Transportation Analysis

Riverview Site Expansion DRI #3873

Douglas County, Georgia

March 2023

Prepared for:

Panattoni Development Company, Inc.

Prepared by:

Kimley-Horn and Associates, Inc. 11720 Amber Park Drive, Suite 600 Alpharetta, Georgia 30009 013527006

Kimley »Horn

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Raw Traffic Count Data *Synchro* Capacity Analyses

EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Riverview Site Expansion* development located in the Douglas County, Georgia. The approximate 83.8-acre site is located south of Fairburn Road (SR 70/SR 154/SR 166) and west of the Chattahoochee River, adjacent to the *Riverview Site* DRI #3095. The site is currently vacant.

The proposed development will consist of the following land use and densities contained in **Table 1**. The project is expected to be completed by 2024 (approximately 1 year).

Table 1: Proposed Land Use and Density						
Warehousing	575,000 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 (LOU dated January 17, 2023).

The adjacent site currently under development by Panattoni Development Company, Inc. was previously reviewed as the *Riverview Site* DRI #3095 in 2020. The project analyzed the impacts of one (1) 798,000 SF industrial warehouse building on a 154-acre site. Access to the development is provided via one (1) full movement driveway onto Fairburn Road (SR 70/SR 92/SR 154/SR 166). The ARC Final Report was issued on November 30, 2020, and the GRTA Notice of Decision (NOD) was issued on November 25, 2020. No modifications to this DRI are proposed. Since that time, Panattoni Development Company, Inc. has acquired an additional parcel, and is proposing a new 575,000 SF industrial warehouse building. Access to this building will be provided through the *Riverview Site* DRI #3095, to share the same access point along Fairburn Road (SR 70/SR 92/SR 154/SR 166). As the new proposed building exceeds 500,000 SF, it is being analyzed as a new DRI, separate from DRI #3095.

Capacity analyses were performed for the study intersections under the Existing 2023 conditions, the Projected 2024 No-Build conditions, and the Projected 2024 Build conditions.

- Existing 2023 conditions represent current traffic volumes that were collected in January 2023. (NOTE: Traffic Count methodology was outlined in a memo approved by GRTA in December 2022).
- Projected 2024 No-Build conditions represent the Existing 2023 traffic volumes grown for one (1) year using a 2.0% per year growth rate, plus project trips associated with the *IDI Logistics* DRI #3072, *Riverside West Business Park* DRI #3080, and *Riverview Site* DRI #3095 developments.
- Projected 2024 Build conditions represent the Projected 2024 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the *Riverview Site Expansion* development.

Projected 2024 No-Build Conditions (System Improvements)

The signalized intersection of Fairburn Road (SR 70/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/SR 154/SR 166) (Intersection 1) is projected to operate at an acceptable <u>overall</u> LOS under the Existing 2023 conditions, Projected No-Build 2024 conditions, and Projected Build 2024 conditions. However, the southbound approach of Old Lower River Road is projected to operate at LOS E under the Existing 2023 conditions and Projected No-Build 2024 conditions.

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 <u>approach</u> LOS under the Projected 2024 No-Build conditions, Kimley-Horn considered the following system improvement (shown in red on **Figure 16** and **Figure 17**):

- Fairburn Road (SR 70/SR 92/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/SR 154/SR 166) (Intersection 1)
 - Install a southbound right-turn lane along Old Lower River Road.
 - Construct a southbound right-turn lane creating one (1) left-turn/through lane and one (1) exclusive right-turn lane along Old Lower River Road.

The recommended improvements will improve the southbound approach LOS. However, the southbound approach will continue to operate at LOS E, as it is a relatively low volume approach and the signal timings prioritize other higher volume approaches. There are no other feasible improvements for the southbound approach.

Projected 2024 Build Conditions

The signalized intersection of Fairburn Road (SR 70/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/SR 154/SR 166) is projected to operate at an acceptable overall LOS under the Projected 2024 Build Conditions; However, the southbound approach operates at LOS E under the Projected 2024 Build Conditions. Under Projected 2024 Build Conditions, with the aforementioned No-Build 2024 improvements, the approach will operate at an improved LOS. Therefore, no additional off-site improvements are recommended.

In order to serve the *Riverview Site Expansion* development (DRI #3873) it is recommended to connect to the internal roadways of the previous *Riverview Site* DRI #3095 and construct the site driveway along Fairburn Road (SR 70/SR 154/SR 166) per previously permitted by GDOT.

Fairburn Road (SR 70/SR 92/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/SR 154/SR 166) (Intersection 1)

Overall LOS Standard: D Approach LOS Standard: D			SR	R 70/SR 154/SR lorthbour	166		wer Rive outhbour			rn Road (Eastboun		(SR 70	airburn Ro /SR 154/S Vestboun	SR 166)
ł		L	T	R	L	T	R	L	T	R	L	T	R	
$\widehat{}$		Overall LOS							(35.1)					
I ₹		Approach LOS		D (40.7)			E (56.0)		(0011)	C (29.4)			D (36.0)	
UN UN	AΜ	Storage	150		150				150		250	250		350
(SI	4	50th Queue	395	406	31		132		10	317	385	44	110	0
53		95th Queue	587	600	90		240		33	517	899	101	188	0
20		Overall LOS						D	(37.6)					
<u>U</u>		Approach LOS		D (45.8)			E (62.2)		<u> </u>	C (23.0)			D (40.0)	
EXISTING 2023 (SIGNAL)	М	Storage	150	1 (150				150] ` ´	250	250	1	350
SIS		50th Queue	327	333	0		72		12	151	0	110	457	0
ŵ		95th Queue	521	527	14		158		35	247	119	215	668	0
		Overall LOS						D	(38.1)					
4 🗅		Approach LOS		D (44.6)			E (61.5)			C (32.3)			D (37.2)	
PROJECTED 2024 NO-BUILD (SIGNAL)	ΜA	Storage	150		150				150		250	250		350
<u><u></u><u></u><u></u><u></u><u></u></u>		50th Queue	409	421	44		137		10	361	496	49	154	0
E S		95th Queue	606	620	110		249		34	581	\$	111	254	0
		Overall LOS						D	(39.3)					
	_	Approach LOS		D (48.2)			E (67.9)			C (24.8)			D (42.0)	
	ЫΜ	Storage	150		150				150		250	250		350
Чž		50th Queue	367	374	0		80		12	198	0	134	511	0
		95th Queue	534	543	20		164		36	311	123	264	751	0
		Overall LOS						D	(38.9)					
2 0	-	Approach LOS		D (45.5)			E (62.8)			C (33.1)			D (37.8)	
AL 20	MΑ	Storage	150		150				150		250	250		350
0 Z		50th Queue	411	422	55		138		10	377	528	53	158	0
E S		95th Queue	607	622	127		249		34	606	\$	118	260	0
PROJECTED 2024 BUILD (SIGNAL)		Overall LOS		D (40.0)				D	(40.1)	0 (05 5)		1	D (40.0)	
54	5	Approach LOS	450	D (49.0)			E (68.9)		450	C (25.5)	050	050	D (43.0)	050
B B	Μd	Storage	150 375	204	150		82		150 12	202	250	250	507	350
_		50th Queue 95th Queue	375 534	384 543	0 25		82 164		36	202 317	0 123	150 302	527 773	0
¢ r		exceeds 1000 secon		040	20		104		- 50	517	125	302	115	U

\$ - Delay exceeds 1000 seconds

Due to the signal timing, the southbound volume being a low volume approach, and the majority of the green time being given to other approaches, the southbound approach is projected to operate at LOS E. The system improvements reduce the delay for the southbound approach but does not change the LOS. The intersection is projected to operate at an acceptable <u>overall</u> LOS under all scenarios. The system improvements are recommended to be conditioned to help reduce the delay of the southbound traffic.

