Transportation Analysis

Rock House Road Site
DRI #3939

Douglas County, Georgia

May 2023

Prepared for:

Taylor & Mathis

Prepared by:

Kimley-Horn and Associates, Inc.
11720 Amber Park Drive, Suite 600
Alpharetta, Georgia 30009
019949036

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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Rock House Road Site* located in unincorporated Douglas County, Georgia. The approximate 134.0-acre site is located along Rock House Road. The site is currently vacant.

The proposed development will consist of the following land uses and densities contained in **Table 1**. The project is expected to be completed by 2025 (approximately 2 years).

Table 1: Proposed Land Use and Density	
Light Industrial/Warehouse	898,000 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, alternative-mode, 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 April 11, 2023).

Capacity analyses were performed for the study intersections under the Existing 2023 conditions, the Projected 2025 No-Build conditions, and the Projected 2025 Build conditions.

- Existing 2023 conditions represent current traffic volumes that were collected in April of 2023. (Note: Traffic count methodology was outlined in the Methodology Meeting Packet).
- Projected 2025 No-Build conditions represent the Existing 2023 traffic volumes grown for two (2) years using a 1.5% per year growth rate, plus the addition of the project trips associated with the *DCT Douglas Hill Distribution Center DRI #2701* development, the *Strategic West Logistics Center IV DRI #3515* development, the *JDA Factory Shoals* development, the *Rock House Road Site (DSP)* development, and the *T5 ATL III Data Center DRI #3747* development.
- Projected 2025 Build conditions represent the Projected 2025 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the *Rock House Road Site* development.

No-Build 2025 (System Improvements)

The signalized intersection of Thornton Road (SR 6) at Factory Shoals Road (Intersection 1) is projected to operate at an acceptable overall LOS during the AM and PM peak hour under all studied scenarios except the Projected 2025 Build Conditions during the PM peak, where the overall intersection is projected to operate at LOS F. Additionally, the eastbound and westbound approaches operate at LOS F under the AM and PM peak hours of the Existing 2023 conditions, Projected 2025 No-Build conditions, and Projected 2025 Build conditions. GDOT has a currently programmed quick response project to be implemented prior to the build-out of the development. The project calls for the addition of an eastbound exclusive left-turn lane and an eastbound exclusive through lanes and the addition of an exclusive westbound left-turn lane. The Quick Response laneage was included in the 2025 No-Build and 2025 Build scenarios (shown in green on **Figure 33** and **Figure 34).**

Per GRTA's DRI guidelines, an improvement should be considered if either the overall intersection, or an individual approach operates at a failing LOS. In order to improve the approach LOS under the 2025 No-Build and 2025 Build conditions, Kimley-Horn recommends the following system improvements in addition to the programmed Quick Response project (shown in red on **Figure 33** and **Figure 34):**

- Thornton Road (SR 6) at Factory Shoals Road (Intersection 1)
    - Construct an exclusive westbound right-turn lane so that the westbound approach of Factory Shoals Road consists of one (1) exclusive left-turn lane, one (1) exclusive through-lane, and one (1) exclusive right-turn lane.

Build 2025 (Site Access Improvements)

In order to serve the *Rock House Road Site* development, the following improvements are recommended:

- Construct a driveway with one (1) lane entering the site and two (2) lanes exiting the site. This driveway will be located approximately 200 feet northwest of the existing Echo Road and will replace Echo Road (Echo Road will be abandoned).
- Provide a southbound right-turn deceleration lane and a northbound left-turn deceleration lane along Rock House Road entering the development.
- Improve Rock House Road to the 36-foot industrial roadway cross-section between the site driveway and where the industrial cross-section ends to the south (approximately 820 feet).

Thornton Road (SR 6) at Factory Shoals Road (Intersection 1)

Overall LOS Standard: D Approach LOS Standard: D			Thornton Road (SR 6)			Thornton Road (SR 6)			Factory Shoals Road			Factory Shoals Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (34.3)											
		Approach LOS	B (24.1)			C (30.2)			F (83.1)			E (72.6)		
		Storage	275		150	300		175	300		300	175		175
		50th Queue	39	242	14	339	668	75	170	94	0	92	68	0
		95th Queue	81	327	54	435	770	134	280	154	0	157	121	60
	PM	Overall LOS	D (50.4)											
		Approach LOS	D (46.0)			D (38.0)			E (79.5)			E (63.7)		
		Storage	275		150	300		175	300		300	175		175
		50th Queue	9	324	13	142	278	18	454	90	0	88	34	390
		95th Queue	13	495	65	286	408	64	682	144	0	145	68	588
BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (35.5)											
		Approach LOS	C (24.1)			C (31.0)			F (91.0)			E (72.6)		
		Storage	275		150	300		175	300		300	175		175
		50th Queue	39	247	15	339	709	92	183	94	0	92	73	0
		95th Queue	81	331	55	435	806	157	319	156	0	157	128	60
	PM	Overall LOS	D (54.1)											
		Approach LOS	D (47.6)			D (38.6)			F (97.7)			E (63.7)		
		Storage	275		150	300		175	300		300	175		175
		50th Queue	10	333	14	142	282	20	548	95	0	88	35	390
		95th Queue	13	568	66	286	414	68	777	151	0	145	69	588

It should be noted that per GRTA's DRI guidelines, an improvement should be considered if an approach operates at a failing LOS, even if the overall intersection operates acceptably. Although the eastbound and westbound approaches are projected to operate at LOS E or F, no feasible improvements exist, as the failing LOS is due to the existing signal timing. Thornton Road (SR 6) is a high priority freight and commuter corridor between I-20 in Douglas County and I-285/Hartsfield-Jackson International Airport in Fulton County. The intersection operates at an acceptable overall LOS, and existing signal timings and cycle lengths prioritize vehicular progression on the mainline (SR 6) at the expense of side-street operations. Therefore, no additional off-site improvements are recommended.

Impacted Queue Lengths Exceeding Storage

Intersection	Movement	Storage Length	Projected Build Queue Length (AM / PM)	Recommendation
1. Thornton Road (SR 6) at Factory Shoals Road	EBL	300	294 / 950 (50^{th}) 455 / 1183 (95^{th})	*No-Build (System Improvement):* Consider extending the eastbound left-turn lane storage.
4. Thornton Road (SR 6) at Riverside Parkway	NBL	375	141 / 345 (50^{th}) 287 / 539 (95^{th})	*No-Build (System Improvement):* Consider extending the northbound left-turn lane storage.
4. Thornton Road (SR 6) at Riverside Parkway	SBR	125	17 / 96 (50^{th}) 25 / 164 (95^{th})	*No-Build (System Improvement):* Consider extending the southbound right-turn lane storage.

Other movements where the projected queueing exceeds the available storage are not impacted by the proposed development traffic.

1.0 PROJECT DESCRIPTION

1.1 Introduction

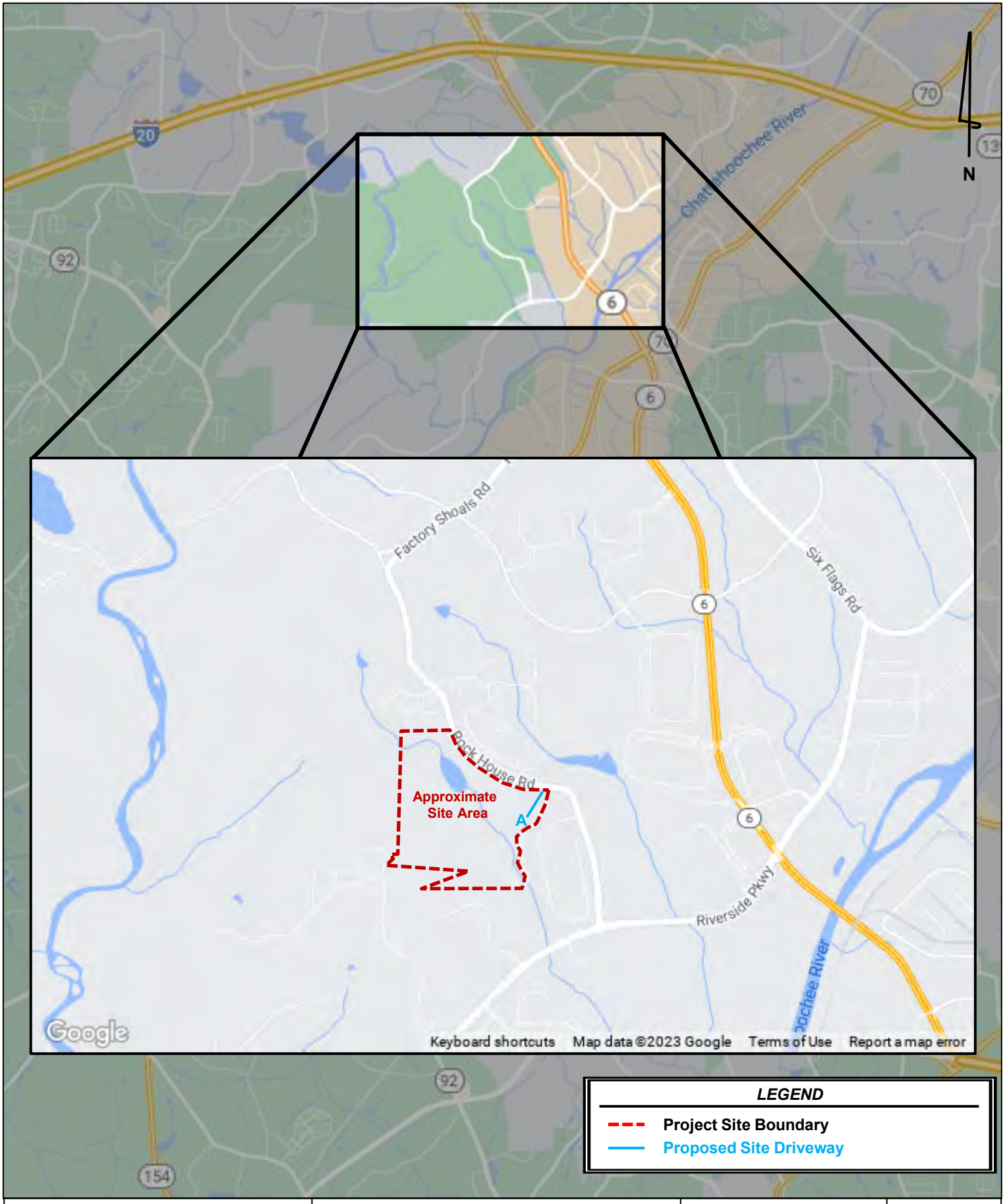
This report presents the analysis of the anticipated traffic impacts of the proposed *Rock House Road Site* development located in unincorporated Douglas County, Georgia. The approximate 134.0-acre site is located along Rock House Road. The project site is currently zoned R-A (Residential Agricultural), PSP (Public Semi-Public), and LI-R (Restricted Light Industrial). The site is proposed to be rezoned to LI (Light Industrial), and the rezoning application was filed on March 6, 2023. **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 undeveloped. The proposed development will consist of the following land uses and densities contained in **Table 2**. The project is expected to be completed by 2025 (approximately 2 years).

Table 2: Proposed Land Use and Density	
Land Use	**Proposed**
Light Industrial/Warehouse	898,000 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 500,000 SF of industrial warehouse space. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on March 8, 2023, by Douglas County. 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 April 11, 2023.



Kimley»Horn	***Rock House Road Site*** ***DRI #3939*** ***Transportation Analysis***	**Site Location Map**	**Figure 1**
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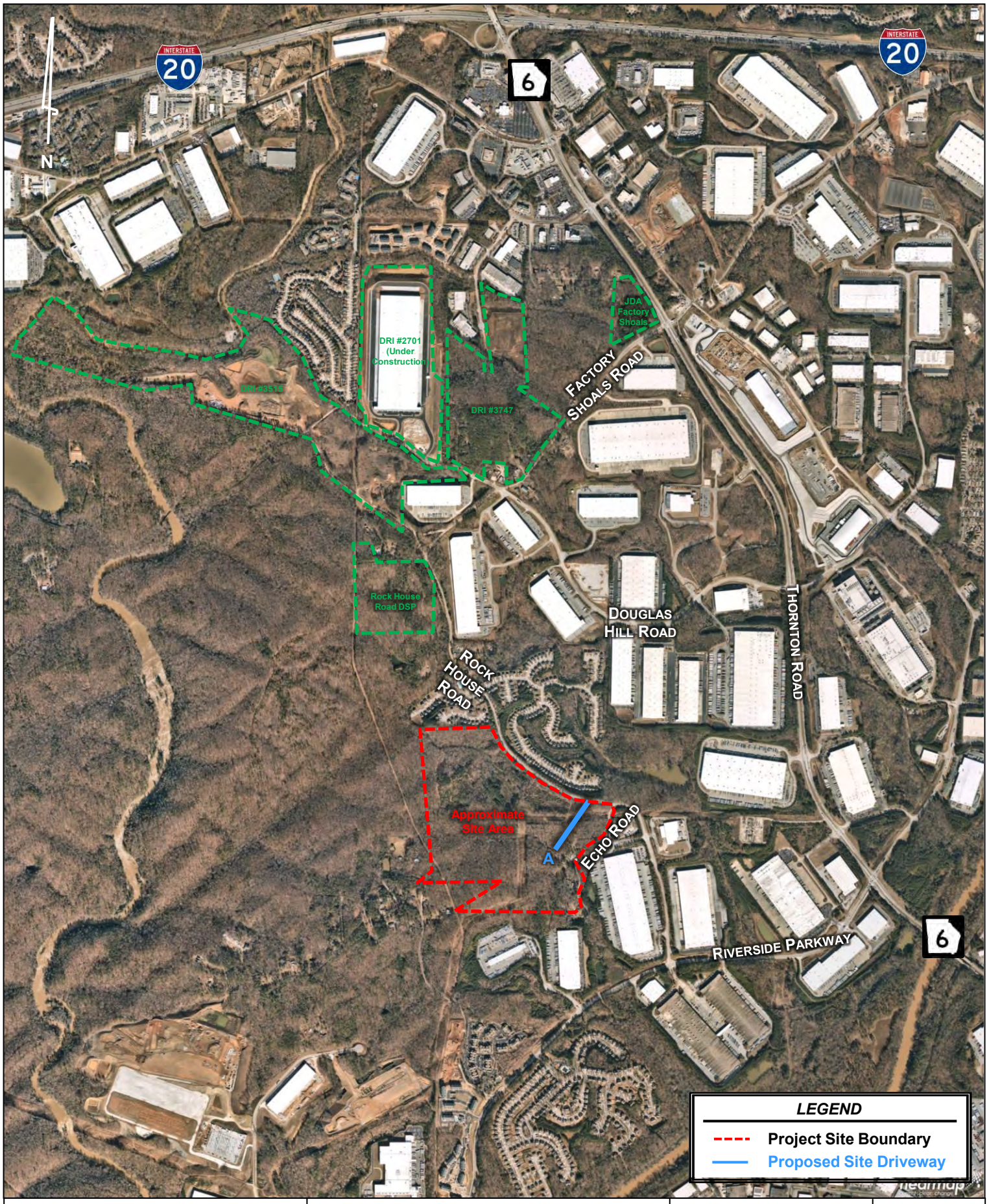

Kimley»Horn	*Rock House Road Site* *DRI #3939* *Transportation Analysis*	Site Aerial	Figure 2
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1.2 Site Access

As currently envisioned, the proposed development will be accessible via one (1) new access point:

1. **Site Driveway A** – a proposed, full-movement driveway located along Rock House Road that will operate under side-street stop control. Site Driveway A will provide vehicular access to all buildings in the development. Site Driveway A will replace the existing unpaved Echo Road and is located approximately 200 feet northwest of the existing Echo Road (Echo Road will be abandoned).

1.3 Internal Circulation Analysis

Internal, private roadways throughout the site provide access to the buildings and parking facilities. See referenced site plan in **Appendix A** for a visual representation of vehicular access and circulation throughout the development.

1.4 Parking

The current number of total site parking spaces to be provided are listed below in **Table 3**.

Table 3: Proposed Parking

Land Use	Minimum	Maximum	Proposed
Warehouse	193	404	404 auto spaces 165 trailer spaces

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

1.5 Alternative Transportation Facilities

There are no dedicated pedestrian or bicycle facilities along the site frontage. Similarly, there are no transit stops in the vicinity of the site.

1.6 Dense Urban Environments Enhanced Focus Area

Per Section 3.2.4.2 of the GRTA *Development of Regional Impact Review Procedures* the *Rock House Road Site* does not qualify for a “Dense Urban Environment Enhanced Focus Area” review, due to its location in Douglas County.

1.7 Heavy Vehicle Enhanced Focus Area

Per Section 3.2.4.1 of the GRTA Development of Regional Impact Review Procedures, the *Rock House Road Site* qualifies for a “Heavy Vehicle Enhanced Focus Area” review, due to the development generating heavy vehicles.

