queue	**180**	483	53	71	643		48	47	14	394	35	36
	PM	Overall LOS	D (50.6)											
		Approach LOS	D (49.2)			D (50.2)			E (67.8)			D (52.4)		
		Storage	175		350	225						350		800
		50th Queue	**73**	500	47	106	521		9	40	0	268	33	0
		95th Queue	**116**	607	254	158	604		29	80	0	314	63	40
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (48.8)											
		Approach LOS	D (40.7)			D (54.2)			E (71.7)			D (51.9)		
		Storage	175		350	225						350		800
		50th Queue	86	461	11	45	633		21	20	0	417	17	0
		95th Queue	200	510	60	74	684		50	48	18	445	36	37
	PM	Overall LOS	D (52.5)											
		Approach LOS	D (51.4)			D (52.8)			E (68.8)			D (52.8)		
		Storage	175		350	225						350		800
		50th Queue	80	552	115	115	574		10	42	0	356	33	0
		95th Queue	157	641	398	227	664		32	84	5	406	62	39

McGinnis Ferry Road at Sargent Road (Intersection 3) LOS Summary

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	U	T	R
PH 2 BUILD (2042) IMPROVED (SIGNAL GREEN-T)	AM	Overall LOS	C (22.8)											
		Approach LOS	A (9.6)						C (33.1)			C (22.7)		
		Storage	325								400			
		50th Queue	110		0					580	0	375	88	
		95th Queue	173		0					707	26	437	74	
	PM	Overall LOS	C (23.4)											
		Approach LOS	A (4.9)						C (27.7)			C (28.9)		
		Storage	325								400			
		50th Queue	42		0					384	0	543	17	
		95th Queue	84		0					446	19	760	0	

McGinnis Ferry Road at Hospital Parkway (Intersection 4) LOS Summary

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
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (31.1)											
		Approach LOS	E (71.8)			F (88.4)			C (21.7)			D (37.3)		
		Storage							200			425		75
		50th Queue	158	0			0		0	656	151	138	565	0
		95th Queue	216	0			0		1	895	392	212	625	0
	PM	Overall LOS	C (30.0)											
		Approach LOS	D (54.2)			D (45.3)			B (17.7)			D (37.3)		
		Storage							200			425		75
		50th Queue	196	1		3	1		2	442	0	1	701	0
		95th Queue	233	37		13	9		9	645	52	15	1000	0
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (49.7)											
		Approach LOS	E (72.3)			F (88.4)			D (45.7)			D (51.8)		
		Storage							200			425		75
		50th Queue	166	0			0		0	885	312	170	645	0
		95th Queue	227	0			0		1	950	430	230	708	0
	PM	Overall LOS	C (34.4)											
		Approach LOS	E (61.7)			D (45.3)			B (18.3)			D (45.1)		
		Storage							200			425		75
		50th Queue	211	1		3	1		2	481	0	1	914	0
		95th Queue	255	38		13	9		9	723	52	7	1106	0
PH 1 BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (41.5)											
		Approach LOS	E (76.6)			F (88.4)			C (30.2)			D (49.8)		
		Storage							200			425		75
		50th Queue	192	0			0		0	753	308	182	603	0
		95th Queue	254	1			0		1	905	472	261	667	0
	PM	Overall LOS	D (35.9)											
		Approach LOS	E (66.1)			D (45.3)			B (19.1)			D (45.3)		
		Storage							200			425		75
		50th Queue	235	1		3	1		2	233	0	10	863	0
		95th Queue	288	42		13	9		9	684	56	19	1028	0
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	E (58.2)											
		Approach LOS	E (79.9)			F (88.4)			D (54.6)			E (58.4)		
		Storage							200			425		75
		50th Queue	143		16		0		0	890	673	435	672	0
		95th Queue	189		77		0		1	956	814	735	731	0
	PM	Overall LOS	D (39.6)											
		Approach LOS	E (77.3)			F (88.5)			B (16.1)			D (44.7)		
		Storage							200			425		75
		50th Queue	350	1	318	6	1		2	613	0	74	972	0
		95th Queue	427	6	391	22	14		7	834	138	58	1053	0

McGinnis Ferry Road at Johns Creek Parkway (Intersection 6) LOS Summary

Overall LOS Standard: E
Approach LOS Standard: E

			Johns Creek Parkway Northbound			Johns Creek Parkway Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (28.0)											
		Approach LOS	E (67.1)			E (75.4)			B (15.7)			C (23.1)		
		Storage	150		200	150			300		325	300		125
		50th Queue	32	47	0	171	141	0	14	281	0	33	508	200
		95th Queue	64	80	0	220	219	0	48	126	0	41	771	240
	PM	Overall LOS	D (38.2)											
		Approach LOS	E (70.2)			E (75.6)			C (33.7)			B (17.8)		
		Storage	150		200	150			300		325	300		125
		50th Queue	51	83	7	387	125	0	3	758	4	15	623	125
		95th Queue	89	125	83	458	196	0	5	975	7	50	586	185
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (30.2)											
		Approach LOS	E (68.7)			E (76.2)			B (17.5)			C (25.7)		
		Storage	150		200	150			300		325	300		125
		50th Queue	34	50	0	180	150	0	16	175	0	40	694	238
		95th Queue	69	84	0	229	231	0	49	174	2	43	863	257
	PM	Overall LOS	D (40.1)											
		Approach LOS	E (72.1)			E (76.6)			D (37.3)			B (18.4)		
		Storage	150		200	150			300		325	300		125
		50th Queue	53	90	17	406	132	0	2	1020	3	15	644	126
		95th Queue	93	132	97	486	205	0	2	1112	5	51	606	188
PH 1 BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (28.2)											
		Approach LOS	E (68.0)			E (76.2)			B (16.2)			C (23.0)		
		Storage	150		200	150			300		325	300		125
		50th Queue	32	47	0	171	141	0	14	258	0	38	555	207
		95th Queue	64	80	0	220	219	0	47	128	1	45	771	236
	PM	Overall LOS	D (38.5)											
		Approach LOS	E (70.7)			E (75.6)			C (34.1)			B (18.0)		
		Storage	150		200	150			300		325	300		125
		50th Queue	51	83	19	387	125	0	3	772	4	21	628	122
		95th Queue	89	125	99	458	196	0	4	1041	7	62	591	180
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (34.3)											
		Approach LOS	E (68.8)			E (76.2)			B (18.4)			C (32.5)		
		Storage	150		200	150			300		325	300		125
		50th Queue	34	50	0	180	150	0	17	277	0	93	993	274
		95th Queue	69	84	0	229	231	0	49	196	2	91	1031	271
	PM	Overall LOS	D (48.5)											
		Approach LOS	E (78.8)			E (76.6)			E (57.7)			B (19.7)		
		Storage	150		200	150			300		325	300		125
		50th Queue	53	90	106	406	132	0	3	1166	2	43	645	112
		95th Queue	93	132	232	486	205	0	3	1246	4	95	616	170

McGinnis Ferry Road at Lakefield Drive (Intersection 7) LOS Summary

Overall LOS Standard: E Approach LOS Standard: E			Lakefield Drive Northbound			Lakefield Drive Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (26.1)											
		Approach LOS	E (67.1)			E (72.4)			B (12.4)			C (30.7)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	20	30	0	3	1	0	24	172	1	29	1609	1
		95th Queue	49	66	48	15	8	0	74	194	5	38	1620	1
	PM	Overall LOS	C (27.6)											
		Approach LOS	E (71.5)			E (72.0)			B (18.2)			C (27.2)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	58	14	207	61	26	0	18	471	0	110	902	0
		95th Queue	108	39	307	113	59	58	25	608	1	199	971	0
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (34.6)											
		Approach LOS	E (67.1)			E (72.4)			B (12.9)			D (43.4)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	21	31	0	4	1	0	26	181	1	64	1702	3
		95th Queue	51	67	49	19	8	0	77	231	3	80	1736	0
	PM	Overall LOS	C (30.2)											
		Approach LOS	E (72.5)			E (72.2)			C (21.4)			C (29.5)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	60	14	222	64	27	0	22	557	0	123	971	0
		95th Queue	111	39	327	118	61	62	26	641	0	224	1019	0
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (26.5)											
		Approach LOS	E (68.0)			E (73.3)			B (12.4)			C (31.2)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	20	30	0	3	1	0	23	174	1	31	1634	1
		95th Queue	49	66	48	15	8	0	72	199	4	38	1600	1
	PM	Overall LOS	C (28.1)											
		Approach LOS	E (72.1)			E (73.8)			B (18.2)			C (28.2)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	58	14	209	61	26	0	19	495	0	104	921	0
		95th Queue	108	39	315	113	59	58	24	615	1	253	982	0
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (39.2)											
		Approach LOS	E (70.0)			E (76.1)			B (13.6)			D (49.9)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	21	31	5	4	1	0	30	185	1	52	1876	2
		95th Queue	53	69	53	19	8	0	100	201	3	65	1763	0
	PM	Overall LOS	C (34.4)											
		Approach LOS	E (77.4)			E (74.1)			C (29.4)			C (29.7)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	61	14	226	65	27	0	21	1628	0	114	1026	0
		95th Queue	112	40	337	120	62	63	20	658	0	266	1082	0

McGinnis Ferry Road at Bell Road/Old Atlanta Road (Intersection 8) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D/E			Bell Road			Old Atlanta Road			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (49.1)											
		Approach LOS	E (75.7)			E (79.0)			D (45.4)			D (37.5)		
		Storage	250		350	350			300		250	425		200
		50th Queue	148	40	116	261	286	113	173	118	11	169	1088	172
		95th Queue	200	64	216	311	366	215	413	222	24	324	1164	264
	PM	Overall LOS	D (42.9)											
		Approach LOS	E (77.4)			E (75.5)			D (38.4)			C (29.8)		
		Storage	250		350	350			300		250	425		200
		50th Queue	39	124	126	258	149	0	135	356	0	239	437	302
		95th Queue	67	160	224	307	209	66	180	467	0	436	572	569
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (49.9)											
		Approach LOS	E (78.3)			E (79.4)			D (41.8)			D (40.8)		
		Storage	250		350	350			300		250	425		200
		50th Queue	154	42	119	275	302	34	137	189	12	164	1052	185
		95th Queue	204	66	218	325	389	134	170	234	31	355	1383	331
	PM	Overall LOS	D (45.2)											
		Approach LOS	E (77.7)			E (77.1)			D (42.1)			C (31.1)		
		Storage	250		350	350			300		250	425		200
		50th Queue	40	130	143	273	156	0	125	379	0	267	453	345
		95th Queue	68	165	242	324	216	66	135	538	0	463	601	648
PH 1 BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (50.0)											
		Approach LOS	E (78.3)			E (79.0)			D (47.3)			D (38.0)		
		Storage	250		350	350			300		250	425		200
		50th Queue	148	40	116	261	286	127	175	118	11	169	1108	174
		95th Queue	200	64	216	311	366	232	428	231	25	326	1182	266
	PM	Overall LOS	D (43.4)											
		Approach LOS	E (77.6)			E (75.5)			D (39.2)			C (30.3)		
		Storage	250		350	350			300		250	425		200
		50th Queue	39	124	126	258	149	0	152	365	0	244	451	313
		95th Queue	67	160	224	307	209	66	201	492	0	438	579	575
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (54.1)											
		Approach LOS	E (78.8)			E (79.7)			D (42.9)			D (48.5)		
		Storage	250		350	350			300		250	425		200
		50th Queue	154	42	113	273	301	110	151	197	11	167	1252	193
		95th Queue	205	67	214	323	399	241	181	248	23	352	1508	338
	PM	Overall LOS	D (47.6)											
		Approach LOS	E (77.8)			E (79.5)			D (45.4)			C (33.2)		
		Storage	250		350	350			300		250	425		200
		50th Queue	40	130	143	275	157	0	171	413	0	258	495	372
		95th Queue	68	165	242	326	218	71	173	580	0	451	637	670

Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 9) 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
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (27.5)											
		Approach LOS	B (12.2)			C (22.3)			E (78.3)			E (61.1)		
		Storage	200		200	375		175	275			125		
		50th Queue	16	80	0	242	380	39	94	99	0	51	126	324
		95th Queue	69	85	2	445	485	90	148	161	0	91	195	473
	PM	Overall LOS	D (40.3)											
		Approach LOS	B (15.4)			D (38.7)			E (74.7)			E (73.4)		
		Storage	200		200	375		175	275			125		
		50th Queue	5	374	1	411	391	12	303	261	0	139	186	404
		95th Queue	11	381	0	671	463	52	418	372	40	202	271	558
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (28.6)											
		Approach LOS	B (13.1)			C (24.1)			E (78.6)			E (61.1)		
		Storage	200		200	375		175	275			125		
		50th Queue	17	87	0	295	408	44	100	105	0	55	135	363
		95th Queue	82	90	2	499	528	100	156	168	0	97	205	508
	PM	Overall LOS	D (46.1)											
		Approach LOS	C (22.7)			D (44.3)			E (78.3)			E (78.3)		
		Storage	200		200	375		175	275			125		
		50th Queue	11	647	1	468	425	16	320	277	0	146	197	439
		95th Queue	16	654	0	723	496	57	472	419	46	212	286	603
PH 1 BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (28.0)											
		Approach LOS	B (12.2)			C (23.0)			E (78.3)			E (63.0)		
		Storage	200		200	375		175	275			125		
		50th Queue	17	84	0	247	392	39	94	99	0	51	126	331
		95th Queue	73	89	2	402	500	90	148	161	0	91	195	454
	PM	Overall LOS	D (40.8)											
		Approach LOS	B (17.4)			D (38.7)			E (74.7)			E (73.4)		
		Storage	200		200	375		175	275			125		
		50th Queue	7	570	1	411	398	12	303	261	0	139	186	404
		95th Queue	13	487	0	671	471	52	418	372	40	202	271	558
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (29.1)											
		Approach LOS	B (14.7)			C (23.8)			E (79.7)			E (64.6)		
		Storage	200		200	375		175	275			125		
		50th Queue	37	97	2	301	475	42	103	105	0	56	136	394
		95th Queue	104	101	3	508	613	97	160	168	0	100	205	542
	PM	Overall LOS	D (49.2)											
		Approach LOS	C (33.6)			D (44.4)			E (78.3)			E (78.3)		
		Storage	200		200	375		175	275			125		
		50th Queue	13	889	0	468	461	16	320	277	0	146	197	439
		95th Queue	19	937	1	723	537	57	472	419	46	212	286	603

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

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Hospital Parkway Eastbound			Johns Crossing Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (31.8)											
		Approach LOS	C (31.6)			C (22.9)			E (65.8)			E (78.6)		
		Storage	475		175	350		150	150		150			
		50th Queue	234	1013	25	54	1095	3	56	62	201	61	31	0
		95th Queue	456	1110	52	106	1185	7	98	112	320	105	67	0
	PM	Overall LOS	D (38.2)											
		Approach LOS	D (36.7)			C (24.4)			E (72.2)			E (77.8)		
		Storage	475		175	350		150	150		150			
		50th Queue	306	508	0	19	817	0	142	107	236	109	97	0
		95th Queue	526	610	0	54	500	0	211	173	350	170	158	0
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (35.0)											
		Approach LOS	D (35.7)			C (25.2)			E (69.6)			E (79.2)		
		Storage	475		175	350		150	150		150			
		50th Queue	277	1093	34	75	1173	4	59	65	254	64	32	0
		95th Queue	500	1170	66	123	1241	7	104	117	374	111	70	0
	PM	Overall LOS	D (43.7)											
		Approach LOS	D (44.3)			C (29.1)			E (73.5)			E (79.1)		
		Storage	475		175	350		150	150		150			
		50th Queue	354	600	0	36	610	0	151	113	264	114	104	0
		95th Queue	613	645	0	67	555	0	222	179	384	176	167	0
PH 1 BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (33.4)											
		Approach LOS	C (33.4)			C (23.6)			E (66.0)			E (79.8)		
		Storage	475		175	350		150	150		150			
		50th Queue	282	1015	25	53	1097	6	69	69	227	61	45	0
		95th Queue	573	1112	49	100	1186	11	115	121	354	105	88	0
	PM	Overall LOS	D (41.8)											
		Approach LOS	D (42.9)			C (24.5)			E (74.0)			E (79.8)		
		Storage	475		175	350		150	150		150			
		50th Queue	342	509	0	22	812	0	166	118	280	108	106	0
		95th Queue	585	606	0	56	501	0	242	187	404	170	172	0
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (40.7)											
		Approach LOS	C (33.0)			D (39.9)			E (64.4)			E (77.9)		
		Storage	475		175	350		150	150		150			
		50th Queue	319	166	3	109	583	20	61	89	308	61	117	0
		95th Queue	459	703	16	140	1297	29	94	143	437	101	181	0
	PM	Overall LOS	E (59.3)											
		Approach LOS	D (40.9)			E (67.5)			E (78.9)			E (78.7)		
		Storage	475		175	350		150	150		150			
		50th Queue	213	916	0	59	1181	4	176	197	522	107	138	0
		95th Queue	310	1277	0	86	1320	13	225	268	732	156	207	0

Medlock Bridge Road (SR 141) at Findley Road (Intersection 11) LOS Summary

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Findley Road			Private Driveway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	U	T	R
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (53.3)											
		Approach LOS	E (70.8)			C (29.3)			E (78.0)			E (76.6)		
		Storage	225		225	175		175						
		50th Queue	753	1398	0	0	1420	0			0			0
		95th Queue	896	1461	0	0	1411	0			0			0
	PM	Overall LOS	D (51.1)											
		Approach LOS	C (26.8)			E (74.9)			E (56.9)			D (48.6)		
		Storage	225		225	175		175						
		50th Queue	187	710	0	8	1358	0			109			0
		95th Queue	372	821	5	38	1482	8			180			0

Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 12)
LOS Summary

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (30.1)											
		Approach LOS	B (19.8)			C (29.4)			E (79.5)			E (75.9)		
		Storage	800		275	125			50				75	
		50th Queue	52	309	27	17	876		28	9		184	9	
		95th Queue	74	352	72	32	949		52	40		228	46	
	PM	Overall LOS	D (41.8)											
		Approach LOS	C (28.4)			D (45.8)			E (74.7)			E (75.2)		
		Storage	800		275	125			50				75	
		50th Queue	90	367	73	18	658		30	13		239	14	
		95th Queue	143	430	139	22	594		55	43		287	59	
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (33.9)											
		Approach LOS	C (22.9)			C (35.0)			E (79.7)			E (76.9)		
		Storage	800		275	125			50				75	
		50th Queue	58	392	92	20	947		29	10		195	10	
		95th Queue	72	403	90	42	995		54	41		240	48	
	PM	Overall LOS	D (42.0)											
		Approach LOS	C (28.4)			D (45.9)			E (74.8)			E (76.5)		
		Storage	800		275	125			50				75	
		50th Queue	98	337	53	18	697		31	14		255	15	
		95th Queue	138	450	139	21	624		57	46		292	62	
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (30.4)											
		Approach LOS	C (20.3)			C (30.0)			E (79.5)			E (75.9)		
		Storage	800		275	125			50				75	
		50th Queue	54	326	39	18	898		28	9		184	9	
		95th Queue	73	365	73	43	971		52	40		228	46	
	PM	Overall LOS	D (42.2)											
		Approach LOS	C (28.5)			D (46.9)			E (74.7)			E (75.2)		
		Storage	800		275	125			50				75	
		50th Queue	91	376	76	18	751		30	13		239	14	
		95th Queue	151	442	144	22	671		55	43		287	59	
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (39.5)											
		Approach LOS	C (28.9)			D (43.6)			E (79.7)			E (78.6)		
		Storage	800		275	125			50				75	
		50th Queue	52	586	143	30	1069		29	10		196	10	
		95th Queue	57	572	123	37	1093		54	41		241	48	
	PM	Overall LOS	D (53.1)											
		Approach LOS	C (34.6)			E (66.3)			E (74.8)			E (76.5)		
		Storage	800		275	125			50				75	
		50th Queue	100	506	136	14	1152		31	14		255	15	
		95th Queue	116	516	141	29	1256		57	46		292	62	

Medlock Bridge Road (SR 141) at Abbotts Bridge Road (SR 120) (Intersection 13) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D/E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Abbotts Bridge Road (SR 120) Eastbound			Abbotts Bridge Road (SR 120) Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (40.6)											
		Approach LOS	D (43.4)			C (24.8)			E (75.2)			E (62.1)		
		Storage	250		200	550		375	700			125		375
		50th Queue	128	582	0	303	489	33	113	170	0	23	210	272
		95th Queue	131	612	0	363	615	111	146	212	0	40	262	332
	PM	Overall LOS	D (39.8)											
		Approach LOS	D (41.5)			B (19.4)			E (76.6)			E (64.7)		
		Storage	250		200	550		375	700			125		375
		50th Queue	118	322	0	274	458	57	144	252	0	39	204	211
		95th Queue	154	795	0	330	532	138	179	301	0	59	256	252
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (44.5)											
		Approach LOS	D (49.2)			C (28.4)			E (75.3)			E (63.7)		
		Storage	250		200	550		375	700			125		375
		50th Queue	135	931	0	332	538	40	119	177	0	24	221	289
		95th Queue	188	1045	0	429	616	96	153	220	4	41	274	375
	PM	Overall LOS	D (41.6)											
		Approach LOS	D (43.5)			C (21.2)			E (77.2)			E (66.9)		
		Storage	250		200	550		375	700			125		375
		50th Queue	126	772	0	291	501	78	151	264	0	40	215	221
		95th Queue	196	922	1	345	573	155	187	314	0	61	267	274
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (41.7)											
		Approach LOS	D (43.4)			C (26.2)			E (75.6)			E (64.3)		
		Storage	250		200	550		375	700			125		375
		50th Queue	128	663	0	313	502	37	118	170	0	23	210	263
		95th Queue	129	610	0	369	627	115	152	212	0	40	262	329
	PM	Overall LOS	D (40.0)											
		Approach LOS	D (41.6)			B (19.6)			E (77.0)			E (65.6)		
		Storage	250		200	550		375	700			125		375
		50th Queue	118	341	0	288	476	69	147	251	0	39	204	217
		95th Queue	153	834	0	340	549	147	183	300	0	59	256	263
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (44.7)											
		Approach LOS	D (47.4)			C (23.2)			E (79.4)			E (77.6)		
		Storage	250		200	550		375	700			125		375
		50th Queue	135	1123	0	358	517	42	152	174	0	24	221	430
		95th Queue	174	1198	0	464	593	85	190	228	4	43	288	534
	PM	Overall LOS	D (50.3)											
		Approach LOS	D (45.6)			D (41.1)			E (77.2)			E (67.6)		
		Storage	250		200	550		375	700			125		375
		50th Queue	125	835	0	370	555	122	163	262	0	40	215	260
		95th Queue	213	324	0	448	561	122	201	314	0	61	269	344

Medlock Bridge Road (SR 141) at Parsons Road (Intersection 14) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D/E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Parsons Road Eastbound			Parsons Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (44.7)											
		Approach LOS	D (38.9)			D (39.6)			E (79.8)			E (75.3)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	229	1252	0	293	879	2	57	148	144	92	109	0
		95th Queue	388	1459	35	485	1432	37	94	182	253	136	143	80
	PM	Overall LOS	D (35.7)											
		Approach LOS	C (30.9)			C (28.0)			E (76.0)			E (71.5)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	276	788	0	50	1016	6	95	108	197	46	58	0
		95th Queue	567	1062	0	123	505	16	145	144	316	81	90	63
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (36.9)											
		Approach LOS	C (30.5)			C (30.2)			E (79.1)			E (71.1)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	253	637	3	334	554	2	58	153	187	95	111	0
		95th Queue	506	690	35	590	695	30	99	195	312	146	152	82
	PM	Overall LOS	C (27.5)											
		Approach LOS	C (21.8)			B (18.9)			E (74.7)			E (74.3)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	260	447	0	44	341	8	100	115	181	47	62	0
		95th Queue	572	645	0	114	387	29	144	149	297	79	90	62
PH 1 BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (45.8)											
		Approach LOS	D (40.2)			D (41.1)			E (79.8)			E (75.3)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	229	1298	0	295	901	2	57	148	144	92	109	0
		95th Queue	388	1505	35	486	1458	36	94	182	253	136	143	80
	PM	Overall LOS	D (36.0)											
		Approach LOS	C (31.5)			C (28.1)			E (76.5)			E (72.1)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	277	814	0	53	409	5	94	108	192	45	58	0
		95th Queue	567	1085	0	122	531	15	145	145	312	81	90	63
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (39.5)											
		Approach LOS	C (32.8)			C (34.7)			E (79.1)			E (71.0)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	260	771	3	336	664	4	58	153	188	95	111	0
		95th Queue	519	830	35	614	727	25	99	195	313	146	152	82
	PM	Overall LOS	C (29.8)											
		Approach LOS	C (25.7)			C (21.3)			E (75.7)			E (74.4)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	279	481	0	52	360	4	100	116	171	48	62	0
		95th Queue	607	693	0	0	501	31	144	149	286	79	90	62

Hospital Parkway at Site Driveway B (Intersection 16) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D			Site Driveway B Northbound			Private Driveway Southbound			Hospital Parkway Eastbound			Hospital Parkway Westbound		
			L	T	R	L	T	R	L	T	R	U	T	R
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (33.9)											
		Approach LOS	D (38.5)			D (44.0)			D (37.0)			C (28.5)		
		Storage									125			125
		50th Queue	147	1	0	13	1	0	51	256	255	272	32	147
		95th Queue	216	7	54	37	6	0	97	373	471	481	63	216
	PM	Overall LOS	D (36.0)											
		Approach LOS	C (28.8)			D (49.2)			D (48.3)			D (38.0)		
		Storage									125			125
		50th Queue	437	0	104	52	1	0	19	265	34	101	87	0
		95th Queue	622	0	201	99	6	0	47	417	97	223	148	0

Impacted Queue Lengths Exceeding Storage

Intersection	Movement	Storage Length	Projected Phase 2 Queue Length (AM / PM)	Recommendation
1. Jones Bridge Road at Findley Road	WBL*	350	838 / 694 (50th) 1022 / 949 (95th)	*No-Build (System Improvement):* Provide one (1) additional WBL lane along Sargent Road (creating 3 left-turn lanes)
2. Sargent Road at Findley Road	NBL**	125	152 / 125 (50th) 231 / 214 (95th)	Consider extending NBL lane storage.
6. McGinnis Ferry Road at Johns Creek Parkway	NBR	125	0 / 108 (50th) 0 / 232 (95th)	Consider extending NBR lane storage.
8. McGinnis Ferry Road at Bell Road/Old Atlanta Road	EBL*	300	297 / 340 (50th) 492 / 366 (95th)	*No-Build (System Improvement):* Provide one (1) additional EBL lane along McGinnis Ferry Road (creating 2 left-turn lanes)
10. Medlock Bridge Road (SR 141) at Hospital Parkway	NBL**	475	830 / 557 (50th) 1078 / 786 (95th)	Provide one (1) additional NBL lane along Medlock Bridge Road (creating 2 left-turn lanes)
	EBL*	150	103 / 440 (50th) 165 / 651 (95th)	Provide one (1) additional EBL lane along Hospital Parkway (creating 2 left-turn lanes)
	EBR*	150	239 / 674 (50th) 471 / 921 (95th)	Consider extending EBR lane storage.
11. Medlock Bridge Road (SR 141) at Findley Road	NBL	225	753 / 187 (50th) 896 / 372 (95th)	Consider extending NBL storage or providing dual left-turns.
13. Medlock Bridge Road (SR 141) at Abbotts Bridge Road (SR 120)	SBL	550	706 / 674 (50th) 781 / 814 (95th)	*No-Build (System Improvement):* Provide one (1) additional EBL lane along Medlock Bridge Road (creating 3 left-turn lanes)
	WBR	375	388 / 261 (50th) 538 / 346 (95th)	GDOT/City of Johns Creek project to add second right-turn lane.

** Exceeds available storage in Estimated 2022 conditions*

*** Exceeds available storage in Phase 2 No-Build 2042 conditions*

1.0 PROJECT DESCRIPTION

1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of the proposed *Emory Johns Creek Hospital Expansion* located in the City of Johns Creek, Georgia. The approximate 65.06-acre site is located west of Hospital Parkway, south of McGinnis Ferry Road, and north of Findley Road. The site currently consists of the existing hospital and medical office space in operation. The project site is currently zoned O-I (Office-Institutional). The zoning pre-application meeting occurred on December 10, 2021, and the rezoning application was submitted on May 10, 2022. The site is seeking a special use permit through the zoning process to increase the allowable density on site. **Figure 1** provides a location map of the project site. **Figure 2** provides an aerial view of the project site and surrounding area.

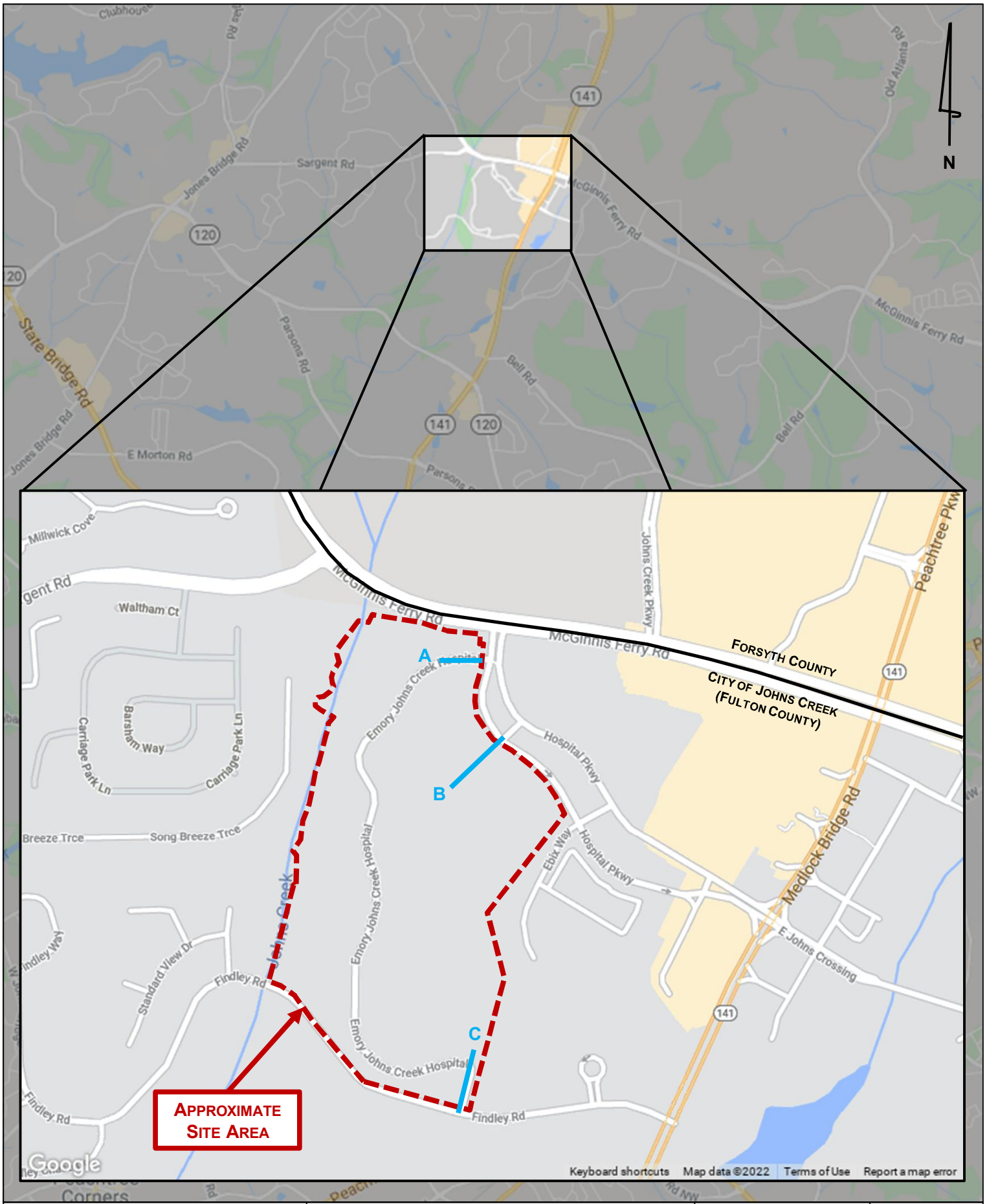
The site is currently largely undeveloped outside of the existing hospital/medical office space. The proposed development will consist of the following land uses and densities contained in **Table 2**. The project is expected to be completed in two (2) phases. Phase 1 is expected to be completed by 2032 (approximately 10 years) and Phase 2 by 2042 (approximately 20 years). Phase 2 considers the full build-out of the site.