Impacted	Queue Leng	gths Exceedin	g Storage
	· ·		

Intersection	Movement	Storage Length	Projected Build Queue Length (AM / PM)	Recommendation
1. Fairburn Road (SR 70/SR 92/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/ SR 154/SR 166)	WBL	250	53 / 150 (50 th) 118 / <mark>302</mark> (95 th)	<i>No-Build (System Improvement):</i> Consider extending the westbound left-turn lane storage.
2. Fulton Industrial Boulevard (SR 70)/Cascade Palmetto Highway at Campbellton Road (SR 70/ SR 154/SR 166)	SBR	150	0 / <mark>302</mark> (50 th) 64 / 710 (95 th)	<i>No-Build (System Improvement):</i> Consider extending the southbound right-turn lane storage.
2. Fulton Industrial Boulevard (SR 70)/Cascade Palmetto Highway at Campbellton Road (SR 70/ SR 154/SR 166)	EBL	100	380 / 122 (50 th) 654 / 233 (95 th)	<i>No-Build (System Improvement):</i> Consider extending the eastbound left- 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 *Riverview Site Expansion* development located in the Douglas County, Georgia. The approximate 83.8-acre site is located south of Fairburn Road (SR 70/SR 154/SR 166). The project site is currently zoned LI-R-C (Restricted Light Industrial-Conditions). The site is currently compliant with the current zoning classification. **Figure 1** provides a location map of the project site. **Figure 2** provides an aerial view of the project site and surrounding area.

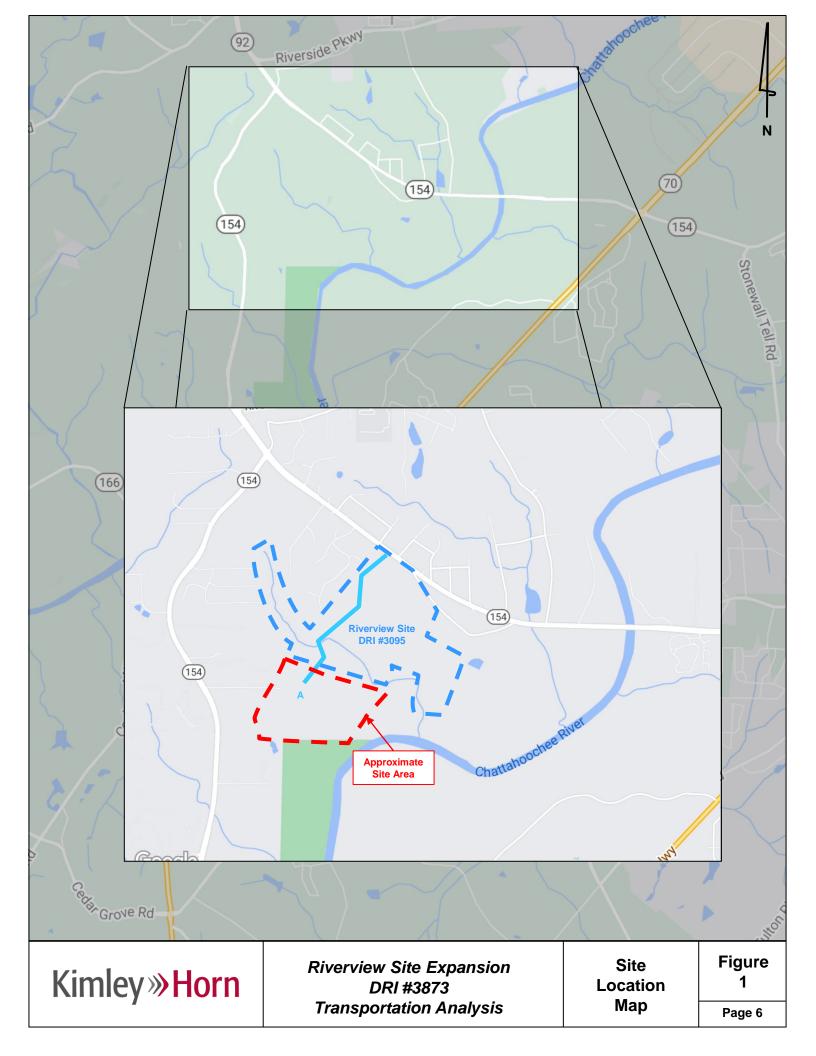
The site is currently undeveloped. The proposed development will consist of the following land use and densities contained in **Table 2**. The project is expected to be completed by 2024 (approximately 1 year).

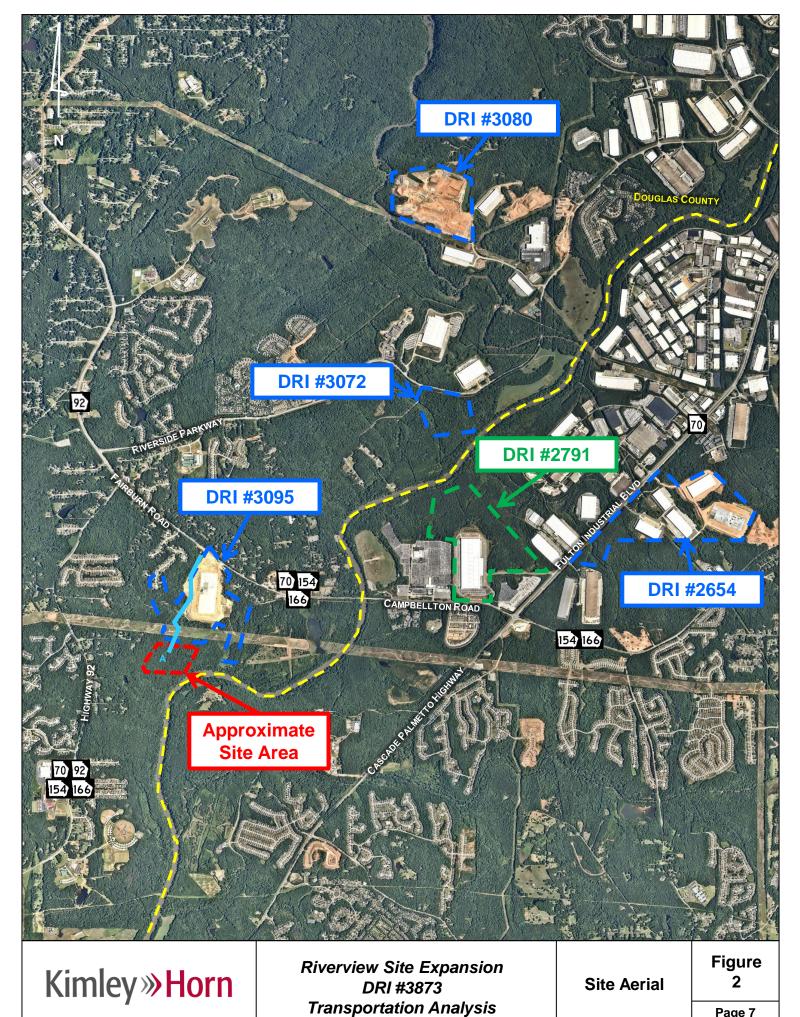
Table 2: Proposed Land Use and Density				
Land Use	Proposed			
Warehousing	575,000 SF			

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 new industrial development within a Developing Suburbs area per the ARC Unified Growth Policy Map. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on November 18, 2022 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 January 17, 2023.

The adjacent site currently under development by Panattoni Development Company, Inc. was previously reviewed as the *Riverview Site* DRI #3095 in 2020. The DRI analyzed the impacts of one (1) 798,000 SF industrial warehouse building on a 154-acre site. Access to the development is provided via one (1) full movement driveway onto Fairburn Road (SR 70/SR 154/SR 166). The ARC Final Report was issued on November 30, 2020, and the GRTA Notice of Decision was issued on November 25, 2020. No modifications to this DRI are proposed. Since that time, Panattoni Development Company, Inc. has acquired an additional parcel, and is proposing a new 575,000 SF industrial warehouse building. Access to this building will be provided through the *Riverview Site* DRI #3095, to share the same access point along Fairburn Road (SR 70/SR 92/SR 154/SR 166). As the new proposed building exceeds 500,000 SF, it is being analyzed as a new DRI, separate from DRI #3095.