1.7.1 Heavy Vehicle Routing

Figure 3 depicts the proposed truck routes that will serve project traffic (highlighted blue). The following segments are included in the Enhanced Focus Area (highlighted yellow):

- Rock House Road from Echo Road to Riverside Parkway
- Riverside Parkway from Rock House Road to Thornton Road (SR 6)

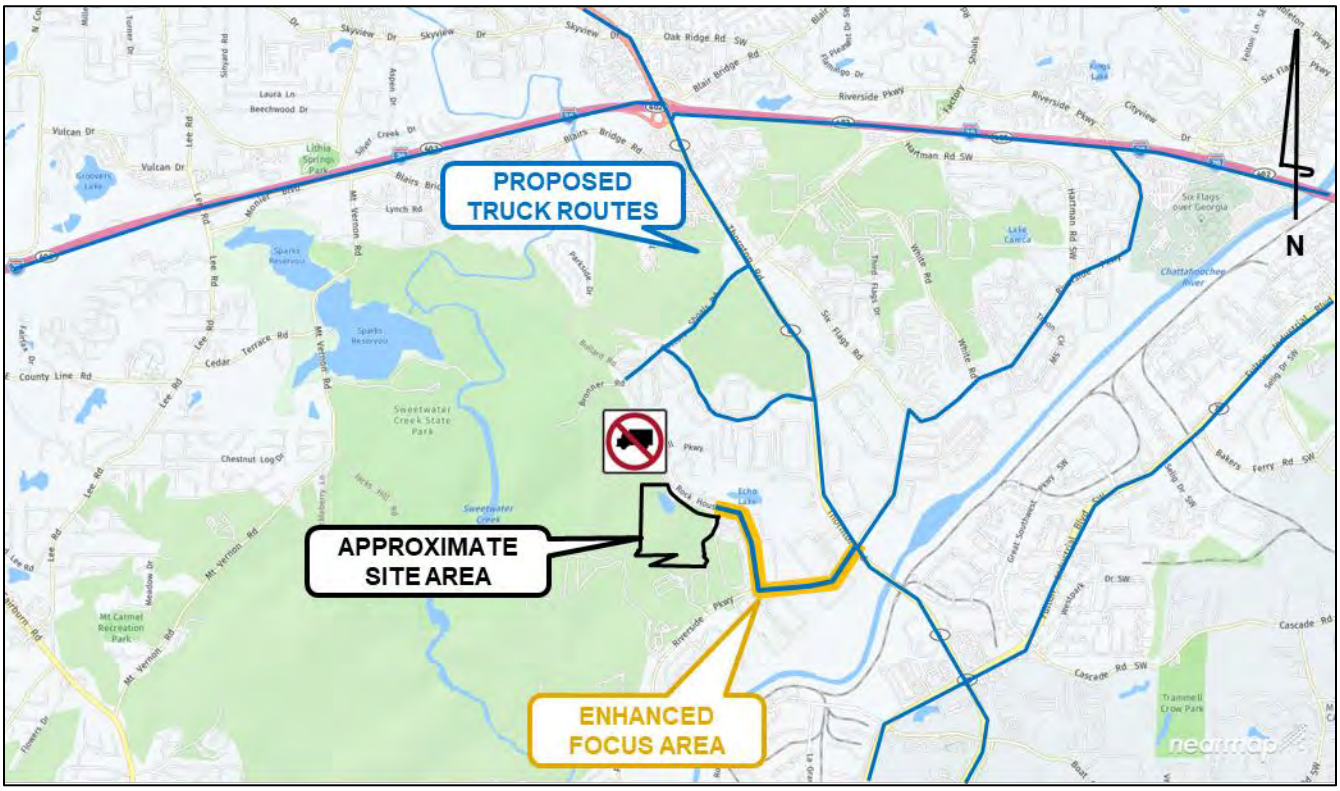


Figure 3: Heavy Vehicle Routing

Heavy vehicles from the site area are prohibited from turning left on Rock House Road but are permitted to make a right turn towards Riverside Parkway.

1.7.2 Pavement Condition

A site visit was conducted on April 12, 2023. Pavement conditions within the Enhanced Focus Area were noted during the site visit. Pavement distress was observed in twelve (12) locations, as shown in **Figure 4. Table 4** outlines the location and type of the observed pavement distress.

Table 4: Pavement Condition Observations				
Location Number (Shown in Figure 4)	**Figure Number**	**Roadway**	**Location**	**Observed Distress**
1	5	Rock House Road	2,630 feet north of Riverside Parkway	Pothole
2	6	Rock House Road	1,060 feet north of Riverside Parkway	Major Cracking
3	7	Rock House Road	650 feet north of Riverside Parkway	Pothole
4	8	Rock House Road	480 feet north of Riverside Parkway	Major Cracking
5	9	Rock House Road	400 feet north of Riverside Parkway	Pothole
6	10	Rock House Road	230 feet north of Riverside Parkway	Major Cracking
7	11	Riverside Parkway	Westbound right turn lane at the intersection of Riverside Parkway at Rock House Road	Pothole and Cracking
8	12	Riverside Parkway	1,730 feet east of Rock House Road	Pothole
8	13	Riverside Parkway	1,730 feet east of Rock House Road (Opposite lane as Figure 10)	Pothole and Cracking
9	14	Riverside Parkway	1,930 feet east of Rock House Road	Pothole
10	15	Riverside Parkway	2,000 feet east of Rock House Road	Potholes
11	16	Riverside Parkway	260 feet west of Thornton Road (SR 6)	Pothole
12	17	Riverside Parkway	110 feet west of Thornton Road (SR 6)	Major Cracking

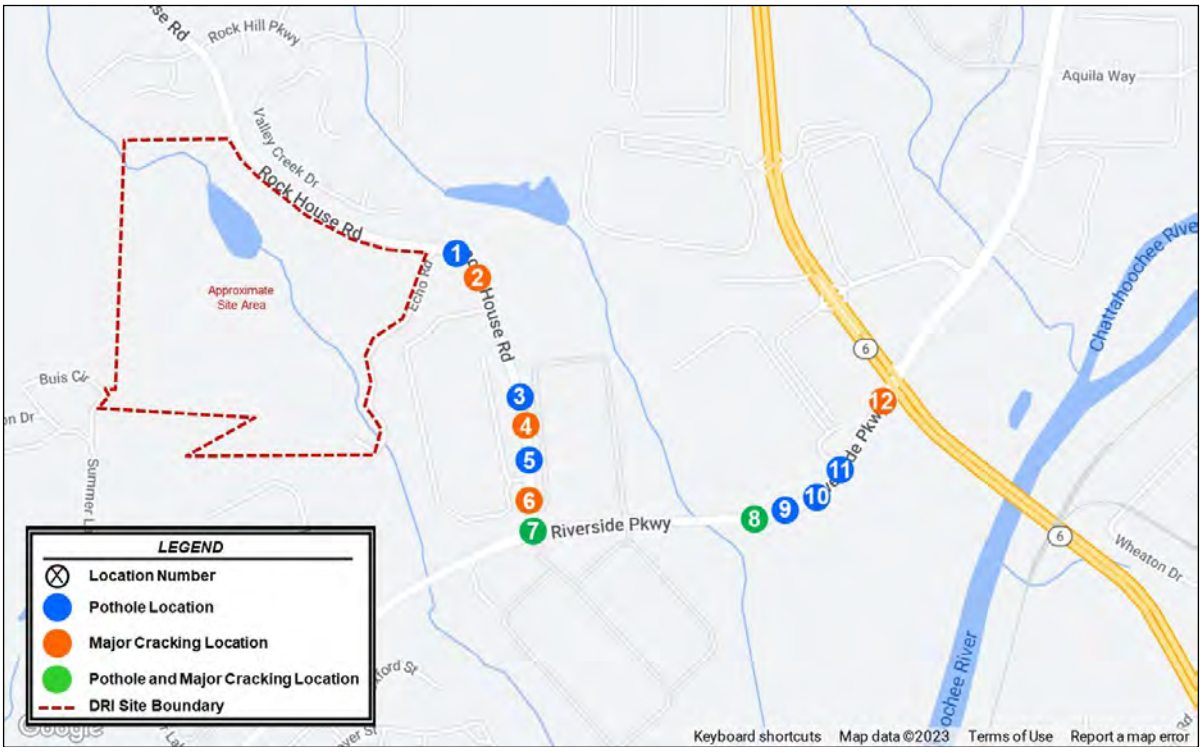


Figure 4: Pavement Condition Location Map

Figure 5: Northbound Rock House Road Potholing

Figure 6: Southbound Rock House Road Cracking

Figure 7: Northbound Rock House Road Potholing

Figure 8: Southbound Rock House Road Cracking

Figure 9: Southbound Rock House Road Potholing

Figure 10: Southbound Rock House Road Cracking

Figure 11: Westbound Riverside Parkway at Rock House Road Potholing and Cracking

Figure 12: Eastbound Riverside Parkway Potholing

Figure 13: Westbound Riverside Parkway Potholing and Cracking

Figure 14: Eastbound Riverside Parkway Potholing

Figure 15: Eastbound Riverside Parkway Potholing

Figure 16: Westbound Riverside Parkway Potholing

Figure 17: Westbound Riverside Parkway Cracking

1.7.3 Roadway Width

The lane widths for the Enhanced Focus Area are shown in **Table 5**. The Douglas County roadway width standards were taken from the Douglas County Unified Development Code document, which notes that "the minimum pavement width, measured from edge of pavement to edge of pavement, shall widths for non-residential roads shall be as required for the street type on Table 10.3." A Local Commercial or Industrial Street has a minimum pavement width of 36 feet, while a Local Residential Street has a minimum pavement width of 24 feet. Rock House Road transitions from an industrial road to a local road approximately 2,830 feet north of the intersection of Riverside Parkway at Rock House Road. Rock House Road will need to be upgraded to an industrial cross-section between the site driveway and the existing industrial cross-section to the south (approximately 820 feet).

Lane width dimensions were measured on NearMap.

Table 5: Roadway Widths

Roadway	Lane Width	Lane Width Standard (Douglas County)
Thornton Road (SR 6)	12 ft	12 ft desirable
Factory Shoals Road	10 - 12 ft	12 ft min (industrial), 12 ft min (local residential)
Douglas Hill Road	12 ft	12 ft desirable
Rock House Road	12 ft	12 ft min (industrial), 12 ft min (local residential)
Riverside Parkway	11 ft	12 ft desirable

1.7.4 Corner Radii

The corner radii of two (2) study intersections were analyzed along the Enhanced Focus Area:

1. Thornton Road (SR 6) at Riverside Parkway
2. Riverside Parkway at Rock House Road

Note: The *GDOT Regulations for Driveway and Encroachment Control* outlines minimum corner radii for trucks as 75 feet. Full Page truck turn exhibits are included in **Appendix E**.

1. Thornton Road (SR 6) at Riverside Parkway (Entering)

Figure 18 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making a southbound right-turn from Thornton Road (SR 6) onto Riverside Parkway. The existing curb radius is approximately 104 feet. The WB-67 truck must impede slightly on the curb to make the maneuver. During the site visit, it was observed that the heavy vehicle wheel paths from the southbound right-turns have created a degraded shoulder, as shown in **Figure 19**. **Figure 20** outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making a northbound left-turn from Thornton Road (SR 6) onto Riverside Parkway. It should be noted that there is a planned GDOT Quick Response project to better accommodate trucks at the intersection.

Figure 18: Thornton Road (SR 6) at Riverside Parkway – Southbound Right (Entering Truck)

Figure 19: Thornton Road (SR 6) at Riverside Parkway Southbound Right – Degraded Shoulder

Figure 20: Thornton Road (SR 6) at Riverside Parkway – Northbound Left (Entering Truck)

2. Thornton Road (SR 6) at Riverside Parkway (Exiting)

Figure 21 outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making an eastbound left-turn from Riverside Parkway onto Thornton Road (SR 6). **Figure 22** outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making an eastbound right-turn from Riverside Parkway onto Thornton Road (SR 6). The existing curb radius is approximately 53 feet. It should be noted that there is a planned GDOT Quick Response project to better accommodate trucks and improve the eastbound right-turn radius at the intersection.

Figure 21: Thornton Road (SR 6) at Riverside Parkway – Eastbound Left (Exiting Truck)

Figure 22: Thornton Road (SR 6) at Riverside Parkway – Eastbound Right (Exiting Truck)

3. Riverside Parkway at Rock House Road (Entering)

Figure 23 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making an eastbound left-turn from Riverside Parkway onto Rock House Road. **Figure 24** outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making a westbound right-turn from Riverside Parkway onto Rock House Road. The WB-67 truck must impede slightly on the curb to make the maneuver. The existing curb radius is approximately 79 feet.

Figure 23: Riverside Parkway at Rock House Road – Eastbound Left (Entering)

Figure 24: Riverside Parkway at Rock House Road – Westbound Right (Entering)

4. Riverside Parkway at Rock House Road (Exiting)

Figure 25 outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a southbound left-turn from Rock House Road onto Riverside Parkway. **Figure 26** outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a southbound right-turn from Rock House Road onto Riverside Parkway. The existing curb radius is approximately 90 feet.

Figure 25: Riverside Parkway at Rock House Road – Southbound Left (Exiting Truck)

Figure 26: Riverside Parkway at Rock House Road – Southbound Right (Exiting Truck)

1.7.5 Heavy Vehicle Staging

The site plan includes a designated truck court to accommodate heavy vehicle queueing, staging, and overflow**.** **Figure 27** indicates the designated truck staging/overflow areas on the site plan.

Figure 27: Heavy Vehicle Staging

1.7.6 Pedestrian Safety

The proposed development will include a minimum 5’ sidewalk along Rock House Road, per Douglas County Code. ADA compliant curb ramps with detectable warning strips will be located on either side of the driveway at the crosswalk. Sidewalks will also be provided adjacent to the buildings and will connect both accessible and non-accessible spaces to the building entrances.

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 four (4) off-site intersections described in **Table 6** and shown visually in **Figure 28**.

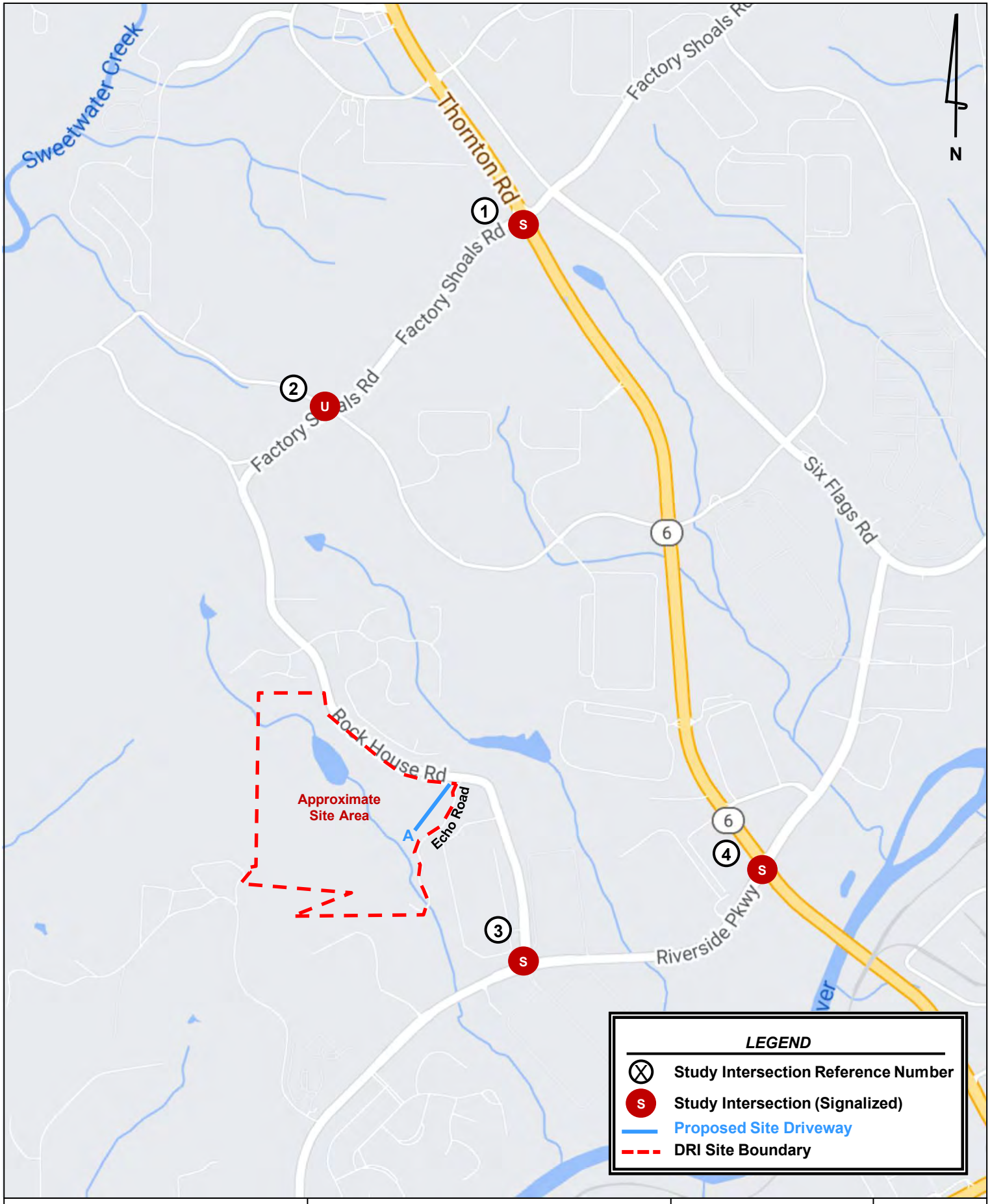
Table 6: Intersection Control Summary		
Intersection	**Jurisdiction**	**Control**
1. Thornton Road (SR 6) at Factory Shoals Road	GDOT	Signalized
2. Factory Shoals Road at Douglas Hill Road	Douglas County	Unsignalized (AWSC)
3. Riverside Parkway at Rock House Road/Private Driveway	Douglas County	Signalized
4. Thornton Road (SR 6) at Riverside Parkway	GDOT	Signalized

Note: AWSC = All Way Stop Control

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 7** (bolded roadways are adjacent to the site).