Table 2: Proposed Land Use and Density

Project Density	Hospital	Medical Office
EXISTING	351,088 SF	241,251 SF
Proposed Phase 1 Conversion	+ 241,251 SF	- 241,251 SF
Phase 1 Construction (0-10 years)	+ 127,922 SF	+ 210,000 SF
Total Phase 1 Density	***720,261 SF***	***210,000 SF***
Phase 2 Construction (10-20 years)	*+252,380 SF*	+ 490,000 SF
Total Future Density	***972,641 SF***	***700,000 SF***

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 December 10, 2021 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 January 25, 2022.



Kimley»Horn	*Emory Johns Creek Hospital Expansion DRI #3542 Transportation Analysis*	**Site Location**	**Figure 1**
			Page 19

Kimley»Horn	*Emory Johns Creek Hospital Expansion DRI #3542 Transportation Analysis*	**Site Aerial**	**Figure 2**
			Page 20

1.2 Site Access

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

1. **Site Driveway A** – an existing right-in/right-out driveway located along Hospital Parkway approximately 125 feet south of the intersection of McGinnis Ferry Road at Hospital Parkway which currently operates under side street stop control. A mountable median is provided for emergency vehicles to turn left into and out of Site Driveway A.
2. **Site Driveway B** – an existing full-movement driveway located along Hospital Parkway approximately 525 feet south of the intersection of McGinnis Ferry Road at Hospital Parkway which currently operates under all-way stop control. Site Driveway B serves as the main entry to the site.
3. **Site Driveway C** – an existing full-movement driveway located along Findley Road approximately 1,150 feet west of the intersection of Medlock Bridge Road (SR 141) at Findley Road which currently operates under side street stop control.

Additionally, it should be noted that a vehicular connection currently exists between the Emory Johns Creek Hospital site and Ebix Way. This connection is permanently closed to traffic, and is controlled by the adjacent property owner.

1.3 Internal Circulation Analysis

The site consists of one (1) main site area. All proposed hospital space and the Phase 1 medical office will be attached to the existing Emory Johns Creek building. The remaining Phase 2 medical office will be constructed in two stand-alone medical office buildings.

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 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**
Hospital	646 *1 per 4 beds and* *1 per 3 employees*	N/A
Medical Office	3,766 *1 per 250 SF*	N/A
Total	**4,412 spaces**	**N/A**

A total of 4,696 parking spaces are proposed (1,435 existing; 3,261 new), located in a mixture of existing surface lots, an existing parking deck, proposed surface lots, and two 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 Hospital Parkway, Findley Road, Sargent Road, and McGinnis Ferry Road. 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) 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 *Emory Johns Creek Hospital Expansion* does not qualify for a "Dense Urban Environment Enhanced Focus Area" review, due to its location in the City of Johns Creek.

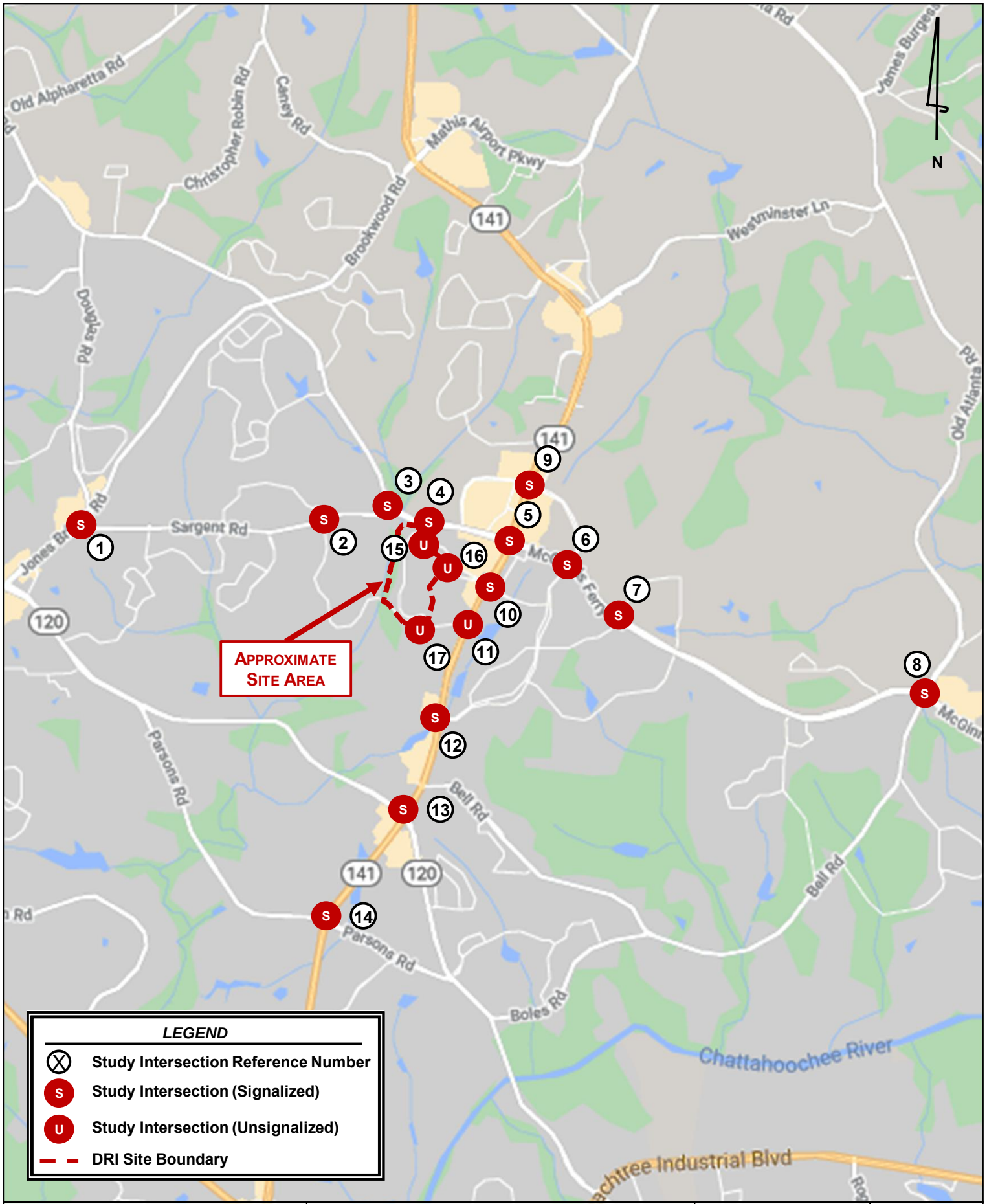
2.0 TRAFFIC ANALYSES, METHODOLOGY AND ASSUMPTIONS

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 fourteen (14) off-site intersections and three (3) site driveways described in **Table 4** and shown visually in **Figure 3**.

Table 4: Intersection Control Summary

Intersection	Jurisdiction	Control
1. Jones Bridge Road at Sargent Road	City of Johns Creek	Signalized
2. Sargent Road at Findley Road	City of Johns Creek	Signalized
3. McGinnis Ferry Road at Sargent Road	City of Johns Creek/ Forsyth County	Signalized
4. McGinnis Ferry Road at Hospital Parkway	City of Johns Creek/ Forsyth County	Signalized
5. Medlock Bridge Road (SR 141) at McGinnis Ferry Road	City of Johns Creek/ Forsyth County/GDOT	Signalized
6. McGinnis Ferry Road at Johns Creek Parkway	City of Johns Creek/ Forsyth County	Signalized
7. McGinnis Ferry Road at Lakefield Drive	City of Johns Creek/ Forsyth County	Signalized
8. McGinnis Ferry Road at Bell Road/Old Atlanta Road	City of Johns Creek/ Forsyth County	Signalized
9. Medlock Bridge Road (SR 141) at Johns Creek Parkway	Forsyth County/GDOT	Signalized
10. Medlock Bridge Road (SR 141) at Hospital Parkway	City of Johns Creek/ GDOT	Signalized
11. Medlock Bridge Road (SR 141) at Findley Road	City of Johns Creek/ GDOT	Unsignalized (Future RCUT)
12. Medlock Bridge Road (SR 141) at Johns Creek Parkway	City of Johns Creek/ GDOT	Signalized
13. Medlock Bridge Road (SR 141) at Abbotts Bridge Road (SR 120)	City of Johns Creek/ GDOT	Signalized
14. Medlock Bridge Road (SR 141) at Parsons Road	City of Johns Creek/ GDOT	Signalized
15. Hospital Parkway at Site Driveway A	City of Johns Creek	Unsignalized (RIRO)
16. Hospital Parkway at Site Driveway B	City of Johns Creek	Unsignalized (AWSC)
17. Hospital Parkway at Site Driveway C	City of Johns Creek	Unsignalized (TWSC)


N
Old Alpharetta Rd
Christopher Robin Rd
Caney Rd
Mathis Airport Pkwy
Brookwood Rd
141
Westminster Ln
Douglas Rd
Sargent Rd
120
Parsons Rd
Bell Rd
Boles Rd
Chattahoochee River
Peachtree Industrial Blvd
APPROXIMATE SITE AREA
LEGEND
Study Intersection Reference Number
Study Intersection (Signalized)
Study Intersection (Unsignalized)
DRI Site Boundary

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	AADT	GDOT Functional Classification
McGinnis Ferry Road	**2/4***	**19,100** 35,600***	**Minor Arterial**
Hospital Parkway	**2**	**-**	**Local**
Findley Road	**2**	**2,170**	**Local**
Medlock Bridge Road (SR 141)	4	41,400	Principal Arterial
Sargent Road	2	-	Major Collector
Johns Creek Parkway	4	-	Major Collector
Jones Bridge Road	2	10,400	Minor Arterial
Lakefield Drive	2	-	Local
Bell Road	2	8,060	Major Collector
Old Atlanta Road	4	14,500	Minor Arterial
Abbotts Bridge Road (SR 120)	2	18,600	Minor Arterial
Parsons Road	2	7,680	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 Thursday, January 20, 2022. The newly collected counts were then calibrated using calibration factors to account for the potential impacts of COVID-19 to typical traffic volumes and patterns.

The peak hour adjustment factors were determined by comparing the AM and PM peak volumes at a newly collected average daily traffic (ADT) count to the AM and PM peak ADT volumes previously collected at GDOT count stations in the same location. The GDOT count station located along Medlock Bridge Road (SR 141) south of Findley Road (Station #121-0360) was used in this comparison. The calibration factors used in this analysis were 1.16 for AM peak hour and 1.05 for PM peak hour. The methodologies used in this analysis for traffic count calibration were approved by GRTA and ARC.

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

Table 6: Traffic Count Summary		
Intersection	**AM Peak Hour**	**PM Peak Hour**
1. Jones Bridge Road at Sargent Road	7:15 – 8:15 AM	5:00 – 6:00 PM
2. Sargent Road at Findley Road	7:15 – 8:15 AM	4:45 – 5:45 PM
3. McGinnis Ferry Road at Sargent Road	7:30 – 8:30 AM	4:45 – 5:45 PM
4. McGinnis Ferry Road at Hospital Parkway	7:45 – 8:45 AM	4:45 – 5:45 PM
5. Medlock Bridge Road (SR 141) at McGinnis Ferry Road	7:30 – 8:30 AM	4:45 – 5:45 PM
6. McGinnis Ferry Road at Johns Creek Parkway	7:45 – 8:45 AM	4:45 – 5:45 PM
7. McGinnis Ferry Road at Lakefield Drive	7:45 – 8:45 AM	4:45 – 5:45 PM
8. McGinnis Ferry Road at Bell Road/Old Atlanta Road	7:30 – 8:30 AM	4:45 – 5:45 PM
9. Medlock Bridge Road (SR 141) at Johns Creek Parkway (north)	7:45 – 8:45 AM	4:45 – 5:45 PM
10. Medlock Bridge Road (SR 141) at Hospital Parkway	7:45 – 8:45 AM	4:45 – 5:45 PM
11. Medlock Bridge Road (SR 141) at Findley Road	7:30 – 8:30 AM	4:30 – 5:30 PM
12. Medlock Bridge Road (SR 141) at Johns Creek Parkway (south)	7:30 – 8:30 AM	4:45 – 5:45 PM
13. Medlock Bridge Road (SR 141) at Abotts Bridge Road (SR 120)	7:30 – 8:30 AM	4:45 – 5:45 PM
14. Medlock Bridge Road (SR 141) at Parsons Road	7:15 – 8:15 AM	4:45 – 5:45 PM
15. Hospital Parkway at Site Driveway A	7:45 – 8:45 AM	4:15 – 5:15 PM
16. Hospital Parkway at Site Driveway B	7:45 – 8:45 AM	4:15 – 5:15 PM
17. Findley Road at Site Driveway C	7:15 – 8:15 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 *Emory Johns Creek Hospital Expansion*. 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 for Phase 1 from 2022 to 2032 (10 years) and a 0.5% per year background traffic growth rate for Phase 2 from 2032 to 2042 (10 years) was used throughout the study network.

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.

Six projects were identified to include in the capacity analyses. These projects are highlighted in yellow below. There projects are taken into consideration in the analysis of the No-Build 2032, No-Build 2042, Build 2032, and Build 2042 conditions. The project details are outlined in **Table 7.**

Table 7: Programmed Projects

Project Name	From / To Points:	Sponsor	GDOT PI #	ARC ID # (TIP)	Design FY	ROW / UTL FY	CST FY
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
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

**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.*

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 - Figure 11**.

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 and all-way stop controlled intersections 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:*

- McGinnis Ferry Road at Hospital Parkway (Intersection 4)
- Medlock Bridge Road (SR 141) at McGinnis Ferry Road (Intersection 5)
- McGinnis Ferry Road at Johns Creek Parkway (Intersection 6)
- McGinnis Ferry Road at Lakefield Drive (Intersection 7)
- Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 8)
- Medlock Bridge Road (SR 141) at Hospital Parkway (Intersection 10)
- Medlock Bridge Road (SR 141) at Findley Road (Intersection 11)
- Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 12)
- Hospital Parkway at Site Driveway A (Intersection 15)
- Hospital Parkway at Site Driveway B (Intersection 16)
- Findley Road at Site Driveway C (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. No mixed-use reductions were applied based on the proposed land-uses.

Alternative modes reductions are taken when a site can be accessed by modes other than vehicles (walking, bicycling, transit, etc.). No alternative modes reductions were taken in this analysis 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. Pass-by trips were not applied based on the proposed land uses.

Table 8 summarizes the gross trip generation, reductions, net trip generation, and driveway volumes for the proposed *Emory Johns Creek Hospital Expansion*.

Table 8: Trip Generation								
Land Use	**Density**	**Daily Traffic**			**AM Peak Hour**		**PM Peak Hour**	
		Total	**Enter**	**Exit**	**Enter**	**Exit**	**Enter**	**Exit**
Phase 1								
610 – Hospital	369,173 S.F.	5,422	2,711	2,711	289	142	149	276
720 – Medical/Dental Office Building	210,000 S.F.	7,346	3,673	3,673	462	108	158	475
720 – Medical/Dental Office Building (To be Removed)	*-241,251 S.F.*	*-8,458*	*-4,229*	*-4,229*	*-531*	*-124*	*-182*	*-546*
Gross Project Trips		**4,310**	**2,155**	**2,155**	**220**	**126**	**125**	**205**
Mixed-Use Reductions		*-0*	*-0*	*-0*	*-0*	*-0*	*-0*	*-0*
Alternative Mode Reductions		*-0*	*-0*	*-0*	*-0*	*-0*	*-0*	*-0*
Pass-By Reductions		*-0*	*-0*	*-0*	*-0*	*-0*	*-0*	*-0*
Net New Trips		**4,310**	**2,155**	**2,155**	**220**	**126**	**125**	**205**
Phase 2: Full Build-Out (Includes Phase 1)								
610 – Hospital	621,553 S.F.	6,758	3,379	3,379	395	195	208	386
720 – Medical/Dental Office Building	210,000 S.F.	24,786	12,393	12,393	1,541	361	532	1,596
720 – Medical/Dental Office Building (To be Removed)	*-241,251 S.F.*	*-8,458*	*-4,229*	*-4,229*	*-531*	*-124*	*-182*	*-546*
Gross Project Trips		**23,086**	**11,543**	**11,543**	**1,405**	**432**	**558**	**1,436**
Mixed-Use Reductions		*-0*	*-0*	*-0*	*-0*	*-0*	*-0*	*-0*
Alternative Mode Reductions		*-0*	*-0*	*-0*	*-0*	*-0*	*-0*	*-0*
Pass-By Reductions		*-0*	*-0*	*-0*	*-0*	*-0*	*-0*	*-0*
Net New Trips		**23,086**	**11,543**	**11,543**	**1,405**	**432**	**558**	**1,436**

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 for Phase 1 and Phase 2 are shown in **Figure 4**. 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 for Phase 1 and Phase 2 are shown by turning movement throughout the study network in **Figure 5** and **Figure 6**, respectively.

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 Estimated 2022 conditions, Projected 2032 No-Build Conditions (Phase 1), Projected 2042 No-Build Conditions (Phase 2), Projected 2032 Build Phase 1 Conditions, and Projected 2042 Build Phase 2 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 Estimated 2022 conditions, **Figure 8** for Projected 2032 No-Build Conditions (Phase 1), **Figure 9** for Projected 2042 No-Build Conditions (Phase 2), **Figure 10** for Projected 2032 Build Phase 1 Conditions, and **Figure 11** for Projected 2042 Build Phase 2 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.

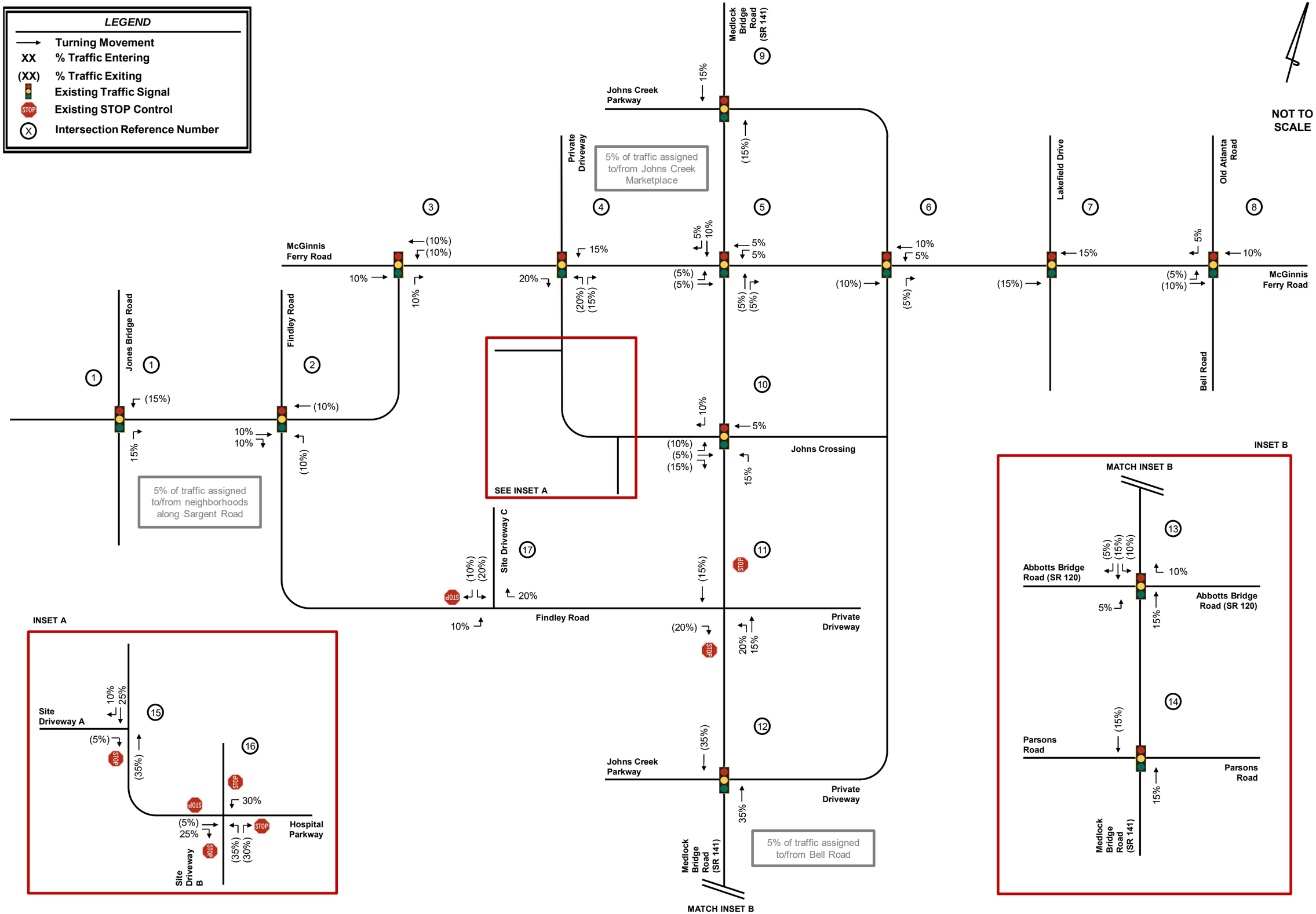


Figure 4

Trip Distribution

Emory Johns Creek Hospital
Expansion DRI #3542
Transportation Analysis

Kimley»Horn

LEGEND

- Turning Movement
- XX AM Peak Hour Project Trips
- (XX) PM Peak Hour Project Trips
- Existing Traffic Signal
- Existing STOP Control
- (X) Intersection Reference Number

NOT TO SCALE

Medlock Bridge Road (SR 141)

Johns Creek Parkway

Private Driveway

5% of traffic assigned to/from Johns Creek Marketplace

Lakefield Drive

Old Atlanta Road

McGinnis Ferry Road

Jones Bridge Road

Findley Road

Bell Road

Johns Crossing

Site Driveway C

Private Driveway

SEE INSET A

5% of traffic assigned to/from neighborhoods along Sargent Road

Johns Creek Parkway

Private Driveway

Medlock Bridge Road (SR 141)

5% of traffic assigned to/from Bell Road

MATCH INSET B

MATCH INSET B

INSET A

Site Driveway A

Site Driveway B

Hospital Parkway

INSET B

Abbotts Bridge Road (SR 120)

Parsons Road

Medlock Bridge Road (SR 141)

Figure 5

Phase 1 Project Trips

Emory Johns Creek Hospital
Expansion DRI #3542
Transportation Analysis

Kimley»Horn

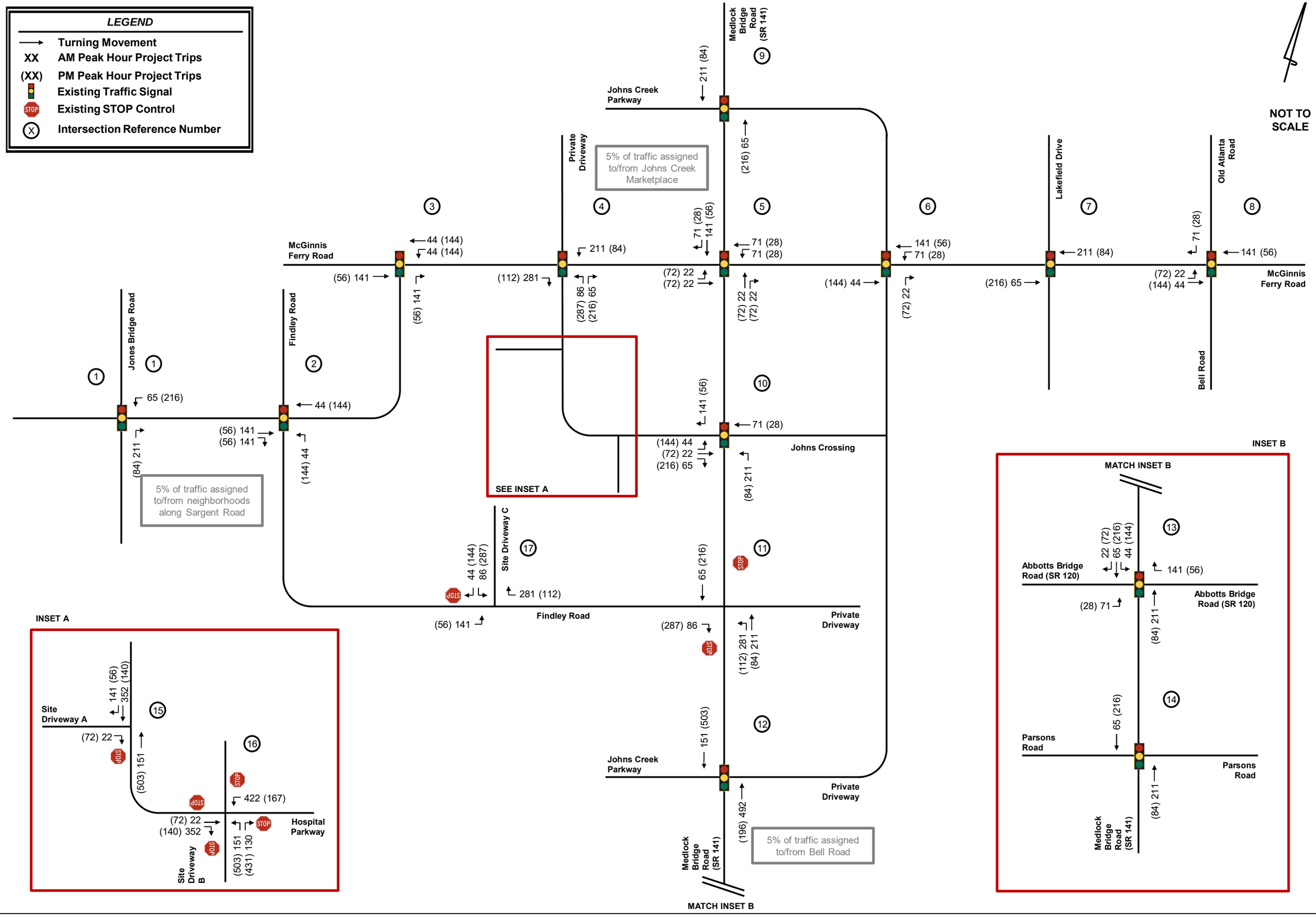


Figure 6

Phase 2 Project Trips

Emory Johns Creek Hospital
Expansion DRI #3542
Transportation Analysis

Kimley»Horn

5.1 Jones Bridge Road at Sargent Road (Intersection 1)

Overall LOS Standard: D Approach LOS Standard: D			Jones Bridge Road Northbound			Jones Bridge Road Southbound			Private Driveway Eastbound			Sargent Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	**AM**	Overall LOS	D (42.9)											
		Approach LOS	C (27.0)			C (31.7)			E (76.7)			E (72.7)		
		Storage	175		350	225						350		800
		50th Queue	53	318	0	32	435		17	16		533	538	0
		95th Queue	84	366	49	57	478		44	67		727	732	43
	PM	Overall LOS	D (35.8)											
		Approach LOS	C (21.1)			C (20.6)			F (114.6)			E (76.9)		
		Storage	175		350	225						350		800
		50th Queue	48	319	0	68	340		9	66		392	400	0
		95th Queue	86	428	87	115	432		30	179		485	494	28
PH 1 NO-BUILD (2032) (SIGNAL)	**AM**	Overall LOS	D (50.2)											
		Approach LOS	C (31.2)			D (39.0)			F (80.3)			F (83.5)		
		Storage	175		350	225						350		800
		50th Queue	63	396	0	39	541		21	20		686	692	0
		95th Queue	101	440	49	64	586		50	89		869	876	44
	PM	Overall LOS	D (41.0)											
		Approach LOS	C (27.4)			C (27.1)			F (119.0)			E (77.2)		
		Storage	175		350	225						350		800
		50th Queue	61	425	0	88	445		10	85		450	462	0
		95th Queue	97	517	97	131	517		32	215		587	601	47
PH 2 NO-BUILD (2042) (SIGNAL)	**AM**	Overall LOS	E (56.0)											
		Approach LOS	C (32.3)			D (41.2)			F (80.4)			F (98.8)		
		Storage	175		350	225						350		800
		50th Queue	66	425	0	41	583		22	21		752	758	0
		95th Queue	155	470	45	67	630		52	92		937	941	0
	PM	Overall LOS	D (43.2)											
		Approach LOS	C (29.8)			C (29.8)			F (127.3)			E (77.2)		
		Storage	175		350	225						350		800
		50th Queue	64	456	0	93	477		11	94		472	483	0
		95th Queue	101	554	100	137	553		35	232		650	663	53
PH 1 BUILD (2032) (SIGNAL)	**AM**	Overall LOS	D (52.1)											
		Approach LOS	C (31.2)			D (39.0)			F (80.3)			F (89.0)		
		Storage	175		350	225						350		800
		50th Queue	63	396	0	39	541		21	20		711	720	0
		95th Queue	101	440	48	64	586		50	89		893	904	44
	PM	Overall LOS	D (42.1)											
		Approach LOS	C (28.0)			C (27.7)			F (133.6)			E (77.3)		
		Storage	175		350	225						350		800
		50th Queue	60	420	0	87	440		10	86		470	476	0
		95th Queue	95	511	96	129	511		33	226		640	650	47
PH 2 BUILD (2042) (SIGNAL)	**AM**	Overall LOS	E (64.1)											
		Approach LOS	C (32.7)			D (41.3)			F (80.4)			F (123.6)		
		Storage	175		350	225						350		800
		50th Queue	66	425	9	41	583		22	21		838	846	0
		95th Queue	155	470	54	67	630		52	92		1022	1028	45
	PM	Overall LOS	D (52.0)											
		Approach LOS	D (37.1)			D (36.5)			F (152.3)			F (82.6)		
		Storage	175		350	225						350		800
		50th Queue	64	456	31	93	477		12	94		694	676	0
		95th Queue	101	554	211	137	553		35	243		949	929	53

Under the Estimated 2022 conditions, the eastbound and westbound approaches of Jones Bridge Road at Sargent Road (Intersection 1) 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 unacceptable overall LOS under the No-Build 2042 and Build Phase 2 2042 conditions.

In order to improve the overall and approach LOS under the No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- Provide an exclusive eastbound right-turn lane along the Private Driveway.
- Provide one (1) additional westbound left turn lane (creating triple lefts) along Sargent Road. An additional southbound receiving lane would be required.
- Provide one (1) exclusive westbound through lane along Sargent Road in order to remove split phasing at the intersection.

The analysis results for the improved conditions at Intersection 1 are shown in the table on the following page.