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1.2 Site Access

As currently envisioned, the proposed development will be accessible via one (1) new access point, currently under construction to serve *Riverview Site* DRI #3095:

Site Driveway A – a full-movement driveway located along Fairburn Road (SR 70/SR 154/SR 166) aligned with Valley Road that will operate under side-street stop control. The driveway was approved for the *Riverview Site* DRI #3095 and will be shared between the two developments (GDOT Permit #A-097-006885-7). Site Driveway A will provide vehicular access to all buildings in the development. Internal, private roadways throughout the site provide access to the building and parking facilities.

1.3 Internal Circulation Analysis

Internal, private roadways throughout the site provide access to the building and parking facilities.

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				
Warehousing	87	N/A	542 employee spaces 162 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 the roadways in the vicinity of the site, Valley Road, Cascade Palmetto Highway, and Campbellton Road (SR 154/SR 166). Similarly, there are no transit stops in the vicinity of the site. The Chattahoochee Regional Greenway Trail (PI #0012877) is proposed along the western side of the Chattahoochee River in the vicinity of the site. No construction timeline for the project has been identified.

1.6 Dense Urban Environments Enhanced Focus Area

Per Section 3.2.4.2 of the GRTA *Development of Regional Impact Review Procedures* the *Riverview Site Expansion* development <u>does not</u> 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 *Riverview Site Expansion* development 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):

• Fairburn Road (SR 70/SR 154/SR 166) at Site Driveway A



Figure 3: Heavy Vehicle Routing

1.7.2 Pavement Condition

A site visit was conducted on February 20, 2023. Pavement conditions within the Enhanced Focus Area were noted during the site visit. Pavement in the Heavy Vehicle focus area is generally in good condition. Pavement distress/cracking was observed in four (4) locations, as outlined in **Table 4**. **Figure 4** shows minor pavement cracking along the shoulder, along westbound Fairburn Road (SR 70/SR 154/SR/166), beginning at Valley Road and extending approximately 30 feet west of Valley Road. **Figure 5** shows the minor pavement cracking along the double yellow line along Fairburn Road (SR 70/SR 154/SR 166), beginning at Valley Road. **Figure 6** shows minor pavement cracking along the double yellow line along Fairburn Road (SR 70/SR 154/SR 166), beginning at Valley Road and spanning east past Britt Road. Note: This level of minor pavement cracking is minimal and commonplace along state routes.

	Table 4: Pavement Condition Observations									
Number	Roadway	Roadway Location								
1	Fairburn Road (SR 70/SR 154/SR 166)	Intersection of Valley Road	Minor Shoulder/Pavement Cracking							
2	Fairburn Road (SR 70/SR 154/SR 166)	20 feet west of Valley Road	Minor Pavement Cracking							
3	Fairburn Road (SR 70/SR 154/SR 166)	Intersection of Valley Road	Minor Pavement Cracking							



Figure 4: Westbound Fairburn Road (SR 70/SR 154/SR 166) Minor Shoulder/Pavement Cracking



Figure 5: Eastbound Fairburn Road (SR 70/SR 154/SR 166) Minor Pavement Cracking



Figure 6: Fairburn Road (SR 70/SR 154/SR 166) Minor Pavement 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 <u>Douglas County Unified Development Ordinance</u>, which notes that "the street paving widths shall be as follows:

- 1. Major Collector Street 24 feet, if two lanes, 60 feet if four lanes and a turn lane;
- 2. Residential Street 24 feet;
- 3. Local Industrial Street 36 feet.

Lane width dimensions were measured on NearMap.

Table 5: Roadway Widths						
Roadway	Lane Width	Lane Width Standard (Douglas County)				
Fairburn Road (SR 70/SR 154/SR 166)	12 ft	12 ft desirable				

1.7.4 Corner Radii

The corner radii of one study intersection was analyzed along the Enhanced Focus Area:

1. Fairburn Road (SR 70/SR 154/SR 166) at Valley Road/Site Driveway A

The *GDOT Regulations for Driveway and Encroachment Control* outlines minimum corner radii for trucks as 75 feet. **Figure 7** shows the approved plans from the GDOT driveway permit for Site Driveway A which highlight the corner radii, measured as 100 feet for both incoming and outgoing right-turns.

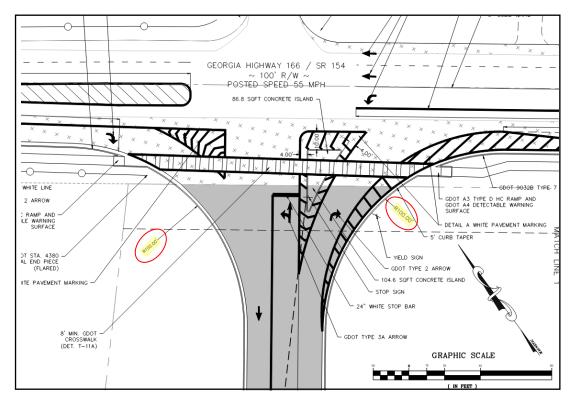


Figure 7: Corner Radii Measurement

1. Fairburn Road (SR 70/SR 154/SR 166) at Valley Road/Site Driveway A (West Leg)

Figure 8 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making an eastbound rightturn from Fairburn Road (SR 70/SR 154/SR 166) onto Site Driveway A and a WB-67 vehicle exiting the site by making a northbound left-turn from Site Driveway A onto Fairburn Road (SR 70/SR 154/SR 166). As shown in **Figure 8**, the proposed driveway is adequately designed to accommodate the turning movements for a WB-67 design vehicle.

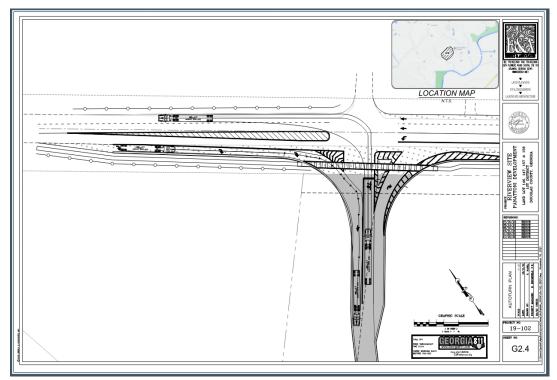


Figure 8: Fairburn Road (SR 70/SR 154/SR 166) at Valley Road/Site Driveway A – Eastbound Right and Northbound Left (Turn Maneuver)

2. Fairburn Road (SR 70/SR 154/SR 166) at Valley Road/Site Driveway A (East Leg)

Figure 9 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making a westbound leftturn from Fairburn Road (SR 70/SR 154/SR 166) onto Site Driveway A and for a WB-67 vehicle exiting the site by making a northbound right-turn from Site Driveway A onto Fairburn Road (SR 70/SR 154/SR 166). As shown in **Figure 9**, the proposed driveway is adequately designed to accommodate the turning movements for a WB-67 design vehicle.

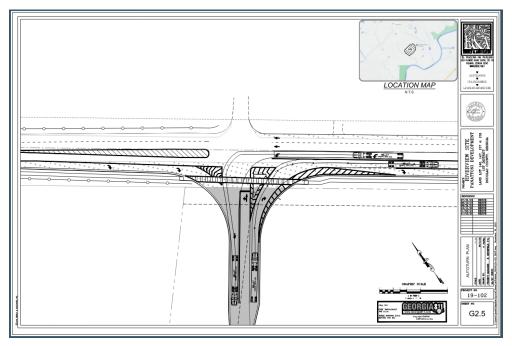


Figure 9: Fairburn Road (SR 70/SR 154/SR 166) at Valley Road/Site Driveway A – Westbound Left and Northbound Right (Turn Maneuver)

1.7.5 Heavy Vehicle Staging

The site plan includes a designated truck court to accommodate heavy vehicle queueing, staging, and overflow. **Figure 10** indicates the designated truck staging/overflow areas on the site plan.