Table 7: Roadway Classifications				
Roadway	**Lanes**	**Posted Speed Limit**	**AADT (GDOT, 2019)**	**GDOT Functional Classification**
Rock House Road	**2**	**35 MPH**	**-**	**Local**
Douglas Hill Road	2	35 MPH	-	Local
Thornton Road (SR 6)	4	55 MPH	34,100	Principal Arterial
Factory Shoals Road	2	35 MPH	1,130	Local
Riverside Parkway	2	45 MPH	6,030	Minor Arterial



Kimley»Horn	***Rock House Road Site*** ***DRI #3939*** ***Transportation Analysis***	**Study Intersections**	**Figure 28** **Page 24**

2.3 Traffic Data Collection and Calibration

Traffic counts were collected at all four (4) existing study intersections on Wednesday, April 12, 2023. Per GDOT Policy issued on July 15, 2022, traffic forecasts based on new traffic count data collected after the start of the Fall 2022 school year will no longer be required to follow COVID-19 policy procedures. Therefore, no COVID adjustment factor was applied. The traffic count methodologies used in this analysis were outlined in the Methodology Meeting Packet.

Traffic count peak hours for all the study intersections are shown in **Table 8**.

Table 8: Traffic Count Summary

Intersection		Count Date	AM Peak Hour	PM Peak Hour
1.	Thornton Road (SR 6) at Factory Shoals Road	04/2023	6:45 AM – 7:45 AM	4:00 PM – 5:00 PM
2.	Factory Shoals Road at Douglas Hill Road	04/2023	7:45 AM – 8:45 AM	4:15 PM – 5:15 PM
3.	Riverside Parkway at Rock House Road	04/2023	6:45 AM – 7:45 AM	5:00 PM – 6:00 PM
4.	Thornton Road (SR 6) at Riverside Parkway	04/2023	6:45 AM – 7:45 AM	4:15 PM – 5:15 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 *Rock House Road Site*. Background traffic can include a base growth rate based on historical count data and population growth data as well as trips anticipated from nearby or adjacent other projects.

Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 1.5% per year background traffic growth rate from 2023 to 2025 (2 years) was used for all roadways.

The Projected 2025 No-Build conditions represent the Existing 2023 traffic volumes grown for two (2) years at 1.5% per year throughout the study network, plus project trips associated with the *DCT Douglas Hill Distribution Center DRI #2701* development, the *Strategic West Logistics Center IV DRI #3515* development, the *JDA Factory Shoals* development, the *Rock House Road Site (DSP)* development, and the *T5 ATL III Data Center DRI #3747* development.

The Projected 2025 Build conditions represent the project trips generated by the *Rock House Road Site* (discussed in Section 3.0 and 4.0) added to the Projected 2025 No-Build Conditions.

2.5 Programmed and Planned Projects

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

The following projects shown in **Table 9** are programmed or planned to occur near the development.

Table 9: Programmed Projects

Project Name	From / To Points:	Sponsor	GDOT PI #	ARC ID # (TIP)	Design FY	ROW / UTL FY	CST FY
Thornton Road (SR 6) Truck Friendly Lanes	I-20 to Garrett Road (SR 6 Spur)	GDOT	0010821	DO-299	2017	2024/ 2029	2029
SR 5/US 78 at SR 6/US 278 Intersection Improvements	Single Intersection	GDOT	0013733	N/A	2018	2022/ 2024	2026
Thornton Road (SR 6) at Riverside Parkway Intersection Improvements	Improved turning radii for heavy vehicles	GDOT / Douglas County SPLOST	N/A	N/A	N/A	N/A	2022
Installation of RT and LT Lane on Factory Shoals Road @ Thornton Road (SR 6)	Single Intersection	GDOT	S015666	N/A	N/A	N/A	2022
I-20 West Express Lanes	I-285 West/ SR 92	GDOT	0013916	AR-ML-800	2040	-	-

**Project information was obtained from GeoPI (GDOT), the Atlanta Region's Plan (ARC), Douglas County Comprehensive Transportation Plan, and the Sweetwater Master Plan.*

GDOT has a currently programmed quick response project (highlighted in yellow) to be implemented prior to the build-out of the development. The project calls for the addition of eastbound exclusive left and exclusive through lanes, and the reconfiguring of the westbound lanes to an exclusive left-turn lane and a shared through/right-turn lane. The remaining non-highlighted projects are not yet funded, beyond the build-out year of the proposed development, or are not anticipated to affect the study network. Available fact sheets for projects listed in the table above can be found in **Appendix D**.

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*.

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 D was assumed for all study intersections per section 3.2.2.1 of the GRTA *Development of Regional Impact Review Procedures* as specified in the LOU.

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 including mixed-use reductions and alternative transportation mode reductions are not considered in the analysis based on methodology outlined in the GRTA Letter of Understanding (LOU).

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 taken in this analysis per the LOU.

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. No pass-by trips were taken for this analysis per the LOU.

Table 10 summarizes the gross trip generation, reductions, net trip generation, and driveway volumes for the proposed *Rock House Road Site*.

Table 10: Trip Generation

Land Use	Density	Daily Traffic			AM Peak Hour		PM Peak Hour	
		Total	Enter	Exit	Enter	Exit	Enter	Exit
150 – Warehousing	898,000 SF	1,458	729	729	101	30	38	96
Gross Project Trips		**1,458**	**729**	**729**	**101**	**30**	**38**	**96**
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*
New Trips		**1,458**	**729**	**729**	**101**	**30**	**38**	**96**
Employee (Car Trips)		*966*	*483*	*483*	*92*	*21*	*24*	*83*
Heavy Vehicle (Trucks)		*492*	*246*	*246*	*9*	*9*	*14*	*13*

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 is shown for heavy vehicle (truck) trips in **Figure 29.** The anticipated distribution and assignment of the trips throughout the study roadway network is shown for employee (car) trips in **Figure 30**. These trip assignment percentages were applied to the net project trips expected to be generated by the development, and the volumes were assigned to the roadway network. The peak hour project trips are shown by turning movement throughout the study network in **Figure 31**.

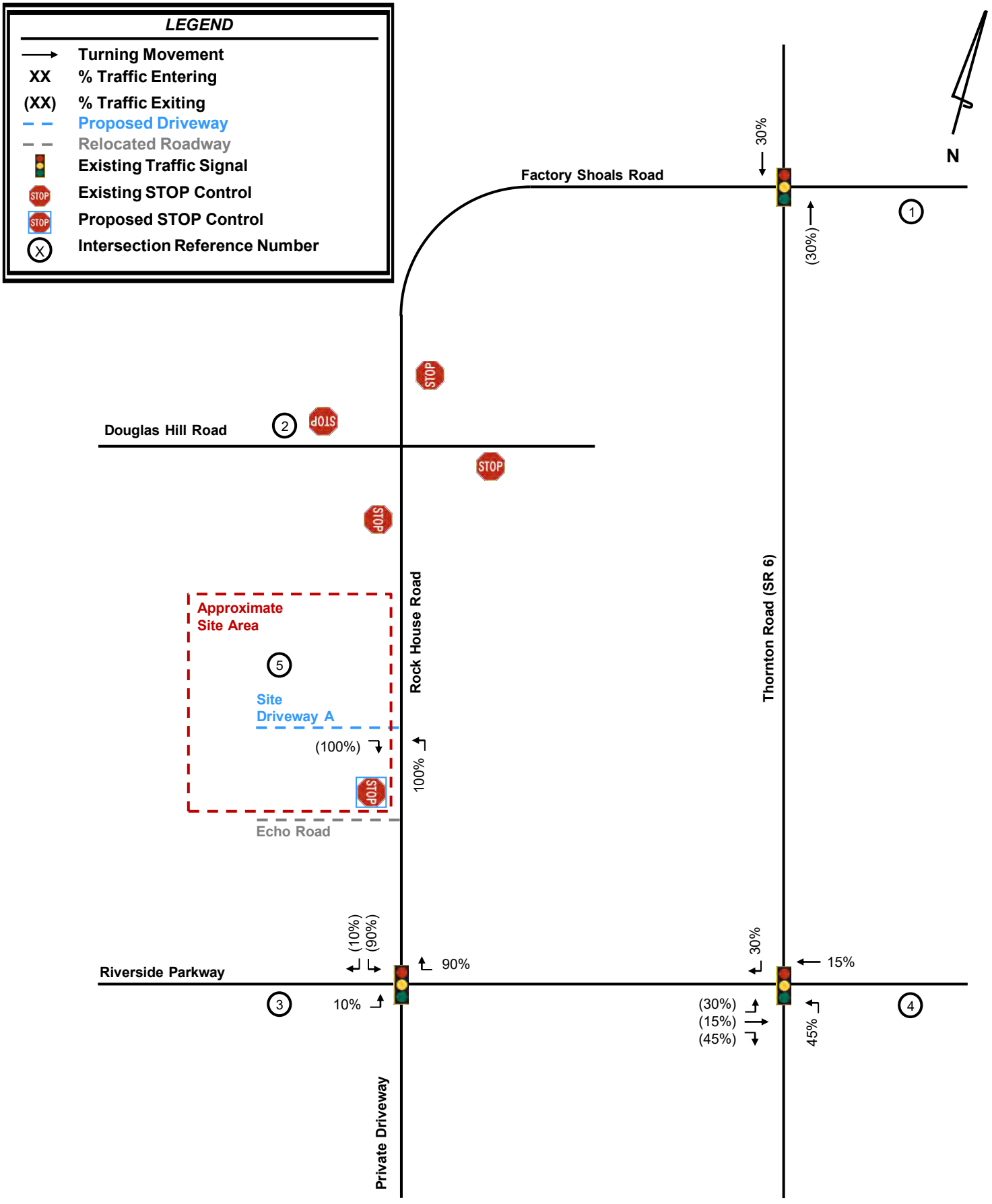
Detailed intersection volume worksheets are provided in **Appendix C**.

5.0 TRAFFIC ANALYSIS

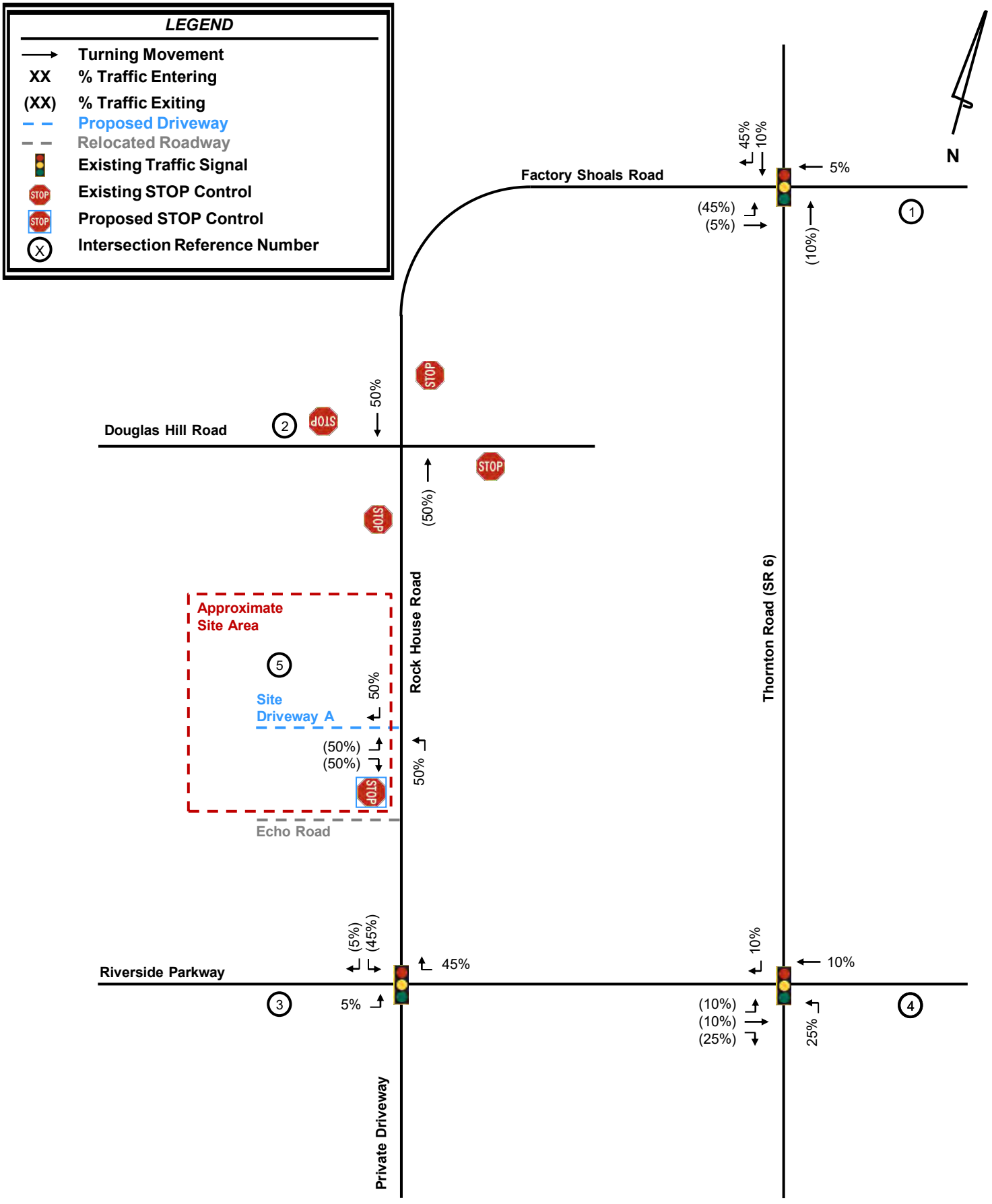
Capacity analyses were performed using *Synchro 11* for the AM and PM peak hours under the Existing 2023 conditions, Projected 2025 No-Build conditions, and Projected 2025 Build conditions. The capacity analyses were performed using methodologies from the *Highway Capacity Manual (HCM), 6th Edition* unless otherwise noted.

These analyses included existing roadway laneage for each of the scenarios. The traffic volumes and roadway laneage used for each scenario are shown visually in **Figure 32** for Existing 2023 conditions, **Figure 33** for Projected 2025 No-Build conditions, and **Figure 34** for Projected 2025 Build conditions.

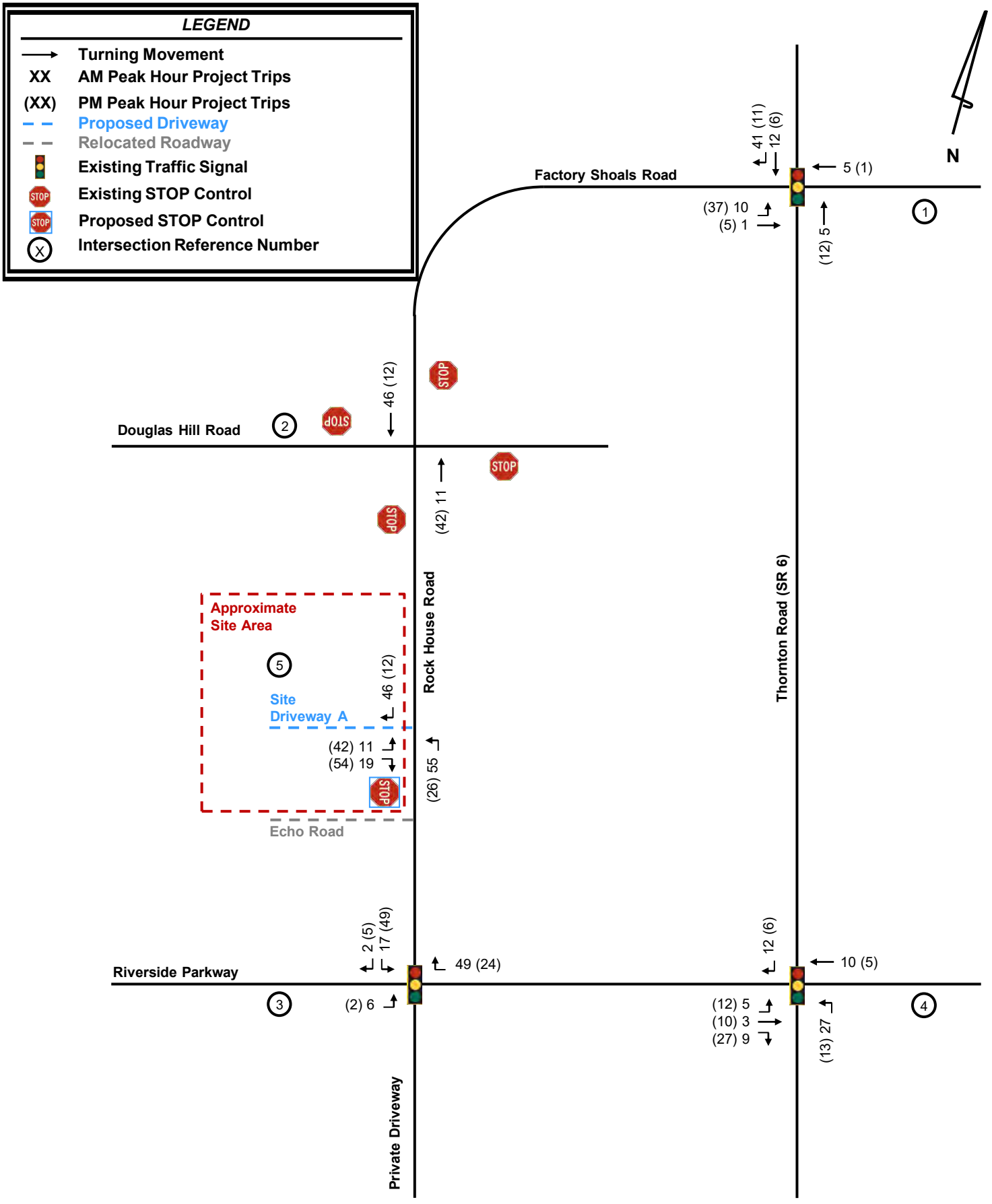
Sections 5.1 – 5.4 provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.