Overall LOS Standard: D Approach LOS Standard: D			Jones Bridge Road Northbound			Jones Bridge Road Southbound			Private Driveway Eastbound			Sargent Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (46.5)											
		Approach LOS	D (39.3)			D (51.9)			E (71.5)			D (48.0)		
		Storage	175		350	225						350		800
		50th Queue	77	435	0	43	592		20	19	0	356	16	0
		95th Queue	180	483	53	71	643		48	47	14	384	35	36
	PM	Overall LOS	D (50.4)											
		Approach LOS	D (49.1)			D (50.2)			E (67.8)			D (51.8)		
		Storage	175		350	225						350		800
		50th Queue	73	500	46	106	521		9	40	0	255	33	0
		95th Queue	116	607	245	158	604		29	80	0	300	63	40
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (48.2)											
		Approach LOS	D (40.0)			D (54.2)			E (71.7)			D (49.7)		
		Storage	175		350	225						350		800
		50th Queue	86	461	0	45	633		21	20	0	383	17	0
		95th Queue	200	510	52	74	684		50	48	18	412	36	37
	PM	Overall LOS	D (52.3)											
		Approach LOS	D (51.4)			D (52.8)			E (67.9)			D (52.3)		
		Storage	175		350	225						350		800
		50th Queue	79	555	126	114	568		10	41	0	270	34	0
		95th Queue	154	658	378	203	658		31	83	5	317	63	39
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (46.6)											
		Approach LOS	D (39.3)			D (51.9)			E (71.6)			D (48.0)		
		Storage	175		350	225						350		800
		50th Queue	77	435	0	43	592		20	19	0	365	16	0
		95th Queue	180	483	53	71	643		48	47	14	394	35	36
	PM	Overall LOS	D (50.6)											
		Approach LOS	D (49.2)			D (50.2)			E (67.8)			D (52.4)		
		Storage	175		350	225						350		800
		50th Queue	73	500	47	106	521		9	40	0	268	33	0
		95th Queue	116	607	254	158	604		29	80	0	314	63	40
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (48.8)											
		Approach LOS	D (40.7)			D (54.2)			E (71.7)			D (51.9)		
		Storage	175		350	225						350		800
		50th Queue	86	461	11	45	633		21	20	0	417	17	0
		95th Queue	200	510	60	74	684		50	48	18	445	36	37
	PM	Overall LOS	D (52.5)											
		Approach LOS	D (51.4)			D (52.8)			E (68.8)			D (52.8)		
		Storage	175		350	225						350		800
		50th Queue	80	552	115	115	574		10	42	0	356	33	0
		95th Queue	157	641	398	227	664		32	84	5	406	62	39

With the improvements listed above, the intersection of Jones Bridge Road at Sargent Road (Intersection 1) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

It should be noted that the eastbound approach exiting the private driveway is projected to operate at LOS E during the AM and PM 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.

5.2 Sargent Road at Findley Road (Intersection 2)

Overall LOS Standard: D Approach LOS Standard: D			Findley Road Northbound			Findley Road Southbound			Sargent Road Eastbound			Sargent Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	B (13.2)											
		Approach LOS	C (20.3)			C (20.9)			B (13.4)			A (9.9)		
		Storage	125						100		125	200		175
		50th Queue	51	19			50		2	225	3	16	130	0
		95th Queue	111	63			110		7	348	25	38	314	0
	PM	Overall LOS	B (11.8)											
		Approach LOS	B (17.0)			B (16.9)			B (11.4)			B (11.2)		
		Storage	125						100		125	200		175
		50th Queue	9	5			7		2	83	0	2	83	0
		95th Queue	49	41			48		8	296	1	9	287	4
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	B (15.1)											
		Approach LOS	C (23.7)			C (24.0)			B (15.0)			B (11.2)		
		Storage	125						100		125	200		175
		50th Queue	75	37			75		2	330	9	23	202	0
		95th Queue	144	89			143		8	451	34	46	409	0
	PM	Overall LOS	B (12.3)											
		Approach LOS	B (19.4)			B (19.4)			B (11.8)			B (11.5)		
		Storage	125						100		125	200		175
		50th Queue	16	9			13		2	117	0	3	116	0
		95th Queue	62	50			60		9	370	3	10	360	6
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	B (16.0)											
		Approach LOS	C (25.2)			C (25.2)			B (15.8)			B (12.0)		
		Storage	125						100		125	200		175
		50th Queue	89	44			90		3	381	12	26	238	0
		95th Queue	155	97			155		9	504	39	49	440	0
	PM	Overall LOS	B (12.6)											
		Approach LOS	C (20.4)			C (20.4)			B (11.9)			B (11.6)		
		Storage	125						100		125	200		175
		50th Queue	24	14			21		3	233	0	3	129	0
		95th Queue	69	56			67		9	399	3	11	389	6
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	B (15.8)											
		Approach LOS	C (24.9)			C (24.7)			B (15.6)			B (11.7)		
		Storage	125						100		125	200		175
		50th Queue	93	40			83		2	379	19	25	233	0
		95th Queue	161	91			145		8	490	47	46	421	0
	PM	Overall LOS	B (12.6)											
		Approach LOS	C (20.0)			B (19.7)			B (11.9)			B (11.7)		
		Storage	125						100		125	200		175
		50th Queue	23	9			14		3	132	0	3	134	0
		95th Queue	83	51			62		10	401	7	11	400	5
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	C (23.3)											
		Approach LOS	D (35.9)			C (32.7)			C (24.1)			B (16.5)		
		Storage	125						100		125	200		175
		50th Queue	152	52			105		3	656	96	41	340	0
		95th Queue	231	97			155		9	781	138	83	492	0
	PM	Overall LOS	B (17.2)											
		Approach LOS	C (28.1)			C (24.8)			B (14.1)			B (16.8)		
		Storage	125						100		125	200		175
		50th Queue	125	19			29		5	375	0	6	314	0
		95th Queue	214	58			70		16	643	29	18	835	7

The intersection of Sargent Road at Findley Road (Intersection 2) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.3 McGinnis Ferry Road at Sargent Road (Intersection 3)

Overall LOS Standard: D Approach LOS Standard: D			Sargent Road Northbound						McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL GREEN-T)	AM	Overall LOS	C (20.4)											
		Approach LOS	A (9.9)						C (20.9)			C (25.6)		
		Storage	325								400			
		50th Queue	89		0					321	0	292	24	
		95th Queue	147		0					448	23	277	54	
	PM	Overall LOS	B (17.9)											
		Approach LOS	A (4.7)						B (14.7)			C (25.3)		
		Storage	325								400			
		50th Queue	35		0					224	0	474	21	
		95th Queue	74		0					322	17	675	0	
PH 1 NO-BUILD (2032) (SIGNAL GREEN-T)	AM	Overall LOS	C (24.8)											
		Approach LOS	B (10.2)						C (31.8)			C (27.6)		
		Storage	325								400			
		50th Queue	103		0					475	0	400	242	
		95th Queue	164		0					548	25	767	46	
	PM	Overall LOS	C (24.0)											
		Approach LOS	A (4.9)						C (26.4)			C (31.2)		
		Storage	325								400			
		50th Queue	41		0					331	0	707	23	
		95th Queue	83		0					387	19	889	0	
PH 2 NO-BUILD (2042) (SIGNAL GREEN-T)	AM	Overall LOS	C (28.4)											
		Approach LOS	B (10.4)						C (32.7)			C (34.8)		
		Storage	325								400			
		50th Queue	110		0					512	0	450	238	
		95th Queue	173		0					589	26	894	45	
	PM	Overall LOS	C (28.6)											
		Approach LOS	A (5.0)						C (27.0)			D (39.9)		
		Storage	325								400			
		50th Queue	42		0					353	0	806	23	
		95th Queue	84		0					412	19	1029	0	
PH 1 BUILD (2032) (SIGNAL GREEN-T)	AM	Overall LOS	C (25.2)											
		Approach LOS	A (10.0)*						C (32.2)			C (28.2)		
		Storage	325								400			
		50th Queue	103		0					491	0	441	167	
		95th Queue	164		0					564	25	788	34	
	PM	Overall LOS	C (25.0)											
		Approach LOS	A (4.8)*						C (26.4)			C (33.2)		
		Storage	325								400			
		50th Queue	41		0					341	0	769	18	
		95th Queue	83		0					400	19	899	0	
PH 2 BUILD (2042) (SIGNAL GREEN-T)	AM	Overall LOS	D (37.7)											
		Approach LOS	A (9.6)*						D (35.7)			E (55.8)		
		Storage	325								400			
		50th Queue	110		0					620	0	811	231	
		95th Queue	173		0					707	26	1017	9	
	PM	Overall LOS	D (48.6)											
		Approach LOS	A (4.9)*						C (27.7)			E (76.5)		
		Storage	325								400			
		50th Queue	42		0					384	0	1200	10	
		95th Queue	84		0					446	19	1093	0	

*Approach LOS improves from No-Build as project trips are added to the free-flow right-turn movement which experiences little delay.

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 3) is projected to operate at an acceptable overall LOS under all studied scenarios. The westbound approach is projected to operate at LOS F under the 2042 Build Phase 2 conditions.

In order to improve the approach LOS under the Build Phase 2 2042 conditions, Kimley-Horn recommends the following improvements (shown in blue on **Figure 11**):

- Provide one (1) additional westbound left-turn lane (creating dual lefts) along McGinnis Ferry Road.

The analysis results for the improved conditions at Intersection 3 are shown in the table below.

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	U	T	R
PH 2 BUILD (2042) IMPROVED (SIGNAL GREEN-T)	**AM**	Overall LOS	C (22.8)											
		Approach LOS	A (9.6)						C (33.1)			C (22.7)		
		Storage	325								400			
		50th Queue	110		0					580	0	375	88	
		95th Queue	173		0					707	26	437	74	
	PM	Overall LOS	C (23.4)											
		Approach LOS	A (4.9)						C (27.7)			C (28.9)		
		Storage	325								400			
		50th Queue	42		0					384	0	543	17	
		95th Queue	84		0					446	19	760	0	

With the improvements listed above, the intersection of McGinnis Ferry Road at Sargent Road (Intersection 3) is projected to operate at or above its overall and approach LOS standards under Build Phase 2 2042 conditions.

5.4 McGinnis Ferry Road at Hospital Parkway (Intersection 4)

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
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	C (30.3)											
		Approach LOS	F (105.3)			E (73.4)			D (41.4)			A (9.3)		
		Storage							200			425		75
		50th Queue		138	0		0		1	500	156	49	193	0
		95th Queue		251	23		0		1	512	183	58	222	0
	PM	Overall LOS	C (23.9)											
		Approach LOS	D (54.0)			C (29.2)			B (19.7)			C (21.2)		
		Storage												
		50th Queue		129	0	2	0		3	385	33	5	615	0
		95th Queue		258	19	11	8		5	393	35	4	776	0
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	D (42.9)											
		Approach LOS	F (133.2)			E (73.4)			D (50.0)			C (25.0)		
		Storage							200			425		75
		50th Queue		164	0		0		1	744	225	106	515	0
		95th Queue		317	34		0		1	827	328	170	574	0
	PM	Overall LOS	D (35.4)											
		Approach LOS	F (83.5)			C (29.4)			B (18.9)			D (41.5)		
		Storage							200			425		75
		50th Queue		169	0	2	0		3	531	34	13	856	0
		95th Queue		322	29	12	8		7	612	50	14	939	0
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	D (48.2)											
		Approach LOS	F (143.8)			E (73.4)			E (58.0)			C (26.5)		
		Storage							200			425		75
		50th Queue		182	0		0		1	825	247	137	531	0
		95th Queue		336	38		0		1	885	359	182	584	0
	PM	Overall LOS	D (39.0)											
		Approach LOS	F (94.6)			C (29.4)			C (23.1)			D (42.7)		
		Storage							200			425		75
		50th Queue		185	0	2	0		3	578	33	8	904	0
		95th Queue		340	32	12	8		7	664	49	7	988	0
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	D (50.2)											
		Approach LOS	F (175.9)			E (73.4)			E (56.4)			C (26.1)		
		Storage							200			425		75
		50th Queue		233	0		0		1	751	258	147	476	0
		95th Queue		395	23		0		1	835	378	215	542	0
	PM	Overall LOS	D (44.4)											
		Approach LOS	F (121.1)			C (29.5)			C (21.2)			D (47.5)		
		Storage							200			425		75
		50th Queue		221	0	2	0		3	530	39	18	870	0
		95th Queue		382	47	12	8		7	615	59	17	945	0
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	F (85.4)											
		Approach LOS	F (316.1)			E (73.4)			E (66.0)			E (66.6)		
		Storage							200			425		75
		50th Queue		417	0		0		1	819	603	464	529	0
		95th Queue		600	68		0		1	880	747	394	388	0
	PM	Overall LOS	F (112.9)											
		Approach LOS	F (401.8)			C (29.6)			C (29.1)			D (49.2)		
		Storage							200			425		75
		50th Queue		546	84	2	0		3	597	65	36	907	0
		95th Queue		747	208	12	8		6	685	104	74	977	0

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

Under the Estimated 2022 conditions, the northbound approach of McGinnis Ferry Road at Hospital Parkway (Intersection 4) 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.

The intersection is projected to operate at an unacceptable overall LOS under the Build Phase 2 2042 conditions.

In order to improve the approach LOS under the No-Build 2032, No-Build 2042, Build Phase 1 2042, and Build 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- 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.

In order to improve the overall and approach LOS under the Build Phase 2 2042 conditions, Kimley-Horn recommends the following site access improvements (shown in blue on **Figure 11**):

- Provide one (1) additional northbound left-turn lane (creating dual lefts) along Hospital Parkway. Provide a protected-only left-turn phase.
- Provide one (1) northbound exclusive right-turn lane along Hospital Parkway. Provide a northbound right-turn overlap phase.

The analysis results for the improved conditions at Intersection 4 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
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (31.1)											
		Approach LOS	E (71.8)			F (88.4)			C (21.7)			D (37.3)		
		Storage							200			425		75
		50th Queue	158	0			0		0	656	151	138	565	0
		95th Queue	216	0			0		1	895	392	212	625	0
	PM	Overall LOS	C (30.0)											
		Approach LOS	D (54.2)			D (45.3)			B (17.7)			D (37.3)		
		Storage							200			425		75
		50th Queue	196	1		3	1		2	442	0	1	701	0
		95th Queue	233	37		13	9		9	645	52	15	1000	0
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (49.7)											
		Approach LOS	E (72.3)			F (88.4)			D (45.7)			D (51.8)		
		Storage							200			425		75
		50th Queue	166	0			0		0	885	312	170	645	0
		95th Queue	227	0			0		1	950	430	230	708	0
	PM	Overall LOS	C (34.4)											
		Approach LOS	E (61.7)			D (45.3)			B (18.3)			D (45.1)		
		Storage							200			425		75
		50th Queue	211	1		3	1		2	481	0	1	914	0
		95th Queue	255	38		13	9		9	723	52	7	1106	0
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (41.5)											
		Approach LOS	E (76.6)			F (88.4)			C (30.2)			D (49.8)		
		Storage							200			425		75
		50th Queue	192	0			0		0	753	308	182	603	0
		95th Queue	254	1			0		1	905	472	261	667	0
	PM	Overall LOS	D (35.9)											
		Approach LOS	E (66.1)			D (45.3)			B (19.1)			D (45.3)		
		Storage							200			425		75
		50th Queue	235	1		3	1		2	233	0	10	863	0
		95th Queue	288	42		13	9		9	684	56	19	1028	0
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	E (58.2)											
		Approach LOS	E (79.9)			F (88.4)			D (54.6)			E (58.4)		
		Storage							200			425		75
		50th Queue	143		16		0		0	890	673	435	672	0
		95th Queue	189		77		0		1	956	814	735	731	0
	PM	Overall LOS	D (39.6)											
		Approach LOS	E (77.3)			F (88.5)			B (16.1)			D (44.7)		
		Storage							200			425		75
		50th Queue	350	1	318	6	1		2	613	0	74	972	0
		95th Queue	427	6	391	22	14		7	834	138	58	1053	0

With the improvements listed above, the intersection of McGinnis Ferry Road at Hospital Parkway (Intersection 4) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

It should be noted that the southbound approach exiting the private driveway is projected to operate at LOS F during the AM and PM 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.

5.5 *Medlock Bridge Road (SR 141) at McGinnis Ferry Road (Intersection 5)*

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	D (50.9)											
		Approach LOS	C (30.2)			E (62.1)			E (58.9)			D (51.4)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	0	290	0	140	956	0	53	316	3	128	649	8
		95th Queue	393	392	23	257	1075	0	97	290	17	238	846	27
	PM	Overall LOS	D (45.5)											
		Approach LOS	B (19.4)			B (17.7)			E (77.6)			F (89.6)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	105	688	35	326	290	0	95	613	41	134	476	54
		95th Queue	220	787	52	532	382	2	138	726	85	238	663	120
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	C (27.0)											
		Approach LOS	A (8.1)			A (8.5)			E (58.9)			D (44.9)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	125	172	8	44	594	0	63	272	28	147	486	20
		95th Queue	182	264	31	86	312	0	122	299	62	205	476	24
	PM	Overall LOS	D (43.6)											
		Approach LOS	D (38.7)			C (21.4)			E (55.4)			E (70.1)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	117	494	32	203	259	0	111	364	59	161	400	72
		95th Queue	158	564	43	260	293	0	156	418	83	233	478	148
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	C (28.1)											
		Approach LOS	A (9.3)			B (10.2)			E (59.1)			D (45.7)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	141	210	11	48	352	0	69	287	35	162	540	19
		95th Queue	194	273	26	101	444	0	131	315	66	282	570	36
	PM	Overall LOS	D (46.8)											
		Approach LOS	D (40.6)			C (22.5)			E (59.8)			E (76.5)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	124	478	31	214	254	0	117	375	60	180	456	97
		95th Queue	157	567	37	282	279	0	162	502	78	254	507	152
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	C (27.4)											
		Approach LOS	A (8.2)			A (8.6)			E (59.8)			D (45.3)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	130	192	11	45	443	0	68	275	18	155	493	21
		95th Queue	184	262	33	84	372	0	131	302	53	223	499	28
	PM	Overall LOS	D (43.8)											
		Approach LOS	D (39.0)			C (21.4)			E (55.8)			E (70.1)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	118	495	34	203	301	0	118	362	57	176	436	91
		95th Queue	154	561	43	260	376	9	164	429	74	242	487	149
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	C (30.2)											
		Approach LOS	B (11.1)			B (12.5)			E (63.7)			D (46.1)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	141	223	19	48	243	0	82	298	31	213	594	17
		95th Queue	191	286	38	107	584	14	165	328	59	365	628	35
	PM	Overall LOS	D (48.9)											
		Approach LOS	D (42.1)			C (23.9)			E (61.6)			E (79.8)		
		Storage	375		375	325		125	350		350	575		100
		50th Queue	126	527	41	214	261	0	164	457	48	199	470	96
		95th Queue	145	579	41	284	309	0	207	612	62	293	545	142

The City of Johns Creek has programmed the following roadway improvements at the intersection (shown in green on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- Provide an additional northbound exclusive left-turn lane (creating dual lefts) and through lane (creating triple throughs) 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 5) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 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.

5.6 McGinnis Ferry Road at Johns Creek Parkway (Intersection 6)

Overall LOS Standard: E Approach LOS Standard: E			Johns Creek Parkway Northbound			Johns Creek Parkway Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	B (16.0)											
		Approach LOS	E (79.9)			F (83.3)			A (5.3)			A (5.3)		
		Storage	150		200	150			300		325	300		125
		50th Queue	31	44	0	148	167		5	90	0	9	89	13
		95th Queue	62	74	0	195	243		10	123	0	18	144	76
	PM	Overall LOS	C (31.0)											
		Approach LOS	E (78.8)			F (84.3)			B (12.7)			B (12.0)		
		Storage	150		200	150			300		325	300		125
		50th Queue	50	76	0	336	152		1	646	0	7	523	222
		95th Queue	89	114	56	429	232		1	634	0	9	477	136
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	C (23.9)											
		Approach LOS	F (80.2)			F (83.4)			B (12.3)			B (15.5)		
		Storage	150		200	150			300		325	300		125
		50th Queue	35	51	0	171	193		6	151	0	29	268	157
		95th Queue	68	83	0	221	272		26	113	2	45	658	261
	PM	Overall LOS	D (38.4)											
		Approach LOS	E (80.0)			F (102.1)			C (21.8)			B (14.3)		
		Storage	150		200	150			300		325	300		125
		50th Queue	58	88	8	415	178		1	730	3	5	163	1
		95th Queue	99	128	84	546	264		2	791	6	13	343	47
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	C (25.0)											
		Approach LOS	F (80.3)			F (83.9)			B (12.4)			B (17.1)		
		Storage	150		200	150			300		325	300		125
		50th Queue	38	54	0	180	202		9	166	0	32	311	185
		95th Queue	73	86	0	235	288		32	141	4	44	781	253
	PM	Overall LOS	D (41.3)											
		Approach LOS	F (80.2)			F (114.6)			C (22.3)			B (15.1)		
		Storage	150		200	150			300		325	300		125
		50th Queue	60	94	18	458	188		1	771	1	8	625	122
		95th Queue	102	134	99	590	278		2	1045	4	26	592	194
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	C (25.2)											
		Approach LOS	F (81.0)			F (85.9)			B (15.2)			B (15.8)		
		Storage	150		200	150			300		325	300		125
		50th Queue	35	51	0	171	194		4	160	0	33	283	169
		95th Queue	68	83	0	220	272		21	126	2	51	733	267
	PM	Overall LOS	D (38.6)											
		Approach LOS	F (80.4)			F (102.1)			C (22.0)			B (14.6)		
		Storage	150		200	150			300		325	300		125
		50th Queue	58	88	20	415	178		1	742	2	9	607	119
		95th Queue	98	127	102	546	264		2	808	6	25	578	186
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	C (28.0)											
		Approach LOS	F (81.2)			F (86.1)			B (15.5)			C (20.6)		
		Storage	150		200	150			300		325	300		125
		50th Queue	38	54	0	180	205		13	178	0	69	620	237
		95th Queue	72	87	0	230	288		44	184	3	70	899	240
	PM	Overall LOS	D (44.9)											
		Approach LOS	F (87.7)			F (114.0)			C (29.9)			B (17.2)		
		Storage	150		200	150			300		325	300		125
		50th Queue	58	91	108	458	183		2	1087	2	45	628	110
		95th Queue	100	132	232	590	272		2	1129	4	109	596	172

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

Under the Estimated 2022 conditions, the southbound approach of McGinnis Ferry Road at Johns Creek Parkway (Intersection 6) is projected to operate at an unacceptable LOS during the AM and PM peak hours. This approach is projected to continue to operate at an unacceptable LOS under all studied scenarios.

Under the No-Build 2032 conditions, the northbound approach of McGinnis Ferry Road at Johns Creek Parkway (Intersection 6) is projected to operate at an unacceptable LOS during the AM and PM peak hours. This approach is 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 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

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

The analysis results for the improved conditions at Intersection 6 are shown in the table on the following page.

Overall LOS Standard: E Approach LOS Standard: E			Johns Creek Parkway Northbound			Johns Creek Parkway Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (28.0)											
		Approach LOS	E (67.1)			E (75.4)			B (15.7)			C (23.1)		
		Storage	150		200	150			300		325	300		125
		50th Queue	32	47	0	171	141	0	14	281	0	33	508	200
		95th Queue	64	80	0	220	219	0	48	126	0	41	771	240
	PM	Overall LOS	D (38.2)											
		Approach LOS	E (70.2)			E (75.6)			C (33.7)			B (17.8)		
		Storage	150		200	150			300		325	300		125
		50th Queue	51	83	7	387	125	0	3	758	4	15	623	125
		95th Queue	89	125	83	458	196	0	5	975	7	50	586	185
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (30.2)											
		Approach LOS	E (68.7)			E (76.2)			B (17.5)			C (25.7)		
		Storage	150		200	150			300		325	300		125
		50th Queue	34	50	0	180	150	0	16	175	0	40	694	238
		95th Queue	69	84	0	229	231	0	49	174	2	43	863	257
	PM	Overall LOS	D (40.1)											
		Approach LOS	E (72.1)			E (76.6)			D (37.3)			B (18.4)		
		Storage	150		200	150			300		325	300		125
		50th Queue	53	90	17	406	132	0	2	1020	3	15	644	126
		95th Queue	93	132	97	486	205	0	2	1112	5	51	606	188
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (28.2)											
		Approach LOS	E (68.0)			E (76.2)			B (16.2)			C (23.0)		
		Storage	150		200	150			300		325	300		125
		50th Queue	32	47	0	171	141	0	14	258	0	38	555	207
		95th Queue	64	80	0	220	219	0	47	128	1	45	771	236
	PM	Overall LOS	D (38.5)											
		Approach LOS	E (70.7)			E (75.6)			C (34.1)			B (18.0)		
		Storage	150		200	150			300		325	300		125
		50th Queue	51	83	19	387	125	0	3	772	4	21	628	122
		95th Queue	89	125	99	458	196	0	4	1041	7	62	591	180
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (34.3)											
		Approach LOS	E (68.8)			E (76.2)			B (18.4)			C (32.5)		
		Storage	150		200	150			300		325	300		125
		50th Queue	34	50	0	180	150	0	17	277	0	93	993	274
		95th Queue	69	84	0	229	231	0	49	196	2	91	1031	271
	PM	Overall LOS	D (48.5)											
		Approach LOS	E (78.8)			E (76.6)			E (57.7)			B (19.7)		
		Storage	150		200	150			300		325	300		125
		50th Queue	53	90	106	406	132	0	3	1166	2	43	645	112
		95th Queue	93	132	232	486	205	0	3	1246	4	95	616	170

With the improvements listed above, the intersection of McGinnis Ferry Road at Johns Creek Parkway (Intersection 6) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

5.7 McGinnis Ferry Road at Lakefield Drive (Intersection 7)

Overall LOS Standard: E Approach LOS Standard: E			Lakefield Drive Northbound			Lakefield Drive Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	B (11.8)											
		Approach LOS	F (82.8)			F (81.7)			A (6.8)			B (10.5)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	17	27	0	4	1	0	15	151	1	6	1130	0
		95th Queue	46	61	11	16	8	0	35	217	5	18	1347	0
	PM	Overall LOS	B (20.0)											
		Approach LOS	F (86.8)			E (77.4)			B (12.1)			B (11.7)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	50	12	84	54	24	0	8	547	0	63	145	0
		95th Queue	93	34	180	96	53	39	25	600	3	114	140	0
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	C (20.1)											
		Approach LOS	F (83.5)			F (82.0)			B (10.8)			C (21.4)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	21	32	0	4	1	0	28	171	1	22	1515	1
		95th Queue	52	70	27	16	8	0	85	186	5	26	1538	1
	PM	Overall LOS	C (30.6)											
		Approach LOS	F (170.7)			E (79.2)			B (12.3)			C (23.3)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	60	15	177	64	27	0	14	460	1	112	826	0
		95th Queue	113	41	377	118	62	61	19	519	3	279	897	0
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	C (22.1)											
		Approach LOS	F (83.5)			F (82.0)			B (11.0)			C (24.3)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	22	33	0	5	1	0	29	180	1	27	1615	1
		95th Queue	54	71	32	20	8	0	78	195	4	41	1648	1
	PM	Overall LOS	C (34.8)											
		Approach LOS	F (208.8)			E (79.7)			B (14.1)			C (24.7)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	62	15	218	67	28	0	15	493	1	124	901	0
		95th Queue	116	41	421	124	64	65	23	605	3	298	974	0
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	C (20.7)											
		Approach LOS	F (83.5)			F (82.0)			B (11.3)			C (22.0)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	21	32	0	4	1	0	28	172	1	21	1531	1
		95th Queue	52	70	27	16	8	0	88	187	5	28	1564	1
	PM	Overall LOS	C (30.9)											
		Approach LOS	F (172.6)			E (79.2)			B (12.7)			C (23.5)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	60	15	179	64	27	0	14	468	0	113	844	0
		95th Queue	113	41	380	118	62	61	21	553	3	277	914	0
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	C (28.5)											
		Approach LOS	F (83.5)			F (82.0)			B (11.7)			C (33.8)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	22	33	0	5	1	0	30	185	1	34	1792	1
		95th Queue	54	71	32	20	8	0	66	201	3	42	1923	1
	PM	Overall LOS	D (36.9)											
		Approach LOS	F (220.1)			E (79.7)			B (18.4)			C (25.2)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	62	15	230	67	28	0	16	593	0	127	988	0
		95th Queue	116	41	433	124	64	65	19	675	1	301	1064	0

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

Under the Estimated 2022 conditions, the northbound and southbound approaches of McGinnis Ferry Road at Lakefield Drive (Intersection 7) are projected to operate at an unacceptable LOS during the AM peak hour. The southbound approach is projected to operate at an unacceptable LOS during the 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 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

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

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			Lakefield Drive Northbound			Lakefield Drive Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (26.1)											
		Approach LOS	E (67.1)			E (72.4)			B (12.4)			C (30.7)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	20	30	0	3	1	0	24	172	1	29	1609	1
		95th Queue	49	66	48	15	8	0	74	194	5	38	1620	1
	PM	Overall LOS	C (27.6)											
		Approach LOS	E (71.5)			E (72.0)			B (18.2)			C (27.2)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	58	14	207	61	26	0	18	471	0	110	902	0
		95th Queue	108	39	307	113	59	58	25	608	1	199	971	0
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (34.6)											
		Approach LOS	E (67.1)			E (72.4)			B (12.9)			D (43.4)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	21	31	0	4	1	0	26	181	1	64	1702	3
		95th Queue	51	67	49	19	8	0	77	231	3	80	1736	0
	PM	Overall LOS	C (30.2)											
		Approach LOS	E (72.5)			E (72.2)			C (21.4)			C (29.5)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	60	14	222	64	27	0	22	557	0	123	971	0
		95th Queue	111	39	327	118	61	62	26	641	0	224	1019	0
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (26.5)											
		Approach LOS	E (68.0)			E (73.3)			B (12.4)			C (31.2)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	20	30	0	3	1	0	23	174	1	31	1634	1
		95th Queue	49	66	48	15	8	0	72	199	4	38	1600	1
	PM	Overall LOS	C (28.1)											
		Approach LOS	E (72.1)			E (73.8)			B (18.2)			C (28.2)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	58	14	209	61	26	0	19	495	0	104	921	0
		95th Queue	108	39	315	113	59	58	24	615	1	253	982	0
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (39.2)											
		Approach LOS	E (70.0)			E (76.1)			B (13.6)			D (49.9)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	21	31	5	4	1	0	30	185	1	52	1876	2
		95th Queue	53	69	53	19	8	0	100	201	3	65	1763	0
	PM	Overall LOS	C (34.4)											
		Approach LOS	E (77.4)			E (74.1)			C (29.4)			C (29.7)		
		Storage	125		125	200		200	400		275	350		275
		50th Queue	61	14	226	65	27	0	21	1628	0	114	1026	0
		95th Queue	112	40	337	120	62	63	20	658	0	266	1082	0

With the improvements listed above, the intersection of McGinnis Ferry Road at Lakefield Drive (Intersection 7) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

5.8 McGinnis Ferry Road at Bell Road/Old Atlanta Road (Intersection 8)

Overall LOS Standard: D Approach LOS Standard: D/E			Bell Road			Old Atlanta Road			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	D (43.3)											
		Approach LOS	F (83.0)			F (99.5)			C (30.7)			C (26.2)		
		Storage	250		350	350			300		250	425		200
		50th Queue	134	70	35	342	249	99	170	195	9	119	665	87
		95th Queue	199	124	133	468	347	208	336	230	24	170	719	152
	PM	Overall LOS	D (53.0)											
		Approach LOS	F (83.4)			F (95.5)			D (54.4)			C (30.6)		
		Storage	250		350	350			300		250	425		200
		50th Queue	32	208	7	335	123	0	117	734	0	119	358	161
		95th Queue	61	288	91	462	183	61	200	784	0	215	458	340
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	E (57.4)											
		Approach LOS	F (99.8)			F (129.6)			D (40.2)			D (35.3)		
		Storage	250		350	350			300		250	425		200
		50th Queue	154	80	107	454	291	171	225	228	11	141	869	124
		95th Queue	242	139	284	586	438	303	411	243	23	197	928	199
	PM	Overall LOS	E (66.9)											
		Approach LOS	F (94.0)			F (111.5)			E (74.1)			D (36.9)		
		Storage	250		350	350			300		250	425		200
		50th Queue	37	246	21	424	143	0	181	1024	0	145	470	280
		95th Queue	71	411	122	553	218	69	238	1090	0	236	520	460
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	E (63.9)											
		Approach LOS	F (109.2)			F (142.6)			D (44.7)			D (39.8)		
		Storage	250		350	350			300		250	425		200
		50th Queue	162	85	132	496	307	197	249	224	12	149	956	139
		95th Queue	249	145	330	628	472	359	432	261	24	222	1018	219
	PM	Overall LOS	E (77.2)											
		Approach LOS	F (98.6)			F (125.7)			F (90.5)			D (39.6)		
		Storage	250		350	350			300		250	425		200
		50th Queue	39	261	37	464	152	0	196	1128	0	155	504	338
		95th Queue	73	441	143	596	229	70	232	1176	0	247	556	540
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	E (58.2)											
		Approach LOS	F (100.7)			F (129.8)			D (42.3)			D (35.7)		
		Storage	250		350	350			300		250	425		200
		50th Queue	154	80	108	454	291	186	241	223	11	141	883	125
		95th Queue	242	139	286	586	438	340	426	245	23	197	943	200
	PM	Overall LOS	E (69.7)											
		Approach LOS	F (96.0)			F (121.6)			E (77.2)			D (37.1)		
		Storage	250		350	350			300		250	425		200
		50th Queue	37	244	20	436	143	0	194	1044	0	145	476	285
		95th Queue	71	399	119	565	218	69	251	1108	0	236	527	466
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	E (70.4)											
		Approach LOS	F (109.2)			F (152.2)			D (53.2)			D (44.5)		
		Storage	250		350	350			300		250	425		200
		50th Queue	163	85	125	508	303	310	297	161	11	147	1057	142
		95th Queue	250	145	318	640	446	547	492	190	23	220	1120	220
	PM	Overall LOS	F (92.5)											
		Approach LOS	F (102.6)			F (125.3)			F (121.1)			D (43.3)		
		Storage	250		350	350			300		250	425		200
		50th Queue	39	261	37	464	152	0	340	1267	0	154	532	359
		95th Queue	73	441	143	596	229	75	366	1307	0	246	585	564

Under the Estimated 2022 conditions, the northbound and southbound approaches of McGinnis Ferry Road at Bell Road/Old Atlanta Road (Intersection 8) are projected to operate at an unacceptable LOS during the AM and PM peak hours.