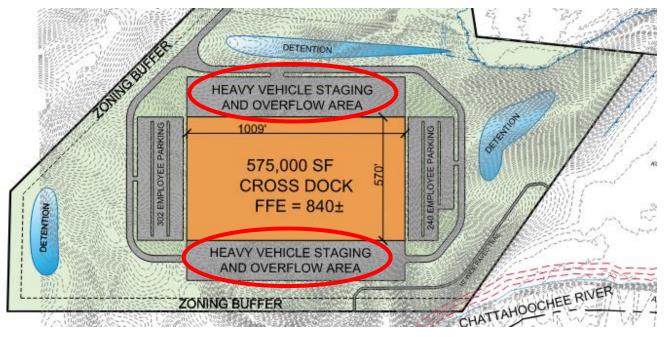


Figure 10: Heavy Vehicle Staging

1.7.6 Pedestrian Safety

The sidewalk requirements for non-residential areas, per section 1013 of the <u>Douglas County development</u> <u>ordinances</u> are as follows: "a 5-foot sidewalk shall be provided within the right-of-way of any arterial, collector, or local streets adjacent to any residential, commercial, or industrial development. The sidewalks shall be installed prior to certificate of occupancy for commercial or industrial developments." The *Riverview Site Expansion* development does not have site frontage along any roadways; therefore, sidewalks are not required along opposing frontage. Sidewalks will be provided adjacent to the building and will connect accessible and non-accessible spaces to the building.

2.0 TRAFFIC ANALYSES, METHODOLOGY AND ASSUMPTIONS

2.1 Study Network Determination

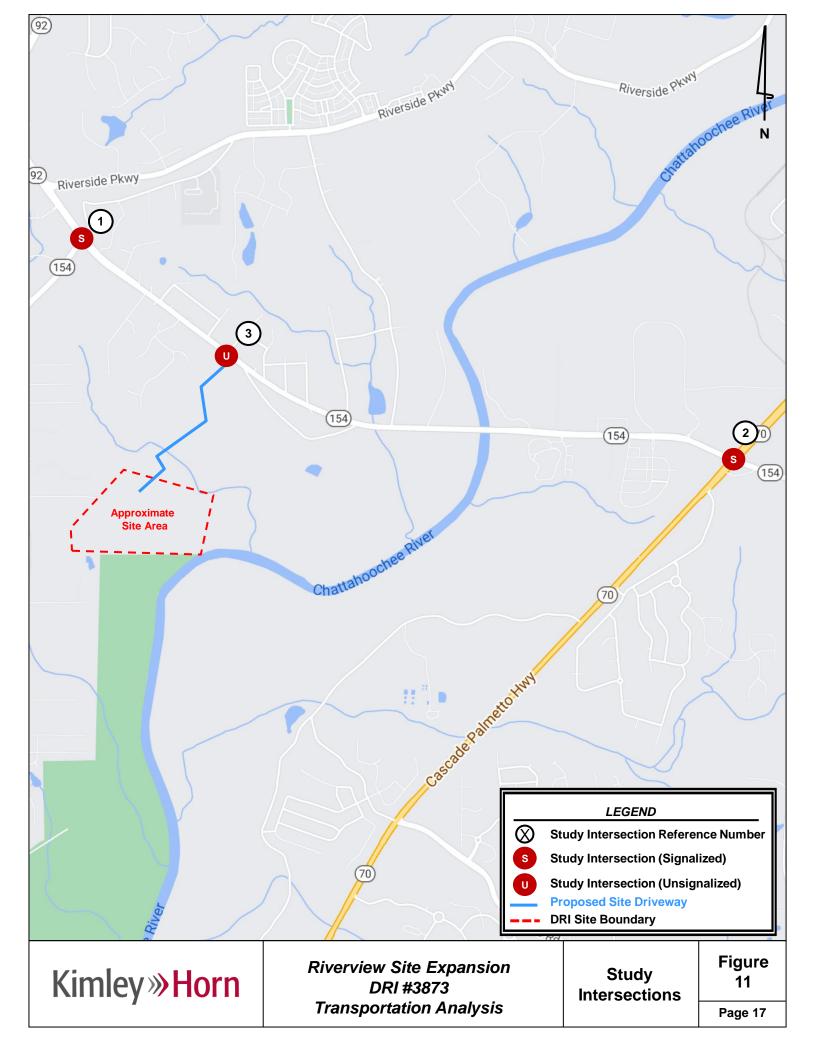
The study area was determined at the methodology meeting with input from GRTA, ARC, and other local agency stakeholders. The study includes the following three (3) off-site intersections described in **Table 6** and shown visually in **Figure 11**.

Table 6: Intersection Control Summary						
	Intersection	Jurisdiction	Control			
	n Road (SR 70/SR 154/SR 166) at Old Lower Dad (SR 70/SR 92/SR 154/SR 166)	GDOT	Signalized			
	ndustrial Boulevard (SR 70)/Cascade Palmetto y at Campbellton Road (SR 70/SR 154/SR 166)	GDOT	Signalized			
	n Road (SR 70/SR 154/SR 166) at Valley ite Driveway A	GDOT	Unsignalized			

2.2 Existing Roadway Facilities

Roadway classification descriptions and estimated Annual Average Daily Traffic (AADT) for roadway segments within the study network are provided in **Table 7** (bolded roadways are adjacent to the site).

Table 7: Roadway Classifications												
Roadway	Lanes	Posted Speed Limit	AADT	GDOT Functional Classification								
Fairburn Road (SR 70/SR 154/SR 166)	2-3	45-55 MPH	16,400	Principal Arterial								
SR 70/SR 92/SR 154/SR 166	2	45 MPH	9,710	Principal Arterial								
Old Lower River Road	2	25 MPH	-	Local								
Campbellton Road (SR 154/SR 166)	2	55 MPH	16,800	Principal Arterial								
Fulton Industrial Boulevard (SR 70)	4	55 MPH	24,100	Minor Arterial								
Cascade Palmetto Highway	2	55 MPH	13,000	Minor Arterial								
Valley Road	2	25 MPH	-	Local								



2.3 Traffic Data Collection and Calibration

Traffic counts were collected at all three (3) existing study intersections on Thursday, January 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.	Fairburn Road (SR 70/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/SR 154/ SR 166)	1/2023	7:15 AM – 8:15 AM	4:45 PM – 5:45 PM								
2.	Fulton Industrial Boulevard (SR 70)/Cascade Palmetto Highway at Campbellton Road (SR 70/SR 154/SR 166)	1/2023	7:15 AM – 8:15 AM	4:00 PM – 5:00 PM								
3.	Fairburn Road (SR 70/SR 154/SR 166) at Valley Road/Site Driveway A	1/2023	7:15 AM – 8:15 AM	4:45 PM – 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 *Riverview Site Expansion* development. Background traffic can include a base growth rate based on historical count data and population growth data as well as trips anticipated from nearby or adjacent other projects.

Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 2.0% per year background traffic growth rate from 2023 to 2024 (1 year) was used for all roadways.

The Projected 2024 No-Build conditions represent the Existing 2023 traffic volumes grown for one (1) year at 2.0% per year throughout the study network, plus project trips associated with the *IDI Logistics* DRI #3072, *Riverside West Business Park* DRI #3080, and the *Riverview Site* DRI #3095.

The Projected 2024 Build conditions represent the project trips generated by the *Riverview Site Expansion* development (discussed in Section 3.0 and 4.0) added to the Projected 2024 No-Build Conditions.