Kimley»Horn	*Rock House Road Site* *DRI #3939* *Transportation Analysis*	Heavy Vehicle (Truck) Trip Distribution & Assignment	Figure 29 Page 29



Kimley»Horn	*Rock House Road Site* *DRI #3939* *Transportation Analysis*	Employee (Car) Trip Distribution & Assignment	Figure 30
			Page 30



Kimley»Horn	*Rock House Road Site* *DRI #3939* *Transportation Analysis*	**Project Trips**	**Figure 31** **Page 31**

5.1 Thornton Road (SR 6) at Factory Shoals Road (Intersection 1)

Overall LOS Standard: D
Approach LOS Standard: D

			Thornton Road (SR 6) Northbound			Thornton Road (SR 6) Southbound			Factory Shoals Road Eastbound			Factory Shoals Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING (SIGNAL)	AM	Overall LOS	D (38.1)											
		Approach LOS	B (18.4)			C (26.1)			F (85.8)			F ($)		
		Storage	275		150	300		175			300			
		50th Queue	23	135	1	313	535	18		141	0		353	
		95th Queue	48	166	15	401	613	43		287	0		540	
	PM	Overall LOS	E (69.1)											
		Approach LOS	D (36.9)			D (35.0)			F ($)			F (121.9)		
		Storage	275		150	300		175			300			
		50th Queue	5	311	11	133	242	5		434	0		928	
		95th Queue	9	374	40	277	363	33		628	0		1181	
NO-BUILD (SIGNAL)	AM	Overall LOS	D (46.5)											
		Approach LOS	B (20.0)			C (25.7)			F ($)			F (86.4)		
		Storage	275		150	300		175	300		300	175		
		50th Queue	36	138	1	322	582	50	266	93	0	92	143	
		95th Queue	64	168	17	411	666	95	423	156	0	177	273	
	PM	Overall LOS	F ($)											
		Approach LOS	D (39.7)			D (35.3)			F ($)			F (85.8)		
		Storage	275		150	300		175	300		300	175		
		50th Queue	10	297	11	142	256	14	860	94	0	92	474	
		95th Queue	14	456	58	286	383	55	1088	150	0	151	730	
BUILD (SIGNAL)	AM	Overall LOS	D (52.2)											
		Approach LOS	C (20.0)			C (26.2)			F ($)			F (88.3)		
		Storage	275		150	300		175	300		300	175		
		50th Queue	36	142	2	322	591	56	294	94	0	92	151	
		95th Queue	65	171	17	411	676	107	455	157	0	178	287	
	PM	Overall LOS	F ($)											
		Approach LOS	D (40.2)			D (35.7)			F ($)			F (86.3)		
		Storage	275		150	300		175	300		300	175		
		50th Queue	10	305	13	142	258	15	950	99	0	92	476	
		95th Queue	13	464	57	286	387	57	1183	157	0	152	732	

$ - Delay exceeds 200 seconds

The signalized intersection of Thornton Road (SR 6) at Factory Shoals Road (Intersection 1) is projected to operate at an acceptable overall LOS during the AM and PM peak hour under all studied scenarios except the Projected 2025 Build Conditions during the PM peak, where the overall intersection is projected to operate at LOS F. Additionally, the eastbound and westbound approaches operate at LOS F under the AM and PM peak hours of the Existing 2023 conditions, Projected 2025 No-Build conditions, and Projected 2025 Build conditions. GDOT has a currently programmed quick response project to be implemented prior to the build-out of the development. The project calls for the addition of an eastbound exclusive left-turn lane and an eastbound exclusive through lanes and the addition of an exclusive westbound left-turn lane. The Quick Response laneage was included in the 2025 No-Build and 2025 Build scenarios (shown in green on **Figure 33** and **Figure 34).**

Per GRTA's DRI guidelines, an improvement should be considered if either the overall intersection, or an individual approach operates at a failing LOS. In order to improve the approach LOS under the 2025 No-Build and 2025 Build conditions, Kimley-Horn recommends the following system improvements in addition to the programmed Quick Response project (shown in red on **Figure 33** and **Figure 34):**

- Thornton Road (SR 6) at Factory Shoals Road (Intersection 1)
  - Construct an exclusive westbound right-turn lane so that the westbound approach of Factory Shoals Road consists of one (1) exclusive left-turn lane, one (1) exclusive through-lane, and one (1) exclusive right-turn lane.

The analysis results shown in the table below are for the improved conditions at Thornton Road (SR 6) at Factory Shoals Road (Intersection 1), which assume the noted geometric changes.

Overall LOS Standard: D Approach LOS Standard: D			Thornton Road (SR 6)			Thornton Road (SR 6)			Factory Shoals Road			Factory Shoals Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (34.3)											
		Approach LOS	B (24.1)			C (30.2)			F (83.1)			E (72.6)		
		Storage	275		150	300		175	300		300	175		175
		50th Queue	39	242	14	339	668	75	170	94	0	92	68	0
		95th Queue	81	327	54	435	770	134	280	154	0	157	121	60
	PM	Overall LOS	D (50.4)											
		Approach LOS	D (46.0)			D (38.0)			E (79.5)			E (63.7)		
		Storage	275		150	300		175	300		300	175		175
		50th Queue	9	324	13	142	278	18	454	90	0	88	34	390
		95th Queue	13	495	65	286	408	64	682	144	0	145	68	588
BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (35.5)											
		Approach LOS	C (24.1)			C (31.0)			F (91.0)			E (72.6)		
		Storage	275		150	300		175	300		300	175		175
		50th Queue	39	247	15	339	709	92	183	94	0	92	73	0
		95th Queue	81	331	55	435	806	157	319	156	0	157	128	60
	PM	Overall LOS	D (54.1)											
		Approach LOS	D (47.6)			D (38.6)			F (97.7)			E (63.7)		
		Storage	275		150	300		175	300		300	175		175
		50th Queue	10	333	14	142	282	20	548	95	0	88	35	390
		95th Queue	13	568	66	286	414	68	777	151	0	145	69	588

Although the eastbound and westbound approaches are projected to operate at LOS E or F, no other feasible improvements exist, as the failing LOS is due to the existing signal timing. Thornton Road (SR 6) is a high priority freight and commuter corridor between I-20 in Douglas County and I-285/Hartsfield-Jackson International Airport in Fulton County. The intersection operates at an acceptable overall LOS, and existing signal timings and cycle lengths prioritize vehicular progression on the mainline (SR 6) at the expense of side-street operations. Therefore, no additional off-site improvements are recommended.

5.2 Factory Shoals Road at Douglas Hill Road (Intersection 2)

Overall LOS Standard: D Approach LOS Standard: D			Factory Shoals Road Northbound			Factory Shoals Road Southbound			Douglas Hill Road Eastbound			Douglas Hill Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING (AWSC)	AM	Overall LOS	A (8.3)											
		Approach LOS	A (8.4)			A (8.3)			A (9.7)			A (7.9)		
		Storage												
		50th Queue												
		95th Queue		25			18			0			3	
	PM	Overall LOS	A (8.4)											
		Approach LOS	A (8.4)			A (8.6)			A (8.1)			A (8.2)		
		Storage												
		50th Queue												
		95th Queue		15			13			3			18	
NO-BUILD (AWSC)	AM	Overall LOS	B (14.3)											
		Approach LOS	B (12.3)			C (15.0)			B (11.7)			B (11.9)		
		Storage												
		50th Queue												
		95th Queue		50			90			28			30	
	PM	Overall LOS	B (14.9)											
		Approach LOS	B (12.8)			B (13.3)			C (18.1)			B (13.0)		
		Storage												
		50th Queue												
		95th Queue		40			45			105			50	
BUILD (AWSC)	AM	Overall LOS	C (15.2)											
		Approach LOS	B (13.2)			C (18.4)			B (12.2)			B (12.5)		
		Storage												
		50th Queue												
		95th Queue		58			128			28			33	
	PM	Overall LOS	C (16.5)											
		Approach LOS	C (15.1)			B (14.7)			C (20.2)			B (14.1)		
		Storage												
		50th Queue												
		95th Queue		63			55			118			53	

The intersection of Factory Shoals Road at Douglas Hill Road (Intersection 2) is projected to operate at an acceptable overall LOS under the Existing 2023 conditions, Projected 2025 No-Build conditions, and Projected 2025 Build conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.3 Riverside Parkway at Rock House Road/Private Driveway (Intersection 3)

Overall LOS Standard: D Approach LOS Standard: D			Private Driveway			Rock House Road			Riverside Parkway			Riverside Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING (SIGNAL)	AM	Overall LOS	A (5.4)											
		Approach LOS	B (16.8)			B (17.4)			A (5.5)			A (3.9)		
		Storage						150	250		200	50		275
		50th Queue		0	0		8	0	11	100	0	1	35	0
		95th Queue		4	0		34	23	30	203	0	7	75	7
	PM	Overall LOS	A (6.8)											
		Approach LOS	C (23.3)			C (26.0)			A (4.5)			A (6.7)		
		Storage						150	250		200	50		275
		50th Queue		4	0		16	0	5	59	0	5	181	0
		95th Queue		20	0		54	39	19	120	2	16	371	5
NO-BUILD (SIGNAL)	AM	Overall LOS	A (5.6)											
		Approach LOS	B (16.8)			B (17.5)			A (5.7)			A (4.0)		
		Storage						150	250		200	50		275
		50th Queue		0	0		8	0	14	106	0	1	36	0
		95th Queue		4	0		36	27	37	213	0	7	77	6
	PM	Overall LOS	A (7.2)											
		Approach LOS	C (24.4)			C (27.3)			A (4.8)			A (7.1)		
		Storage						150	250		200	50		275
		50th Queue		4	0		17	0	6	62	0	5	195	0
		95th Queue		20	0		55	44	24	125	2	17	402	5
BUILD (SIGNAL)	AM	Overall LOS	A (5.9)											
		Approach LOS	B (17.4)			B (18.4)			A (5.9)			A (4.0)		
		Storage						150	250		200	50		275
		50th Queue		0	0		14	0	16	113	0	1	39	0
		95th Queue		4	0		53	30	45	244	0	8	88	13
	PM	Overall LOS	C (29.4)											
		Approach LOS	C (30.9)			D (45.2)			B (15.8)			C (34.0)		
		Storage						150	250		200	50		275
		50th Queue		4	0		39	12	8	70	0	6	219	0
		95th Queue		17	0		83	53	31	148	3	20	558	12

The intersection of Riverside Parkway at Rock House Road (Intersection 3) is projected to operate at an acceptable overall LOS under the AM and PM peak hours of the Existing 2023 conditions, Projected 2025 No-Build conditions, and Projected 2025 Build conditions. Due to the increase in volume on the southbound left-turn movement during the PM peak hour of the Projected 2025 Build conditions, the split time for the approach was increased to accommodate the additional demand, per the GRTA Review Procedures. As a result, the southbound approach operates at an acceptable LOS under Projected 2025 Build conditions. Since a change in signal timing would improve the southbound approach to an acceptable LOS, no physical improvements are recommended to be conditioned.

5.4 *Thornton Road (SR 6) at Riverside Parkway (Intersection 4)*

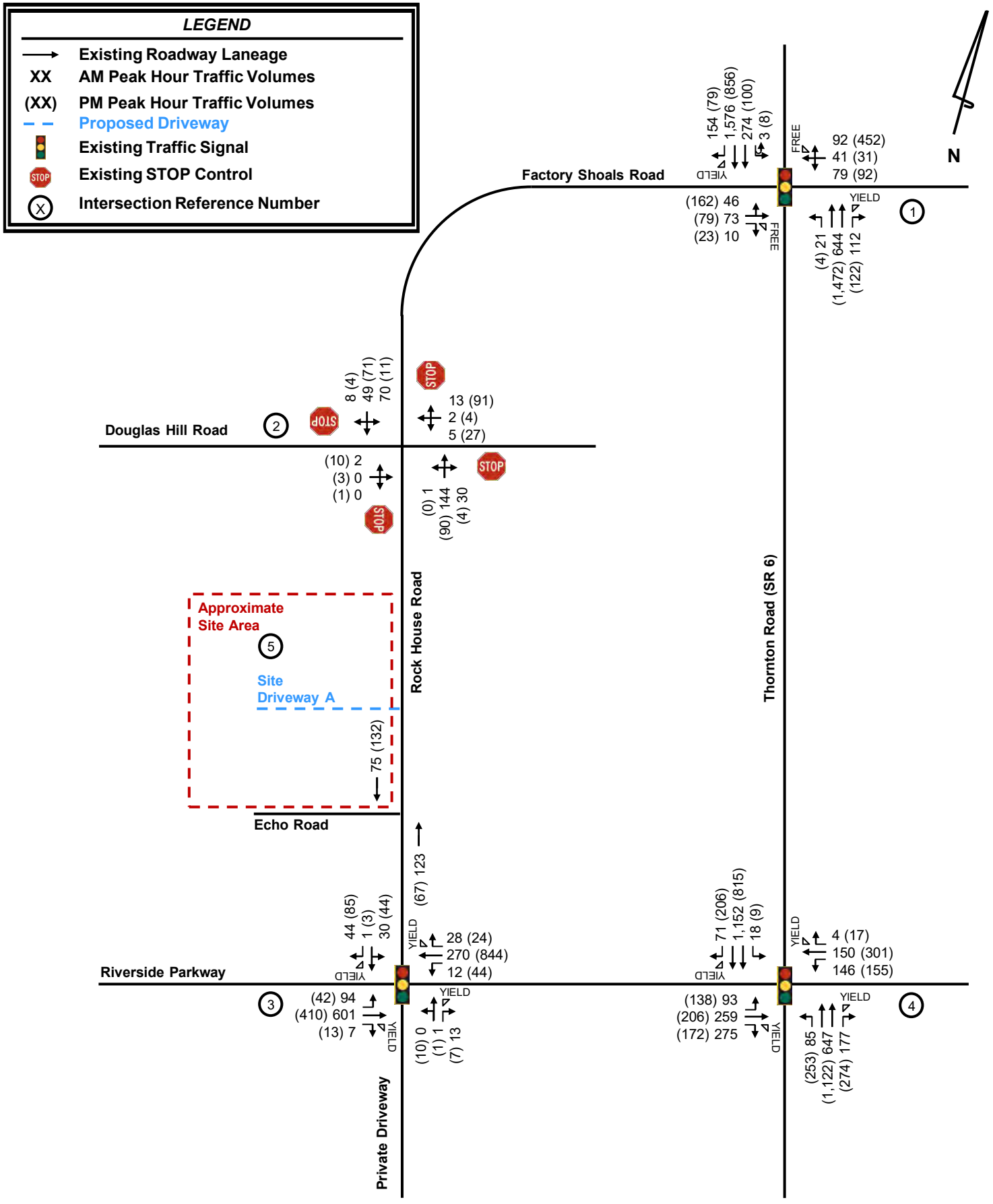
Overall LOS Standard: D Approach LOS Standard: D			Thornton Road (SR 6)			Thornton Road (SR 6)			Riverside Parkway			Riverside Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING (SIGNAL)	AM	Overall LOS	D (44.2)											
		Approach LOS	C (28.8)			C (33.3)			F (90.5)			E (63.1)		
		Storage	375		175	250		125	250		300	175		150
		50th Queue	102	254	22	20	635	12	80	308	69	132	157	0
		95th Queue	198	320	71	30	704	22	131	511	191	200	246	0
	PM	Overall LOS	D (49.4)											
		Approach LOS	D (37.8)			D (41.9)			E (70.2)			F (88.7)		
		Storage	375		175	250		125	250		300	175		150
		50th Queue	311	463	73	12	477	93	127	234	0	146	367	0
		95th Queue	476	660	164	30	529	153	190	330	73	216	544	0
NO-BUILD (SIGNAL)	AM	Overall LOS	D (46.9)											
		Approach LOS	C (29.3)			D (39.0)			F (94.6)			E (64.6)		
		Storage	375		175	250		125	250		300	175		150
		50th Queue	107	305	35	22	784	11	82	320	93	135	163	0
		95th Queue	207	379	88	29	888	20	134	532	219	205	253	0
	PM	Overall LOS	D (51.8)											
		Approach LOS	D (40.5)			D (47.0)			E (71.2)			F (89.2)		
		Storage	375		175	250		125	250		300	175		150
		50th Queue	325	580	88	11	572	90	130	244	0	150	380	0
		95th Queue	500	817	184	28	665	150	197	344	74	222	571	0
BUILD (SIGNAL)	AM	Overall LOS	D (50.1)											
		Approach LOS	C (34.7)			D (41.2)			F (95.6)			E (65.9)		
		Storage	375		175	250		125	250		300	175		150
		50th Queue	141	305	35	22	784	17	88	323	104	135	176	0
		95th Queue	287	380	88	28	942	25	141	541	235	206	270	0
	PM	Overall LOS	D (54.1)											
		Approach LOS	D (42.5)			D (50.8)			E (71.7)			F (89.3)		
		Storage	375		175	250		125	250		300	175		150
		50th Queue	345	580	88	11	572	96	143	255	0	150	393	0
		95th Queue	539	817	184	28	667	164	245	357	79	222	588	0

Although the eastbound and westbound approaches of Thornton Road (SR 6) at Riverside Parkway (Intersection 4) are projected to operate at LOS E or F under all studied scenarios, no feasible improvements exist, as the failing LOS is due to the existing signal timing. Thornton Road (SR 6) is a high priority freight and commuter corridor between I-20 in Douglas County and I-285/Hartsfield-Jackson International Airport in Fulton County. The intersection operates at an acceptable overall LOS, and existing signal timings and cycle lengths prioritize vehicular progression on the mainline (SR 6) at the expense of side-street operations.