The intersection is projected to operate at an unacceptable overall LOS under the No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions. Under these scenarios, multiple approaches of the intersection are projected to operate at an unacceptable LOS under all studied scenarios.

In order to improve the overall and approach LOS under the No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- Provide one (1) additional southbound left-turn lane (creating triple lefts) along Old Atlanta Road.
- Provide one (1) additional northbound through lane (creating dual throughs) along Bell Road.
- Provide one (1) additional eastbound through lane (creating quadruple throughs) along McGinnis Ferry Road
- 2042 No-Build and Build Phase 2 Conditions Only: Construct one (1) additional eastbound left-turn lane (creating dual left-turns) along McGinnis Ferry Road.

The analysis results for the improved conditions at Intersection 8 are shown in the table on the following page.

Overall LOS Standard: D Approach LOS Standard: D/E			Bell Road			Old Atlanta Road			McGinnis Ferry Road			McGinnis Ferry Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (49.1)											
		Approach LOS	E (75.7)			E (79.0)			D (45.4)			D (37.5)		
		Storage	250		350	350			300		250	425		200
		50th Queue	148	40	116	261	286	113	173	118	11	169	1088	172
		95th Queue	200	64	216	311	366	215	413	222	24	324	1164	264
	PM	Overall LOS	D (42.9)											
		Approach LOS	E (77.4)			E (75.5)			D (38.4)			C (29.8)		
		Storage	250		350	350			300		250	425		200
		50th Queue	39	124	126	258	149	0	135	356	0	239	437	302
		95th Queue	67	160	224	307	209	66	180	467	0	436	572	569
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (49.9)											
		Approach LOS	E (78.3)			E (79.4)			D (41.8)			D (40.8)		
		Storage	250		350	350			300		250	425		200
		50th Queue	154	42	119	275	302	34	137	189	12	164	1052	185
		95th Queue	204	66	218	325	389	134	170	234	31	355	1383	331
	PM	Overall LOS	D (45.2)											
		Approach LOS	E (77.7)			E (77.1)			D (42.1)			C (31.1)		
		Storage	250		350	350			300		250	425		200
		50th Queue	40	130	143	273	156	0	125	379	0	267	453	345
		95th Queue	68	165	242	324	216	66	135	538	0	463	601	648
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (50.0)											
		Approach LOS	E (78.3)			E (79.0)			D (47.3)			D (38.0)		
		Storage	250		350	350			300		250	425		200
		50th Queue	148	40	116	261	286	127	175	118	11	169	1108	174
		95th Queue	200	64	216	311	366	232	428	231	25	326	1182	266
	PM	Overall LOS	D (43.4)											
		Approach LOS	E (77.6)			E (75.5)			D (39.2)			C (30.3)		
		Storage	250		350	350			300		250	425		200
		50th Queue	39	124	126	258	149	0	152	365	0	244	451	313
		95th Queue	67	160	224	307	209	66	201	492	0	438	579	575
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (54.1)											
		Approach LOS	E (78.8)			E (79.7)			D (42.9)			D (48.5)		
		Storage	250		350	350			300		250	425		200
		50th Queue	154	42	113	273	301	110	151	197	11	167	1252	193
		95th Queue	205	67	214	323	399	241	181	248	23	352	1508	338
	PM	Overall LOS	D (47.6)											
		Approach LOS	E (77.8)			E (79.5)			D (45.4)			C (33.2)		
		Storage	250		350	350			300		250	425		200
		50th Queue	40	130	143	275	157	0	171	413	0	258	495	372
		95th Queue	68	165	242	326	218	71	173	580	0	451	637	670

With the improvements listed above, the intersection of McGinnis Ferry Road at Bell Road/Old Atlanta Road (Intersection 8) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

Per Section 3.2.2.1 of the *GRTA DRI Review Procedures*, the LOS standard for the northbound and southbound approaches is LOS E since the approaches currently operate at LOS F.

5.9 Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 9)

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	C (26.2)											
		Approach LOS	A (8.8)			B (18.6)			E (67.6)			E (77.8)		
		Storage	200		200	375		175	275			125		
		50th Queue	13	91	0	120	464	36	84	82	0	46	113	34
		95th Queue	22	111	2	244	708	92	127	129	0	79	169	156
	PM	Overall LOS	D (44.3)											
		Approach LOS	C (23.1)			D (37.7)			E (68.4)			F (90.1)		
		Storage	200		200	375		175	275			125		
		50th Queue	8	935	1	315	516	19	259	222	0	120	156	175
		95th Queue	12	1063	0	541	650	58	343	316	21	176	228	336
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	C (33.5)											
		Approach LOS	B (15.6)			C (27.0)			E (62.0)*			F (86.2)		
		Storage	200		200	375		175	275			125		
		50th Queue	16	322	0	313	396	41	92	90	0	50	124	147
		95th Queue	64	504	3	590	521	99	140	145	0	87	190	327
	PM	Overall LOS	E (71.2)											
		Approach LOS	F (85.2)			D (48.3)			E (66.2)*			F (101.0)		
		Storage	200		200	375		175	275			125		
		50th Queue	5	1175	0	449	408	32	295	254	0	135	175	282
		95th Queue	11	1323	0	671	463	74	387	372	39	202	260	522
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	D (38.9)											
		Approach LOS	B (17.5)			C (34.2)			E (63.3)			F (93.4)		
		Storage	200		200	375		175	275			125		
		50th Queue	18	374	0	427	449	44	95	94	0	52	125	254
		95th Queue	84	531	3	659	521	94	155	159	0	96	194	475
	PM	Overall LOS	F (86.1)											
		Approach LOS	F (113.7)			E (56.0)			E (69.1)			F (112.7)		
		Storage	200		200	375		175	275			125		
		50th Queue	11	1324	1	496	438	37	314	272	0	143	186	353
		95th Queue	16	1460	0	723	496	80	445	419	45	212	275	592
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	D (35.3)											
		Approach LOS	B (16.8)			C (28.5)			E (62.7)			F (91.9)		
		Storage	200		200	375		175	275			125		
		50th Queue	17	355	0	328	422	42	91	89	0	50	120	207
		95th Queue	68	513	2	585	515	93	144	148	0	89	185	392
	PM	Overall LOS	E (74.0)											
		Approach LOS	F (86.6)			D (52.6)			E (68.4)			F (104.0)		
		Storage	200		200	375		175	275			125		
		50th Queue	3	1208	0	435	447	36	300	258	0	138	178	278
		95th Queue	8	1352	1	658	495	79	414	399	40	206	264	527
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	D (41.7)											
		Approach LOS	C (20.6)			D (37.7)			E (69.3)			F (95.7)		
		Storage	200		200	375		175	275			125		
		50th Queue	51	447	1	491	578	51	93	97	0	51	125	232
		95th Queue	118	613	3	723	658	105	151	160	0	94	194	445
	PM	Overall LOS	F (111.0)											
		Approach LOS	F (180.2)			E (55.6)			E (69.1)			F (113.3)		
		Storage	200		200	375		175	275			125		
		50th Queue	14	1619	0	496	475	37	314	272	0	143	186	355
		95th Queue	19	1750	0	723	537	80	445	419	45	212	275	594

*LOS Improves due to additional EB receiving lane programmed.

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

Under the Estimated 2022 conditions, the westbound approach of Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 9) is projected to operate at an unacceptable LOS during the PM peak hour. Under the No-Build 2032 conditions, the westbound approach is projected to operate at an unacceptable LOS during the AM peak hour, and both the northbound and westbound approaches are projected to operate at an unacceptable LOS during the PM peak hour.

The intersection is projected to operate at an unacceptable overall LOS under the No-Build 2042 and Build Phase 2 2042 conditions. Under these scenarios, multiple approaches of the intersection are projected to operate at an unacceptable LOS under all studied scenarios.

In order to improve the overall and approach LOS under the No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- Provide one (1) additional northbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).
- Provide a westbound right-turn overlap phase along Johns Creek Parkway.

The analysis results for the improved conditions at Intersection 9 are shown in the table on the following page.

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (27.5)											
		Approach LOS	B (12.2)			C (22.3)			E (78.3)			E (61.1)		
		Storage	200		200	375		175	275			125		
		50th Queue	16	80	0	242	380	39	94	99	0	51	126	324
		95th Queue	69	85	2	445	485	90	148	161	0	91	195	473
	PM	Overall LOS	D (40.3)											
		Approach LOS	B (15.4)			D (38.7)			E (74.7)			E (73.4)		
		Storage	200		200	375		175	275			125		
		50th Queue	5	374	1	411	391	12	303	261	0	139	186	404
		95th Queue	11	381	0	671	463	52	418	372	40	202	271	558
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (28.6)											
		Approach LOS	B (13.1)			C (24.1)			E (78.6)			E (61.1)		
		Storage	200		200	375		175	275			125		
		50th Queue	17	87	0	295	408	44	100	105	0	55	135	363
		95th Queue	82	90	2	499	528	100	156	168	0	97	205	508
	PM	Overall LOS	D (46.1)											
		Approach LOS	C (22.7)			D (44.3)			E (78.3)			E (78.3)		
		Storage	200		200	375		175	275			125		
		50th Queue	11	647	1	468	425	16	320	277	0	146	197	439
		95th Queue	16	654	0	723	496	57	472	419	46	212	286	603
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (28.0)											
		Approach LOS	B (12.2)			C (23.0)			E (78.3)			E (63.0)		
		Storage	200		200	375		175	275			125		
		50th Queue	17	84	0	247	392	39	94	99	0	51	126	331
		95th Queue	73	89	2	402	500	90	148	161	0	91	195	454
	PM	Overall LOS	D (40.8)											
		Approach LOS	B (17.4)			D (38.7)			E (74.7)			E (73.4)		
		Storage	200		200	375		175	275			125		
		50th Queue	7	570	1	411	398	12	303	261	0	139	186	404
		95th Queue	13	487	0	671	471	52	418	372	40	202	271	558
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (29.1)											
		Approach LOS	B (14.7)			C (23.8)			E (79.7)			E (64.6)		
		Storage	200		200	375		175	275			125		
		50th Queue	37	97	2	301	475	42	103	105	0	56	136	394
		95th Queue	104	101	3	508	613	97	160	168	0	100	205	542
	PM	Overall LOS	D (49.2)											
		Approach LOS	C (33.6)			D (44.4)			E (78.3)			E (78.3)		
		Storage	200		200	375		175	275			125		
		50th Queue	13	889	0	468	461	16	320	277	0	146	197	439
		95th Queue	19	937	1	723	537	57	472	419	46	212	286	603

With the improvements listed above, the intersection of Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 9) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

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

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Hospital Parkway Eastbound			Johns Crossing Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	C (21.9)											
		Approach LOS	C (21.6)			A (7.2)			F (82.3)			E (75.7)		
		Storage	475		175	350		150	150		150			
		50th Queue	95	533	20	5	180	2	48	54	38	53	26	
		95th Queue	217	938	35	11	174	3	85	97	142	91	64	
	PM	Overall LOS	C (34.8)											
		Approach LOS	C (33.2)			B (16.2)			E (78.6)			F (86.8)		
		Storage	475		175	350		150	150		150			
		50th Queue	217	537	0	15	347	0	120	90	68	92	132	
		95th Queue	344	565	0	28	463	0	186	151	181	150	213	
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	D (37.7)											
		Approach LOS	D (36.9)			C (25.0)			F (95.3)			E (73.8)*		
		Storage	475		175	350		150	150		150			
		50th Queue	260	1017	26	62	1111	3	53	59	108	58	32	
		95th Queue	507	1109	52	126	1183	7	95	109	269	103	75	
	PM	Overall LOS	D (46.8)											
		Approach LOS	D (46.9)			C (25.1)			F (99.2)			F (90.7)		
		Storage	475		175	350		150	150		150			
		50th Queue	324	552	0	25	398	0	138	105	150	106	158	
		95th Queue	526	563	0	60	500	0	212	173	335	170	278	
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	D (45.3)											
		Approach LOS	D (51.7)			C (27.5)			F (94.3)			E (74.1)		
		Storage	475		175	350		150	150		150			
		50th Queue	351	1098	28	103	1173	4	55	61	174	60	34	
		95th Queue	559	1164	58	162	1241	7	101	111	354	107	79	
	PM	Overall LOS	D (54.8)											
		Approach LOS	E (59.7)			C (28.9)			F (106.0)			F (91.9)		
		Storage	475		175	350		150	150		150			
		50th Queue	400	556	0	42	467	0	147	111	180	111	169	
		95th Queue	609	623	0	74	555	0	230	179	390	176	312	
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	D (41.9)											
		Approach LOS	D (44.6)			C (25.3)			F (97.4)			E (74.1)		
		Storage	475		175	350		150	150		150			
		50th Queue	397	1029	26	63	1107	6	64	64	131	56	49	
		95th Queue	608	1112	53	124	1181	11	113	119	318	103	100	
	PM	Overall LOS	E (56.2)											
		Approach LOS	E (57.5)			C (29.9)			F (113.3)			F (98.4)		
		Storage	475		175	350		150	150		150			
		50th Queue	373	544	0	28	468	0	163	117	211	106	171	
		95th Queue	581	553	0	62	501	0	266	187	424	170	325	
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	F (83.3)											
		Approach LOS	F (126.3)			C (29.3)			F (119.1)			F (81.0)		
		Storage	475		175	350		150	150		150			
		50th Queue	830	1103	29	104	1174	24	103	87	239	60	131	
		95th Queue	1072	1174	52	139	1248	33	165	147	471	107	229	
	PM	Overall LOS	F (125.6)											
		Approach LOS	E (71.4)			C (31.8)			F (427.7)			F (128.4)		
		Storage	475		175	350		150	150		150			
		50th Queue	557	526	0	40	464	3	440	205	674	111	225	
		95th Queue	786	623	0	67	557	10	651	362	921	176	403	

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

Under the Estimated 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 peak hour, 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.

The intersection is projected to operate at an unacceptable overall LOS under the Build Phase 2 2042 conditions. Under this scenario, multiple approaches of the intersection are projected to operate at an unacceptable LOS under all studied scenarios.

In order to improve the approach LOS under the No-Build 2032, No-Build 2042, Build Phase 1 2042, and Build 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

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

In order to improve the overall and approach LOS under the Build Phase 2 2042 conditions, Kimley-Horn recommends the following site access improvements (shown in blue on **Figure 11**):

- Provide one (1) additional northbound left-turn lane (creating dual lefts) along Medlock Bridge Road (SR 141). Provide a protected-only left-turn phase. An additional westbound receiving lane would be required (could be provided by removing free-flow southbound right-turn).
- Provide one (1) additional eastbound left-turn (creating dual lefts) lane along Hospital Parkway. Provide a protected-only left-turn phase.

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			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
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (31.8)											
		Approach LOS	C (31.6)			C (22.9)			E (65.8)			E (78.6)		
		Storage	475		175	350		150	150		150			
		50th Queue	234	1013	25	54	1095	3	56	62	201	61	31	0
		95th Queue	456	1110	52	106	1185	7	98	112	320	105	67	0
	PM	Overall LOS	D (38.2)											
		Approach LOS	D (36.7)			C (24.4)			E (72.2)			E (77.8)		
		Storage	475		175	350		150	150		150			
		50th Queue	306	508	0	19	817	0	142	107	236	109	97	0
		95th Queue	526	610	0	54	500	0	211	173	350	170	158	0
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (35.0)											
		Approach LOS	D (35.7)			C (25.2)			E (69.6)			E (79.2)		
		Storage	475		175	350		150	150		150			
		50th Queue	277	1093	34	75	1173	4	59	65	254	64	32	0
		95th Queue	500	1170	66	123	1241	7	104	117	374	111	70	0
	PM	Overall LOS	D (43.7)											
		Approach LOS	D (44.3)			C (29.1)			E (73.5)			E (79.1)		
		Storage	475		175	350		150	150		150			
		50th Queue	354	600	0	36	610	0	151	113	264	114	104	0
		95th Queue	613	645	0	67	555	0	222	179	384	176	167	0
PH 1 BUILD (2032) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (33.4)											
		Approach LOS	C (33.4)			C (23.6)			E (66.0)			E (79.8)		
		Storage	475		175	350		150	150		150			
		50th Queue	282	1015	25	53	1097	6	69	69	227	61	45	0
		95th Queue	573	1112	49	100	1186	11	115	121	354	105	88	0
	PM	Overall LOS	D (41.8)											
		Approach LOS	D (42.9)			C (24.5)			E (74.0)			E (79.8)		
		Storage	475		175	350		150	150		150			
		50th Queue	342	509	0	22	812	0	166	118	280	108	106	0
		95th Queue	585	606	0	56	501	0	242	187	404	170	172	0
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	D (40.7)											
		Approach LOS	C (33.0)			D (39.9)			E (64.4)			E (77.9)		
		Storage	475		175	350		150	150		150			
		50th Queue	319	166	3	109	583	20	61	89	308	61	117	0
		95th Queue	459	703	16	140	1297	29	94	143	437	101	181	0
	PM	Overall LOS	E (59.3)											
		Approach LOS	D (40.9)			E (67.5)			E (78.9)			E (78.7)		
		Storage	475		175	350		150	150		150			
		50th Queue	213	916	0	59	1181	4	176	197	522	107	138	0
		95th Queue	310	1277	0	86	1320	13	225	268	732	156	207	0

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 Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

5.11 Medlock Bridge Road (SR 141) at Findley Road (Intersection 11)

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Findley Road Eastbound			Private Driveway Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (TWSC)	AM	Overall LOS	(2.9)											
		Approach LOS	D (26.0)			B (13.8)			E (45.2)			F (1000)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	90			0				95			-	
	PM	Overall LOS	(1.2)											
		Approach LOS	B (12.0)			B (11.1)			C (19.9)			C (18.4)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	10			3				45			3	
PH 1 NO-BUILD (2032) (TWSC – RCUT)	AM	Overall LOS	(4.3)											
		Approach LOS	F (52.3)			C (16.1)			E (45.5)			C (18.5)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	145			0				105			3	
	PM	Overall LOS	(1.8)											
		Approach LOS	C (15.3)			B (13.2)			D (32.8)			C (17.2)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	23			3				90			3	
PH 2 NO-BUILD (2042) (TWSC – RCUT)	AM	Overall LOS	(5.9)											
		Approach LOS	F (76.6)			C (17.1)			F (58.9)			C (19.5)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	188			0				130			3	
	PM	Overall LOS	(2.4)											
		Approach LOS	C (17.2)			B (14.9)			E (44.9)			C (19.8)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	28			3				120			3	
PH 1 BUILD (2032) (TWSC – RCUT)	AM	Overall LOS	(7.7)											
		Approach LOS	F (88.8)			C (16.5)			F (60.4)			C (18.9)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	230			0				145			3	
	PM	Overall LOS	(3.2)											
		Approach LOS	C (17.1)			B (13.7)			F (51.6)			C (17.9)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	33			3				153			3	
PH 2 BUILD (2042) (TWSC – RCUT)	AM	Overall LOS	(70.8)											
		Approach LOS	F (616.1)			C (19.8)			F (185.1)			C (22.3)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	1018			0				333			3	
	PM	Overall LOS	(89.1)											
		Approach LOS	F (77.4)			C (16.5)			F (919.5)			C (22.1)		
		Storage	225		225	175		175						
		50th Queue												
		95th Queue	200			5				1123			5	

GDOT has programmed the following roadway improvements at the intersection (shown in green on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- Construct an RCUT intersection, restricting side-street left-turns.

The northbound left-turn movement is projected to operate at an unacceptable LOS during the AM peak hour under No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

The intersection of Medlock Bridge Road (SR 141) at Findley Road (Intersection 11) is projected to operate at an unacceptable overall LOS under the Build Phase 2 2042 conditions. The westbound approach is projected to operate at LOS F during the AM and PM peak hours under the Build Phase 1 2032 and Build Phase 2 2042 conditions.

It should be noted that a low LOS for side-street approaches are not uncommon, as vehicles may experience significant delay turning onto a major roadway.

In order to improve the approach and overall LOS under the Build Phase 2 2042 conditions, Kimley-Horn recommends the following (shown in blue on **Figure 11**):

- Install a traffic signal at the intersection (proposed signalized RCUT)
- Provide one (1) additional westbound right-turn lane (creating dual rights) along Findley Road.

The analysis results for the improved conditions at Intersection 11 are shown in the table below.

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Findley Road			Private Driveway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	U	T	R
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (53.3)											
		Approach LOS	E (70.8)			C (29.3)			E (78.0)			E (76.6)		
		Storage	225		225	175		175						
		50th Queue	753	1398	0	0	1420	0			0			0
		95th Queue	896	1461	0	0	1411	0			0			0
	PM	Overall LOS	D (51.1)											
		Approach LOS	C (26.8)			E (74.9)			E (56.9)			D (48.6)		
		Storage	225		225	175		175						
		50th Queue	187	710	0	8	1358	0			109			0
		95th Queue	372	821	5	38	1482	8			180			0

With the improvements listed above, the intersection of Medlock Bridge Road (SR 141) at Findley Road (Intersection 11) is projected to operate at or above its overall and approach LOS standards under Build Phase 2 2042 conditions.

Note: The improved scenario was modeled using HCM 2000 methodology due to limitations in HCM 6th Edition methodology.

5.12 Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 12)

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	D (36.0)											
		Approach LOS	B (19.0)			C (27.2)			F (84.0)			F (153.7)		
		Storage	800		275	125		200	50				75	
		50th Queue	22	437	84	14	1065	0	24	8		273	9	
		95th Queue	21	413	71	15	1116	0	47	38		389	46	
	PM	Overall LOS	D (38.0)											
		Approach LOS	C (23.4)			D (37.0)			F (83.5)			F (88.6)		
		Storage	800		275	125		200	50				75	
		50th Queue	60	467	84	13	932	0	25	13		305	13	
		95th Queue	66	498	98	18	908	0	49	43		394	60	
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	D (36.3)											
		Approach LOS	B (16.2)			B (17.3)			F (84.5)			F (216.6)		
		Storage	800		275	125			50				75	
		50th Queue	31	318	37	7	709		28	10		352	10	
		95th Queue	45	336	65	10	730		52	42		473	50	
	PM	Overall LOS	D (40.5)											
		Approach LOS	C (27.9)			D (41.8)			F (83.5)			E (77.1)		
		Storage	800		275	125			50				75	
		50th Queue	89	409	100	18	613		30	15		351	15	
		95th Queue	115	468	128	23	620		55	47		405	59	
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	D (40.9)											
		Approach LOS	B (17.5)			C (21.3)			F (84.9)			F (242.5)		
		Storage	800		275	125			50				75	
		50th Queue	50	335	45	12	875		29	10		382	11	
		95th Queue	60	368	89	11	775		54	43		506	52	
	PM	Overall LOS	D (42.2)											
		Approach LOS	C (30.0)			D (43.6)			F (83.6)			E (77.2)		
		Storage	800		275	125			50				75	
		50th Queue	97	458	128	18	628		31	16		369	15	
		95th Queue	117	476	131	22	649		57	48		426	61	
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	D (38.1)											
		Approach LOS	B (16.5)			C (22.6)			F (84.5)			F (216.6)		
		Storage	800		275	125			50				75	
		50th Queue	42	336	43	11	854		28	10		352	10	
		95th Queue	54	353	71	12	804		52	42		473	50	
	PM	Overall LOS	D (42.2)											
		Approach LOS	C (27.9)			D (46.5)			F (83.5)			E (77.1)		
		Storage	800		275	125			50				75	
		50th Queue	87	427	107	16	704		30	15		351	15	
		95th Queue	114	495	149	23	690		55	47		405	59	
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	D (41.7)											
		Approach LOS	C (20.4)			C (25.9)			F (84.9)			F (242.5)		
		Storage	800		275	125			50				75	
		50th Queue	53	464	111	32	953		29	10		382	11	
		95th Queue	50	474	114	38	985		54	43		506	52	
	PM	Overall LOS	D (48.4)											
		Approach LOS	C (31.7)			E (57.3)			F (83.6)			E (77.2)		
		Storage	800		275	125			50				75	
		50th Queue	92	539	164	17	1183		31	16		369	15	
		95th Queue	111	558	158	20	1063		57	48		426	61	

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, Figure 9, Figure 10**, and **Figure 11**):

- 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 Estimated 2022 conditions, the eastbound and westbound approaches of Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 12) 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 12) are projected to operate at an unacceptable LOS during the AM peak hour. Only the eastbound approach is projected to operate at an unacceptable LOS during the PM peak hour.

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 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- 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 12 are shown in the table on the following page.

Overall LOS Standard: E Approach LOS Standard: E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (30.1)											
		Approach LOS	B (19.8)			C (29.4)			E (79.5)			E (75.9)		
		Storage	800		275	125			50				75	
		50th Queue	52	309	27	17	876		28	9		184	9	
		95th Queue	74	352	72	32	949		52	40		228	46	
	PM	Overall LOS	D (41.8)											
		Approach LOS	C (28.4)			D (45.8)			E (74.7)			E (75.2)		
		Storage	800		275	125			50				75	
		50th Queue	90	367	73	18	658		30	13		239	14	
		95th Queue	143	430	139	22	594		55	43		287	59	
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	C (33.9)											
		Approach LOS	C (22.9)			C (35.0)			E (79.7)			E (76.9)		
		Storage	800		275	125			50				75	
		50th Queue	58	392	92	20	947		29	10		195	10	
		95th Queue	72	403	90	42	995		54	41		240	48	
	PM	Overall LOS	D (42.0)											
		Approach LOS	C (28.4)			D (45.9)			E (74.8)			E (76.5)		
		Storage	800		275	125			50				75	
		50th Queue	98	337	53	18	697		31	14		255	15	
		95th Queue	138	450	139	21	624		57	46		292	62	
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	C (30.4)											
		Approach LOS	C (20.3)			C (30.0)			E (79.5)			E (75.9)		
		Storage	800		275	125			50				75	
		50th Queue	54	326	39	18	898		28	9		184	9	
		95th Queue	73	365	73	43	971		52	40		228	46	
	PM	Overall LOS	D (42.2)											
		Approach LOS	C (28.5)			D (46.9)			E (74.7)			E (75.2)		
		Storage	800		275	125			50				75	
		50th Queue	91	376	76	18	751		30	13		239	14	
		95th Queue	151	442	144	22	671		55	43		287	59	
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (39.5)											
		Approach LOS	C (28.9)			D (43.6)			E (79.7)			E (78.6)		
		Storage	800		275	125			50				75	
		50th Queue	52	586	143	30	1069		29	10		196	10	
		95th Queue	57	572	123	37	1093		54	41		241	48	
	PM	Overall LOS	D (53.1)											
		Approach LOS	C (34.6)			E (66.3)			E (74.8)			E (76.5)		
		Storage	800		275	125			50				75	
		50th Queue	100	506	136	14	1152		31	14		255	15	
		95th Queue	116	516	141	29	1256		57	46		292	62	

With the improvements listed above, the intersection of Medlock Bridge Road (SR 141) at Johns Creek Parkway (Intersection 12) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

5.13 Medlock Bridge Road (SR 141) at Abbotts Bridge Road (SR 120) (Intersection 13)

Overall LOS Standard: D Approach LOS Standard: D/E*			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Abbotts Bridge Road (SR 120) Eastbound			Abbotts Bridge Road (SR 120) Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	E (79.8)											
		Approach LOS	E (66.2)			D (40.3)			F (92.3)			F (260.7)		
		Storage	250		200	550		375	700			125		375
		50th Queue	111	1155	0	468	453	15	146	184		40	437	529
		95th Queue	137	1269	0	564	663	51	237	248		78	645	769
	PM	Overall LOS	E (62.1)											
		Approach LOS	E (59.2)			C (33.6)			F (83.2)			F (150.4)		
		Storage	250		200	550		375	700			125		375
		50th Queue	104	962	0	403	501	33	184	272		65	379	348
		95th Queue	157	1110	0	528	663	100	266	307		112	585	580
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	E (61.5)											
		Approach LOS	D (40.7)			E (61.2)			F (113.8)			F (85.6)		
		Storage	250		200	550		375	700			125		375
		50th Queue	129	326	0	597	287	13	185	172	0	23	210	157
		95th Queue	142	438	0	678	372	24	288	230	0	44	271	263
	PM	Overall LOS	E (55.4)											
		Approach LOS	D (47.3)			D (53.0)			E (73.7)			E (64.2)		
		Storage	250		200	550		375	700			125		375
		50th Queue	116	618	0	417	387	25	209	242	0	37	204	196
		95th Queue	161	795	0	626	533	124	259	284	0	56	256	271
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	E (66.8)											
		Approach LOS	D (42.2)			E (68.9)			F (123.1)			F (89.2)		
		Storage	250		200	550		375	700			125		375
		50th Queue	137	443	0	646	313	15	204	182	0	25	222	183
		95th Queue	141	448	0	720	425	25	310	241	4	46	288	309
	PM	Overall LOS	E (59.1)											
		Approach LOS	D (49.9)			E (59.7)			E (73.7)			E (65.0)		
		Storage	250		200	550		375	700			125		375
		50th Queue	121	755	0	437	448	46	220	253	0	38	215	213
		95th Queue	161	950	0	693	573	142	271	295	0	57	267	292
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	E (64.1)											
		Approach LOS	D (41.0)			E (64.0)			F (122.9)			F (88.2)		
		Storage	250		200	550		375	700			125		375
		50th Queue	128	377	0	614	327	13	202	172	0	23	210	178
		95th Queue	139	436	0	694	395	24	307	230	0	44	271	300
	PM	Overall LOS	E (57.7)											
		Approach LOS	D (47.3)			E (57.8)			E (74.6)			E (65.4)		
		Storage	250		200	550		375	700			125		375
		50th Queue	116	594	0	433	445	56	213	241	0	37	204	209
		95th Queue	175	761	0	681	518	104	264	283	0	56	256	286
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	F (87.2)											
		Approach LOS	D (46.9)			F (80.1)			F (194.5)			F (145.0)		
		Storage	250		200	550		375	700			125		375
		50th Queue	136	649	0	706	404	15	304	182	0	25	222	388
		95th Queue	131	442	0	781	466	39	417	241	4	46	288	538
	PM	Overall LOS	E (77.2)											
		Approach LOS	D (53.3)			F (97.4)			E (75.1)			E (65.5)		
		Storage	250		200	550		375	700			125		375
		50th Queue	121	803	0	674	547	102	237	250	0	38	215	261
		95th Queue	153	988	0	814	619	126	294	302	0	58	272	346

The City of Johns Creek and GDOT have programmed the following roadway improvements at the intersection (shown in green on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- Provide an exclusive eastbound right-turn lane along Abbotts Bridge Road (SR 120).
- Provide an additional westbound left-turn lane (creating dual lefts), additional westbound through lane (creating dual throughs), and an additional westbound right-turn lane (creating dual rights) along Abbotts Bridge Road (SR 120)
- Provide an additional northbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).
- Provide an additional southbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).