2.5 Programmed and Planned Projects

Programmed and planned projects near the project site were researched to account for any improvements or modifications within the study network before or by the build-out year of the development. The programmed and planned projects were discussed in the methodology meeting with GRTA, ARC, and other local stakeholders. Three (3) projects are currently programmed/planned by GDOT or Douglas County in the vicinity of the project site.

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

	Table 9: Programmed and Planned Projects												
Project Name	From / To Points:	Sponsor	GDOT PI #	ARC ID # (TIP)	Design FY	ROW / UTL FY	CST FY						
SR 166 Widening	Old Lower River Road to SR 70	GDOT / City of Fairburn	<u>721770-</u>	<u>DO-019</u>	2030	2032	2035						
CHC Regional Greenway Trail	Boundary Waters Park to Sweetwater Creek State Park	Douglas County	<u>0012877</u>	<u>DO-298</u>	-	2023	2025						
Cascade Palmetto Highway Widening	SR 92 to SR 154	GDOT	-	<u>FS-011</u>	-	-	2050						

*Project information was obtained from GeoPI (GDOT), the Atlanta Region's Plan (ARC), and Douglas County and Fulton County SPLOST list.

The SR 166 and Cascade Palmetto Highway widening projects are long-range planned projects, and will not be built-out before the build-out of the *Riverview Site Expansion* development. Therefore, no modifications to the intersection laneage or phasing will be included in the traffic study. The Chattahoochee Greenway Trail is currently routed through the development property. The applicant will coordinate with Douglas County DOT on the path and construction of the trail through the site.

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 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 intersection of Fulton Industrial Boulevard (SR 70)/Cascade Palmetto Highway at Campbellton Road (SR 70/SR 154/SR 166) (Intersection 2) due to its location in the Regional Employment Corridor, and a LOS standard of D was assumed for all other 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, alternative transportation mode reductions, and pass-by 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 *Riverview Site Expansion* development.

Table 10: Trip Generation												
Land Use	Density	D	aily Traffi	C	AM Pea	k Hour	PM Peak Hour					
Land Use	Density	Total	Enter	Exit	Enter	Exit	Enter	Exit				
150 – Warehousing	150 – Warehousing 575,000 SF				71	21	27	69				
Gross Projec	946	473	473	71	21	27	69					
Mixe	d-Use Reductions	0	0	0	0	0	0	0				
Alternative	Mode Reductions	0	0	0	0	0	0	0				
Pa	ss-By Reductions	0	0	0	0	0	0	0				
New Trip	DS	946	473	473	71	21	27	69				
Em	ployee (Car Trips)	628	314	314	65	15	18	61				
Heav	y Vehicle (Trucks)	318	159	159	6	6	9	8				

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 12**. The anticipated distribution and assignment of the trips throughout the study roadway network is shown for employee (car) trips in **Figure 13**. 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 14**.

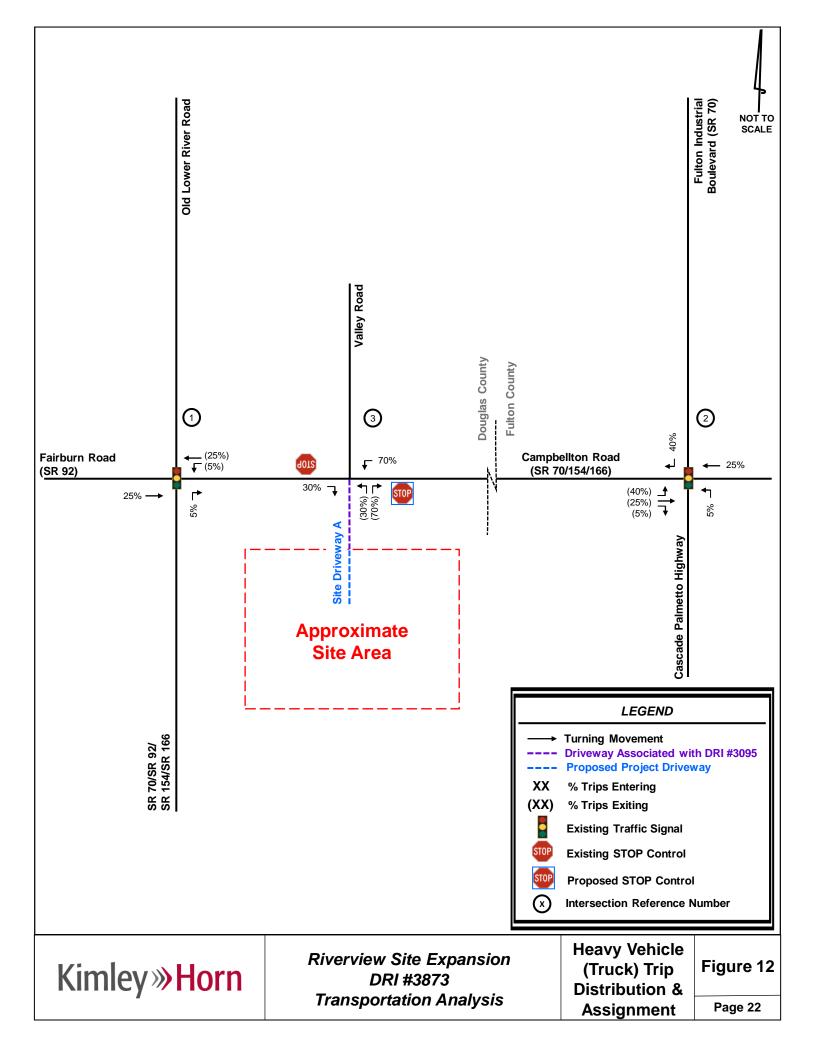
Detailed intersection volume worksheets are provided in Appendix C.