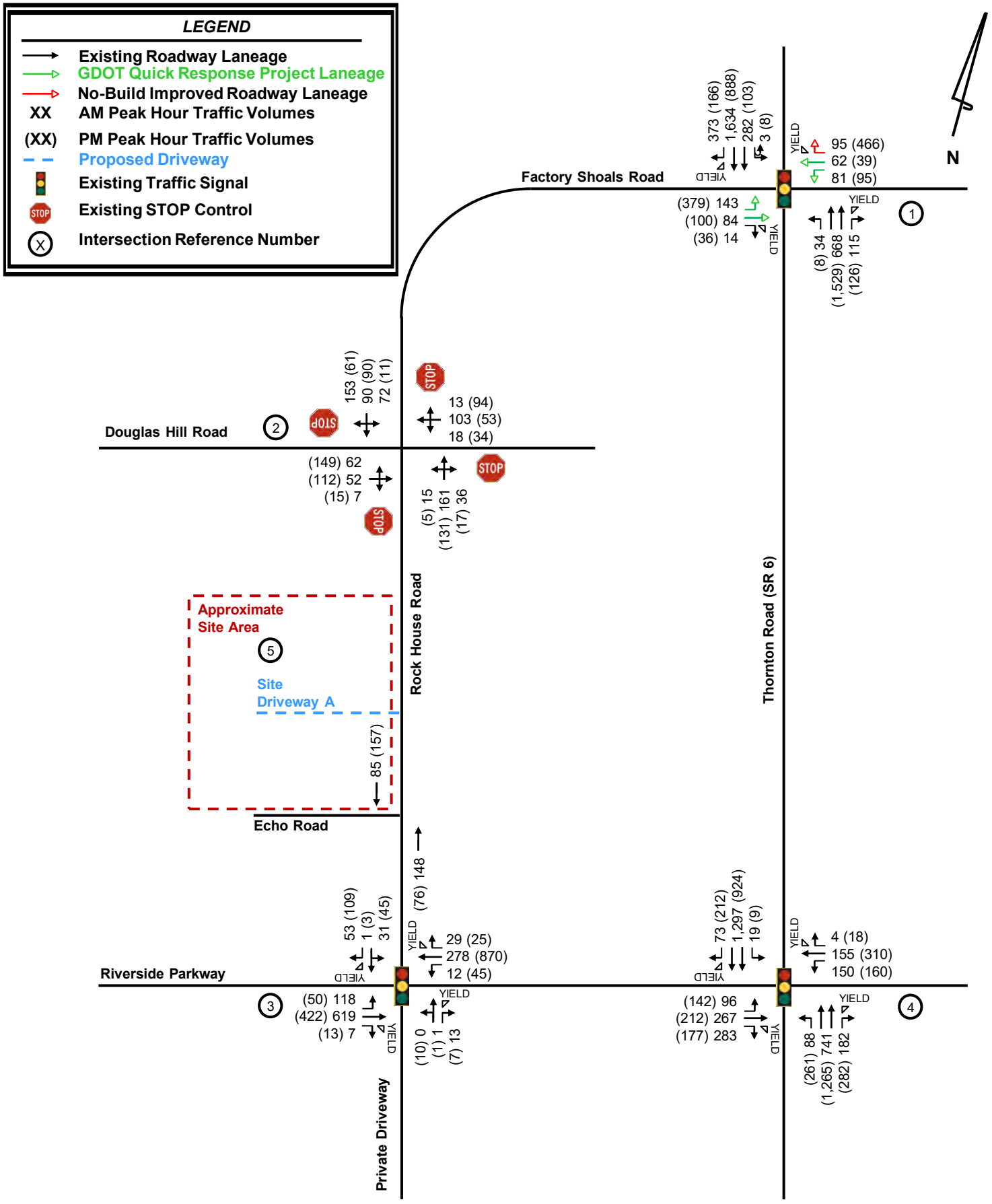
5.5 *Rock House Road at Site Driveway A (Intersection 5)*

Overall LOS Standard: D Approach LOS Standard: D			Rock House Road			Rock House Road			Site Driveway A					
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R			
BUILD (TWSC)	AM	Overall LOS	(3.2)											
		Approach LOS	A (7.8)			A (0.0)			B (11.1)					
		Storage												
		50th Queue												
		95th Queue	3						3		3			
	PM	Overall LOS	(3.2)											
		Approach LOS	A (8.2)			A (0.0)			B (10.7)					
		Storage												
		50th Queue												
		95th Queue	3						5		5			

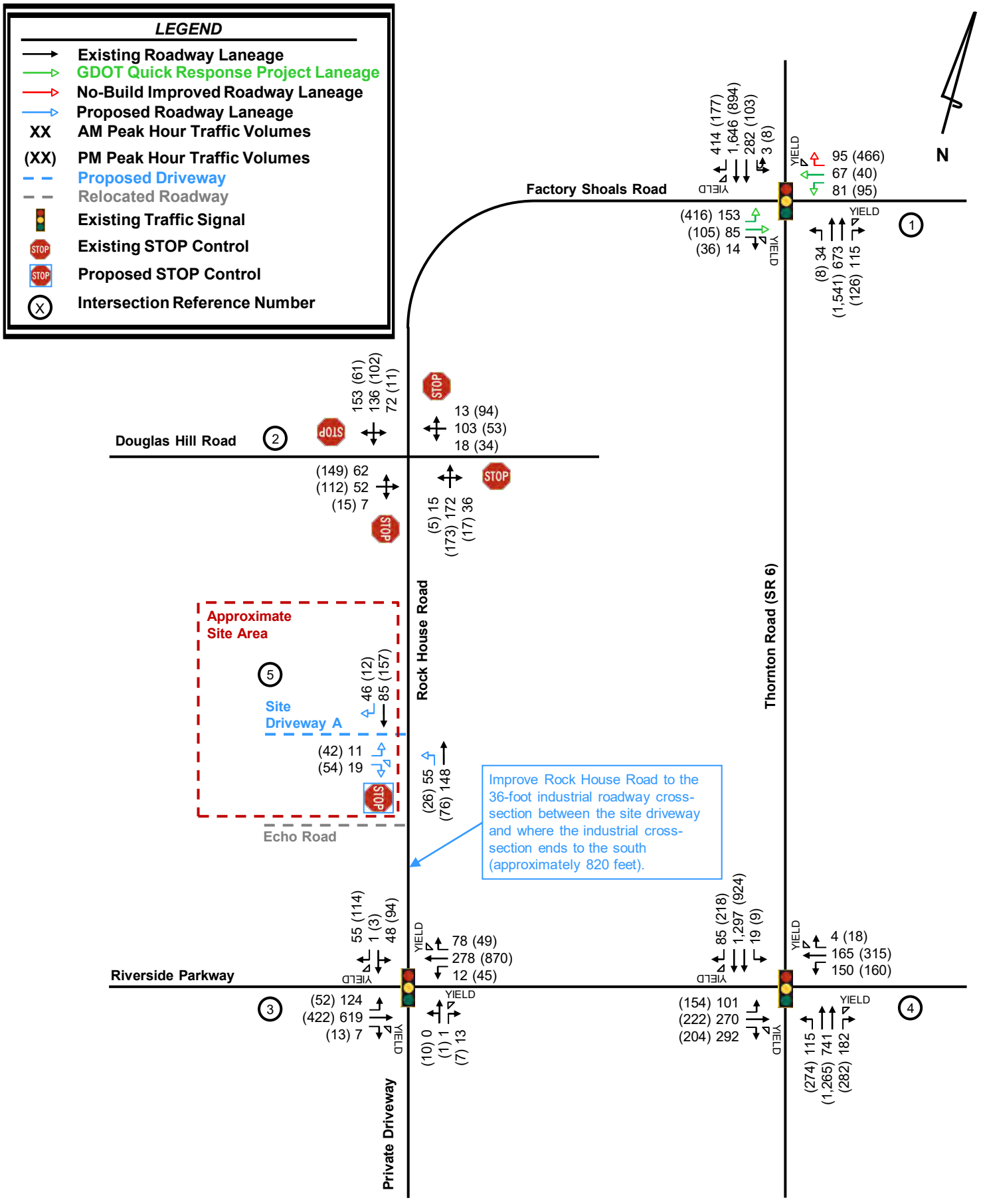
The intersection of Rock House Road at Site Driveway A (Intersection 5) is projected to operate at an acceptable LOS under the Projected 2025 Build scenario. Each approach of the intersection is projected to operate acceptably under the Projected 2025 Build conditions. The recommended lane configuration for Site Driveway A is one (1) lane entering the site and one (1) exclusive left-turn lane and one (1) exclusive right-turn lane exiting the site.



Kimley»Horn	*Rock House Road Site* *DRI #3939* *Transportation Analysis*	**Existing 2023 Traffic Volumes**	**Figure 32**
			Page 38



Kimley»Horn	*Rock House Road Site* *DRI #3939* *Transportation Analysis*	**Projected 2025 No-Build Traffic Volumes**	**Figure 33** **Page 39**

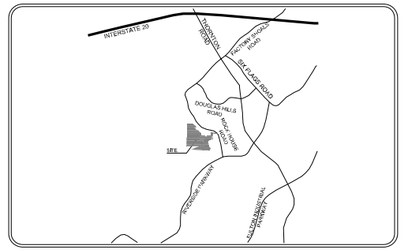


Kimley»Horn	*Rock House Road Site DRI #3939 Transportation Analysis*	**Projected 2025 Build Traffic Volumes**	**Figure 34**
			Page 40

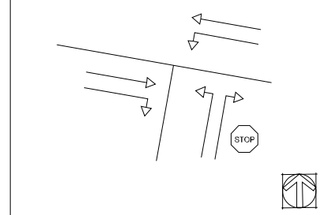
APPENDIX A

Proposed Site Plan

ACREAGE:	TOTAL	134.6 AC
BUILDINGS :		
	BUILDING 100	304,000 S.F.
	BUILDING 200	594,000 S.F.
	TOTAL	898,000 S.F.
	BUILDING USE	WAREHOUSING
	ZONING	LIGHT INDUSTRIAL
YIELD:		
	FLOOR AREA RATIO	15.3%
	IMPERVIOUS COVER	30.4%
	OPEN SPACE	69.6%
PAVEMENT:		
	MINIMUM REQUIRED PARKING SPACES	193
	MAXIMUM REQUIRED PARKING SPACES (PER EMPLOYEE)	404
	PARKING SPACES	404
	TRAILER SPACES	165
LOCATION:	STREET	ROCK HOUSE ROAD
	JURISDICTION	DOUGLAS COUNTY, GA
	PARCEL NO.	09481820002, 09921820001, 09921820007, 09911820001, 09921820003, 09921820002, 09921820005, 01750150029, 01750150028, 01750150007, 01750150033, 09471820001, 09471820001
SERVICES:	SEWER DEMAND	9,625 GPD
	WATER DEMAND	9,625 GPD



LOCATION MAP
N.T.S.



LANEAGE AT ROCK HOUSE ROAD

GRAPHIC SCALE

150 0 50 100 200 400

(IN FEET)
1 INCH = 150 FT.

E&A EBERLY & ASSOCIATES
TEL770.452.7849 FAX770.452.0086
2951 FLOWERS ROAD SOUTH
SUITE 119
ATLANTA, GEORGIA 30341
WWW.EBERLY.NET
LAND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE

PROJECT:
TAYLOR & MATHIS
ROCK HOUSE RD.
DRI #3939
LAND LOT 17, 94, 95, & 99
1ST, 21ST, 50TH, 71ST, & 81ST DISTRICT
DOUGLAS COUNTY, GEORGIA
ROCK HOUSE ROAD

REVISIONS:

12/17/22	REV 1
03/03/23	REV 2
05/18/23	DRI PLAN

DEVELOPER

TAYLOR & MATHIS
400 INTERSTATE N PKWY
SUITE 850
ATLANTA, GA 30339
(770) 795-1330
MRSY@TAYLORMATHIS.COM

ENGINEER

WESLEY REED, P.E.
EBERLY & ASSOCIATES, INC.
2951 FLOWERS ROAD SOUTH
SUITE 119
ATLANTA, GEORGIA 30341
(770) 452-7849
WREED@EBERLY.NET

TRAFFIC ENGINEER

HARRISON FORDER, P.E. (GA, AL)
JOHN WALKER, PTOE
KIMLEY-HORN
11720 AMBER PARK DRIVE
SUITE 600
ALPHARETTA, GEORGIA 30009
(770) 919-4280

DRI #3939 SITE PLAN	
SCALE:	1"=100'
DATE:	12/13/22
DRAWN BY:	
PROJECT MANAGER:	WESLEY REED, P.E.
QA/QC CHECK:	

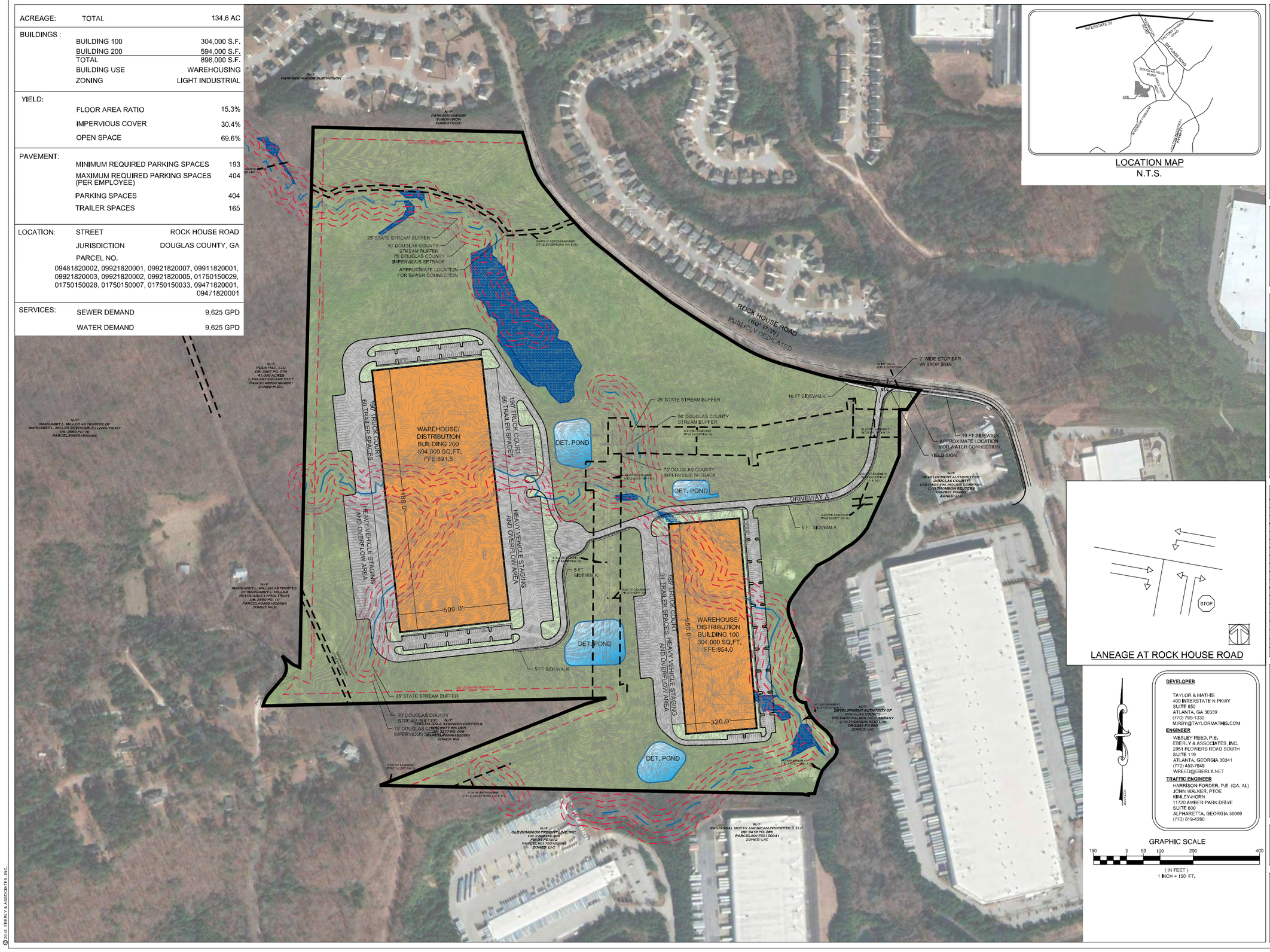
PROJECT NO.
22-130

SHEET NO.
DRI

NOT ISSUED FOR CONSTRUCTION

G:\PROJECTS\2022\22-130 Taylor & Mathis Rock House Road\5.0 Drawing\30x42 Base_030323.dwg May 22, 2023

ACREAGE:	TOTAL	134.6 AC
BUILDINGS :		
	BUILDING 100	304,000 S.F.
	BUILDING 200	594,000 S.F.
	TOTAL	898,000 S.F.
	BUILDING USE	WAREHOUSING
	ZONING	LIGHT INDUSTRIAL
YIELD:		
	FLOOR AREA RATIO	15.3%
	IMPERVIOUS COVER	30.4%
	OPEN SPACE	69.6%
PAVEMENT:		
	MINIMUM REQUIRED PARKING SPACES	193
	MAXIMUM REQUIRED PARKING SPACES (PER EMPLOYEE)	404
	PARKING SPACES	404
	TRAILER SPACES	165
LOCATION:	STREET	ROCK HOUSE ROAD
	JURISDICTION	DOUGLAS COUNTY, GA
	PARCEL NO.	09481820002, 09921820001, 09921820007, 09911820001, 09921820003, 09921820002, 09921820005, 01750150029, 01750150028, 01750150007, 01750150033, 09471820001, 09471820001
SERVICES:	SEWER DEMAND	9,625 GPD
	WATER DEMAND	9,625 GPD



LOCATION MAP
N.T.S.