Under the Estimated 2022 conditions, the northbound, eastbound, and westbound approaches of Medlock Bridge Road (SR 141) at Abbotts Bridge Road (Intersection 13) are projected to operate at an unacceptable LOS during the AM and PM peak hours. The intersection is projected to operate at an unacceptable overall LOS under the Estimated 2022 conditions.

After the implementation of the City of Johns Creek/GDOT projects, the eastbound and westbound approaches of Medlock Bridge Road (SR 141) at Abbotts Bridge Road (SR 120) (Intersection 13) are projected to operate at an unacceptable LOS during the AM peak hour. The southbound approach is projected to operate at an unacceptable LOS during the AM and PM peak hours.

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

In order to improve the approach and overall LOS under the No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- Provide one (1) additional eastbound left-turn lane (creating triple lefts) along Abbotts Bridge Road (SR 120). A third receiving lane will be provided as part of the programmed City of Johns Creek project.
- Provide one (1) additional southbound left turn lane (creating triple lefts) along Medlock Bridge Road (SR 141). An additional southbound receiving lane would be required.
- Provide a westbound right-turn overlap phase along Abbotts Bridge Road (SR 120).

Other non-conventional intersection designs or grade separation should be considered in lieu of the above improvements. The analysis results for the improved conditions at Intersection 13 are shown in the table on the following page.

Overall LOS Standard: D Approach LOS Standard: D/E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Abbotts Bridge Road (SR 120) Eastbound			Abbotts Bridge Road (SR 120) Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (40.6)											
		Approach LOS	D (43.4)			C (24.8)			E (75.2)			E (62.1)		
		Storage	250		200	550		375	700			125		375
		50th Queue	128	582	0	303	489	33	113	170	0	23	210	272
		95th Queue	131	612	0	363	615	111	146	212	0	40	262	332
	PM	Overall LOS	D (39.8)											
		Approach LOS	D (41.5)			B (19.4)			E (76.6)			E (64.7)		
		Storage	250		200	550		375	700			125		375
		50th Queue	118	322	0	274	458	57	144	252	0	39	204	211
		95th Queue	154	795	0	330	532	138	179	301	0	59	256	252
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (44.5)											
		Approach LOS	D (49.2)			C (28.4)			E (75.3)			E (63.7)		
		Storage	250		200	550		375	700			125		375
		50th Queue	135	931	0	332	538	40	119	177	0	24	221	289
		95th Queue	188	1045	0	429	616	96	153	220	4	41	274	375
	PM	Overall LOS	D (41.6)											
		Approach LOS	D (43.5)			C (21.2)			E (77.2)			E (66.9)		
		Storage	250		200	550		375	700			125		375
		50th Queue	126	772	0	291	501	78	151	264	0	40	215	221
		95th Queue	196	922	1	345	573	155	187	314	0	61	267	274
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (41.7)											
		Approach LOS	D (43.4)			C (26.2)			E (75.6)			E (64.3)		
		Storage	250		200	550		375	700			125		375
		50th Queue	128	663	0	313	502	37	118	170	0	23	210	263
		95th Queue	129	610	0	369	627	115	152	212	0	40	262	329
	PM	Overall LOS	D (40.0)											
		Approach LOS	D (41.6)			B (19.6)			E (77.0)			E (65.6)		
		Storage	250		200	550		375	700			125		375
		50th Queue	118	341	0	288	476	69	147	251	0	39	204	217
		95th Queue	153	834	0	340	549	147	183	300	0	59	256	263
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (44.7)											
		Approach LOS	D (47.4)			C (23.2)			E (79.4)			E (77.6)		
		Storage	250		200	550		375	700			125		375
		50th Queue	135	1123	0	358	517	42	152	174	0	24	221	430
		95th Queue	174	1198	0	464	593	85	190	228	4	43	288	534
	PM	Overall LOS	D (50.3)											
		Approach LOS	D (45.6)			D (41.1)			E (77.2)			E (67.6)		
		Storage	250		200	550		375	700			125		375
		50th Queue	125	835	0	370	555	122	163	262	0	40	215	260
		95th Queue	213	324	0	448	561	122	201	314	0	61	269	344

With the improvements listed above, the intersection of Medlock Bridge Road (SR 141) at Abbotts Bridge Road (SR 120) (Intersection 13) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

Per Section 3.2.2.1 of the *GRTA DRI Review Procedures*, the LOS standard for the eastbound and westbound approaches is LOS E since the approaches currently operate at LOS F.

5.14 Medlock Bridge Road (SR 141) at Parsons Road (Intersection 14)

Overall LOS Standard: D Approach LOS Standard: D/E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Parsons Road Eastbound			Parsons Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (SIGNAL)	AM	Overall LOS	C (34.0)											
		Approach LOS	C (27.7)			C (25.7)			F (87.3)			E (72.0)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	186	861	8	238	816	7	46	249	67	74	174	0
		95th Queue	362	971	39	381	903	21	83	344	179	122	256	74
	PM	Overall LOS	C (23.9)											
		Approach LOS	B (16.4)			B (14.8)			F (84.3)			E (79.5)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	125	537	0	30	384	5	83	190	101	39	99	0
		95th Queue	281	693	0	42	442	15	134	274	217	75	158	59
PH 1 NO-BUILD (2032) (SIGNAL)	AM	Overall LOS	E (57.4)											
		Approach LOS	D (51.9)			D (54.4)			F (88.4)			E (72.6)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	286	1101	15	360	896	16	53	286	168	86	204	21
		95th Queue	484	1298	46	561	982	37	98	422	300	147	309	110
	PM	Overall LOS	C (34.3)											
		Approach LOS	C (26.7)			C (24.3)			F (94.3)			F (80.7)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	300	714	0	38	275	3	97	218	229	47	117	0
		95th Queue	505	877	0	104	441	8	158	331	438	88	187	65
PH 2 NO-BUILD (2042) (SIGNAL)	AM	Overall LOS	E (70.7)											
		Approach LOS	E (67.0)			E (69.9)			F (90.1)			E (73.1)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	318	1293	18	389	979	17	56	305	200	92	216	32
		95th Queue	518	1417	51	597	1389	39	101	459	371	158	341	125
	PM	Overall LOS	D (39.7)											
		Approach LOS	C (33.7)			C (27.0)			F (103.5)			F (81.2)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	364	782	0	62	255	3	104	234	298	49	127	0
		95th Queue	571	942	0	114	427	6	169	385	518	93	244	70
PH 1 BUILD (2032) (SIGNAL)	AM	Overall LOS	E (59.5)											
		Approach LOS	D (54.6)			E (56.5)			F (88.9)			E (72.6)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	286	1148	15	354	911	15	53	286	168	86	204	21
		95th Queue	484	1344	46	562	1007	36	98	422	300	147	309	110
	PM	Overall LOS	D (35.7)											
		Approach LOS	C (28.1)			C (25.4)			F (95.2)			F (82.1)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	302	701	0	38	274	3	98	218	241	47	119	0
		95th Queue	507	860	0	98	454	7	161	331	458	90	202	67
PH 2 BUILD (2042) (SIGNAL)	AM	Overall LOS	F (88.5)											
		Approach LOS	F (100.3)			E (77.5)			F (91.0)			E (73.1)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	318	1591	18	389	1350	14	56	305	202	92	216	32
		95th Queue	518	1707	51	598	1480	37	101	459	373	158	341	125
	PM	Overall LOS	D (47.5)											
		Approach LOS	D (42.7)			C (32.6)			F (119.2)			F (82.2)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	402	891	0	79	646	2	104	233	313	49	127	0
		95th Queue	609	1041	0	111	577	11	169	372	533	93	244	70

Under the Estimated 2022 conditions, the eastbound and westbound approaches of Medlock Bridge Road (SR 141) at Parsons Road (Intersection 14) 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 unacceptable overall LOS during the AM peak under the No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions. Under these scenarios, multiple approaches of the intersection are projected to operate at an unacceptable LOS under all studied scenarios.

In order to improve the overall and approach LOS under the No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 8, Figure 9, Figure 10**, and **Figure 11**):

- Provide one (1) additional eastbound through lane (creating dual throughs) along Parsons Road.
- Provide one (1) additional westbound through lane (creating dual throughs) along Parsons Road.
- 2042 No-Build and Build Phase 2 Conditions Only: Provide one (1) additional northbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).
- 2042 No-Build and Build Phase 2 Conditions Only: Provide one (1) additional southbound through lane (creating triple throughs) along Medlock Bridge Road (SR 141).

The analysis results for the improved conditions at Intersection 14 are shown in the table below.

Overall LOS Standard: D Approach LOS Standard: D/E			Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Parsons Road Eastbound			Parsons Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PH 1 NO-BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (44.7)											
		Approach LOS	D (38.9)			D (39.6)			E (79.8)			E (75.3)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	229	1252	0	293	879	2	57	148	144	92	109	0
		95th Queue	388	1459	35	485	1432	37	94	182	253	136	143	80
	PM	Overall LOS	D (35.7)											
		Approach LOS	C (30.9)			C (28.0)			E (76.0)			E (71.5)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	276	788	0	50	1016	6	95	108	197	46	58	0
		95th Queue	567	1062	0	123	505	16	145	144	316	81	90	63
PH 2 NO-BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (36.9)											
		Approach LOS	C (30.5)			C (30.2)			E (79.1)			E (71.1)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	253	637	3	334	554	2	58	153	187	95	111	0
		95th Queue	506	690	35	590	695	30	99	195	312	146	152	82
	PM	Overall LOS	C (27.5)											
		Approach LOS	C (21.8)			B (18.9)			E (74.7)			E (74.3)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	260	447	0	44	341	8	100	115	181	47	62	0
		95th Queue	572	645	0	114	387	29	144	149	297	79	90	62
PH 1 BUILD (2032) IMPROVED (SIGNAL)	AM	Overall LOS	D (45.8)											
		Approach LOS	D (40.2)			D (41.1)			E (79.8)			E (75.3)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	229	1298	0	295	901	2	57	148	144	92	109	0
		95th Queue	388	1505	35	486	1458	36	94	182	253	136	143	80
	PM	Overall LOS	D (36.0)											
		Approach LOS	C (31.5)			C (28.1)			E (76.5)			E (72.1)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	277	814	0	53	409	5	94	108	192	45	58	0
		95th Queue	567	1085	0	122	531	15	145	145	312	81	90	63
PH 2 BUILD (2042) IMPROVED (SIGNAL)	AM	Overall LOS	D (39.5)											
		Approach LOS	C (32.8)			C (34.7)			E (79.1)			E (71.0)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	260	771	3	336	664	4	58	153	188	95	111	0
		95th Queue	519	830	35	614	727	25	99	195	313	146	152	82
	PM	Overall LOS	C (29.8)											
		Approach LOS	C (25.7)			C (21.3)			E (75.7)			E (74.4)		
		Storage	500		200	275		200	100		325	200		150
		50th Queue	279	481	0	52	360	4	100	116	171	48	62	0
		95th Queue	607	693	0	0	501	31	144	149	286	79	90	62

With the improvements listed above, the intersection of Medlock Bridge Road (SR 141) at Parsons Road (Intersection 14) is projected to operate at or above its overall and approach LOS standards under both Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions.

Per Section 3.2.2.1 of the *GRTA DRI Review Procedures*, the LOS standard for the eastbound and westbound approaches is LOS E since the approaches currently operate at LOS F.

5.15 Hospital Parkway at Site Driveway A (Intersection 15)

Overall LOS Standard: E
Approach LOS Standard: E

			Hospital Parkway Northbound			Hospital Parkway Southbound			Site Driveway A Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (RIRO)	AM	Overall LOS							(0.4)					
		Approach LOS							B (12.5)					
		Storage												
		50th Queue												
		95th Queue									5			
	PM	Overall LOS							(0.7)					
		Approach LOS							A (9.9)					
		Storage												
		50th Queue												
		95th Queue									5			
PH 1 NO-BUILD (2032) (RIRO)	AM	Overall LOS							(0.5)					
		Approach LOS							B (13.6)					
		Storage												
		50th Queue												
		95th Queue									5			
	PM	Overall LOS							(0.7)					
		Approach LOS							B (10.3)					
		Storage												
		50th Queue												
		95th Queue									5			
PH 2 NO-BUILD (2042) (RIRO)	AM	Overall LOS							(0.5)					
		Approach LOS							B (14.1)					
		Storage												
		50th Queue												
		95th Queue									5			
	PM	Overall LOS							(0.7)					
		Approach LOS							B (10.4)					
		Storage												
		50th Queue												
		95th Queue									5			
PH 1 BUILD (2032) (RIRO)	AM	Overall LOS							(0.5)					
		Approach LOS							B (14.8)					
		Storage												
		50th Queue												
		95th Queue									8			
	PM	Overall LOS							(0.8)					
		Approach LOS							B (10.6)					
		Storage												
		50th Queue												
		95th Queue									8			
PH 2 BUILD (2042) (RIRO)	AM	Overall LOS							(0.9)					
		Approach LOS							D (27.1)					
		Storage												
		50th Queue												
		95th Queue									25			
	PM	Overall LOS							(1.1)					
		Approach LOS							B (13.1)					
		Storage												
		50th Queue												
		95th Queue									23			

The intersection of Hospital Parkway at Site Driveway A (Intersection 15) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.16 Hospital Parkway at Site Driveway B (Intersection 16)

Due to intersection geometry, Intersection 16 is analyzed as two separate all-way stop-controlled intersections.

Overall LOS Standard: E Approach LOS Standard: E			Site Driveway B			Private Driveway			Hospital Parkway					
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (AWSC)	AM	Overall LOS	B (12.0)											
		Approach LOS	A (9.0)			B (10.4)			B (12.9)					
		Storage									125			
		50th Queue												
		95th Queue		8	5		18			90	18			
	PM	Overall LOS	B (10.4)											
		Approach LOS	A (9.0)			A (9.7)			B (11.5)					
		Storage									125			
		50th Queue												
		95th Queue		18	8		10			53	3			
PH 1 NO-BUILD (2032) (AWSC)	AM	Overall LOS	B (14.2)											
		Approach LOS	A (9.4)			B (11.1)			C (15.8)					
		Storage									125			
		50th Queue												
		95th Queue		10	8		23			130	20			
	PM	Overall LOS	B (11.4)											
		Approach LOS	A (9.5)			B (10.1)			B (12.9)					
		Storage									125			
		50th Queue												
		95th Queue		23	10		13			70	3			
PH 2 NO-BUILD (2042) (AWSC)	AM	Overall LOS	C (15.3)											
		Approach LOS	A (9.6)			B (11.4)			C (17.3)					
		Storage									125			
		50th Queue												
		95th Queue		10	8		25			148	23			
	PM	Overall LOS	B (11.8)											
		Approach LOS	A (9.6)			B (10.3)			B (13.6)					
		Storage									125			
		50th Queue												
		95th Queue		23	10		15			78	10			
PH 1 BUILD (2032) (AWSC)	AM	Overall LOS	C (17.0)											
		Approach LOS	B (10.7)			B (13.6)			C (19.9)					
		Storage									125			
		50th Queue												
		95th Queue		20	15		43			170	38			
	PM	Overall LOS	B (13.0)											
		Approach LOS	B (11.2)			B (11.4)			C (15.1)					
		Storage									125			
		50th Queue												
		95th Queue		45	23		23			90	8			
PH 2 BUILD (2042) (AWSC)	AM	Overall LOS	F (89.4)											
		Approach LOS	C (17.4)			F (153.9)			F (82.2)					
		Storage									125			
		50th Queue												
		95th Queue		70	50		615			355	418			
	PM	Overall LOS	F (111.7)											
		Approach LOS	F (166.1)			C (21.4)			E (39.2)					
		Storage									125			
		50th Queue												
		95th Queue		893	423		95			253	43			

Overall LOS Standard: E Approach LOS Standard: E			Site Driveway B			Private Driveway						Hospital Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (AWSC)	**AM**	Overall LOS	A (8.8)											
		Approach LOS	A (8.7)			A (7.7)						A (8.9)		
		Storage												125
		50th Queue												
		95th Queue		15			3						25	10
	PM	Overall LOS	A (8.8)											
		Approach LOS	A (8.9)			A (8.0)						A (9.3)		
		Storage												125
		50th Queue												
		95th Queue		18			13						23	3
PH 1 NO-BUILD (2032) (AWSC)	**AM**	Overall LOS	A (9.2)											
		Approach LOS	A (9.1)			A (7.9)						A (9.4)		
		Storage												125
		50th Queue												
		95th Queue		20			3						33	13
	PM	Overall LOS	A (9.2)											
		Approach LOS	A (9.3)			A (8.4)						A (9.8)		
		Storage												125
		50th Queue												
		95th Queue		23			15						28	3
PH 2 NO-BUILD (2042) (AWSC)	**AM**	Overall LOS	A (9.4)											
		Approach LOS	A (9.3)			A (8.0)						A (9.5)		
		Storage												125
		50th Queue												
		95th Queue		20			3						35	13
	PM	Overall LOS	A (9.4)											
		Approach LOS	A (9.5)			A (8.5)						A (10.0)		
		Storage												125
		50th Queue												
		95th Queue		25			18						30	3
PH 1 BUILD (2032) (AWSC)	**AM**	Overall LOS	B (10.7)											
		Approach LOS	B (10.2)			A (8.3)						B (11.1)		
		Storage												125
		50th Queue												
		95th Queue		30			3						55	13
	PM	Overall LOS	B (10.5)											
		Approach LOS	B (10.8)			A (8.8)						B (11.2)		
		Storage												125
		50th Queue												
		95th Queue		40			18						40	3
PH 2 BUILD (2042) (AWSC)	**AM**	Overall LOS	F (80.4)											
		Approach LOS	C (17.3)			B (10.1)						F (108.3)		
		Storage												125
		50th Queue												
		95th Queue		85			10						623	15
	PM	Overall LOS	F (90.8)											
		Approach LOS	F (140.0)			B (11.7)						D (27.4)		
		Storage												125
		50th Queue												
		95th Queue		705			25						150	3

The intersection of Hospital Parkway at Site Driveway B (Intersection 16) is projected to operate at an unacceptable overall LOS during the AM and PM peak hours under Build Phase 2 2042 conditions. Under this scenario, multiple approaches of the intersection are projected to operate at an unacceptable LOS under all studied scenarios.

In order to improve the approach LOS under the Build Phase 2 2042 conditions, Kimley-Horn recommends the following (shown in blue on **Figure 11**):

- Reconfigure the two all-way stop controlled intersections into one signalized intersection.
- Provide an exclusive left-turn lane along all four approaches.

The analysis results for the improved conditions at Intersection 16 are shown in the table below.

Overall LOS Standard: D Approach LOS Standard: D			Site Driveway B			Private Driveway			Hospital Parkway			Hospital Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	U	T	R
PH 2 BUILD (2042) IMPROVED (SIGNAL)	**AM**	Overall LOS	C (33.9)											
		Approach LOS	D (38.5)			D (44.0)			D (37.0)			C (28.5)		
		Storage									125			125
		50th Queue	147	1	0	13	1	0	51	256	255	272	32	147
		95th Queue	216	7	54	37	6	0	97	373	471	481	63	216
	PM	Overall LOS	D (36.0)											
		Approach LOS	C (28.8)			D (49.2)			D (48.3)			D (38.0)		
		Storage									125			125
		50th Queue	437	0	104	52	1	0	19	265	34	101	87	0
		95th Queue	622	0	201	99	6	0	47	417	97	223	148	0

With the improvements listed above, the intersection of Hospital Parkway at Site Driveway B (Intersection 16) is projected to operate at or above its overall and approach LOS standards under Build Phase 2 2042 conditions.

5.17 Findley Road at Site Driveway C (Intersection 17)

Overall LOS Standard: E Approach LOS Standard: E			Northbound			Site Driveway C Southbound			Findley Road Eastbound			Findley Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
ESTIMATED 2022 (TWSC)	AM	Overall LOS	(0.5)											
		Approach LOS				A (9.8)			A (7.6)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				3		0			0			
	PM	Overall LOS	(2.9)											
		Approach LOS				B (10.2)			A (7.5)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				10		0			0			
PH 1 NO-BUILD (2032) (TWSC)	AM	Overall LOS	(0.5)											
		Approach LOS				B (10.1)			A (7.7)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				3		0			0			
	PM	Overall LOS	(3.1)											
		Approach LOS				B (10.6)			A (7.6)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				13		0			0			
PH 2 NO-BUILD (2042) (TWSC)	AM	Overall LOS	(0.5)											
		Approach LOS				B (10.3)			A (7.7)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				3		0			0			
	PM	Overall LOS	(3.1)											
		Approach LOS				B (10.6)			A (7.6)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				13		0			0			
PH 1 BUILD (2032) (TWSC)	AM	Overall LOS	(1.5)											
		Approach LOS				B (10.5)			A (7.8)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				5		0			3			
	PM	Overall LOS	(4.4)											
		Approach LOS				B (11.1)			A (7.7)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				20		3			0			
PH 2 BUILD (2042) (TWSC)	AM	Overall LOS	(3.9)											
		Approach LOS				C (16.0)			A (9.2)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				33		5			15			
	PM	Overall LOS	(15.6)											
		Approach LOS				D (26.5)			A (8.1)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				200		20			5			

The intersection of Findley Road at Site Driveway C (Intersection 17) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2032, No-Build 2042, Build Phase 1 2032, and Build Phase 2 2042 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

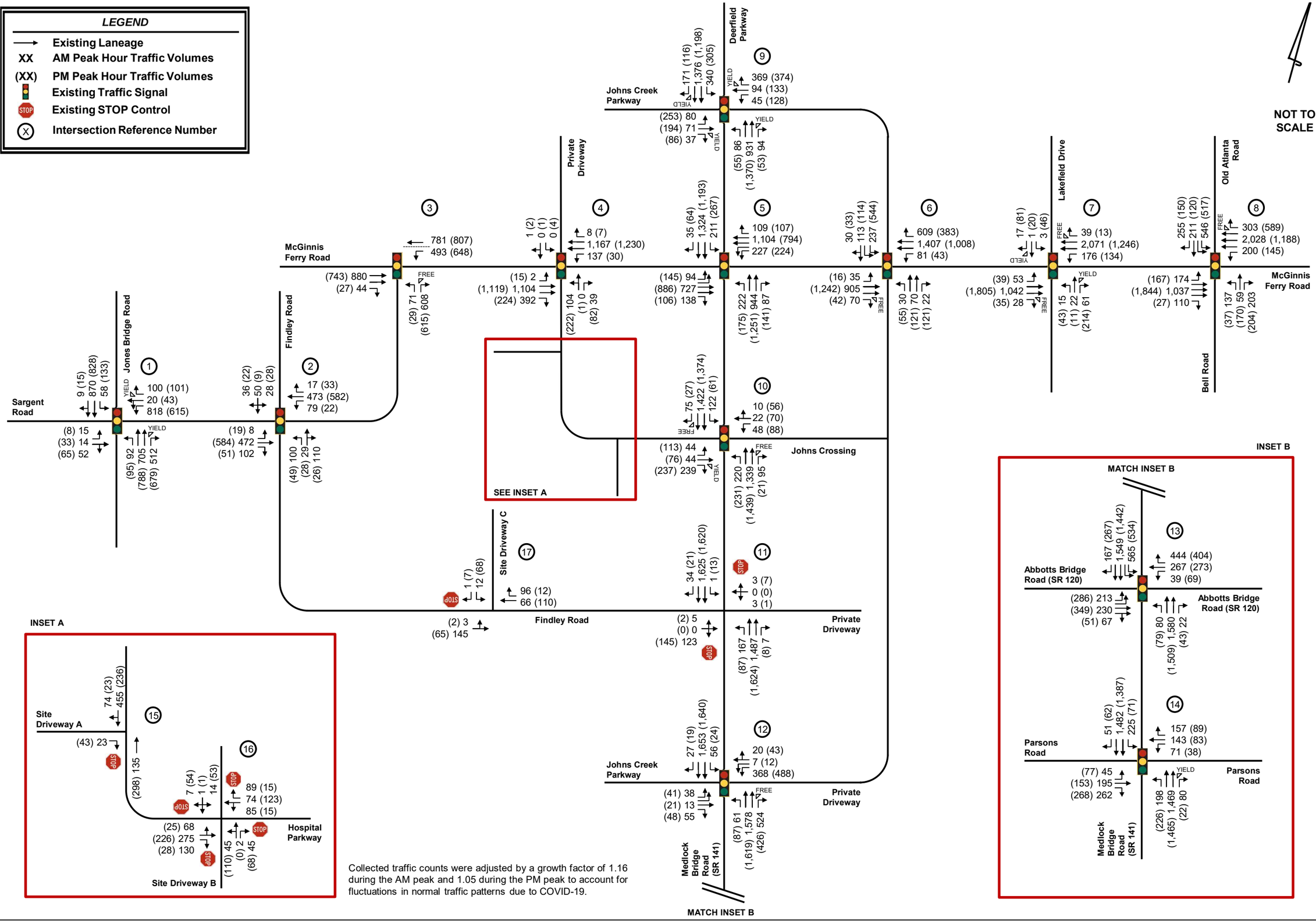
LEGEND

- Existing Laneage
- XX — AM Peak Hour Traffic Volumes
- (XX) — PM Peak Hour Traffic Volumes
- Existing Traffic Signal
- Existing STOP Control
- (X) — Intersection Reference Number

NOT TO SCALE

Figure 7
Estimated 2022 Traffic Conditions
Emory Johns Creek Hospital Expansion DRI #3542 Transportation Analysis

Kimley»Horn



Collected traffic counts were adjusted by a growth factor of 1.16 during the AM peak and 1.05 during the PM peak to account for fluctuations in normal traffic patterns due to COVID-19.

LEGEND

- Existing Laneage
- Programmed Laneage
- No-Build IMPROVED Laneage
- XX AM Peak Hour Traffic Volumes
- (XX) PM Peak Hour Traffic Volumes
- Existing Traffic Signal
- Existing STOP Control
- (X) Intersection Reference Number

NOT TO SCALE

Provide NB Protected/Permissive Left-Turn

Provide WB RT Overlap Phase

Provide NB RT Overlap Phase

Provide EB RT Overlap Phase

GDOT Project to Install RCUT

Sargent Road

Jones Bridge Road

Findley Road

McGinnis Ferry Road

Private Driveway

Johns Creek Parkway

Medlock Bridge Road (SR 141)

Lakefield Drive

Old Atlanta Road

Bell Road

Johns Crossing

Site Driveway C

Site Driveway A

Site Driveway B

Hospital Parkway

Abbotts Bridge Road (SR 120)

Parsons Road

SEE INSET A

INSET A

INSET B

MATCH INSET B

MATCH INSET B

Estimated 2022 Traffic Volumes grown at 1.5% per year for ten (10) years.

Figure 8

Projected 2032 No-Build (Phase 1) Traffic Conditions

Emory Johns Creek Hospital Expansion DRI #3542 Transportation Analysis

Kimley»Horn

LEGEND

- Existing Laneage
- Programmed Laneage
- No-Build IMPROVED Laneage
- XX AM Peak Hour Traffic Volumes
- (XX) PM Peak Hour Traffic Volumes
- Existing Traffic Signal
- STOP Existing STOP Control
- (X) Intersection Reference Number

NOT TO SCALE

Provide NB Protected/Permissive Left-Turn

Provide WB RT Overlap Phase

Provide NB RT Overlap Phase

Provide EB RT Overlap Phase

GDOT Project to Install RCUT

Sargent Road

Jones Bridge Road

Findley Road

McGinnis Ferry Road

Private Driveway

Johns Creek Parkway

Medlock Bridge Road (SR 141)

Johns Crossing

Lakefield Drive

Old Atlanta Road

Bell Road

Site Driveway C

Site Driveway A

Site Driveway B

Hospital Parkway

Abbotts Bridge Road (SR 120)

Parsons Road

SEE INSET A

INSET A

INSET B

MATCH INSET B

MATCH INSET B

Projected 2032 No-Build Traffic Volumes grown at 0.5% per year for ten (10) years.