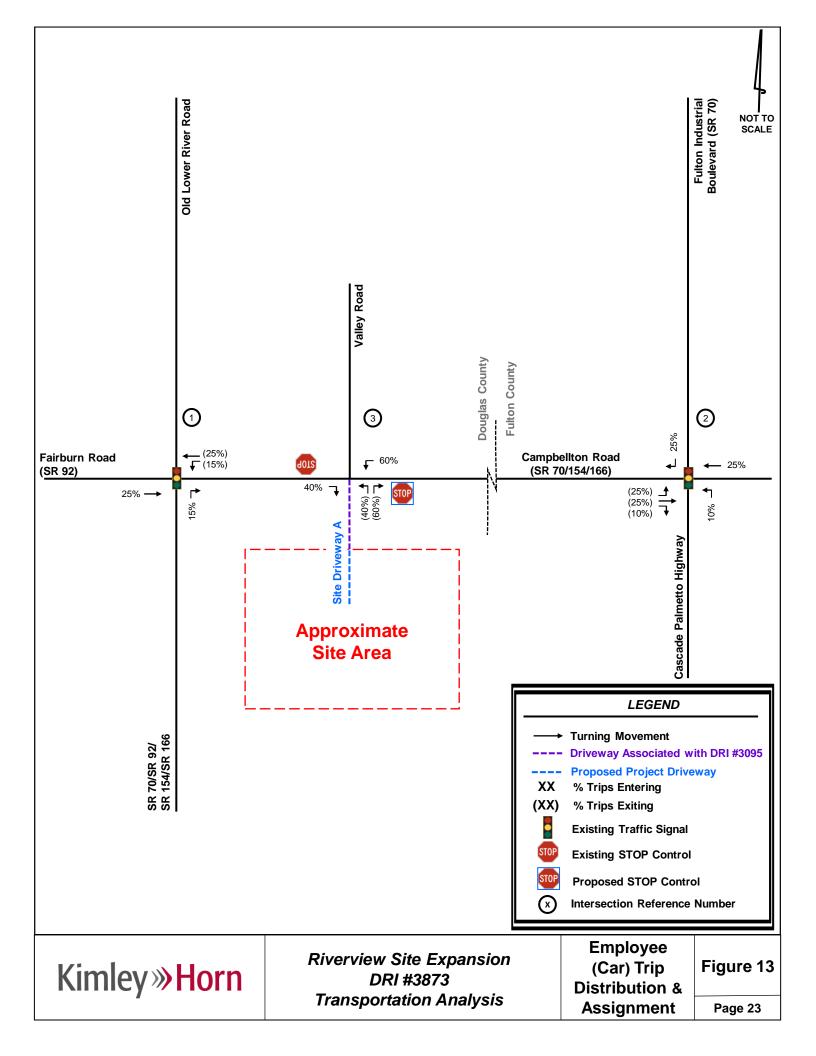
5.0 TRAFFIC ANALYSIS

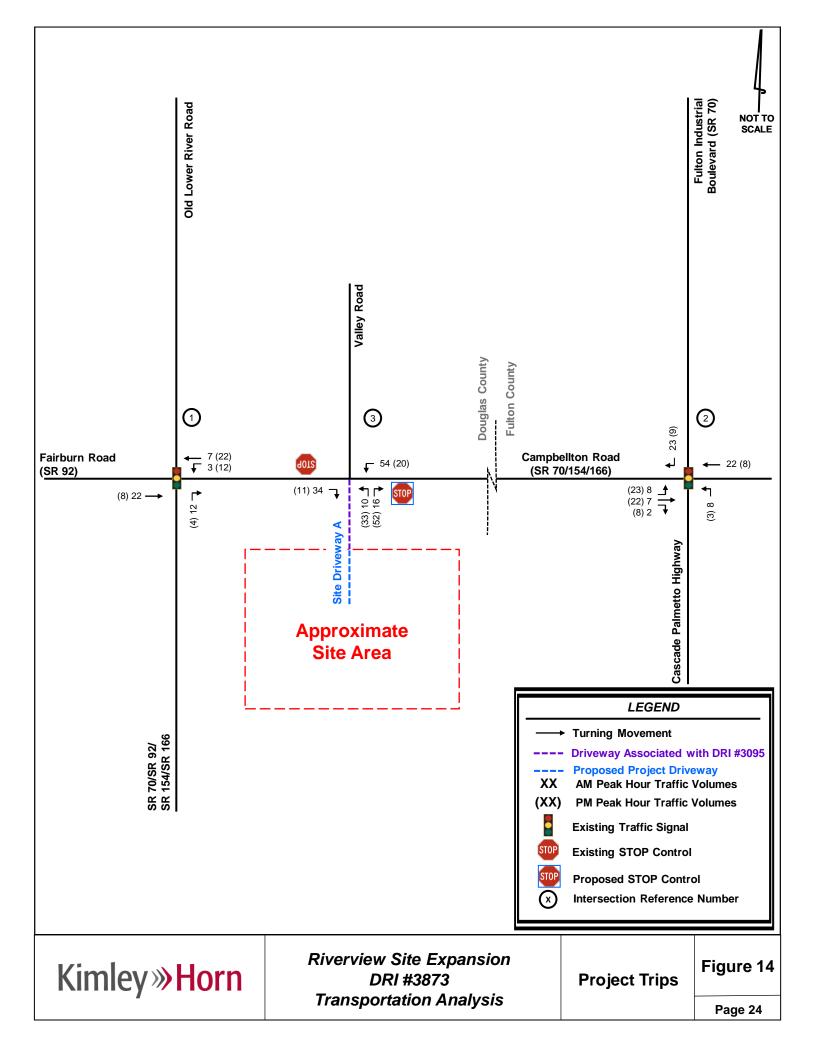
Capacity analyses were performed using *Synchro 11* for the AM and PM peak hours under the Existing 2023 conditions, Projected 2024 No-Build conditions, and Projected 2024 Build conditions. The capacity analyses were performed using methodologies from the *Highway Capacity Manual (HCM), 6*th *Edition* 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 15** for Existing 2023 conditions, **Figure 16** for Projected 2024 No-Build conditions, and **Figure 17** for Projected 2024 Build conditions.

Sections 5.1 – 5.3 provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.







5.1 Fairburn Road (SR 70/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/SR 154/SR 166) (Intersection 1)

	Overall LOS Standard: D Approach LOS Standard: D			SR 70/SR 92/ SR 154/SR 166 Northbound			Old Lower River Road Southbound			n Road (S	,	Fairburn Road (SR 70/SR 154/SR 166) Westbound			
			L		R		T	R			R	L	T	R	
		Overall LOS		•		-			35.1)	•		-	•		
AL		Approach LOS		D (40.7)		E (56.0)				C (29.4)		D (36.0)			
2023 (SIGNAL)	AM	Storage	150		150				150	0 (<u>20. i)</u>	250	250		350	
Si	◄	50th Queue	395	406	31		132		10	317	385	44	110	0	
53		95th Queue	587	600	90		240		33	517	899	101	188	0	
502		Overall LOS	001	000	00		210	101	100	Ū					
Ŭ		Approach LOS		D (45.8)			E (62.2)	5 (37.6)	C (23.0)			D (40.0)		
EXISTING	Μ	Storage	150		150				150		250	250]	350	
<u>s</u>	<u>a</u>	50th Queue	327	333	0		72		12	151	0	110	457	0	
Ш		95th Queue	521	527	14		158		35	247	119	215	668	0	
		Overall LOS		D (38.1)											
		Approach LOS		D (44.6)			E (61.5)		C (32.3)				D (37.2)		
4 02	AM	Storage	150		150				150		250	250		350	
G 2	1	50th Queue	409	421	44		137		10	361	496	49	154	0	
E S		95th Queue	606	620	110		249		34	581	1026	111	254	0	
PROJECTED 2024 NO-BUILD (SIGNAL)		Overall LOS		•				D (39.3)	•	•		•		
		Approach LOS		D (48.2)		E (67.9)			(C (24.8)		D (42.0)			
28	ΡM	Storage	150		150				150		250	250		350	
₽Ž		50th Queue	367	374	0		80		12	198	0	134	511	0	
		95th Queue	534	543	20		164		36	311	123	264	751	0	
		Overall LOS						D (38.9)						
2 ~	_	Approach LOS		D (45.5)			E (62.8)		(C (33.1)			D (37.8)		
AL 202	AM	Storage	150		150				150		250	250		350	
D No		50th Queue	411	422	55		138		10	377	528	53	158	0	
ES		95th Queue	607	622	127		249		34	606	1061	118	260	0	
PROJECTED 2024 BUILD (SIGNAL)		Overall LOS						D (40.1)			r			
	5	Approach LOS		D (49.0)	1 = 0		E (68.9)		C (25.5)			D (43.0)			
B	РМ	Storage	150	004	150				150	000	250	250	507	350	
"		50th Queue	375	384	0		82		12	202	0	150	527	0	
		95th Queue	534	543	25		164		36	317	123	302	773	0	

The intersection of Fairburn Road (SR 70/SR 92/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/SR 154/SR 166) (Intersection 1) is projected to operate at an acceptable <u>overall</u> LOS under the Existing 2023, No-Build 2024 and Build 2024 conditions. During the AM and PM peak hours, the southbound approach operates at LOS E under Existing 2023, Projected 2024 No-Build conditions, and Projected 2024 Build conditions.

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 <u>approach</u> LOS under the No-Build 2024 and Build 2024 conditions, Kimley-Horn considered the following system improvements (shown in red on **Figure 16** and **Figure 17**):

- Fairburn Road (SR 70/SR 92/SR 154/SR 166) at Old Lower River Road (SR 70/SR 92/SR 154/SR 166) (Intersection 1)
 - Install a southbound right-turn lane along Old Lower River Road.
 - Construct a southbound right-turn lane creating one (1) shared left-turn/through lane and one (1) exclusive right-turn lane along Old Lower River Road.