E&A EBERLY & ASSOCIATES
TEL770.452.7849 FAX770.452.0086
2951 FLOWERS ROAD SOUTH
SUITE 119
ATLANTA, GEORGIA 30341
WWW.EBERLY.NET
LAND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE

PROJECT

TAYLOR & MATHIS
ROCK HOUSE RD.
DRI #3939
LAND LOT 17, 94, 95, & 99
1ST, 21ST, 50TH, 71ST, & 81ST DISTRICT
DOUGLAS COUNTY, GEORGIA
ROCK HOUSE ROAD

REVISIONS:

12/17/22	REV 1
03/03/23	REV 2
05/18/23	DRI PLAN

LANEAGE AT ROCK HOUSE ROAD

DEVELOPER
TAYLOR & MATHIS
400 INTERSTATE N PKWY
SUITE 650
ATLANTA, GA 30339
(770) 795-1330
MRSY@TAYLORMATHIS.COM

ENGINEER
WESLEY REED, P.E.
EBERLY & ASSOCIATES, INC.
2951 FLOWERS ROAD SOUTH
SUITE 119
ATLANTA, GEORGIA 30341
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SUITE 600
ALPHARETTA, GEORGIA 30009
(770) 619-4280

GRAPHIC SCALE
150 0 50 100 200 400
(IN FEET)
1 INCH = 150 FT.

DRI #3939 SITE PLAN

SCALE:	1"=100'
DATE:	12/1/22
DRAWN BY:	
PROJECT MANAGER:	WESLEY REED, P.E.
QA/QC CHECK:	

PROJECT NO.
22-130

SHEET NO.
DRI

NOT ISSUED FOR CONSTRUCTION

G:\PROJECTS\2022\22-130 Taylor & Mathis Rock House Road\5.0 Drawings\30x42 Base_030323.dwg May 22, 2023

APPENDIX B

Trip Generation Analysis

Trip Generation Analysis (11th Ed. with *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Rock House Road Site DRI #3939
Douglas County, GA

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Proposed Site Traffic								
150 Warehousing	898,000 s.f.	1,458	131	101	30	134	38	96
Gross Trips		**1,458**	**131**	**101**	**30**	**134**	**38**	**96**
Warehouse Truck Trips (per ITE 11th Edition)		492	18	9	9	27	14	13
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Truck Trips		492	18	9	9	27	14	13
Warehouse Car Trips (per ITE 11th Edition)		966	113	92	21	107	24	83
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Car Trips		966	113	92	21	107	24	83
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		**1,458**	**131**	**101**	**30**	**134**	**38**	**96**
Passenger Car Trips		*966*	*113*	*92*	*21*	*107*	*24*	*83*
Truck Trips		*492*	*18*	*9*	*9*	*27*	*14*	*13*

APPENDIX C

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

Intersection #1: Thorton Road (SR 6) @ Factory Shoals Road
AM PEAK HOUR

Description	Thorton Road (SR 6) Northbound			Thorton Road (SR 6) Southbound				Factory Shoals Road Eastbound			Factory Shoals Road Westbound		
	Left	Through	Right	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2023 Traffic Volumes	21	644	112	3	274	1,576	154	46	73	10	79	41	92
Pedestrians		0				0			0			0	
Conflicting Pedestrians	0		0	0	0		0	0		0	0		0
Heavy Vehicles	0	105	10	0	12	143	13	2	2	2	8	2	19
Heavy Vehicle %	2%	16%	9%	2%	4%	9%	8%	4%	3%	20%	10%	5%	21%
Peak Hour Factor		0.96				0.96			0.96			0.96	
Adjustment													
Adjusted 2023 Volumes	21	644	112	3	274	1576	154	46	73	10	79	41	92
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment													
DCT Douglas Hill Distribution Center DRI #2701							34	15	1			3	
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)		5				10							
Strategic West Logistics IV DRI #3515							64	15	1			5	
Strategic West Logistics IV DRI #3515 (Trucks)							6	5					
JDA Factory Shoals Site	11						15	4	1	3		3	
JDA Factory Shoals Site (Trucks)	1						1	1		1			
Rock House Road Site (DSP)							35	8	1			3	
Rock House Road Site (DSP) (Trucks)							3	2					
T5 ATL III Data Center DRI #3747							56	46	5			6	
2025 Background Traffic	34	668	115	3	282	1,634	373	143	84	14	81	62	95
2025 No-Build Heavy Vehicle %	4%	17%	9%	2%	4%	10%	6%	7%	2%	22%	10%	3%	21%
Project Trips													
Trip Distribution IN						30%							
Trip Distribution OUT		30%											
Heavy Vehicle (Truck) Trips	0	3	0	0	0	3	0	0	0	0	0	0	0
Trip Distribution IN						10%	45%					5%	
Trip Distribution OUT		10%						45%	5%				
Employee (Car) Trips	0	2	0	0	0	9	41	10	1	0	0	5	0
Project Trips Balance													
Total Project Trips	0	5	0	0	0	12	41	10	1	0	0	5	0
2025 Buildout Total	34	673	115	3	282	1,646	414	153	85	14	81	67	95
2025 Build Heavy Vehicle %	4%	17%	9%	2%	4%	10%	6%	7%	2%	22%	10%	3%	21%

PM PEAK HOUR

Description	Thorton Road (SR 6) Northbound			Thorton Road (SR 6) Southbound				Factory Shoals Road Eastbound			Factory Shoals Road Westbound		
	Left	Through	Right	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2023 Traffic Volumes	4	1,472	122	8	100	856	79	162	79	23	92	31	452
Pedestrians		0				0			0			0	
Conflicting Pedestrians	0		0	0	0		0	0		0	0		0
Heavy Vehicles	0	169	19	1	29	124	7	6	3	4	6	1	27
Heavy Vehicle %	2%	11%	16%	13%	29%	14%	9%	4%	4%	17%	7%	3%	6%
Peak Hour Factor		0.98				0.98			0.98			0.98	
Adjustment													
Adjusted 2023 Volumes	4	1472	122	8	100	856	79	162	79	23	92	31	452
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment													
DCT Douglas Hill Distribution Center DRI #2701							15	34	3			1	
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)		13				6							
Strategic West Logistics IV DRI #3515							16	59	5			1	
Strategic West Logistics IV DRI #3515 (Trucks)							8	8					
JDA Factory Shoals Site	3						5	15	3	11		1	
JDA Factory Shoals Site (Trucks)	1						1	1		1			
Rock House Road Site (DSP)							10	32	2			1	
Rock House Road Site (DSP) (Trucks)							4	3					
T5 ATL III Data Center DRI #3747							26	60	6			3	
2025 Background Traffic	8	1,529	126	8	103	888	166	379	100	36	95	39	466
2025 No-Build Heavy Vehicle %	14%	12%	16%	13%	29%	15%	12%	5%	3%	14%	7%	3%	6%
Project Trips													
Trip Distribution IN						30%							
Trip Distribution OUT		30%											
Heavy Vehicle (Truck) Trips	0	4	0	0	0	4	0	0	0	0	0	0	0
Trip Distribution IN						10%	45%					5%	
Trip Distribution OUT		10%						45%	5%				
Employee (Car) Trips	0	8	0	0	0	2	11	37	4	0	0	1	0
Project Trips Balance									1				
Total Project Trips	0	12	0	0	0	6	11	37	5	0	0	1	0
2025 Buildout Total	8	1,541	126	8	103	894	177	416	105	36	95	40	466
2025 Build Heavy Vehicle %	14%	12%	16%	13%	29%	15%	11%	4%	3%	14%	7%	3%	6%

INTERSECTION VOLUME DEVELOPMENT

Intersection #2: Factory Shoals Road @ Douglas Hills Road
AM PEAK HOUR

Description	Factory Shoals Road Northbound			Factory Shoals Road Southbound			Douglas Hills Road Eastbound			Douglas Hills Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2023 Traffic Volumes	1	144	30	70	49	8	2	0	0	5	2	13
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	5	0	2	4	3	2	0	0	1	1	1
Heavy Vehicle %	2%	3%	2%	3%	8%	38%	100%	0%	0%	20%	50%	8%
Peak Hour Factor		0.79			0.79			0.79			0.79	
Adjustment												
Adjusted 2023 Volumes	1	144	30	70	49	8	2	0	0	5	2	13
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment												
DCT Douglas Hill Distribution Center DRI #2701	3					37	16	9	1		21	
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)								10			22	
Strategic West Logistics IV DRI #3515	5					69	16	6	1		25	
Strategic West Logistics IV DRI #3515 (Trucks)						6	5	4			5	
JDA Factory Shoals Site		2										
JDA Factory Shoals Site (Trucks)												
Rock House Road Site (DSP)		9	3		37					11		
Rock House Road Site (DSP) (Trucks)		2	2		3					2		
T5 ATL III Data Center DRI #3747	6					33	23	23	5		28	
2025 Background Traffic	15	161	36	72	90	153	62	52	7	18	103	13
2025 No-Build Heavy Vehicle %	2%	4%	7%	3%	8%	6%	11%	27%	2%	17%	27%	8%
Project Trips												
Trip Distribution IN												
Trip Distribution OUT												
Heavy Vehicle (Truck) Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN					50%							
Trip Distribution OUT		50%										
Employee (Car) Trips	0	11	0	0	46	0	0	0	0	0	0	0
Project Trips Balance												
Total Project Trips	0	11	0	0	46	0	0	0	0	0	0	0
2025 Buildout Total	15	172	36	72	136	153	62	52	7	18	103	13
2025 Build Heavy Vehicle %	2%	4%	7%	3%	5%	6%	11%	27%	2%	17%	27%	8%

PM PEAK HOUR

Description	Factory Shoals Road Northbound			Factory Shoals Road Southbound			Douglas Hills Road Eastbound			Douglas Hills Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2023 Traffic Volumes	0	90	4	11	71	4	10	3	1	27	4	91
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	6	1	2	4	1	1	2	0	1	3	4
Heavy Vehicle %	0%	7%	25%	18%	6%	25%	10%	67%	2%	4%	75%	4%
Peak Hour Factor		0.74			0.74			0.74			0.74	
Adjustment												
Adjusted 2023 Volumes	0	90	4	11	71	4	10	3	1	27	4	91
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment												
DCT Douglas Hill Distribution Center DRI #2701	1					17	37	21	3		13	
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)								29			10	
Strategic West Logistics IV DRI #3515	1					17	64	23	5		6	
Strategic West Logistics IV DRI #3515 (Trucks)						8	8	6			7	
JDA Factory Shoals Site					2							
JDA Factory Shoals Site (Trucks)												
Rock House Road Site (DSP)		35	10		11					3		
Rock House Road Site (DSP) (Trucks)		3	3		4					3		
T5 ATL III Data Center DRI #3747	3					15	30	30	6		13	
2025 Background Traffic	5	131	17	11	90	61	149	112	15	34	53	94
2025 No-Build Heavy Vehicle %	2%	7%	24%	19%	9%	15%	6%	33%	2%	12%	38%	4%
Project Trips												
Trip Distribution IN												
Trip Distribution OUT												
Heavy Vehicle (Truck) Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN					50%							
Trip Distribution OUT		50%										
Employee (Car) Trips	0	42	0	0	12	0	0	0	0	0	0	0
Project Trips Balance												
Total Project Trips	0	42	0	0	12	0	0	0	0	0	0	0
2025 Buildout Total	5	173	17	11	102	61	149	112	15	34	53	94
2025 Build Heavy Vehicle %	2%	5%	24%	19%	8%	15%	6%	33%	2%	12%	38%	4%

INTERSECTION VOLUME DEVELOPMENT

Intersection #3: Riverside Parkway @ Private Driveway / Rock House Road

AM PEAK HOUR

Description	Private Driveway Northbound			Rock House Road Southbound			Riverside Parkway Eastbound			Riverside Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2023 Traffic Volumes	0	1	13	30	1	44	94	601	7	12	270	28
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	2	7	0	3	1	32	0	2	35	13
Heavy Vehicle %	0%	2%	15%	23%	2%	7%	2%	5%	2%	17%	13%	46%
Peak Hour Factor		0.91			0.91			0.91			0.91	
Adjustment												
Adjusted 2023 Volumes	0	1	13	30	1	44	94	601	7	12	270	28
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment												
DCT Douglas Hill Distribution Center DRI #2701						1	3					
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)						0	0					
Strategic West Logistics IV DRI #3515						1	5					
Strategic West Logistics IV DRI #3515 (Trucks)						0	0					
JDA Factory Shoals Site						0	2					
JDA Factory Shoals Site (Trucks)						0	0					
Rock House Road Site (DSP)						1	5					
Rock House Road Site (DSP) (Trucks)						0	0					
T5 ATL III Data Center DRI #3747						5	6					
2025 Background Traffic	0	1	13	31	1	53	118	619	7	12	278	29
2025 No-Build Heavy Vehicle %	0%	2%	16%	23%	2%	6%	2%	5%	2%	17%	13%	46%
Project Trips												
Trip Distribution IN							10%					90%
Trip Distribution OUT				90%		10%						
Heavy Vehicle (Truck) Trips	0	0	0	8	0	1	1	0	0	0	0	8
Trip Distribution IN							5%					45%
Trip Distribution OUT				45%		5%						
Employee (Car) Trips	0	0	0	10	0	1	5	0	0	0	0	41
Project Trips Balance				-1								
Total Project Trips	0	0	0	17	0	2	6	0	0	0	0	49
2025 Buildout Total	0	1	13	48	1	55	124	619	7	12	278	78
2025 Build Heavy Vehicle %	0%	2%	16%	32%	2%	7%	3%	5%	2%	17%	13%	27%

PM PEAK HOUR

Description	Private Driveway Northbound			Rock House Road Southbound			Riverside Parkway Eastbound			Riverside Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2023 Traffic Volumes	10	1	7	44	3	85	42	410	13	44	844	24
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	7	0	2	2	27	0	0	45	7
Heavy Vehicle %	2%	2%	2%	16%	2%	2%	5%	7%	2%	2%	5%	29%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment												
Adjusted 2023 Volumes	10	1	7	44	3	85	42	410	13	44	844	24
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment												
DCT Douglas Hill Distribution Center DRI #2701						3	1					
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)						0	0					
Strategic West Logistics IV DRI #3515						5	1					
Strategic West Logistics IV DRI #3515 (Trucks)						0	0					
JDA Factory Shoals Site						2	0					
JDA Factory Shoals Site (Trucks)						0	0					
Rock House Road Site (DSP)						5	2					
Rock House Road Site (DSP) (Trucks)						0	0					
T5 ATL III Data Center DRI #3747						6	3					
2025 Background Traffic	10	1	7	45	3	109	50	422	13	45	870	25
2025 No-Build Heavy Vehicle %	2%	2%	2%	16%	2%	2%	4%	7%	2%	2%	5%	29%
Project Trips												
Trip Distribution IN							10%					90%
Trip Distribution OUT				90%		10%						
Heavy Vehicle (Truck) Trips	0	0	0	12	0	1	1	0	0	0	0	13
Trip Distribution IN							5%					45%
Trip Distribution OUT				45%		5%						
Employee (Car) Trips	0	0	0	37	0	4	1	0	0	0	0	11
Project Trips Balance												
Total Project Trips	0	0	0	49	0	5	2	0	0	0	0	24
2025 Buildout Total	10	1	7	94	3	114	52	422	13	45	870	49
2025 Build Heavy Vehicle %	2%	2%	2%	20%	2%	3%	6%	7%	2%	2%	5%	41%