Figure 9

Projected 2042 No-Build (Phase 2) Traffic Conditions

Emory Johns Creek Hospital Expansion DRI #3542 Transportation Analysis

Kimley»Horn

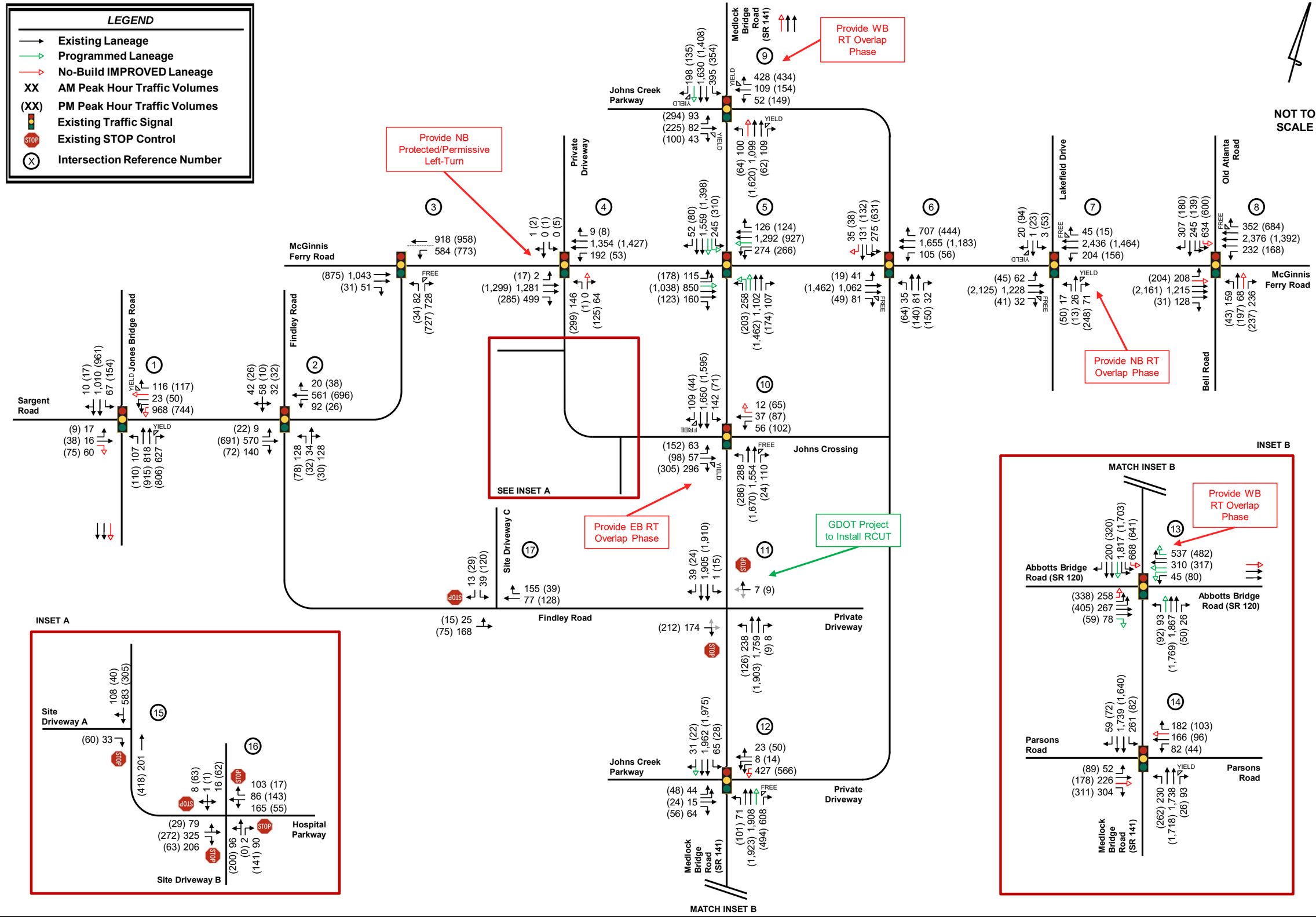


Figure 10

Projected 2032 Build Phase 1 Traffic Conditions

Emory Johns Creek Hospital Expansion DRI #3542 Transportation Analysis

Kimley»Horn

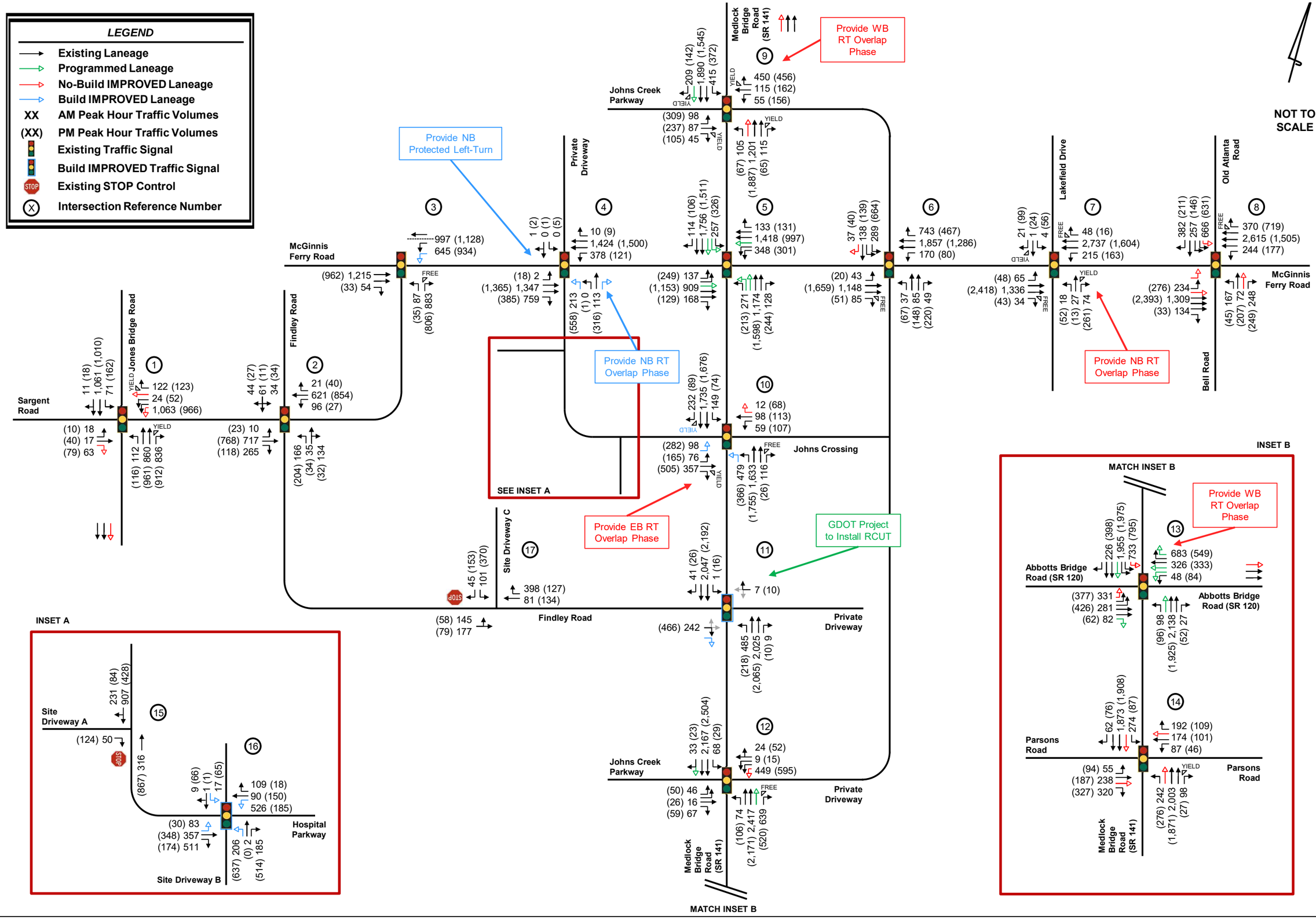


Figure 11

Projected 2042 Build Phase 2 Traffic Conditions

Emory Johns Creek Hospital Expansion DRI #3542 Transportation Analysis

Kimley»Horn

APPENDIX A

Proposed Site Plan

BOUNDARY DATA TABLE		
CODE	BEARING	DISTANCE
L1	N03°22'55"W	36.02'
L2	N13°35'17"E	46.19'
L3	N23°48'o8"W	34.31'
L4	N21°35'06"E	25.19'
L5	N51°49'36"E	35.00'
L6	N02°35'42"E	41.25'
L7	N20°39'25"	34.06'
L8	N15°28'05"E	49.59'
L9	N32°12'15"E	47.51'
L10	N15°06'15"E	46.12'
L11	N14°11'27"E	44.60'
L12	N11°43'26"E	53.17'
L13	N15°22'50"E	51.50'
L14	N04°21'04"E	45.11'
L15	N28°13'11"E	48.36'
L16	N20°34'17"E	59.10'
L17	N28°49'37"E	52.91'
L18	N00°06'48"W	53.51'
L19	N12°39'48"E	41.44'
L20	N09°12'50"E	50.20'
L21	N49°46'42"E	45.04'
L22	N48°56'07"W	48.90'
L23	N64°15'02"W	41.45'
L24	N29°31'17"W	66.79'
L25	N44°52'28"E	21.40'
L26	N84°28'44"E	37.63'
L27	N51°39'36"E	70.89'
L28	N26°30'34"W	47.41'
L29	N13°50'30"E	43.97'
L30	N62°22'09"E	40.79'
L31	N04°35'29"E	34.92'
L32	N21°40'36"W	30.20'
L33	N09°48'32"E	18.79'

SITE DATA

ZONING: SPECIAL USE PERMIT / O & I ZONE (PETITION: RZ-18-005)
TOTAL SITE ACREAGE: ±65.06 ac
FUTURE EJCH IMPERVIOUS RATIO: 1,613,519 SF (IMPERVIOUS) / 2,834,013.60 SF (65.03 AC) = 0.569 (57%) < 70% MAX
FUTURE FLOOR-AREA-RATIO: 1,672,641 SF (TOTAL BUILDING SPACE) / 2,834,014 SF (TOTAL SITE) = 0.59

EXISTING BUILDING SQUARE FOOTAGES:

TOTAL ALLOWABLE BUILDING AREA:	672,963 SF (65.06 AC X 10,343.23)
TOTAL HOSPITAL BUILDING AREA:	351,088 SF
TOTAL PHYSICIANS PLAZA BUILDING AREA:	241,251 SF
TOTAL CAMPUS BUILDING AREA:	592,339 SF
MAX. ALLOWABLE BUILDING HEIGHT:	100' MAX. (6 STORIES PLUS SUB LEVEL)

FUTURE BUILDING SQUARE FOOTAGES:

HOSPITAL

1. FUTURE CCU A:	40,419 SF (3 STORIES)
2. FUTURE CCU B:	18,888 SF (4 STORIES)
3. FUTURE SURGERY EXPANSION:	29,808 SF (2 STORIES)
4. FUTURE ROCU B EXPANSION:	11,095 SF (5 STORIES)
5. FUTURE MRI & DOCK EXPANSION:	6,016 SF (2 STORIES)
6. FUTURE SAME DAY SURGERY EXPANSION:	7,778 SF (1 STORY)
7. FUTURE PHARMACY, FOOD SERVICE, EMERGENCY DPT., PATIENT UNIT EXPANSIONS	177,604 SF (7 STORIES)
8. FUTURE PHARMACY, EVS, IMAGING, ADMIN.	33,726 SF (3 STORIES)
9. CENTRAL ENERGY PLANT EXPANSION	10,000 SF (1 STORY)
10. FUTURE PATIENT UNIT FLOORS	44,968 SF (4 STORIES)
TOTAL FUTURE HOSPITAL AREA:	380,302 SF

MEDICAL OFFICE BUILDING

11. FUTURE ATTACHED MEDICAL OFFICE BUILDINGS:	210,000 SF (7 STORIES)
12. FUTURE MEDICAL OFFICE BUILDING 1:	245,000 SF (7 STORIES)
13. FUTURE MEDICAL OFFICE BUILDING 2:	245,000 SF (7 STORIES)
TOTAL FUTURE MEDICAL OFFICE BUILDING AREA:	700,000 SF

LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN LAND LOTS 354, 355, 376, & 377 OF THE FIRST DISTRICT, FIRST SECTION, FULTON COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A 1/2 INCH RBS LOCATED S18°17656'05"W A DISTANCE OF 199.64 FEET AS MEASURED FROM A CONCRETE MONUMENT FOUND AT THE LAND LOT CORNER COMMON TO LAND LOTS 354, 355, 376 AND 377; THENCE FROM SAID POINT OF BEGINNING AS THUS ESTABLISHED, S86°17648'40"W A DISTANCE OF 1155.52 FEET TO A 1/2 INCH RBF; THENCE N14°17601'18"E A DISTANCE OF 281.84 FEET TO A POINT IN THE CENTERLINE OF JOHNS CREEK; THENCE ALONG SAID CENTERLINE A DISTANCE OF 1443.42 FEET AS FURTHER DESCRIBED BY THE FOLLOWING COURSES AND DISTANCES; N03°17622'55"W, 36.02 FEET; THENCE N13°17635'17"E, 46.19 FEET; THENCE N23°17648'08"W, 34.31 FEET; THENCE N21°17635'06"E, 25.19 FEET; THENCE N51°17649'36"E, 35.00 FEET; THENCE N02°17635'42"E, 41.25 FEET; THENCE N20°17639'25"E, 34.56 FEET; THENCE N15°17628'05"W, 49.59 FEET; THENCE N32°17612'15"E, 47.51 FEET; THENCE N15°17606'15"E, 46.12 FEET; THENCE N14°17611'27"E, 44.60 FEET; THENCE N11°17643'26"E, 53.17 FEET; THENCE N15°17622'50"E, 51.10 FEET; THENCE N04°17621'04"E, 45.11 FEET; THENCE N28°17613'11"E, 48.36 FEET; THENCE N20°17634'17"E, 59.10 FEET; N28°17649'37"E, 52.91 FEET; N00°17606'48"W, 53.51 FEET; THENCE N12°17639'48"E, 41.44 FEET; THENCE N09°17612'50"E, 50.20 FEET; THENCE N49°17646'42"E, 45.04 FEET; THENCE N48°17656'07"W, 48.90 FEET; THENCE N64°17615'02"W, 41.45 FEET; THENCE N29°17631'17"W, 66.79 FEET; THENCE N44°17652'28"E, 21.40 FEET; THENCE N84°17628'44"E, 37.63 FEET; THENCE N51°17639'36"E, 70.89 FEET; THENCE N26°17630'34"W, 47.41 FEET; THENCE N13°17650'30"E, 43.97 FEET; THENCE N62°17622'09"E, 40.79 FEET; THENCE N04°17635'29"E, 34.92 FEET; THENCE N21°17640'36"W, 30.20 FEET; THENCE N09°17648'32"E, 18.79 FEET TO A POINT; THENCE LEAVING SAID CENTERLINE OF JOHNS CREEK N34°17602'43"E, 279.53 FEET TO A 1/2 INCH RBS ON THE SOUTHERLY RIGHT OF WAY OF MCGINNIS FERRY ROAD (HAVING AN 80 FOOT RIGHT OF WAY WIDTH); THENCE ALONG SAID RIGHT OF WAY, S82°17614'00"E A DISTANCE OF 456.57 FEET TO A POINT; THENCE CONTINUING ALONG SAID RIGHT OF WAY, S76°17644'43"E A DISTANCE OF 94.65 FEET; THENCE S82°17613'44"E A DISTANCE OF 100.52 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 61.28 FEET, HAVING A RADIUS OF 39.00 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S37°17612'59"E, 55.17 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY OF WEST JOHNS CROSSING (RIGHT OF WAY WIDTH VARIES); THENCE ALONG SAID RIGHT OF WAY THE FOLLOWING COURSES AND DISTANCES, S07°17647'46"W A DISTANCE OF 149.35 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 67.89 FEET, HAVING A RADIUS OF 228.50 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S16°17618'29"W, 67.64 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 154.40 FEET, HAVING A RADIUS OF 271.50 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S08°17631'41"W, 152.33 FEET TO A POINT; THENCE S07°17603'06"E A DISTANCE OF 78.30 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 38.94 FEET, HAVING A RADIUS OF 283.50 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S27°17643'52"E, 38.91 FEET TO A POINT; THENCE S31°17639'57"E A DISTANCE OF 64.50 FEET TO A POINT; THENCE S48°17616'29"E A DISTANCE OF 89.49 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 42.08 FEET, HAVING A RADIUS OF 325.50 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S51°17658'42"E, 42.05 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 72.01 FEET, HAVING A RADIUS OF 625.50 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S58°17658'48"E, 71.97 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 216.09 FEET, HAVING A RADIUS OF 599.50 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S51°17657'07"E, 214.92 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 107.97 FEET, HAVING A RADIUS OF 330.00 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S32°17615'10"E, 107.49 FEET TO A POINT; THENCE S22°17652'46"E, 30.72 FEET; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 85.49 FEET, HAVING A RADIUS OF 662.50 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF S26°17634'36"E, 85.43 FEET TO A 1/2 INCH RBS ON THE WESTERLY RIGHT OF WAY OF WEST JOHNS CROSSING; THENCE LEAVING SAID RIGHT OF WAY, S38°17644'18"W A DISTANCE OF 698.53 FEET TO A 1/2 INCH RBS AND THE POINT OF BEGINNING. THE ABOVE DESCRIBED PROPERTY IS SHOWN ON AN ALTA/ACSM LAND TITLE AND TOPOGRAPHIC SURVEY FOR: GRESHAM SMITH AND PARTNERS, TECHNOLOGY PARK/ATLANTA, INC. AND CHICAGO TITLE INSURANCE COMPANY CONTAINING 41.1828 ACRES PREPARED BY HANNON, MEEKS & BAGWELL,SURVEYORS & ENGINEER, INC., DATED APRIL 1, 2002 BEARING THE SEAL OF MILES H. HANNON, REGISTERED LAND SURVEYOR NO. 1528.

BEGINNING AT THE ORIGINAL ½ " RBS POINT S 18°56 ' 05 " W A DISTANCE OF 199.64 FEET AS MEASURED FROM CONCRETE MONUMENT FOUND AT THE LAND LOT CORNER COMMON TO LAND LOTS 354, 376, AND 377; THENCE FROM SAID POINT OF BEGINNING AS THIS ESTABLISHED, S15°19 ' 30 " E A DISTANCE OF 374.09 FEET AS MEASURED FROM A MONUMENT AT THE LOT CORNER; THENCE FROM SAID POINT OF BEGINNING AS THUS S14°26 ' 54 " W, 421.40 FEET; THENCE S14°10 ' 14 " W. 159.19 FEET; THENCE S7°34 ' 06 " W, 197.50 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 40.73 FEET, HAVING A RADIUS OF 444.37 FEET, THENCE TURNING FROM SAID POINT N74°16 ' 21 " W. 536.93 FEET; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 136.28 FEET, HAVING A RADIUS OF 220.00 FEET, THENCE TURNING FROM SAID POINT N38°46 ' 52 " W, 482.07 FEET; THENCE FOLLOWING A COPUNTER CLOCKWISE CURVE WITH AN ARC DISTANCE OF 187.26 FEET, HAVING A RADIUS OF 370.00 FEET, THENCE TURNING FROM SAID POINT N67°46 ' 46 " W, 47.47 FEET; THENCE N14°01 ' 18 " E, 331.32 FEET, REACHING A ½ " RBF MONUMENT, TURNING CLOCKWISE N86°48 ' 40 " E, 1155.52 FEET TO THE POINT OF BEGINNING.

NOTE: NO CURRENT SITE SURVEY WAS PROVIDED. INFORMATION SHOWN IS FROM A COLLECTION OF PREVIOUS SURVEY, DESIGN, AND PARKING COUNTS PROVIDED BY OTHERS. KIMLEY-HORN SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THIS INFORMATION.

PARKING DATA

REQUIRED PARKING – PER CODE

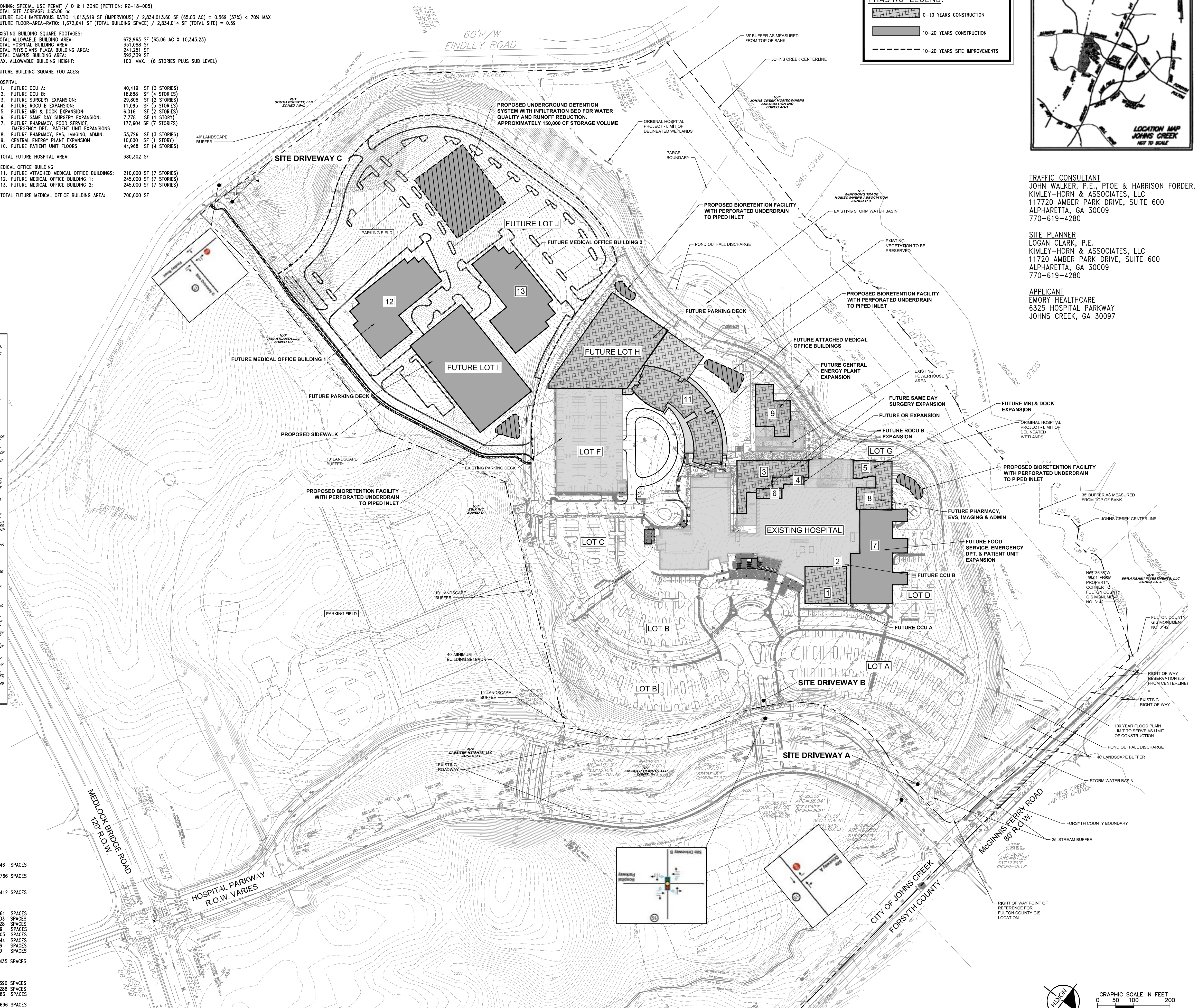
HOSPITAL USE: CODE REQUIRED (1 SP/4 BEDS AND 1 SP/3 EMPLOYEES)	646 SPACES
MEDICAL OFFICE BUILDING CODE REQUIRED (1 SP/250 SF)	3766 SPACES
MINIMUM REQUIRED TOTAL ONSITE PARKING:	4412 SPACES

EXISTING PARKING

LOT A	261 SPACES
LOT B	103 SPACES
LOT C	128 SPACES
LOT D	59 SPACES
LOT E	205 SPACES
LOT F (2 STORY PARKING DECK)	644 SPACES
LOT G	16 SPACES
VALET	19 SPACES
TOTAL EXISTING PARKING:	1435 SPACES

PROPOSED PARKING

FUTURE LOT I (5 STORY PARKING DECK)	1390 SPACES
FUTURE LOT H (4 STORY PARKING DECK)	1288 SPACES
FUTURE LOT J	583 SPACES
TOTAL PROPOSED PARKING:	4696 SPACES



60'R/W FINDLEY ROAD
SITE DRIVEWAY C
SITE DRIVEWAY B
SITE DRIVEWAY A
FUTURE LOT J
FUTURE LOT I
FUTURE LOT H
LOT F
LOT C
LOT B
LOT A
LOT D
LOT G
EXISTING HOSPITAL
FUTURE MEDICAL OFFICE BUILDING 1
FUTURE MEDICAL OFFICE BUILDING 2
FUTURE PARKING DECK
FUTURE ATTACHED MEDICAL OFFICE BUILDINGS
FUTURE CENTRAL ENERGY PLANT EXPANSION
FUTURE SAME DAY SURGERY EXPANSION
FUTURE OR EXPANSION
FUTURE ROCU B EXPANSION
FUTURE MRI & DOCK EXPANSION
FUTURE PHARMACY, EVS, IMAGING & ADMIN
FUTURE FOOD SERVICE, EMERGENCY DPT. & PATIENT UNIT EXPANSION
FUTURE CCU B
FUTURE CCU A
PROPOSED UNDERGROUND DETENTION SYSTEM WITH INFILTRATION BED FOR WATER QUALITY AND RUNOFF REDUCTION. APPROXIMATELY 150,000 CF STORAGE VOLUME
PROPOSED BIORETENTION FACILITY WITH PERFORATED UNDERDRAIN TO PIPED INLET
PROPOSED SIDEWALK
EXISTING PARKING DECK
40' LANDSCAPE BUFFER
10' LANDSCAPE BUFFER
40' MINIMUM BUILDING SETBACK
35' BUFFER AS MEASURED FROM TOP OF BANK
JOHNS CREEK CENTERLINE
ORIGINAL HOSPITAL PROJECT - LIMIT OF DELINEATED WETLANDS
PARCEL BOUNDARY
EXISTING STORM WATER BASIN
EXISTING VEGETATION TO BE PRESERVED
POND OUTFALL DISCHARGE
EXISTING POWERHOUSE AREA
100 YEAR FLOOD PLAIN LIMIT TO SERVE AS LIMIT OF CONSTRUCTION
STORM WATER BASIN
FORSYTH COUNTY BOUNDARY
25' STREAM BUFFER
RIGHT-OF-WAY RESERVATION (55' FROM CENTERLINE)
EXISTING RIGHT-OF-WAY
RIGHT OF WAY POINT OF REFERENCE FOR FULTON COUNTY GIS LOCATION
EXISTING ROADWAY
MEDLOCK BRIDGE ROAD 120' R.O.W.
HOSPITAL PARKWAY R.O.W. VARIES
MCGINNIS FERRY ROAD 80' R.O.W.
CITY OF JOHNS CREEK
FORSYTH COUNTY
LOCATION MAP JOHNS CREEK NOT TO SCALE
GRAPHIC SCALE IN FEET
0 50 100 200
NORTH

PHASING LEGEND:

- 0–10 YEARS CONSTRUCTION
- 10–20 YEARS CONSTRUCTION
- 10–20 YEARS SITE IMPROVEMENTS

TRAFFIC CONSULTANT
JOHN WALKER, P.E., PTOE & HARRISON FORDER, P.E.
KIMLEY-HORN & ASSOCIATES, LLC
117720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
770-619-4280

SITE PLANNER
LOGAN CLARK, P.E.
KIMLEY-HORN & ASSOCIATES, LLC
11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
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APPLICANT
EMORY HEALTHCARE
6325 HOSPITAL PARKWAY
JOHNS CREEK, GA 30097

Kimley»Horn
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PHONE (770) 619-4280
WWW.KIMLEY-HORN.COM

CLIENT: EMORY JOHNS CREEK HOSPITAL

PROJECT: EMORY JOHNS CREEK HOSPITAL EXPANSION DRI #3582

No.	REVISION DESCRIPTIONS	DATE	BY

GSWCC CERT. (LEVEL II)	
DRAWN BY	TNF
DESIGNED BY	LDC
REVIEWED BY	KHA
DATE	05/03/2022
PROJECT NO.	014384001
TITLE	DRI SITE PLAN
SHEET NUMBER	EX. A

Drawing name: K:\AMT_Marketing\Emory Johns Creek Hospital\2021 Rezoning\CAD\2022-04-20 EJCH DRI Site Plan.dwg EXHIBIT A May 03, 2022 4:33pm by: Teagan.Frank

Trip Generation Analysis

Trip Generation Analysis (10th Ed. with *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Emory Johns Creek Hospital Expansion DRI #3542
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								
610 Hospital	621,553 s.f.	6,758	590	395	195	594	208	386
720 Medical-Dental Office Building	700,000 s.f.	24,786	1,902	1,541	361	2,128	532	1,596
720 Medical-Dental Office Building	*241,251 s.f.*	*-8,458*	*-655*	*-531*	*-124*	*-728*	*-182*	*-546*
Gross Trips		**23,086**	**1,837**	**1,405**	**432**	**1,994**	**558**	**1,436**
Medical Office Trips		16,328	1,247	1,010	237	1,400	350	1,050
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Office Trips		16,328	1,247	1,010	237	1,400	350	1,050
Hospital Trips		6,758	590	395	195	594	208	386
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Other Non-Residential Trips		6,758	590	395	195	594	208	386
Mixed-Use Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips		**23,086**	**1,837**	**1,405**	**432**	**1,994**	**558**	**1,436**
Driveway Volumes		**23,086**	**1,837**	**1,405**	**432**	**1,994**	**558**	**1,436**

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Trip Generation Analysis (10th Ed. with *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Emory Johns Creek Hospital Expansion DRI #3542
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								
610 Hospital	369,173 s.f.	5,422	431	289	142	425	149	276
720 Medical-Dental Office Building	210,000 s.f.	7,346	570	462	108	633	158	475
720 Medical-Dental Office Building	*241,251 s.f.*	*-8,458*	*-655*	*-531*	*-124*	*-728*	*-182*	*-546*
Gross Trips		**4,310**	**346**	**220**	**126**	**330**	**125**	**205**
Medical Office Trips		-1,112	-85	-69	-16	-95	-24	-71
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Office Trips		-1,112	-85	-69	-16	-95	-24	-71
Hospital Trips		5,422	431	289	142	425	149	276
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Other Non-Residential Trips		5,422	431	289	142	425	149	276
Mixed-Use Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips		**4,310**	**346**	**220**	**126**	**330**	**125**	**205**
Driveway Volumes		**4,310**	**346**	**220**	**126**	**330**	**125**	**205**

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Trip Generation Analysis (10th Ed. with *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Emory Johns Creek Hospital Expansion DRI #3542
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								
610 Hospital	252,380 s.f.	1,336	159	106	53	169	59	110
720 Medical-Dental Office Building	490,000 s.f.	17,440	1,332	1,079	253	1,495	374	1,121
720 Medical-Dental Office Building	*0 s.f.*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Gross Trips		**18,776**	**1,491**	**1,185**	**306**	**1,664**	**433**	**1,231**
Medical Office Trips		17,440	1,332	1,079	253	1,495	374	1,121
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Office Trips		17,440	1,332	1,079	253	1,495	374	1,121
Hospital Trips		1,336	159	106	53	169	59	110
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Other Non-Residential Trips		1,336	159	106	53	169	59	110
Mixed-Use Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips		**18,776**	**1,491**	**1,185**	**306**	**1,664**	**433**	**1,231**
Driveway Volumes		**18,776**	**1,491**	**1,185**	**306**	**1,664**	**433**	**1,231**

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APPENDIX C

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

Intersection #1: Jones Bridge Road @ Private Driveway / Sargent Road

AM PEAK HOUR

Description	Jones Bridge Road Northbound			Jones Bridge Road Southbound			Private Driveway Eastbound			Sargent Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	79	608	441	50	750	8	13	12	45	705	17	86
Pedestrians		0			0			2			0	
Conflicting Pedestrians	2		0	0		2	0		0	0		0
Heavy Vehicles	2	22	6	0	16	0	2	0	1	11	0	2
Heavy Vehicle %	3%	4%	2%	2%	2%	2%	15%	2%	2%	2%	2%	2%
Peak Hour Factor		0.86			0.86			0.86			0.86	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**92**	**705**	**512**	**58**	**870**	**9**	**15**	**14**	**52**	**818**	**20**	**100**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	107	818	594	67	1,010	10	17	16	60	949	23	116
2042 Background Traffic	112	860	625	71	1,061	11	18	17	63	998	24	122
Phase 1 Project Trips												
Trip Distribution IN			15%									
Trip Distribution OUT										15%		
Medical Office Trips	0	0	-10	0	0	0	0	0	0	-2	0	0
Trip Distribution IN			15%									
Trip Distribution OUT										15%		
Hospital Trips	0	0	43	0	0	0	0	0	0	21	0	0
Total Phase 1 Project Trips	0	0	33	0	0	0	0	0	0	19	0	0
2032 Buildout Total	107	818	627	67	1,010	10	17	16	60	968	23	116
Phase 2 Project Trips												
Trip Distribution IN			15%									
Trip Distribution OUT										15%		
Medical Office Trips	0	0	152	0	0	0	0	0	0	36	0	0
Trip Distribution IN			15%									
Trip Distribution OUT										15%		
Hospital Trips	0	0	59	0	0	0	0	0	0	29	0	0
Total Phase 2 Project Trips	0	0	211	0	0	0	0	0	0	65	0	0
2042 Buildout Total	112	860	836	71	1,061	11	18	17	63	1,063	24	122

PM PEAK HOUR

Description	Jones Bridge Road Northbound			Jones Bridge Road Southbound			Private Driveway Eastbound			Sargent Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	90	750	647	127	789	14	8	31	62	586	41	96
Pedestrians		0			1			1			2	
Conflicting Pedestrians	1		2	2		1	1		0	0		1
Heavy Vehicles	0	8	6	1	8	0	0	0	1	6	1	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.99			0.99			0.99			0.99	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**95**	**788**	**679**	**133**	**828**	**15**	**8**	**33**	**65**	**615**	**43**	**101**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	110	915	788	154	961	17	9	38	75	714	50	117
2042 Background Traffic	116	961	828	162	1,010	18	10	40	79	750	52	123
Phase 1 Project Trips												
Trip Distribution IN			15%									
Trip Distribution OUT										15%		
Medical Office Trips	0	0	-4	0	0	0	0	0	0	-11	0	0
Trip Distribution IN			15%									
Trip Distribution OUT										15%		
Hospital Trips	0	0	22	0	0	0	0	0	0	41	0	0
Total Phase 1 Project Trips	0	0	18	0	0	0	0	0	0	30	0	0
2032 Buildout Total	110	915	806	154	961	17	9	38	75	744	50	117
Phase 2 Project Trips												
Trip Distribution IN			15%									
Trip Distribution OUT										15%		
Medical Office Trips	0	0	53	0	0	0	0	0	0	158	0	0
Trip Distribution IN			15%									
Trip Distribution OUT										15%		
Hospital Trips	0	0	31	0	0	0	0	0	0	58	0	0
Total Phase 2 Project Trips	0	0	84	0	0	0	0	0	0	216	0	0
2042 Buildout Total	116	961	912	162	1,010	18	10	40	79	966	52	123