Overall LOS Standard: D Approach LOS Standard: D		SR 70/SR 92/ SR 154/SR 166			Old Lower River Road			Fairburn Road (SR 92)			Fairburn Road (SR 70/SR 154/ SR 166)					
			Northbound			So	uthbour	nd	Ea	astbour	nd	W	/estboun	d		
			L	Т	R	L	Т	R	L	Т	R	L	Т	R		
		Overall LOS						D (35.3)							
4 <u>H</u>		Approach LOS	D (41.8)			ŀ	E (56.2)		(C (29.6)			D (35.3)			
2024 30VE	AM	Storage	150		150			100	150		250	250		350		
L D 2		50th Queue	394	405	43		97	0	9	339	462	47	146	0		
		95th Queue	580	593	105		185	6	31	546	986	105	240	0		
PROJECTED 2024 NO-BUILD IMPROVED (SIGNAL)		Overall LOS		D (39.0)												
III S)	_	Approach LOS	D (48.2)			E (57.9)			C (24.8)			D (42.0)				
- B B	ΜЧ	Storage	150		150			100	150		250	250		350		
чŇ		50th Queue	349	356	0		47	0	11	188	0	128	486	0		
		95th Queue	511	520	20		103	19	33	290	116	246	698	0		
		Overall LOS	D (36.0)													
4 O	_	Approach LOS		D (42.6)		E (57.5)			C (30.2)			D (35.7)				
202 VE	AM	Storage	150		150			100	150		250	250		350		
Γ, QD		50th Queue	395	406	53		97	0	9	354	492	51	150	0		
JECTED D IMPRO (SIGNAL)		95th Queue	583	594	122		185	6	31	569	1018	113	245	0		
S≥S		Overall LOS						D (39.8)							
PROJECTED 2024 BUILD IMPROVED (SIGNAL)	_	Approach LOS		D (48.9)		I	= (58.9)		(<u>C (25.5)</u>			D (42.9)			
NR(ΜЧ	Storage	150		150			100	150		250	250		350		
		50th Queue	358	366	0		48	0	11	192	0	143	501	0		
		95th Queue	511	520	24		103	19	33	296	116	282	720	0		

The analysis results for the improved condition at Intersection 1 are shown in the table below.

Although the southbound approach is still projected to operate at LOS E, no other feasible improvements exist. This approach is a low volume approach, and the LOS E is primarily due to the existing signal timing, which prioritizes other higher volume approaches. The system improvements reduce the delay for the southbound approach but does not improve the LOS to LOS D. The intersection is projected to operate at an acceptable <u>overall</u> LOS under all scenarios. The system improvements are recommended to be considered by Douglas County.

5.2 Fulton Industrial Boulevard (SR 70)/Cascade Palmetto Highway at Campbellton Road (SR 70/SR 154/SR 166) (Intersection 2)

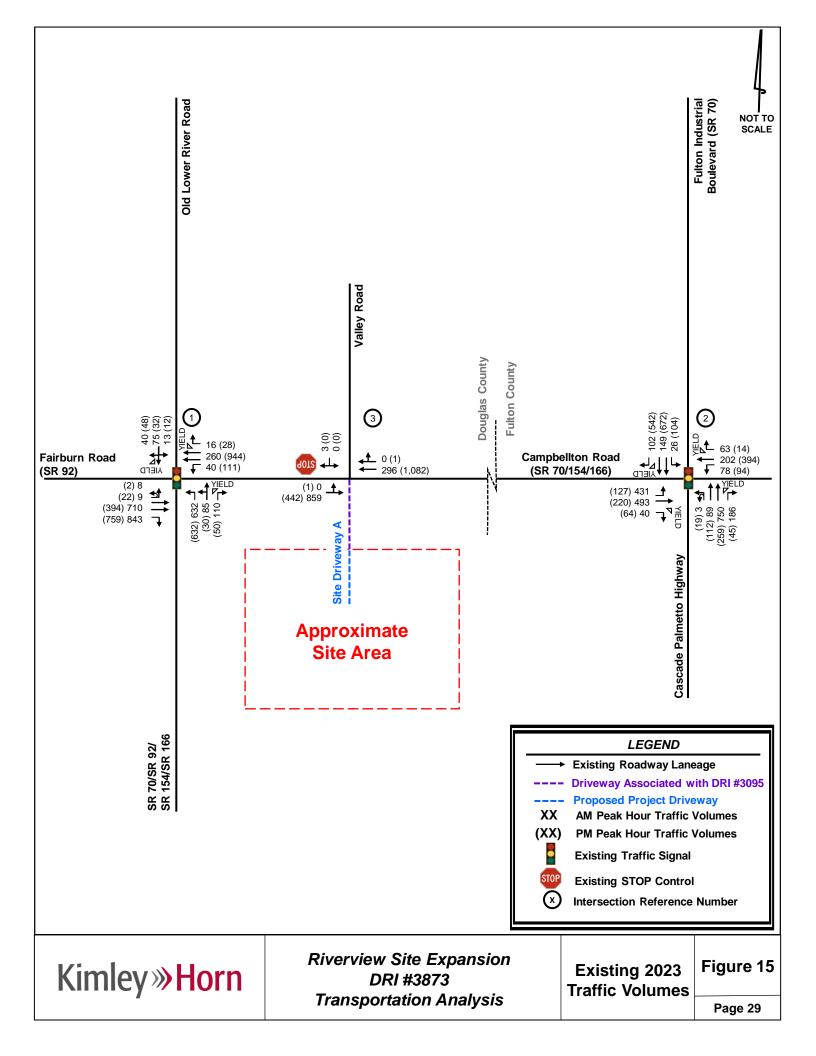
Overall LOS Standard: E Approach LOS Standard: E			Cascade Palmetto Highway				Fulton Industrial Boulevard (SR 70)			Campbellton Road (SR 70/SR 154/ SR 166)			Campbellton Road (SR 154/SR 166)		
			N	orthbour		Southbound			Eastbound			Westbound			
			L	Т	R	L	Т	R	L	Т	R	L	Т	R	
(T		Overall LOS						D (3	38.7)			1			
Z	_	Approach LOS		<u>C (28.4)</u>			C (24.6)			D (48.7)			D (49.2)		
Di Di	AM	Storage	300		150	300		150	100		150	150			
(S		50th Queue	43	267	56	12	45	0	263	387	0	37	203		
EXISTING 2023 (SIGNAL)		95th Queue	97	426	145	37	91	48	475	558	0	69	302		
20		Overall LOS	C (30.1)												
U Z	_	Approach LOS		C (22.2)		C (26.5)				C (33.1)			D (42.1)		
IL	Δd	Storage	300		150	300		150	100		150	150			
XIS		50th Queue	62	82	0	48	251	226	69	156	0	50	335		
Û		95th Queue	131	152	0	107	413	540	119	252	19	91	509		
		Overall LOS						D (4	5.5)						
4 ()	_	Approach LOS		C (31.4)			C (28.2)		E (62.2)				D (49.3)		
NA NA	AM	Storage	300		150	300		150	100		150	150			
102		50th Queue	60	293	62	13	50	0	346	416	0	38	263		
LEI (S		95th Queue	125	450	154	39	97	60	609	591	2	70	378		
PROJECTED 2024 NO-BUILD (SIGNAL)		Overall LOS						C (3	33.9)						
SU B		Approach LOS		C (25.9)		C (32.0)			C (33.7)			D (44.3)			
R R R R	M	Storage	300		150	300		150	100		150	150			
d X		50th Queue	75	93	0	56	285	282	107	207	0	51	383		
		95th Queue	159	173	0	124	480	669	186	323	36	94	585		
		Overall LOS						D (4	8.3)						
4	_	Approach LOS		C (32.6)			C (29.6)			E (67.8)			D (49.3)		
AL)	AM	Storage	300		150	300		150	100		150	150			
N/		50th Queue	66	301	64	13	52	0	380	424	0	38	287		
		95th Queue	133	453	155	39	99	64	654	599	4	70	407		
PROJECTED 2024 BUILD (SIGNAL)		Overall LOS						D (3	35.3)						
		Approach LOS		C (27.3)			C (34.0)		C (34.2)			D (45.1)			
BU	Μd	Storage	300		150	300		150	100		150	150			
a -		50th Queue	81	96	0	58	297	302	122	228	4	52	401		
		95th Queue	171	180	0	130	501	710	233	352	44	94	614		