INTERSECTION VOLUME DEVELOPMENT

Intersection #4: Thorton Road (SR 6) @ Riverside Parkway
AM PEAK HOUR

Description	Thorton Road (SR 6) Northbound Left	Through	Right	Thorton Road (SR 6) Southbound Left	Through	Right	Riverside Parkway Eastbound Left	Through	Right	Riverside Parkway Westbound Left	Through	Right
Observed 2023 Traffic Volumes	85	647	177	18	1,152	71	93	259	275	146	150	4
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	22	102	22	3	130	11	8	8	25	23	17	4
Heavy Vehicle %	26%	16%	12%	17%	11%	15%	9%	3%	9%	16%	11%	100%
Peak Hour Factor		0.92			0.92			0.92			0.92	
Adjustment												
Adjusted 2023 Volumes	85	647	177	18	1152	71	93	259	275	146	150	4
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment												
DCT Douglas Hill Distribution Center DRI #2701		9			21							
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)		15			32							
Strategic West Logistics IV DRI #3515		6			25							
Strategic West Logistics IV DRI #3515 (Trucks)		4			5							
JDA Factory Shoals Site		11			3							
JDA Factory Shoals Site (Trucks)		1			1							
Rock House Road Site (DSP)		0			0							
Rock House Road Site (DSP) (Trucks)		0			0							
T5 ATL III Data Center DRI #3747		28			23							
2025 Background Traffic	88	741	182	19	1,297	73	96	267	283	150	155	4
2025 No-Build Heavy Vehicle %	26%	17%	12%	16%	13%	16%	9%	3%	9%	16%	11%	100%
Project Trips												
Trip Distribution IN	45%					30%					15%	
Trip Distribution OUT							30%	15%	45%			
Heavy Vehicle (Truck) Trips	4	0	0	0	0	3	3	1	4	0	1	0
Trip Distribution IN	25%					10%					10%	
Trip Distribution OUT							10%	10%	25%			
Employee (Car) Trips	23	0	0	0	0	9	2	2	5	0	9	0
Project Trips Balance												
Total Project Trips	27	0	0	0	0	12	5	3	9	0	10	0
2025 Buildout Total	115	741	182	19	1,297	85	101	270	292	150	165	4
2025 Build Heavy Vehicle %	23%	17%	12%	16%	13%	17%	11%	3%	10%	16%	11%	100%

PM PEAK HOUR

Description	Thorton Road (SR 6) Northbound Left	Through	Right	Thorton Road (SR 6) Southbound Left	Through	Right	Riverside Parkway Eastbound Left	Through	Right	Riverside Parkway Westbound Left	Through	Right
Observed 2023 Traffic Volumes	253	1,122	274	9	815	206	138	206	172	155	301	17
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	24	147	41	4	119	17	11	10	28	28	9	5
Heavy Vehicle %	9%	13%	15%	44%	15%	8%	8%	5%	16%	18%	3%	29%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment												
Adjusted 2023 Volumes	253	1122	274	9	815	206	138	206	172	155	301	17
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment												
DCT Douglas Hill Distribution Center DRI #2701		21			13							
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)		42			16							
Strategic West Logistics IV DRI #3515		23			6							
Strategic West Logistics IV DRI #3515 (Trucks)		6			7							
JDA Factory Shoals Site		3			11							
JDA Factory Shoals Site (Trucks)		1			1							
Rock House Road Site (DSP)		0			0							
Rock House Road Site (DSP) (Trucks)		0			0							
T5 ATL III Data Center DRI #3747		13			30							
2025 Background Traffic	261	1,265	282	9	924	212	142	212	177	160	310	18
2025 No-Build Heavy Vehicle %	9%	16%	15%	46%	16%	8%	8%	5%	16%	18%	3%	29%
Project Trips												
Trip Distribution IN	45%					30%					15%	
Trip Distribution OUT							30%	15%	45%			
Heavy Vehicle (Truck) Trips	6	0	0	0	0	4	4	2	6	0	2	0
Trip Distribution IN	25%					10%					10%	
Trip Distribution OUT							10%	10%	25%			
Employee (Car) Trips	6	0	0	0	0	2	8	8	21	0	2	0
Project Trips Balance	1										1	
Total Project Trips	13	0	0	0	0	6	12	10	27	0	5	0
2025 Buildout Total	274	1,265	282	9	924	218	154	222	204	160	315	18
2025 Build Heavy Vehicle %	11%	16%	15%	46%	16%	10%	10%	6%	17%	18%	4%	29%

INTERSECTION VOLUME DEVELOPMENT

Intersection #5: Rock House Road @ Site Dirveway A
AM PEAK HOUR

Description	Rock House Road Northbound Left	Through	Right	Rock House Road Southbound Left	Through	Right	Site Dirveway A Eastbound Left	Through	Right	Westbound Left	Through	Right
Observed 2023 Traffic Volumes	0	123	0	0	75	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	14	0	3	10	0	0	0	0	0	0	0
Heavy Vehicle %	0%	11%	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.91			0.91			0.91			0.91	
Adjustment												
Adjusted 2023 Volumes	0	123	0	0	75	0	0	0	0	0	0	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment												
DCT Douglas Hill Distribution Center DRI #2701		3			1							
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)		0			0							
Strategic West Logistics IV DRI #3515		5			1							
Strategic West Logistics IV DRI #3515 (Trucks)		0			0							
JDA Factory Shoals Site		2			0							
JDA Factory Shoals Site (Trucks)		0			0							
Rock House Road Site (DSP)		5			1							
Rock House Road Site (DSP) (Trucks)		0			0							
T5 ATL III Data Center DRI #3747		6			5							
2025 Background Traffic	0	148	0	0	85	0	0	0	0	0	0	0
2025 No-Build Heavy Vehicle %	0%	10%	0%	0%	12%	0%	0%	0%	0%	0%	0%	0%
Project Trips												
Trip Distribution IN	100%											
Trip Distribution OUT									100%			
Heavy Vehicle (Truck) Trips	9	0	0	0	0	0	0	0	9	0	0	0
Trip Distribution IN	50%					50%						
Trip Distribution OUT							50%		50%			
Employee (Car) Trips	46	0	0	0	0	46	11	0	11	0	0	0
Project Trips Balance									-1			
Total Project Trips	55	0	0	0	0	46	11	0	19	0	0	0
2025 Buildout Total	55	148	0	0	85	46	11	0	19	0	0	0
2025 Build Heavy Vehicle %	16%	10%	0%	0%	12%	2%	2%	0%	47%	0%	0%	0%

PM PEAK HOUR

Description	Rock House Road Northbound Left	Through	Right	Rock House Road Southbound Left	Through	Right	Site Dirveway A Eastbound Left	Through	Right	Westbound Left	Through	Right
Observed 2023 Traffic Volumes	0	67	0	0	132	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	9	0	0	9	0	0	0	0	0	0	0
Heavy Vehicle %	0%	13%	0%	0%	7%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment												
Adjusted 2023 Volumes	0	67	0	0	132	0	0	0	0	0	0	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
New Road Adjustment												
DCT Douglas Hill Distribution Center DRI #2701		1			3							
DCT Douglas Hill Distribution Center DRI #2701 (Trucks)		0			0							
Strategic West Logistics IV DRI #3515		1			5							
Strategic West Logistics IV DRI #3515 (Trucks)		0			0							
JDA Factory Shoals Site		0			2							
JDA Factory Shoals Site (Trucks)		0			0							
Rock House Road Site (DSP)		2			5							
Rock House Road Site (DSP) (Trucks)		0			0							
T5 ATL III Data Center DRI #3747		3			6							
2025 Background Traffic	0	76	0	0	157	0	0	0	0	0	0	0
2025 No-Build Heavy Vehicle %	0%	12%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%
Project Trips												
Trip Distribution IN	100%											
Trip Distribution OUT									100%			
Heavy Vehicle (Truck) Trips	14	0	0	0	0	0	0	0	13	0	0	0
Trip Distribution IN	50%					50%						
Trip Distribution OUT							50%		50%			
Employee (Car) Trips	12	0	0	0	0	12	42	0	42	0	0	0
Project Trips Balance									-1			
Total Project Trips	26	0	0	0	0	12	42	0	54	0	0	0
2025 Buildout Total	26	76	0	0	157	12	42	0	54	0	0	0
2025 Build Heavy Vehicle %	54%	12%	0%	0%	6%	2%	2%	0%	24%	0%	0%	0%

APPENDIX D

Programmed Project Fact Sheets

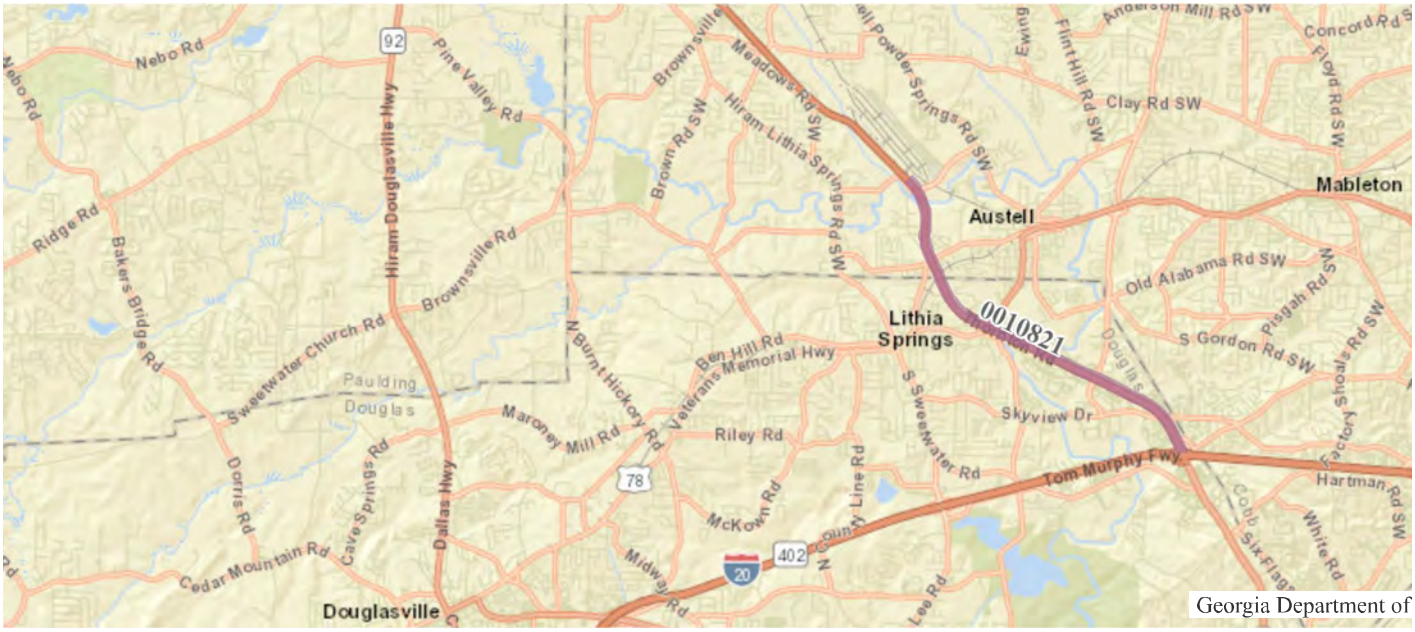
SR 6 FROM I-20 WB TO SR 6 SPUR - TRUCK FRIENDLY LANES

Project ID:	**0010821**	Notice to Proceed Date:	
Project Manager:	Obi Ezenekwe	Construction Percent Complete:	%
Office:	Program Delivery	Current Completion Date:	
County:	Cobb, Douglas	Work Completion Date:	
Congressional District:	013, 014	Construction Contract Amount:	
State Senate District.:	033, 035	Construction Contractor:	
State House District:	038, 061	**Preconstruction Status Report**	
Project Type:	Reconstruction/Rehabilitation	**Construction Status Report**	
Project Status:	Construction Work Program		
Right of Way Authorization:		Contact Us	

Project Description:

The purpose is to improve operations for trucks on SR 6 from I-20 West to SR 6 Spur. SR 6 is an urban principal arterial and is 6 lanes with a raised median from I-20 to US 78/Veterans Memorial Parkway and 4 lanes with a paved median from Veterans Memorial Parkway to SR 6 Spur. This section of SR 6 connects the Norfolk Southern Rail Yard near SR 6 Spur with I-20 therefore, carries significant freight traffic. this project is located within the Atlanta MPO boundary and is listed in the TIP as DO-299. This project is justified by the need to address current and future freight traffic needs and improve operations on SR 6 between 1-20 and SR 6 Spur.

Activity	Program Year	Cost Estimate	Date of Last Estimate
SCP (Scoping)	2015	$1,000,000.00	
PE (Preliminary Engineering)	2017	$1,649,794.00	2/14/2014
UTL (Utilities)	2060	$2,000,000.00	
ROW (Right of Way)	2060	$6,000,000.00	
CST (Construction)	2060	$35,654,850.00	



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

Georgia Department of Transportation

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

Contact Us

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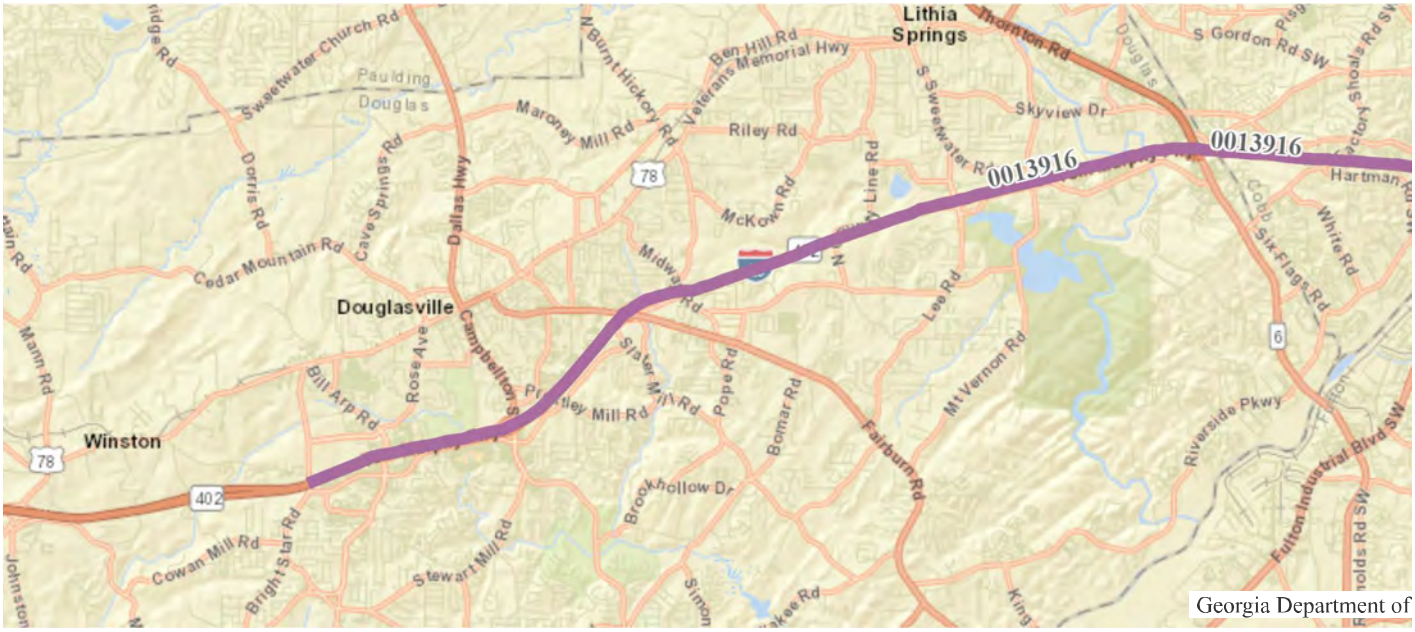
I-20 FROM I-285 TO CR 192/BRIGHT STAR ROAD - EXPRESS LANES

Project ID:	**0013916**	Notice to Proceed Date:	
Project Manager:	Timothy W. Matthews	Construction Percent Complete:	%
Office:	Innovative Prog. Delivery	Current Completion Date:	
County:	Cobb, Douglas, Fulton	Work Completion Date:	
Congressional District:	005, 013	Construction Contract Amount:	
State Senate District.:	030, 035, 038	Construction Contractor:	
State House District:	039, 060, 061, 064, 066	**Preconstruction Status Report**	
Project Type:	Reconstruction/Rehabilitation	**Construction Status Report**	
Project Status:	Long Range Program		
Right of Way Authorization:		Contact Us	

Project Description:

Activity	Program Year	Cost Estimate	Date of Last Estimate
PE (Preliminary Engineering)	2018	$1,000,000.00	8/11/2021
PE (Preliminary Engineering)	2033	$57,067,079.00	8/11/2021
ROW (Right of Way)	2036	$57,430,263.00	8/11/2021
UTL (Utilities)	2038	$32,717,711.00	8/11/2021
CST (Construction)	2039	$795,013,882.00	8/11/2021



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

Georgia Department of Transportation

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

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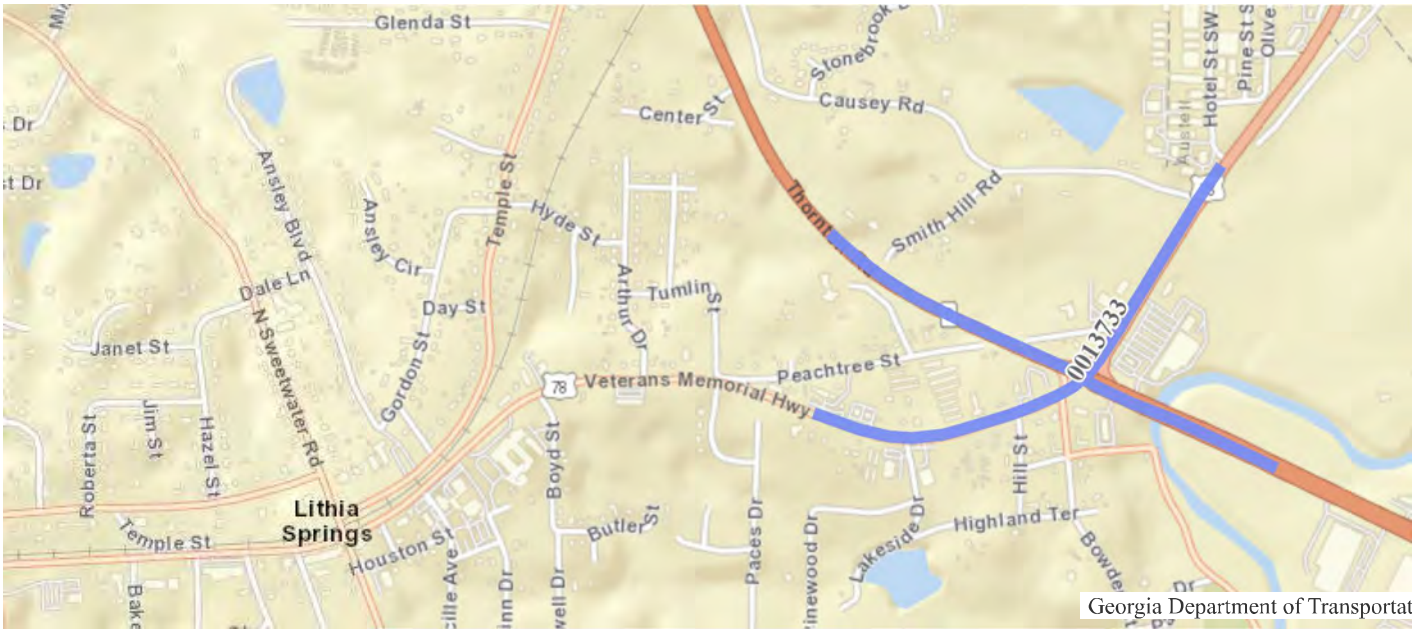
SR 5/US 78 @ SR 6/US 278

Project ID:	**0013733**	Notice to Proceed Date:	
Project Manager:	Obi Ezenekwe	Construction Percent Complete:	%
Office:	Program Delivery	Current Completion Date:	
County:	Douglas	Work Completion Date:	
Congressional District:	013	Construction Contract Amount:	
State Senate District.:	035	Construction Contractor:	
State House District:	061	**Preconstruction Status Report**	
Project Type:	Reconstruction/Rehabilitation	**Construction Status Report**	
Project Status:	Construction Work Program		
Right of Way Authorization:	1/25/2023	Contact Us	

Project Description:

This project is located in Douglas County at the intersection of SR 5/US 78/Veterans Memorial Hwy and SR 6/US 278/Thornton Rd, approximately 1.2 miles southwest of Austell and 1 mile east of Lithia Springs. This project consists of a new location Quadrant Roadway through the Northwest quadrant of the intersection connecting SR 5 and SR 6. The project is approximately 0.9 miles in length. Minor widening will occur along SR 5 and SR 6 in order to accommodate extra capacity. SR 6 westbound would be widened to 3 thru lanes through the SR 5 and Quadrant Roadway intersections along with a dedicated right turn lane to SR 5 and the proposed Quadrant Roadway; left turn movements will be prohibited at the SR 5 at SR 6 intersection. SR 5 southbound will have 3 lanes with the outside lane turning right only to SR 6 westbound. A raised median varying from 7-14-ft as well as a 14-ft flushed median will be added along SR 5. A 16-ft raised median will be added along SR 6.

Activity	Program Year	Cost Estimate	Date of Last Estimate
PE (Preliminary Engineering)	2018	$1,000,000.00	
ROW (Right of Way)	2024	$2,130,000.00	1/17/2023
UTL (Utilities)	2026	$1,200,000.00	2/24/2022
CST (Construction)	2026	$9,793,390.09	2/24/2022



Project Documents
Approved Concept Reports
0013733_L&D_DEC2022.pdf
0013733_L&D_AD_JAN2023.pdf
0013733_CR_OCT2020.pdf

GDOT
Georgia Department of Transportation

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

AR-ML-800

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

Short Title	I-20 WEST EXPRESS LANES FROM I-285 WEST TO SR 92 (FAIRBURN ROAD)
GDOT Project No.	0013916
Federal ID No.	N/A
Status	Long Range
Service Type	Roadway / Express Lanes
Sponsor	GDOT
Jurisdiction	Regional - West
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	0	**LCI**		**Network Year**	2050
Planned Thru Lane	2	**Flex**		**Corridor Length**	10.5 miles

Detailed Description and Justification

This is an express lanes project along I-20 West from I-285 West to SR 92 (Fairburn Road).

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	National Highway Performance Program (NHPP)	AUTH	2018	**$1,000,000**	~~$800,000~~	~~$200,000~~	~~$0,000~~	~~$0,000~~
PE	General Federal Aid 2029-2050		LR 2031-2040	**$41,610,000**	$33,288,000	$8,322,000	$0,000	$0,000
ROW	General Federal Aid 2029-2050		LR 2031-2040	**$9,670,000**	$7,736,000	$1,934,000	$0,000	$0,000
CST	General Federal Aid 2029-2050		LR 2031-2040	**$714,630,000**	$571,704,000	$142,926,000	$0,000	$0,000
CST	General Federal Aid 2029-2050		LR 2041-2050	**$289,872,691**	$231,898,153	$57,974,538	$0,000	$0,000
				$1,056,782,691	**$845,426,153**	**$211,356,538**	**$0,000**	**$0,000**

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

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

Report Generated: 5/18/2023

DO-299

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

Short Title	SR 6 (THORNTON ROAD) TRUCK FRIENDLY LANES FROM I-20 WEST IN DOUGLAS COUNTY TO SR 6 SPUR (GARRETT ROAD) IN COBB COUNTY
GDOT Project No.	0010821
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Operations & Safety
Sponsor	GDOT
Jurisdiction	Cobb County,Douglas County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	Var	**LCI**		**Network Year**	2030
Planned Thru Lane	Var	**Flex**		**Corridor Length**	5.2 miles

Detailed Description and Justification

This project will implement truck friendly lanes along SR 6 (Thornton Road). The project will begin at I-20 West in Douglas County and terminate at the SR 6 Spur (Garrett Road) in Cobb County.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
SCP	National Highway System	AUTH	2015	**$1,000,000**	~~$800,000~~	~~$200,000~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2017	**$1,649,794**	~~$1,319,835~~	~~$329,959~~	~~$0,000~~	~~$0,000~~
ROW	National Highway Performance Program (NHPP)		2024	**$6,000,000**	$4,800,000	$1,200,000	$0,000	$0,000
ALL	General Federal Aid 2029-2050		LR 2029-2030	**$43,654,850**	$34,923,880	$8,730,970	$0,000	$0,000
				$52,304,644	**$41,843,715**	**$10,460,929**	**$0,000**	**$0,000**

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

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

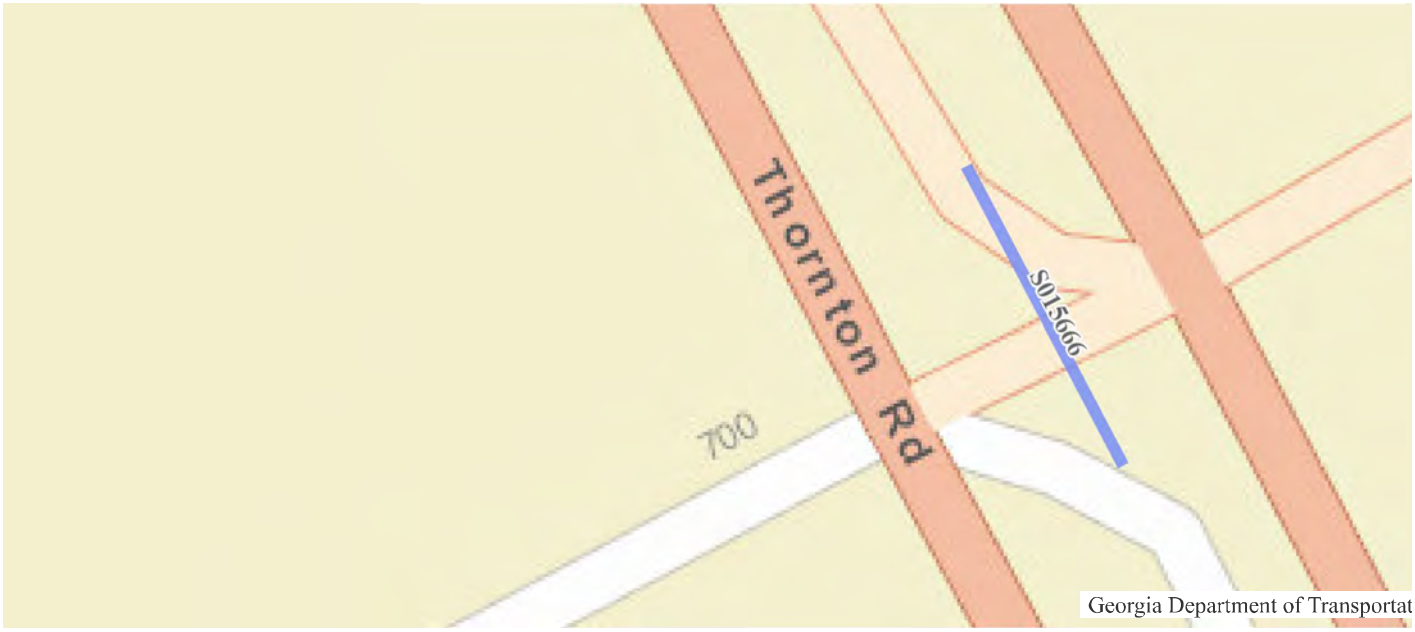
Report Generated: 5/18/2023

Install of Right & Left Turn Lane on Factory Shoals Rd@ SR 6

Project ID:	**S015666**	Notice to Proceed Date:	
Project Manager:	Bill Wright Jr	Construction Percent Complete:	%
Office:	Local Grants Office	Current Completion Date:	
County:	Douglas	Work Completion Date:	
Congressional District:	013	Construction Contract Amount:	
State Senate District.:	035	Construction Contractor:	
State House District:	061	**Preconstruction Status Report**	
Project Type:	Operating	**Construction Status Report**	
Project Status:	Construction Work Program		
Right of Way Authorization:		Contact Us	

Project Description:

Activity	Program Year	Cost Estimate	Date of Last Estimate
TSA (TSAP Projects)	2022	$197,730.41	



Project Documents

There are no items to show in this view.

Georgia Department of Transportation

Georgia Department of Transportation
One Georgia Center
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Atlanta, GA 30308
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APPENDIX E

Full Page Truck Exhibits


ROCK HOUSE ROAD
R90'
WB-67
AASHTO 2014 (US)
WB-67
AASHTO 2014 (US)
RIVERSIDE PARKWAY
RIVERSIDE PARKWAY
PRIVATE DRIVEWAY

ROCK HOUSE ROAD

WB-67
AASHTO 2014 (US)

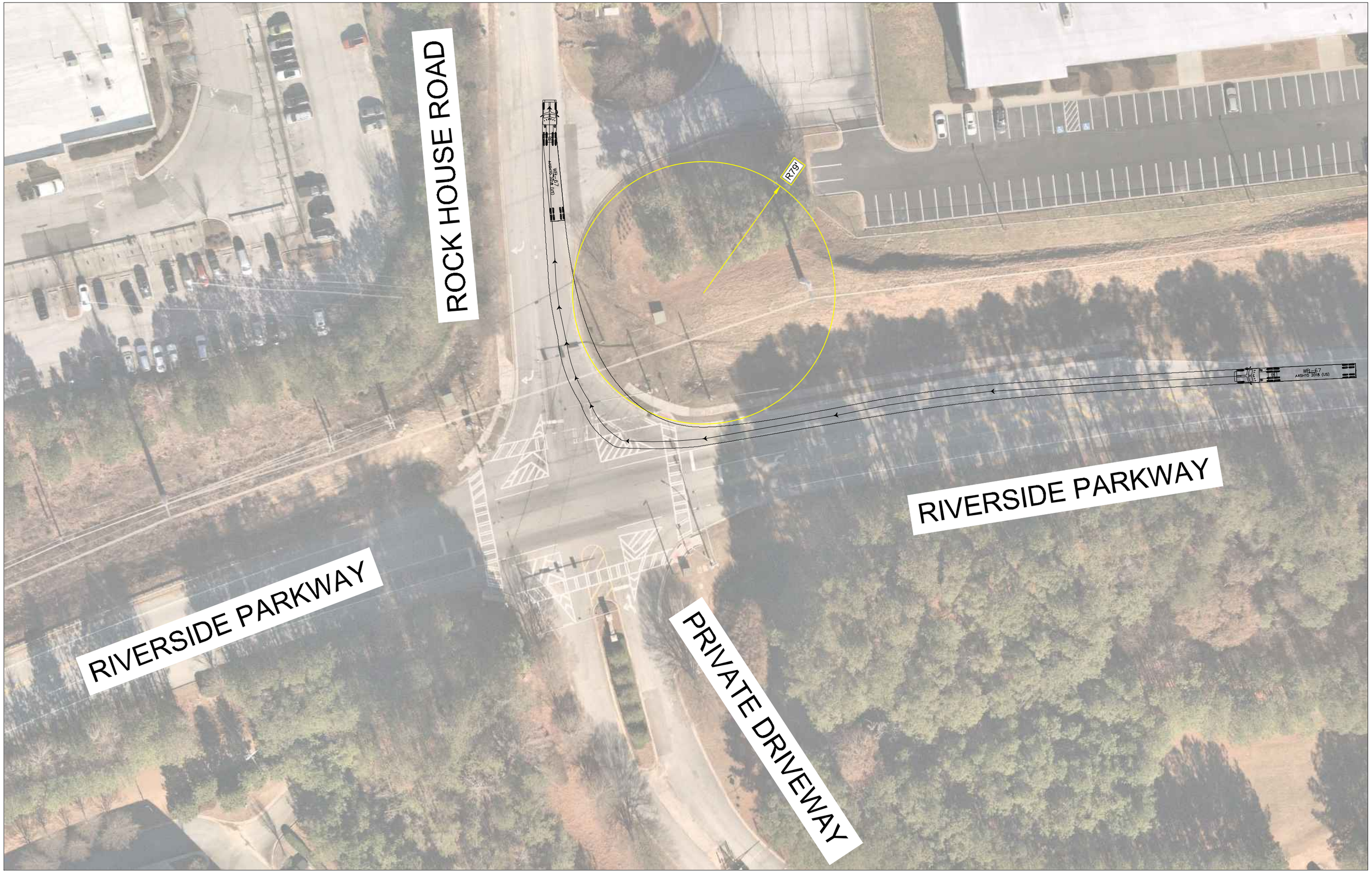
R79'

WB-67
AASHTO 2014 (US)

RIVERSIDE PARKWAY

RIVERSIDE PARKWAY

PRIVATE DRIVEWAY


ROCK HOUSE ROAD
R79
WB-67
AASHTO 2018 (US)
RIVERSIDE PARKWAY
RIVERSIDE PARKWAY
PRIVATE DRIVEWAY


ROCK HOUSE ROAD
R90'
WB-67
AASHTO 2005 (US)
WB-67
AASHTO 2005 (US)
RIVERSIDE PARKWAY
RIVERSIDE PARKWAY
PRIVATE DRIVEWAY

THORNTON ROAD (SR 6)

RIVERSIDE PARKWAY

R104'

THORNTON ROAD (SR 6)

THORNTON ROAD (SR 6)

RIVERSIDE PARKWAY

R531'

THORNTON ROAD (SR 6)

RIVERSIDE PARKWAY

R104'

THORNTON ROAD (SR 6)

THORNTON ROAD (SR 6)

RIVERSIDE PARKWAY

R53'