INTERSECTION VOLUME DEVELOPMENT

Intersection #2: Sargent Road @ Findley Road / Cambridge Club Approach

AM PEAK HOUR

Description	Findley Road Northbound			Cambridge Club Approach Southbound			Sargent Road Eastbound			Sargent Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	86	25	95	24	43	31	7	407	88	68	408	15
Pedestrians		1			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		1	1		0
Heavy Vehicles	0	1	5	0	1	1	1	3	1	0	7	0
Heavy Vehicle %	2%	4%	5%	2%	2%	3%	14%	2%	2%	2%	2%	2%
Peak Hour Factor		0.79			0.79			0.79			0.79	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**100**	**29**	**110**	**28**	**50**	**36**	**8**	**472**	**102**	**79**	**473**	**17**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	116	34	128	32	58	42	9	548	118	92	549	20
2042 Background Traffic	122	35	134	34	61	44	10	576	124	96	577	21
Phase 1 Project Trips												
Trip Distribution IN								10%	10%			
Trip Distribution OUT	10%										10%	
Medical Office Trips	-2	0	0	0	0	0	0	-7	-7	0	-2	0
Trip Distribution IN								10%	10%			
Trip Distribution OUT	10%										10%	
Hospital Trips	14	0	0	0	0	0	0	29	29	0	14	0
Total Phase 1 Project Trips	12	0	0	0	0	0	0	22	22	0	12	0
2032 Buildout Total	128	34	128	32	58	42	9	570	140	92	561	20
Phase 2 Project Trips												
Trip Distribution IN								10%	10%			
Trip Distribution OUT	10%										10%	
Medical Office Trips	24	0	0	0	0	0	0	101	101	0	24	0
Trip Distribution IN								10%	10%			
Trip Distribution OUT	10%										10%	
Hospital Trips	20	0	0	0	0	0	0	40	40	0	20	0
Total Phase 2 Project Trips	44	0	0	0	0	0	0	141	141	0	44	0
2042 Buildout Total	166	35	134	34	61	44	10	717	265	96	621	21

PM PEAK HOUR

Description	Findley Road Northbound			Cambridge Club Approach Southbound			Sargent Road Eastbound			Sargent Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	47	27	25	27	9	21	18	556	49	21	554	31
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	0	0	0	0	4	1	0	8	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.98			0.98			0.98			0.98	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**49**	**28**	**26**	**28**	**9**	**22**	**19**	**584**	**51**	**22**	**582**	**33**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	57	32	30	32	10	26	22	678	59	26	675	38
2042 Background Traffic	60	34	32	34	11	27	23	712	62	27	710	40
Phase 1 Project Trips												
Trip Distribution IN								10%	10%			
Trip Distribution OUT	10%										10%	
Medical Office Trips	-7	0	0	0	0	0	0	-2	-2	0	-7	0
Trip Distribution IN								10%	10%			
Trip Distribution OUT	10%										10%	
Hospital Trips	28	0	0	0	0	0	0	15	15	0	28	0
Total Phase 1 Project Trips	21	0	0	0	0	0	0	13	13	0	21	0
2032 Buildout Total	78	32	30	32	10	26	22	691	72	26	696	38
Phase 2 Project Trips												
Trip Distribution IN								10%	10%			
Trip Distribution OUT	10%										10%	
Medical Office Trips	105	0	0	0	0	0	0	35	35	0	105	0
Trip Distribution IN								10%	10%			
Trip Distribution OUT	10%										10%	
Hospital Trips	39	0	0	0	0	0	0	21	21	0	39	0
Total Phase 2 Project Trips	144	0	0	0	0	0	0	56	56	0	144	0
2042 Buildout Total	204	34	32	34	11	27	23	768	118	27	854	40

INTERSECTION VOLUME DEVELOPMENT

Intersection #3: McGinnis Ferry Road @ Sargent Road
AM PEAK HOUR

Description	Sargent Road Northbound Left	Through	Right	Southbound Left	Through	Right	McGinnis Ferry Road Eastbound Left	Through	Right	McGinnis Ferry Road Westbound 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
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	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**71**	**0**	**608**	**0**	**0**	**0**	**0**	**880**	**44**	**493**	**781**	**0**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	82	0	706	0	0	0	0	1,021	51	572	906	0
2042 Background Traffic	87	0	742	0	0	0	0	1,074	54	601	953	0
Phase 1 Project Trips												
Trip Distribution IN			10%					10%				
Trip Distribution OUT										10%	10%	
Medical Office Trips	0	0	-7	0	0	0	0	-7	0	-2	-2	0
Trip Distribution IN			10%					10%				
Trip Distribution OUT										10%	10%	
Hospital Trips	0	0	29	0	0	0	0	29	0	14	14	0
Total Phase 1 Project Trips	0	0	22	0	0	0	0	22	0	12	12	0
2032 Buildout Total	82	0	728	0	0	0	0	1,043	51	584	918	0
Phase 2 Project Trips												
Trip Distribution IN			10%					10%				
Trip Distribution OUT										10%	10%	
Medical Office Trips	0	0	101	0	0	0	0	101	0	24	24	0
Trip Distribution IN			10%					10%				
Trip Distribution OUT										10%	10%	
Hospital Trips	0	0	40	0	0	0	0	40	0	20	20	0
Total Phase 2 Project Trips	0	0	141	0	0	0	0	141	0	44	44	0
2042 Buildout Total	87	0	883	0	0	0	0	1,215	54	645	997	0

PM PEAK HOUR

Description	Sargent Road Northbound Left	Through	Right	Southbound Left	Through	Right	McGinnis Ferry Road Eastbound Left	Through	Right	McGinnis Ferry Road Westbound 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
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	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**29**	**0**	**615**	**0**	**0**	**0**	**0**	**743**	**27**	**648**	**807**	**0**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	34	0	714	0	0	0	0	862	31	752	937	0
2042 Background Traffic	35	0	750	0	0	0	0	906	33	790	984	0
Phase 1 Project Trips												
Trip Distribution IN			10%					10%				
Trip Distribution OUT										10%	10%	
Medical Office Trips	0	0	-2	0	0	0	0	-2	0	-7	-7	0
Trip Distribution IN			10%					10%				
Trip Distribution OUT										10%	10%	
Hospital Trips	0	0	15	0	0	0	0	15	0	28	28	0
Total Phase 1 Project Trips	0	0	13	0	0	0	0	13	0	21	21	0
2032 Buildout Total	34	0	727	0	0	0	0	875	31	773	958	0
Phase 2 Project Trips												
Trip Distribution IN			10%					10%				
Trip Distribution OUT										10%	10%	
Medical Office Trips	0	0	35	0	0	0	0	35	0	105	105	0
Trip Distribution IN			10%					10%				
Trip Distribution OUT										10%	10%	
Hospital Trips	0	0	21	0	0	0	0	21	0	39	39	0
Total Phase 2 Project Trips	0	0	56	0	0	0	0	56	0	144	144	0
2042 Buildout Total	35	0	806	0	0	0	0	962	33	934	1,128	0

INTERSECTION VOLUME DEVELOPMENT

Intersection #4: McGinnis Ferry Road @ Hospital Parkway
AM PEAK HOUR

Description	Hospital Parkway Northbound			Hospital Parkway Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
	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	1		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	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**104**	**0**	**39**	**0**	**0**	**1**	**2**	**1104**	**392**	**137**	**1167**	**8**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	121	0	45	0	0	1	2	1,281	455	159	1,354	9
2042 Background Traffic	127	0	48	0	0	1	2	1,347	478	167	1,424	10
Phase 1 Project Trips												
Trip Distribution IN									20%	15%		
Trip Distribution OUT	20%		15%									
Medical Office Trips	-3	0	-2	0	0	0	0	0	-14	-10	0	0
Trip Distribution IN									20%	15%		
Trip Distribution OUT	20%		15%									
Hospital Trips	28	0	21	0	0	0	0	0	58	43	0	0
Total Phase 1 Project Trips	25	0	19	0	0	0	0	0	44	33	0	0
2032 Buildout Total	146	0	64	0	0	1	2	1,281	499	192	1,354	9
Phase 2 Project Trips												
Trip Distribution IN									20%	15%		
Trip Distribution OUT	20%		15%									
Medical Office Trips	47	0	36	0	0	0	0	0	202	152	0	0
Trip Distribution IN									20%	15%		
Trip Distribution OUT	20%		15%									
Hospital Trips	39	0	29	0	0	0	0	0	79	59	0	0
Total Phase 2 Project Trips	86	0	65	0	0	0	0	0	281	211	0	0
2042 Buildout Total	213	0	113	0	0	1	2	1,347	759	378	1,424	10

PM PEAK HOUR

Description	Hospital Parkway Northbound			Hospital Parkway Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
	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
Heavy Vehicles	0	0	0	0	0	0	0	0	10	3	21	1
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	5%	10%	2%	14%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**222**	**1**	**82**	**4**	**1**	**2**	**15**	**1119**	**224**	**30**	**1230**	**7**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	258	1	95	5	1	2	17	1,299	260	35	1,427	8
2042 Background Traffic	271	1	100	5	1	2	18	1,365	273	37	1,500	9
Phase 1 Project Trips												
Trip Distribution IN									20%	15%		
Trip Distribution OUT	20%		15%									
Medical Office Trips	-14	0	-11	0	0	0	0	0	-5	-4	0	0
Trip Distribution IN									20%	15%		
Trip Distribution OUT	20%		15%									
Hospital Trips	55	0	41	0	0	0	0	0	30	22	0	0
Total Phase 1 Project Trips	41	0	30	0	0	0	0	0	25	18	0	0
2032 Buildout Total	299	1	125	5	1	2	17	1,299	285	53	1,427	8
Phase 2 Project Trips												
Trip Distribution IN									20%	15%		
Trip Distribution OUT	20%		15%									
Medical Office Trips	210	0	158	0	0	0	0	0	70	53	0	0
Trip Distribution IN									20%	15%		
Trip Distribution OUT	20%		15%									
Hospital Trips	77	0	58	0	0	0	0	0	42	31	0	0
Total Phase 2 Project Trips	287	0	216	0	0	0	0	0	112	84	0	0
2042 Buildout Total	558	1	316	5	1	2	18	1,365	385	121	1,500	9

INTERSECTION VOLUME DEVELOPMENT

Intersection #5: Medlock Bridge Road (SR 141) @ McGinnis Ferry Road

AM PEAK HOUR

	Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			McGinnis Ferry Road			McGinnis Ferry Road		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	191	814	75	182	1,141	30	81	627	119	196	952	94
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	9	27	7	7	30	0	3	20	5	6	22	8
Heavy Vehicle %	5%	3%	9%	4%	3%	2%	4%	3%	4%	3%	2%	9%
Peak Hour Factor		0.98			0.98			0.98			0.98	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**222**	**944**	**87**	**211**	**1324**	**35**	**94**	**727**	**138**	**227**	**1104**	**109**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	258	1,096	101	245	1,537	41	109	844	160	263	1,281	126
2042 Background Traffic	271	1,152	106	257	1,615	43	115	887	168	277	1,347	133
Phase 1 Project Trips												
Trip Distribution IN					10%	5%				5%	5%	
Trip Distribution OUT		5%	5%				5%	5%				
Medical Office Trips	0	-1	-1	0	-7	-3	-1	-1	0	-3	-3	0
Trip Distribution IN					10%	5%				5%	5%	
Trip Distribution OUT		5%	5%				5%	5%				
Hospital Trips	0	7	7	0	29	14	7	7	0	14	14	0
Total Phase 1 Project Trips	0	6	6	0	22	11	6	6	0	11	11	0
2032 Buildout Total	258	1,102	107	245	1,559	52	115	850	160	274	1,292	126
Phase 2 Project Trips												
Trip Distribution IN					10%	5%				5%	5%	
Trip Distribution OUT		5%	5%				5%	5%				
Medical Office Trips	0	12	12	0	101	51	12	12	0	51	51	0
Trip Distribution IN					10%	5%				5%	5%	
Trip Distribution OUT		5%	5%				5%	5%				
Hospital Trips	0	10	10	0	40	20	10	10	0	20	20	0
Total Phase 2 Project Trips	0	22	22	0	141	71	22	22	0	71	71	0
2042 Buildout Total	271	1,174	128	257	1,756	114	137	909	168	348	1,418	133

PM PEAK HOUR

	Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			McGinnis Ferry Road			McGinnis Ferry Road		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	167	1,191	134	254	1,136	61	138	844	101	213	756	102
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	9	3	10	34	0	1	22	0	1	17	1
Heavy Vehicle %	2%	2%	2%	4%	3%	2%	2%	3%	2%	2%	2%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**175**	**1251**	**141**	**267**	**1193**	**64**	**145**	**886**	**106**	**224**	**794**	**107**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	203	1,452	164	310	1,385	74	168	1,028	123	260	921	124
2042 Background Traffic	213	1,526	172	326	1,455	78	177	1,081	129	273	969	131
Phase 1 Project Trips												
Trip Distribution IN					10%	5%				5%	5%	
Trip Distribution OUT		5%	5%				5%	5%				
Medical Office Trips	0	-4	-4	0	-2	-1	-4	-4	0	-1	-1	0
Trip Distribution IN					10%	5%				5%	5%	
Trip Distribution OUT		5%	5%				5%	5%				
Hospital Trips	0	14	14	0	15	7	14	14	0	7	7	0
Total Phase 1 Project Trips	0	10	10	0	13	6	10	10	0	6	6	0
2032 Buildout Total	203	1,462	174	310	1,398	80	178	1,038	123	266	927	124
Phase 2 Project Trips												
Trip Distribution IN					10%	5%				5%	5%	
Trip Distribution OUT		5%	5%				5%	5%				
Medical Office Trips	0	53	53	0	35	18	53	53	0	18	18	0
Trip Distribution IN					10%	5%				5%	5%	
Trip Distribution OUT		5%	5%				5%	5%				
Hospital Trips	0	19	19	0	21	10	19	19	0	10	10	0
Total Phase 2 Project Trips	0	72	72	0	56	28	72	72	0	28	28	0
2042 Buildout Total	213	1,598	244	326	1,511	106	249	1,153	129	301	997	131

INTERSECTION VOLUME DEVELOPMENT

Intersection #6: McGinnis Ferry Road @ Johns Creek Parkway
AM PEAK HOUR

Description	Johns Creek Parkway Northbound			Johns Creek Parkway Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	26	60	19	204	97	26	30	780	60	70	1,213	525
Pedestrians		0			0			1			0	
Conflicting Pedestrians	1		0	0		1	0		0	0		0
Heavy Vehicles	0	0	0	7	1	0	1	35	0	0	32	14
Heavy Vehicle %	2%	2%	2%	3%	2%	2%	3%	4%	2%	2%	3%	3%
Peak Hour Factor		0.96			0.96			0.96			0.96	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**30**	**70**	**22**	**237**	**113**	**30**	**35**	**905**	**70**	**81**	**1407**	**609**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	35	81	26	275	131	35	41	1,050	81	94	1,633	707
2042 Background Traffic	37	85	27	289	138	37	43	1,104	85	99	1,716	743
Phase 1 Project Trips												
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Medical Office Trips	0	0	-1	0	0	0	0	-2	0	-3	-7	0
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Hospital Trips	0	0	7	0	0	0	0	14	0	14	29	0
Total Phase 1 Project Trips	0	0	6	0	0	0	0	12	0	11	22	0
2032 Buildout Total	35	81	32	275	131	35	41	1,062	81	105	1,655	707
Phase 2 Project Trips												
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Medical Office Trips	0	0	12	0	0	0	0	24	0	51	101	0
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Hospital Trips	0	0	10	0	0	0	0	20	0	20	40	0
Total Phase 2 Project Trips	0	0	22	0	0	0	0	44	0	71	141	0
2042 Buildout Total	37	85	49	289	138	37	43	1,148	85	170	1,857	743

PM PEAK HOUR

Description	Johns Creek Parkway Northbound			Johns Creek Parkway Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	52	115	115	518	109	31	15	1,183	40	41	960	365
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	2	3	2	2	0	31	1	0	16	3
Heavy Vehicle %	2%	2%	2%	2%	2%	6%	2%	3%	3%	2%	2%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**55**	**121**	**121**	**544**	**114**	**33**	**16**	**1242**	**42**	**43**	**1008**	**383**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	64	140	140	631	132	38	19	1,441	49	50	1,170	444
2042 Background Traffic	67	148	148	664	139	40	20	1,515	51	52	1,230	467
Phase 1 Project Trips												
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Medical Office Trips	0	0	-4	0	0	0	0	-7	0	-1	-2	0
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Hospital Trips	0	0	14	0	0	0	0	28	0	7	15	0
Total Phase 1 Project Trips	0	0	10	0	0	0	0	21	0	6	13	0
2032 Buildout Total	64	140	150	631	132	38	19	1,462	49	56	1,183	444
Phase 2 Project Trips												
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Medical Office Trips	0	0	53	0	0	0	0	105	0	18	35	0
Trip Distribution IN										5%	10%	
Trip Distribution OUT			5%					10%				
Hospital Trips	0	0	19	0	0	0	0	39	0	10	21	0
Total Phase 2 Project Trips	0	0	72	0	0	0	0	144	0	28	56	0
2042 Buildout Total	67	148	220	664	139	40	20	1,659	51	80	1,286	467

INTERSECTION VOLUME DEVELOPMENT

Intersection #7: McGinnis Ferry Road @ Lakefield Drive

AM PEAK HOUR

Description	Lakefield Drive Northbound			Lakefield Drive Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	13	19	53	3	1	15	46	898	24	152	1,785	34
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	2	4	1	0	3	1	40	1	0	44	1
Heavy Vehicle %	2%	11%	8%	33%	2%	20%	2%	4%	4%	2%	2%	3%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**15**	**22**	**61**	**3**	**1**	**17**	**53**	**1042**	**28**	**176**	**2071**	**39**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	17	26	71	3	1	20	62	1,209	32	204	2,403	45
2042 Background Traffic	18	27	74	4	1	21	65	1,271	34	215	2,526	48
Phase 1 Project Trips												
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Medical Office Trips	0	0	0	0	0	0	0	-2	0	0	-10	0
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Hospital Trips	0	0	0	0	0	0	0	21	0	0	43	0
Total Phase 1 Project Trips	0	0	0	0	0	0	0	19	0	0	33	0
2032 Buildout Total	17	26	71	3	1	20	62	1,228	32	204	2,436	45
Phase 2 Project Trips												
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Medical Office Trips	0	0	0	0	0	0	0	36	0	0	152	0
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Hospital Trips	0	0	0	0	0	0	0	29	0	0	59	0
Total Phase 2 Project Trips	0	0	0	0	0	0	0	65	0	0	211	0
2042 Buildout Total	18	27	74	4	1	21	65	1,336	34	215	2,737	48

PM PEAK HOUR

Description	Lakefield Drive Northbound			Lakefield Drive Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	41	10	204	44	19	77	37	1,719	33	128	1,187	12
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	5	1	1	0	5	32	0	0	20	0
Heavy Vehicle %	2%	2%	2%	2%	5%	2%	14%	2%	2%	2%	2%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**43**	**11**	**214**	**46**	**20**	**81**	**39**	**1805**	**35**	**134**	**1246**	**13**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	50	13	248	53	23	94	45	2,095	41	156	1,446	15
2042 Background Traffic	52	13	261	56	24	99	48	2,202	43	163	1,520	16
Phase 1 Project Trips												
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Medical Office Trips	0	0	0	0	0	0	0	-11	0	0	-4	0
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Hospital Trips	0	0	0	0	0	0	0	41	0	0	22	0
Total Phase 1 Project Trips	0	0	0	0	0	0	0	30	0	0	18	0
2032 Buildout Total	50	13	248	53	23	94	45	2,125	41	156	1,464	15
Phase 2 Project Trips												
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Medical Office Trips	0	0	0	0	0	0	0	158	0	0	53	0
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Hospital Trips	0	0	0	0	0	0	0	58	0	0	31	0
Total Phase 2 Project Trips	0	0	0	0	0	0	0	216	0	0	84	0
2042 Buildout Total	52	13	261	56	24	99	48	2,418	43	163	1,604	16

INTERSECTION VOLUME DEVELOPMENT

Intersection #8: McGinnis Ferry Road @ Bell Road / Old Atlanta Road

AM PEAK HOUR

Description	Bell Road Northbound			Old Atlanta Road Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	118	51	175	471	182	220	150	894	95	172	1,748	261
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	1	2	5	5	1	8	5	28	8	3	36	11
Heavy Vehicle %	2%	4%	3%	2%	2%	4%	3%	3%	8%	2%	2%	4%
Peak Hour Factor		0.98			0.98			0.98			0.98	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**137**	**59**	**203**	**546**	**211**	**255**	**174**	**1037**	**110**	**200**	**2028**	**303**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	159	68	236	634	245	296	202	1,203	128	232	2,354	352
2042 Background Traffic	167	72	248	666	257	311	212	1,265	134	244	2,474	370
Phase 1 Project Trips												
Trip Distribution IN						5%					10%	
Trip Distribution OUT							5%	10%				
Medical Office Trips	0	0	0	0	0	-3	-1	-2	0	0	-7	0
Trip Distribution IN						5%					10%	
Trip Distribution OUT							5%	10%				
Hospital Trips	0	0	0	0	0	14	7	14	0	0	29	0
Total Phase 1 Project Trips	0	0	0	0	0	11	6	12	0	0	22	0
2032 Buildout Total	159	68	236	634	245	307	208	1,215	128	232	2,376	352
Phase 2 Project Trips												
Trip Distribution IN						5%					10%	
Trip Distribution OUT							5%	10%				
Medical Office Trips	0	0	0	0	0	51	12	24	0	0	101	0
Trip Distribution IN						5%					10%	
Trip Distribution OUT							5%	10%				
Hospital Trips	0	0	0	0	0	20	10	20	0	0	40	0
Total Phase 2 Project Trips	0	0	0	0	0	71	22	44	0	0	141	0
2042 Buildout Total	167	72	248	666	257	382	234	1,309	134	244	2,615	370

PM PEAK HOUR

Description	Bell Road Northbound			Old Atlanta Road Southbound			McGinnis Ferry Road Eastbound			McGinnis Ferry Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	35	162	194	492	114	143	159	1,756	26	138	1,131	561
Pedestrians		0			1			0			1	
Conflicting Pedestrians	0		1	1		0	1		0	0		1
Heavy Vehicles	0	0	1	8	4	2	2	30	0	1	15	3
Heavy Vehicle %	2%	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**37**	**170**	**204**	**517**	**120**	**150**	**167**	**1844**	**27**	**145**	**1188**	**589**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	43	197	237	600	139	174	194	2,140	31	168	1,379	684
2042 Background Traffic	45	207	249	631	146	183	204	2,249	33	177	1,449	719
Phase 1 Project Trips												
Trip Distribution IN						5%					10%	
Trip Distribution OUT							5%	10%				
Medical Office Trips	0	0	0	0	0	-1	-4	-7	0	0	-2	0
Trip Distribution IN						5%					10%	
Trip Distribution OUT							5%	10%				
Hospital Trips	0	0	0	0	0	7	14	28	0	0	15	0
Total Phase 1 Project Trips	0	0	0	0	0	6	10	21	0	0	13	0
2032 Buildout Total	43	197	237	600	139	180	204	2,161	31	168	1,392	684
Phase 2 Project Trips												
Trip Distribution IN						5%					10%	
Trip Distribution OUT							5%	10%				
Medical Office Trips	0	0	0	0	0	18	53	105	0	0	35	0
Trip Distribution IN						5%					10%	
Trip Distribution OUT							5%	10%				
Hospital Trips	0	0	0	0	0	10	19	39	0	0	21	0
Total Phase 2 Project Trips	0	0	0	0	0	28	72	144	0	0	56	0
2042 Buildout Total	45	207	249	631	146	211	276	2,393	33	177	1,505	719

INTERSECTION VOLUME DEVELOPMENT

Intersection #9: Medlock Bridge Road (SR 141) @ Johns Creek Parkway

AM PEAK HOUR

Description	Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	74	803	81	293	1,186	147	69	61	32	39	81	318
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	1	21	3	7	32	3	5	0	1	1	1	10
Heavy Vehicle %	2%	3%	4%	2%	3%	2%	7%	2%	3%	3%	2%	3%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**86**	**931**	**94**	**340**	**1376**	**171**	**80**	**71**	**37**	**45**	**94**	**369**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	100	1,080	109	395	1,597	198	93	82	43	52	109	428
2042 Background Traffic	105	1,136	115	415	1,679	209	98	87	45	55	115	450
Phase 1 Project Trips												
Trip Distribution IN					15%							
Trip Distribution OUT		15%										
Medical Office Trips	0	-2	0	0	-10	0	0	0	0	0	0	0
Trip Distribution IN					15%							
Trip Distribution OUT		15%										
Hospital Trips	0	21	0	0	43	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	19	0	0	33	0	0	0	0	0	0	0
2032 Buildout Total	100	1,099	109	395	1,630	198	93	82	43	52	109	428
Phase 2 Project Trips												
Trip Distribution IN					15%							
Trip Distribution OUT		15%										
Medical Office Trips	0	36	0	0	152	0	0	0	0	0	0	0
Trip Distribution IN					15%							
Trip Distribution OUT		15%										
Hospital Trips	0	29	0	0	59	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	65	0	0	211	0	0	0	0	0	0	0
2042 Buildout Total	105	1,201	115	415	1,890	209	98	87	45	55	115	450

PM PEAK HOUR

Description	Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	52	1,305	50	290	1,141	110	241	185	82	122	127	356
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	14	1	2	34	0	2	1	4	1	1	3
Heavy Vehicle %	2%	2%	2%	2%	3%	2%	2%	2%	5%	2%	2%	2%
Peak Hour Factor		0.96			0.96			0.96			0.96	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**55**	**1370**	**53**	**305**	**1198**	**116**	**253**	**194**	**86**	**128**	**133**	**374**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	64	1,590	62	354	1,390	135	294	225	100	149	154	434
2042 Background Traffic	67	1,671	65	372	1,461	142	309	237	105	156	162	456
Phase 1 Project Trips												
Trip Distribution IN					15%							
Trip Distribution OUT		15%										
Medical Office Trips	0	-11	0	0	-4	0	0	0	0	0	0	0
Trip Distribution IN					15%							
Trip Distribution OUT		15%										
Hospital Trips	0	41	0	0	22	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	30	0	0	18	0	0	0	0	0	0	0
2032 Buildout Total	64	1,620	62	354	1,408	135	294	225	100	149	154	434
Phase 2 Project Trips												
Trip Distribution IN					15%							
Trip Distribution OUT		15%										
Medical Office Trips	0	158	0	0	53	0	0	0	0	0	0	0
Trip Distribution IN					15%							
Trip Distribution OUT		15%										
Hospital Trips	0	58	0	0	31	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	216	0	0	84	0	0	0	0	0	0	0
2042 Buildout Total	67	1,887	65	372	1,545	142	309	237	105	156	162	456

INTERSECTION VOLUME DEVELOPMENT

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

AM PEAK HOUR

	Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Hospital Parkway			Johns Crossing		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	190	1,154	82	105	1,226	65	38	38	206	41	19	9
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	1	31	0	1	44	0	0	2	3	0	2	0
Heavy Vehicle %	2%	3%	2%	2%	4%	2%	2%	5%	2%	2%	11%	2%
Peak Hour Factor		0.96			0.96			0.96			0.96	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**220**	**1339**	**95**	**122**	**1422**	**75**	**44**	**44**	**239**	**48**	**22**	**10**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	255	1,554	110	142	1,650	87	51	51	277	56	26	12
2042 Background Traffic	268	1,633	116	149	1,735	91	54	54	292	59	27	12
Phase 1 Project Trips												
Trip Distribution IN	15%					10%					5%	
Trip Distribution OUT							10%	5%	15%			
Medical Office Trips	-10	0	0	0	0	-7	-2	-1	-2	0	-3	0
Trip Distribution IN	15%					10%					5%	
Trip Distribution OUT							10%	5%	15%			
Hospital Trips	43	0	0	0	0	29	14	7	21	0	14	0
Total Phase 1 Project Trips	33	0	0	0	0	22	12	6	19	0	11	0
2032 Buildout Total	288	1,554	110	142	1,650	109	63	57	296	56	37	12
Phase 2 Project Trips												
Trip Distribution IN	15%					10%					5%	
Trip Distribution OUT							10%	5%	15%			
Medical Office Trips	152	0	0	0	0	101	24	12	36	0	51	0
Trip Distribution IN	15%					10%					5%	
Trip Distribution OUT							10%	5%	15%			
Hospital Trips	59	0	0	0	0	40	20	10	29	0	20	0
Total Phase 2 Project Trips	211	0	0	0	0	141	44	22	65	0	71	0
2042 Buildout Total	479	1,633	116	149	1,735	232	98	76	357	59	98	12

PM PEAK HOUR

	Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Hospital Parkway			Johns Crossing		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	220	1,370	20	58	1,309	26	108	72	226	84	67	53
Pedestrians		0			0			1			0	
Conflicting Pedestrians	1		0	0		1	0		0	0		0
Heavy Vehicles	0	17	2	0	32	0	1	4	1	0	3	0
Heavy Vehicle %	2%	2%	10%	2%	2%	2%	2%	6%	2%	2%	4%	2%
Peak Hour Factor		0.96			0.96			0.96			0.96	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**231**	**1439**	**21**	**61**	**1374**	**27**	**113**	**76**	**237**	**88**	**70**	**56**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	268	1,670	24	71	1,595	31	131	88	275	102	81	65
2042 Background Traffic	282	1,755	26	74	1,676	33	138	93	289	107	85	68
Phase 1 Project Trips												
Trip Distribution IN	15%					10%					5%	
Trip Distribution OUT							10%	5%	15%			
Medical Office Trips	-4	0	0	0	0	-2	-7	-4	-11	0	-1	0
Trip Distribution IN	15%					10%					5%	
Trip Distribution OUT							10%	5%	15%			
Hospital Trips	22	0	0	0	0	15	28	14	41	0	7	0
Total Phase 1 Project Trips	18	0	0	0	0	13	21	10	30	0	6	0
2032 Buildout Total	286	1,670	24	71	1,595	44	152	98	305	102	87	65
Phase 2 Project Trips												
Trip Distribution IN	15%					10%					5%	
Trip Distribution OUT							10%	5%	15%			
Medical Office Trips	53	0	0	0	0	35	105	53	158	0	18	0
Trip Distribution IN	15%					10%					5%	
Trip Distribution OUT							10%	5%	15%			
Hospital Trips	31	0	0	0	0	21	39	19	58	0	10	0
Total Phase 2 Project Trips	84	0	0	0	0	56	144	72	216	0	28	0
2042 Buildout Total	366	1,755	26	74	1,676	89	282	165	505	107	113	68

INTERSECTION VOLUME DEVELOPMENT

Intersection #11: Medlock Bridge Road (SR 141) @ Findley Road / Private Driveway

AM PEAK HOUR

Description	Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Findley Road Eastbound			Private Driveway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	144	1,282	6	1	1,401	29	4	0	106	3	0	3
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	4	49	0	0	36	0	0	0	3	0	0	0
Heavy Vehicle %	3%	4%	2%	2%	3%	2%	2%	0%	3%	2%	0%	2%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**167**	**1487**	**7**	**1**	**1625**	**34**	**5**	**0**	**123**	**3**	**0**	**3**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment							-6		6	-3		3
Other Proposed Developments												
2032 Background Traffic	194	1,726	8	1	1,886	39	0	0	149	0	0	7
2042 Background Traffic	204	1,814	9	1	1,982	41	0	0	156	0	0	7
Phase 1 Project Trips												
Trip Distribution IN	20%	15%										
Trip Distribution OUT					15%				20%			
Medical Office Trips	-14	-10	0	0	-2	0	0	0	-3	0	0	0
Trip Distribution IN	20%	15%										
Trip Distribution OUT					15%				20%			
Hospital Trips	58	43	0	0	21	0	0	0	28	0	0	0
Total Phase 1 Project Trips	44	33	0	0	19	0	0	0	25	0	0	0
2032 Buildout Total	238	1,759	8	1	1,905	39	0	0	174	0	0	7
Phase 2 Project Trips												
Trip Distribution IN	20%	15%										
Trip Distribution OUT					15%				20%			
Medical Office Trips	202	152	0	0	36	0	0	0	47	0	0	0
Trip Distribution IN	20%	15%										
Trip Distribution OUT					15%				20%			
Hospital Trips	79	59	0	0	29	0	0	0	39	0	0	0
Total Phase 2 Project Trips	281	211	0	0	65	0	0	0	86	0	0	0
2042 Buildout Total	485	2,025	9	1	2,047	41	0	0	242	0	0	7

PM PEAK HOUR

Description	Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Findley Road Eastbound			Private Driveway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	83	1,547	8	12	1,543	20	2	0	138	1	0	7
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	1	22	0	0	27	0	0	0	4	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	0%	3%	2%	0%	2%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**87**	**1624**	**8**	**13**	**1620**	**21**	**2**	**0**	**145**	**1**	**0**	**7**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment							-2		2	-1		1
Other Proposed Developments												
2032 Background Traffic	101	1,885	9	15	1,880	24	0	0	171	0	0	9
2042 Background Traffic	106	1,981	10	16	1,976	26	0	0	179	0	0	10
Phase 1 Project Trips												
Trip Distribution IN	20%	15%										
Trip Distribution OUT					15%				20%			
Medical Office Trips	-5	-4	0	0	-11	0	0	0	-14	0	0	0
Trip Distribution IN	20%	15%										
Trip Distribution OUT					15%				20%			
Hospital Trips	30	22	0	0	41	0	0	0	55	0	0	0
Total Phase 1 Project Trips	25	18	0	0	30	0	0	0	41	0	0	0
2032 Buildout Total	126	1,903	9	15	1,910	24	0	0	212	0	0	9
Phase 2 Project Trips												
Trip Distribution IN	20%	15%										
Trip Distribution OUT					15%				20%			
Medical Office Trips	70	53	0	0	158	0	0	0	210	0	0	0
Trip Distribution IN	20%	15%										
Trip Distribution OUT					15%				20%			
Hospital Trips	42	31	0	0	58	0	0	0	77	0	0	0
Total Phase 2 Project Trips	112	84	0	0	216	0	0	0	287	0	0	0
2042 Buildout Total	218	2,065	10	16	2,192	26	0	0	466	0	0	10

INTERSECTION VOLUME DEVELOPMENT

Intersection #12: Medlock Bridge Road (SR 141) @ Johns Creek Parkway

AM PEAK HOUR

Description	Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	53	1,360	452	48	1,425	23	33	11	47	317	6	17
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	1	49	8	2	44	0	0	1	1	4	0	0
Heavy Vehicle %	2%	4%	2%	4%	3%	2%	2%	9%	2%	2%	2%	2%
Peak Hour Factor		0.93			0.93			0.93			0.93	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**61**	**1578**	**524**	**56**	**1653**	**27**	**38**	**13**	**55**	**368**	**7**	**20**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	71	1,831	608	65	1,918	31	44	15	64	427	8	23
2042 Background Traffic	74	1,925	639	68	2,016	33	46	16	67	449	9	24
Phase 1 Project Trips												
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Medical Office Trips	0	-24	0	0	-6	0	0	0	0	0	0	0
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Hospital Trips	0	101	0	0	50	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	77	0	0	44	0	0	0	0	0	0	0
2032 Buildout Total	71	1,908	608	65	1,962	31	44	15	64	427	8	23
Phase 2 Project Trips												
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Medical Office Trips	0	354	0	0	83	0	0	0	0	0	0	0
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Hospital Trips	0	138	0	0	68	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	492	0	0	151	0	0	0	0	0	0	0
2042 Buildout Total	74	2,417	639	68	2,167	33	46	16	67	449	9	24

PM PEAK HOUR

Description	Medlock Bridge Road (SR 141) Northbound			Medlock Bridge Road (SR 141) Southbound			Johns Creek Parkway Eastbound			Johns Creek Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	83	1,542	406	23	1,562	18	39	20	46	465	11	41
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	15	1	0	27	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.96			0.96			0.96			0.96	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**87**	**1619**	**426**	**24**	**1640**	**19**	**41**	**21**	**48**	**488**	**12**	**43**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	101	1,879	494	28	1,903	22	48	24	56	566	14	50
2042 Background Traffic	106	1,975	520	29	2,001	23	50	26	59	595	15	52
Phase 1 Project Trips												
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Medical Office Trips	0	-8	0	0	-25	0	0	0	0	0	0	0
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Hospital Trips	0	52	0	0	97	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	44	0	0	72	0	0	0	0	0	0	0
2032 Buildout Total	101	1,923	494	28	1,975	22	48	24	56	566	14	50
Phase 2 Project Trips												
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Medical Office Trips	0	123	0	0	368	0	0	0	0	0	0	0
Trip Distribution IN		35%										
Trip Distribution OUT					35%							
Hospital Trips	0	73	0	0	135	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	196	0	0	503	0	0	0	0	0	0	0
2042 Buildout Total	106	2,171	520	29	2,504	23	50	26	59	595	15	52

INTERSECTION VOLUME DEVELOPMENT

Intersection #13: Medlock Bridge Road (SR 141) @ Abbott's Bridge Road (SR 120)

AM PEAK HOUR

	Medlock Bridge Road (SR 14			Medlock Bridge Road (SR 141			Abbott's Bridge Road (SR 120			Abbott's Bridge Road (SR 120		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	69	1,362	19	487	1,335	144	184	198	58	34	230	383
Pedestrians		6			0			2			0	
Conflicting Pedestrians	2		0	0		2	0		6	6		0
Heavy Vehicles	2	36	2	19	23	5	3	9	0	1	12	21
Heavy Vehicle %	3%	3%	11%	4%	2%	3%	2%	5%	2%	3%	5%	5%
Peak Hour Factor		0.90			0.90			0.90			0.90	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**80**	**1580**	**22**	**565**	**1549**	**167**	**213**	**230**	**67**	**39**	**267**	**444**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	93	1,834	26	656	1,798	194	247	267	78	45	310	515
2042 Background Traffic	98	1,927	27	689	1,890	204	260	281	82	48	326	542
Phase 1 Project Trips												
Trip Distribution IN		15%					5%					10%
Trip Distribution OUT				10%	15%	5%						
Medical Office Trips	0	-10	0	-2	-2	-1	-3	0	0	0	0	-7
Trip Distribution IN		15%					5%					10%
Trip Distribution OUT				10%	15%	5%						
Hospital Trips	0	43	0	14	21	7	14	0	0	0	0	29
Total Phase 1 Project Trips	0	33	0	12	19	6	11	0	0	0	0	22
2032 Buildout Total	93	1,867	26	668	1,817	200	258	267	78	45	310	537
Phase 2 Project Trips												
Trip Distribution IN		15%					5%					10%
Trip Distribution OUT				10%	15%	5%						
Medical Office Trips	0	152	0	24	36	12	51	0	0	0	0	101
Trip Distribution IN		15%					5%					10%
Trip Distribution OUT				10%	15%	5%						
Hospital Trips	0	59	0	20	29	10	20	0	0	0	0	40
Total Phase 2 Project Trips	0	211	0	44	65	22	71	0	0	0	0	141
2042 Buildout Total	98	2,138	27	733	1,955	226	331	281	82	48	326	683

PM PEAK HOUR

	Medlock Bridge Road (SR 14			Medlock Bridge Road (SR 141			Abbott's Bridge Road (SR 120			Abbott's Bridge Road (SR 120		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	75	1,437	41	509	1,373	254	272	332	49	66	260	385
Pedestrians		3			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		3	3		0
Heavy Vehicles	1	11	0	7	20	0	1	6	1	1	2	5
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**79**	**1509**	**43**	**534**	**1442**	**267**	**286**	**349**	**51**	**69**	**273**	**404**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	92	1,751	50	620	1,673	310	332	405	59	80	317	469
2042 Background Traffic	96	1,841	52	651	1,759	326	349	426	62	84	333	493
Phase 1 Project Trips												
Trip Distribution IN		15%					5%					10%
Trip Distribution OUT				10%	15%	5%						
Medical Office Trips	0	-4	0	-7	-11	-4	-1	0	0	0	0	-2
Trip Distribution IN		15%					5%					10%
Trip Distribution OUT				10%	15%	5%						
Hospital Trips	0	22	0	28	41	14	7	0	0	0	0	15
Total Phase 1 Project Trips	0	18	0	21	30	10	6	0	0	0	0	13
2032 Buildout Total	92	1,769	50	641	1,703	320	338	405	59	80	317	482
Phase 2 Project Trips												
Trip Distribution IN		15%					5%					10%
Trip Distribution OUT				10%	15%	5%						
Medical Office Trips	0	53	0	105	158	53	18	0	0	0	0	35
Trip Distribution IN		15%					5%					10%
Trip Distribution OUT				10%	15%	5%						
Hospital Trips	0	31	0	39	58	19	10	0	0	0	0	21
Total Phase 2 Project Trips	0	84	0	144	216	72	28	0	0	0	0	56
2042 Buildout Total	96	1,925	52	795	1,975	398	377	426	62	84	333	549

INTERSECTION VOLUME DEVELOPMENT

Intersection #14: Medlock Bridge Road (SR 141) @ Parsons Road

AM PEAK HOUR

	Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Parsons Road			Parsons Road		
	Northbound			Southbound			Eastbound			Westbound		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	171	1,266	69	194	1,278	44	39	168	226	61	123	135
Pedestrians		1			1			1			0	
Conflicting Pedestrians	1		0	0		1	1		1	1		1
Heavy Vehicles	8	53	5	2	27	0	2	4	2	0	7	0
Heavy Vehicle %	5%	4%	7%	2%	2%	2%	5%	2%	2%	2%	6%	2%
Peak Hour Factor		0.91			0.91			0.91			0.91	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**198**	**1469**	**80**	**225**	**1482**	**51**	**45**	**195**	**262**	**71**	**143**	**157**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	230	1,705	93	261	1,720	59	52	226	304	82	166	182
2042 Background Traffic	242	1,792	98	274	1,808	62	55	238	320	87	174	192
Phase 1 Project Trips												
Trip Distribution IN		15%										
Trip Distribution OUT					15%							
Medical Office Trips	0	-10	0	0	-2	0	0	0	0	0	0	0
Trip Distribution IN		15%										
Trip Distribution OUT					15%							
Hospital Trips	0	43	0	0	21	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	33	0	0	19	0	0	0	0	0	0	0
2032 Buildout Total	230	1,738	93	261	1,739	59	52	226	304	82	166	182
Phase 2 Project Trips												
Trip Distribution IN		15%										
Trip Distribution OUT					15%							
Medical Office Trips	0	152	0	0	36	0	0	0	0	0	0	0
Trip Distribution IN		15%										
Trip Distribution OUT					15%							
Hospital Trips	0	59	0	0	29	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	211	0	0	65	0	0	0	0	0	0	0
2042 Buildout Total	242	2,003	98	274	1,873	62	55	238	320	87	174	192

PM PEAK HOUR

	Medlock Bridge Road (SR 141)			Medlock Bridge Road (SR 141)			Parsons Road			Parsons Road		
	Northbound			Southbound			Eastbound			Westbound		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	215	1,395	21	68	1,321	59	73	146	255	36	79	85
Pedestrians		0			4			2			0	
Conflicting Pedestrians	2		0	0		2	4		0	0		4
Heavy Vehicles	3	15	2	0	20	0	1	7	2	0	4	0
Heavy Vehicle %	2%	2%	10%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**226**	**1465**	**22**	**71**	**1387**	**62**	**77**	**153**	**268**	**38**	**83**	**89**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	262	1,700	26	82	1,610	72	89	178	311	44	96	103
2042 Background Traffic	276	1,787	27	87	1,692	76	94	187	327	46	101	109
Phase 1 Project Trips												
Trip Distribution IN		15%										
Trip Distribution OUT					15%							
Medical Office Trips	0	-4	0	0	-11	0	0	0	0	0	0	0
Trip Distribution IN		15%										
Trip Distribution OUT					15%							
Hospital Trips	0	22	0	0	41	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	18	0	0	30	0	0	0	0	0	0	0
2032 Buildout Total	262	1,718	26	82	1,640	72	89	178	311	44	96	103
Phase 2 Project Trips												
Trip Distribution IN		15%										
Trip Distribution OUT					15%							
Medical Office Trips	0	53	0	0	158	0	0	0	0	0	0	0
Trip Distribution IN		15%										
Trip Distribution OUT					15%							
Hospital Trips	0	31	0	0	58	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	84	0	0	216	0	0	0	0	0	0	0
2042 Buildout Total	276	1,871	27	87	1,908	76	94	187	327	46	101	109

INTERSECTION VOLUME DEVELOPMENT

Intersection #15: Hospital Parkway @ Site Driveway A

AM PEAK HOUR

Description	Hospital Parkway Northbound			Hospital Parkway Southbound			Site Driveway A Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	2	116	0	0	392	64	8	0	20	0	0	0
Pedestrians		0			0			1			0	
Conflicting Pedestrians	1		0	0		1	0		0	0		0
Heavy Vehicles	2	1	0	0	8	0	1	0	1	0	0	0
Heavy Vehicle %	100%	2%	0%	0%	2%	2%	13%	0%	5%	0%	0%	0%
Peak Hour Factor		0.85			0.85			0.85			0.85	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**2**	**135**	**0**	**0**	**455**	**74**	**9**	**0**	**23**	**0**	**0**	**0**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	2	157	0	0	528	86	10	0	27	0	0	0
2042 Background Traffic	2	165	0	0	555	90	11	0	28	0	0	0
Phase 1 Project Trips												
Trip Distribution IN					25%	10%						
Trip Distribution OUT		35%							5%			
Medical Office Trips	0	-6	0	0	-17	-7	0	0	-1	0	0	0
Trip Distribution IN					25%	10%						
Trip Distribution OUT		35%							5%			
Hospital Trips	0	50	0	0	72	29	0	0	7	0	0	0
Total Phase 1 Project Trips	0	44	0	0	55	22	0	0	6	0	0	0
2032 Buildout Total	2	201	0	0	583	108	10	0	33	0	0	0
Phase 2 Project Trips												
Trip Distribution IN					25%	10%						
Trip Distribution OUT		35%							5%			
Medical Office Trips	0	83	0	0	253	101	0	0	12	0	0	0
Trip Distribution IN					25%	10%						
Trip Distribution OUT		35%							5%			
Hospital Trips	0	68	0	0	99	40	0	0	10	0	0	0
Total Phase 2 Project Trips	0	151	0	0	352	141	0	0	22	0	0	0
2042 Buildout Total	2	316	0	0	907	231	11	0	50	0	0	0

PM PEAK HOUR

Description	Hospital Parkway Northbound			Hospital Parkway Southbound			Site Driveway A Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	284	0	0	225	22	22	0	41	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	2	0	0	5	0	0	0	1	0	0	0
Heavy Vehicle %	0%	2%	0%	0%	2%	2%	2%	0%	2%	0%	0%	0%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**0**	**298**	**0**	**0**	**236**	**23**	**23**	**0**	**43**	**0**	**0**	**0**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	0	346	0	0	274	27	27	0	50	0	0	0
2042 Background Traffic	0	364	0	0	288	28	28	0	52	0	0	0
Phase 1 Project Trips												
Trip Distribution IN					25%	10%						
Trip Distribution OUT		35%							5%			
Medical Office Trips	0	-25	0	0	-6	-2	0	0	-4	0	0	0
Trip Distribution IN					25%	10%						
Trip Distribution OUT		35%							5%			
Hospital Trips	0	97	0	0	37	15	0	0	14	0	0	0
Total Phase 1 Project Trips	0	72	0	0	31	13	0	0	10	0	0	0
2032 Buildout Total	0	418	0	0	305	40	27	0	60	0	0	0
Phase 2 Project Trips												
Trip Distribution IN					25%	10%						
Trip Distribution OUT		35%							5%			
Medical Office Trips	0	368	0	0	88	35	0	0	53	0	0	0
Trip Distribution IN					25%	10%						
Trip Distribution OUT		35%							5%			
Hospital Trips	0	135	0	0	52	21	0	0	19	0	0	0
Total Phase 2 Project Trips	0	503	0	0	140	56	0	0	72	0	0	0
2042 Buildout Total	0	867	0	0	428	84	28	0	124	0	0	0

INTERSECTION VOLUME DEVELOPMENT

Intersection #16: Hospital Parkway @ Site Driveway B / Private Driveway

AM PEAK HOUR

Description	Site Driveway B Northbound			Private Driveway Southbound			Hospital Parkway Eastbound			Hospital Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	39	2	39	12	1	6	59	237	112	73	64	77
Pedestrians		0			0			1			0	
Conflicting Pedestrians	1		0	0		1	0		0	0		0
Heavy Vehicles	2	0	0	2	0	0	1	4	2	2	0	0
Heavy Vehicle %	5%	2%	2%	17%	2%	2%	2%	2%	2%	3%	2%	2%
Peak Hour Factor		0.88			0.88			0.88			0.88	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**45**	**2**	**45**	**14**	**1**	**7**	**68**	**275**	**130**	**85**	**74**	**89**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	52	2	52	16	1	8	79	319	151	99	86	103
2042 Background Traffic	55	2	55	17	1	9	83	335	159	104	90	109
Phase 1 Project Trips												
Trip Distribution IN									25%	30%		
Trip Distribution OUT	35%		30%					5%				
Medical Office Trips	-6	0	-5	0	0	0	0	-1	-17	-21	0	0
Trip Distribution IN									25%	30%		
Trip Distribution OUT	35%		30%					5%				
Hospital Trips	50	0	43	0	0	0	0	7	72	87	0	0
Total Phase 1 Project Trips	44	0	38	0	0	0	0	6	55	66	0	0
2032 Buildout Total	96	2	90	16	1	8	79	325	206	165	86	103
Phase 2 Project Trips												
Trip Distribution IN									25%	30%		
Trip Distribution OUT	35%		30%					5%				
Medical Office Trips	83	0	71	0	0	0	0	12	253	303	0	0
Trip Distribution IN									25%	30%		
Trip Distribution OUT	35%		30%					5%				
Hospital Trips	68	0	59	0	0	0	0	10	99	119	0	0
Total Phase 2 Project Trips	151	0	130	0	0	0	0	22	352	422	0	0
2042 Buildout Total	206	2	185	17	1	9	83	357	511	526	90	109

PM PEAK HOUR

Description	Site Driveway B Northbound			Private Driveway Southbound			Hospital Parkway Eastbound			Hospital Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	105	0	65	50	1	51	24	215	27	14	117	14
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	1	0	0	0	2	0	0	5	1
Heavy Vehicle %	2%	0%	2%	2%	2%	2%	2%	2%	2%	2%	4%	7%
Peak Hour Factor		0.88			0.88			0.88			0.88	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**110**	**0**	**68**	**53**	**1**	**54**	**25**	**226**	**28**	**15**	**123**	**15**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	128	0	79	62	1	63	29	262	32	17	143	17
2042 Background Traffic	134	0	83	65	1	66	30	276	34	18	150	18
Phase 1 Project Trips												
Trip Distribution IN									25%	30%		
Trip Distribution OUT	35%		30%					5%				
Medical Office Trips	-25	0	-21	0	0	0	0	-4	-6	-7	0	0
Trip Distribution IN									25%	30%		
Trip Distribution OUT	35%		30%					5%				
Hospital Trips	97	0	83	0	0	0	0	14	37	45	0	0
Total Phase 1 Project Trips	72	0	62	0	0	0	0	10	31	38	0	0
2032 Buildout Total	200	0	141	62	1	63	29	272	63	55	143	17
Phase 2 Project Trips												
Trip Distribution IN									25%	30%		
Trip Distribution OUT	35%		30%					5%				
Medical Office Trips	368	0	315	0	0	0	0	53	88	105	0	0
Trip Distribution IN									25%	30%		
Trip Distribution OUT	35%		30%					5%				
Hospital Trips	135	0	116	0	0	0	0	19	52	62	0	0
Total Phase 2 Project Trips	503	0	431	0	0	0	0	72	140	167	0	0
2042 Buildout Total	637	0	514	65	1	66	30	348	174	185	150	18

INTERSECTION VOLUME DEVELOPMENT

Intersection #16: Findley Road @ Site Driveway C
AM PEAK HOUR

Description	Northbound			Site Driveway C Southbound			Findley Road Eastbound			Findley Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	10	0	1	3	125	0	0	57	83
Pedestrians		0			0			1			0	
Conflicting Pedestrians	1		0	0		1	0		0	0		0
Heavy Vehicles	0	0	0	0	0	0	0	60	0	0	4	4
Heavy Vehicle %	0%	0%	0%	2%	0%	2%	2%	48%	0%	0%	7%	5%
Peak Hour Factor		0.88			0.88			0.88			0.88	
Adjustment	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Adjusted 2022 Volumes	**0**	**0**	**0**	**12**	**0**	**1**	**3**	**145**	**0**	**0**	**66**	**96**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	0	0	0	14	0	1	3	168	0	0	77	111
2042 Background Traffic	0	0	0	15	0	1	4	177	0	0	81	117
Phase 1 Project Trips												
Trip Distribution IN							10%					20%
Trip Distribution OUT				20%		10%						
Medical Office Trips	0	0	0	-3	0	-2	-7	0	0	0	0	-14
Trip Distribution IN							10%					20%
Trip Distribution OUT				20%		10%						
Hospital Trips	0	0	0	28	0	14	29	0	0	0	0	58
Total Phase 1 Project Trips	0	0	0	25	0	12	22	0	0	0	0	44
2032 Buildout Total	0	0	0	39	0	13	25	168	0	0	77	155
Phase 2 Project Trips												
Trip Distribution IN							10%					20%
Trip Distribution OUT				20%		10%						
Medical Office Trips	0	0	0	47	0	24	101	0	0	0	0	202
Trip Distribution IN							10%					20%
Trip Distribution OUT				20%		10%						
Hospital Trips	0	0	0	39	0	20	40	0	0	0	0	79
Total Phase 2 Project Trips	0	0	0	86	0	44	141	0	0	0	0	281
2042 Buildout Total	0	0	0	101	0	45	145	177	0	0	81	398

PM PEAK HOUR

Description	Northbound			Site Driveway C Southbound			Findley Road Eastbound			Findley Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	65	0	7	2	62	0	0	105	11
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	1	0	0	0	1	0	0	0	0
Heavy Vehicle %	0%	0%	0%	2%	0%	2%	2%	2%	0%	0%	2%	2%
Peak Hour Factor		0.81			0.81			0.81			0.81	
Adjustment	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Adjusted 2022 Volumes	**0**	**0**	**0**	**68**	**0**	**7**	**2**	**65**	**0**	**0**	**110**	**12**
Base 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%
Base Growth Factor	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161	1.161
Design Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Design Growth Factor	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
New Road Adjustment												
Other Proposed Developments												
2032 Background Traffic	0	0	0	79	0	8	2	75	0	0	128	14
2042 Background Traffic	0	0	0	83	0	9	2	79	0	0	134	15
Phase 1 Project Trips												
Trip Distribution IN							10%					20%
Trip Distribution OUT				20%		10%						
Medical Office Trips	0	0	0	-14	0	-7	-2	0	0	0	0	-5
Trip Distribution IN							10%					20%
Trip Distribution OUT				20%		10%						
Hospital Trips	0	0	0	55	0	28	15	0	0	0	0	30
Total Phase 1 Project Trips	0	0	0	41	0	21	13	0	0	0	0	25
2032 Buildout Total	0	0	0	120	0	29	15	75	0	0	128	39
Phase 2 Project Trips												
Trip Distribution IN							10%					20%
Trip Distribution OUT				20%		10%						
Medical Office Trips	0	0	0	210	0	105	35	0	0	0	0	70
Trip Distribution IN							10%					20%
Trip Distribution OUT				20%		10%						
Hospital Trips	0	0	0	77	0	39	21	0	0	0	0	42
Total Phase 2 Project Trips	0	0	0	287	0	144	56	0	0	0	0	112
2042 Buildout Total	0	0	0	370	0	153	58	79	0	0	134	127

Programmed Project Fact Sheets


PEACHTREE PARKWAY
JOHNS CREEK PKWY
COMMERCE WAY
THE PEOPLES BANK OF FORSYTH COUNTY
JEMA LLC & CHEDDAR LLC
CHICK-FIL-A, INC.
RGC SOUTHEAST PROPERTIES LLC
RTD ASSOCIATES
JP MORGAN CHASE BANK
JC LAND INVESTMENT LLC
UCB METRO PROPERTIES, INC.
HARRIS DIVERSIFIED SERVICES, INC.
GARDEN HOSPITALITY III LP
EDL PROPERTIES LLC
SNAK ENTERPRISES LLC
MCGINNIS FERRY ROAD
MEDLOCK BRIDGE ROAD
HOSPITAL PKWY
EAST JOHNS CROSSING
SR 141/MEDLOCK BRIDGE ROAD &
MCGINNIS FERRY ROAD IMPROVEMENTS
CONCEPT 2021
LEGEND
EXISTING ROADWAY/OVERLAY
PROPOSED ROADWAY/WIDENING
PROPOSED SIDEWALK
PROPOSED LADNSCAPED MEDIAN
PROPOSED CONCRETE MEDIAN
PROPOSED GUARDRAIL
PROPOSED RIGHT OF WAY
REQUIRED DRIVEWAY EASEMENT
TEMPORARY EASEMENT
PROPERTY LINE/EXISTING R/W
Johns Creek
Michael Baker
INTERNATIONAL
SCALE IN FEET
0
100
200

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

SCALE IN FEET
0 100 200 400

BEGIN PROJECT STP00-0189-01(010)
P. I. NO. 721000
TIE TO P. I. NO. 0012788

FUTURE PROJECT
P. I. NO. 0012788

PROPOSED S. R. 120 TYPICAL SECTION
(JOHNS CREEK)

SR 120 FROM SR 141/MEDLOCK BRIDGE RD TO PEACHTREE INDUSTRIAL BLVD

GDOT
Georgia Department of Transportation

CALYX
ENGINEERS + CONSULTANTS

SHEET 1 OF 2

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

SCALE IN FEET
0 200 400

END PROJECT STP00-189-01(010)
P.I. NO. 721000

BOLES RD.

ABBOTTS BRIDGE ROAD / SR 120

FULTON COUNTY / CITY OF JOHNS CREEK

CHATTAHOOCHEE RIVER

GWINNETT COUNTY / CITY OF DULUTH

ABBOTTS POINTE DR.

AINSLEY MILL WAY

RIVER MILL DRIVE

ROGERS CREEK

PEACHTREE INDUSTRIAL BLVD.

MS4 AREA

UNITED STATES OF AMERICA (NATIONAL PARK SERVICE PROPERTY)

WOODWARD ACADEMY

SAINT IVES COUNTRY CLUB

YOST HOLDINGS @ ABBOTTS BRIDGE, LLC

ROMAN CATHOLIC ARCHBISHOP OF ATLANTA

RIVERS EDGE AT ABBOTTS BRIDGE HOA

WCCOY HOLDINGS, LLLP

AGCO CORPORATION

ANDA EXCHANGE LLC

PATE PROPERTIES, LLC

3250 PEACHTREE BOULEVARD, LLC

3264 PEACHTREE BOULEVARD, LLC

3500 PEACHTREE INDUSTRIAL BOULEVARD HOLDINGS, LLC

4185 GLENRIDGE HIGHLAND 120 LLC

CAROL J. CASTELLANO
JACK R. CASTELLANO

JERRY A. BRADFORD
KATHLEEN D. BRADFORD

JANE ANN ELLIOTT

JAMES D ELLIOT ET AL

CITY OF DULUTH
GWINNETT COUNTY

PROPOSED S. R. 120 TYPICAL SECTION
(DULUTH)

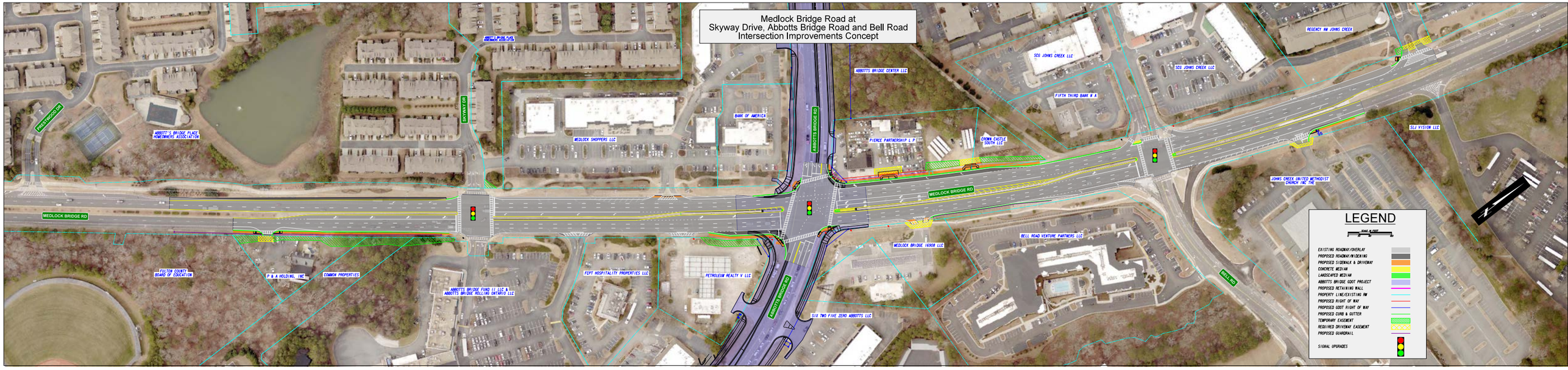
SR 120 FROM SR 141/MEDLOCK BRIDGE RD TO PEACHTREE INDUSTRIAL BLVD

GDOT
Georgia Department of Transportation

CALYX
ENGINEERS + CONSULTANTS

SHEET 2 OF 2

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




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
N
THE STANDARD CLUB
THE REGENCY AT JOHNS CREEK WALK
ASHWOOD MEADOWS
PUBLIC STORAGE
JOHNS CREEK WALK
JOHNS CREEK CIRCLE
THE REGENCY AT JOHNS CREEK WALK
THE REGENCY AT JOHNS CREEK WALK
JOHNS CREEK FESTIVAL
JOHNS CREEK PARKWAY
JOHNS CREEK PROMENADE
HEARTHSIDE JOHNS CREEK
THE STANDARD CLUB
MEDLOCK BRIDGE ROAD
MEDLOCK BRIDGE ROAD
THE STANDARD CLUB
MEDLOCK BRIDGE ROAD
CITY OF JOHNS CREEK
ALCON
CITY OF JOHNS CREEK
SUNRISE OF JOHNS CREEK
CITY OF JOHNS CREEK
JOHNS CREEK UNITED METHODIST CHURCH
JOHNS CREEK PARKWAY
MEDLOCK MEDICAL OFFICE BUILDING
DATA SUPPLIES INC.
11330 LAKEFIELD DRIVE TECHNOLOGY PARK AT JOHNS CREEK
HYATT PLACE
11340 LAKEFIELD DRIVE TECHNOLOGY PARK AT JOHNS CREEK

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