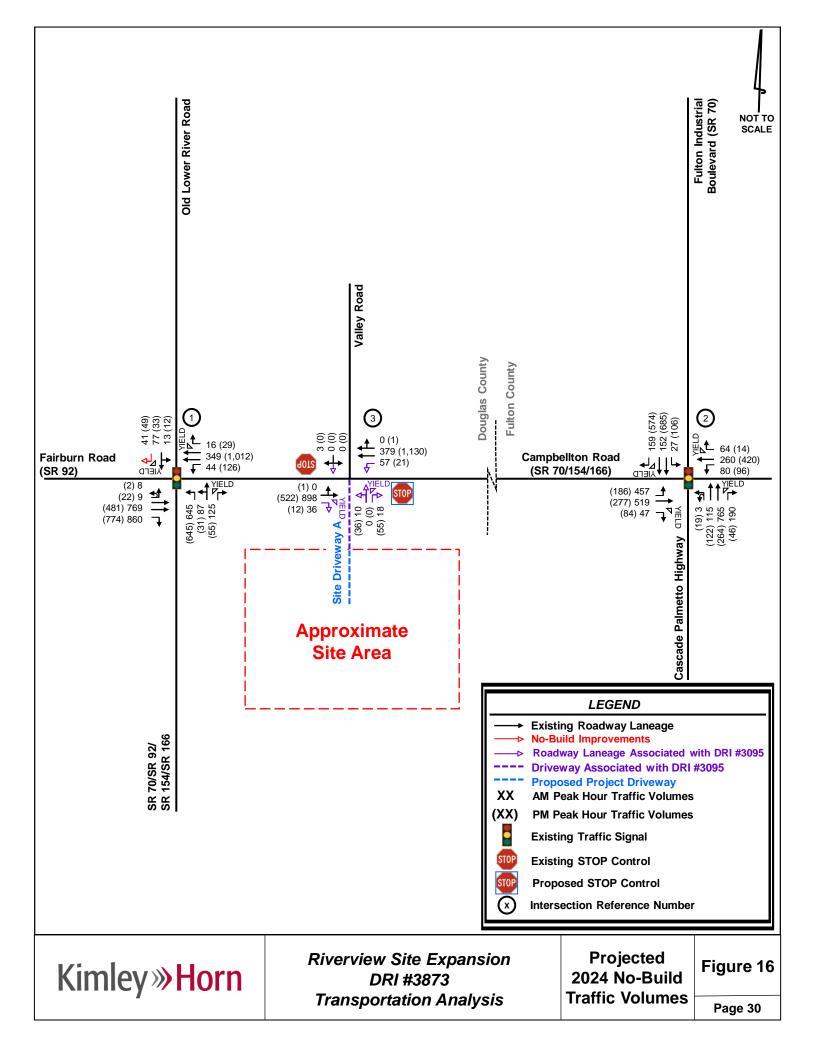
The signalized intersection of Fulton Industrial Boulevard (SR 70)/Cascade Palmetto Highway at Campbellton Road (SR 70/SR 154/SR 166) (Intersection 2) is projected to operate at an acceptable <u>overall</u> LOS under the Existing 2023, No-Build 2024, and Build 2024 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

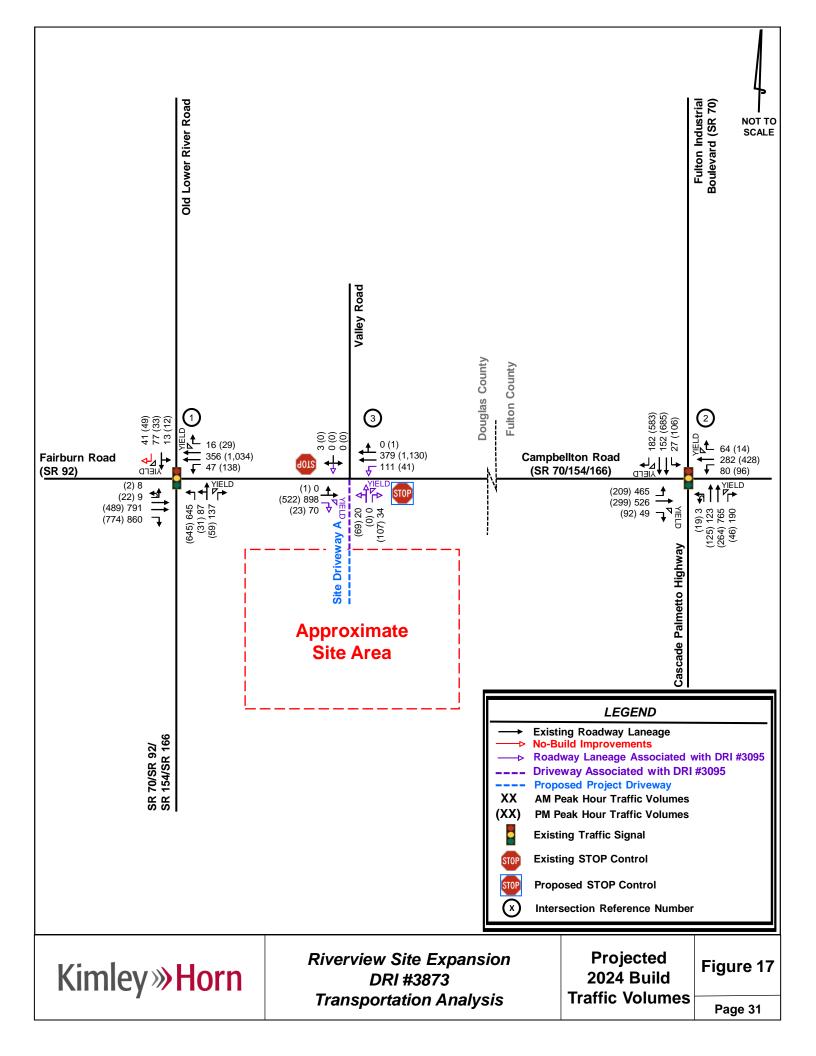
5.3 Fairburn Road (SR 70/SR 154/SR 166) at Valley Road/Site Driveway A (Intersection 3)

	Overall LOS Standard: D Approach LOS Standard: D			Site Driveway A			Valley Road			Fairburn Road (SR 70/SR 154/SR 166)			Fairburn Road (SR 70/SR 154/SR 166)		
				orthbou		Southbound			Eastbound			Westbound			
			L	Т	R	L	Т	R	L	Т	R	L	Т	R	
		Overall LOS						(0	.0)						
	-	Approach LOS					A (9.2)			A (0.0)			A (0.0)		
23	AM	Storage													
C) 50		50th Queue													
SC		95th Queue					0		0						
EXISTING 2023 (TWSC)		Overall LOS						(0							
(IS	_	Approach LOS					A (0.0)			B (10.7)		A (0.0)		
ŵ	Μd	Storage													
	_	50th Queue													
		95th Queue					0		0						
		Overall LOS		(1.0)											
4 🙃	_	Approach LOS		C (24.8))		A (9.5)			A (0.0)			B (10.5)	1	
SC 82	AM	Storage													
≦ S		50th Queue													
EI C		95th Queue	8		5					0		8			
PROJECTED 2024 NO-BUILD (TWSC)		Overall LOS						(1	.3)						
BU	_	Approach LOS		C (21.0))		A (0.0)			B (10.9))		A (8.5)		
ччо	Μd	Storage					1	1	1						
ΔZ	_	50th Queue													
		95th Queue	23		10					0		3			
		Overall LOS						(2	.0)						
4	_	Approach LOS		D (32.2))		A (9.5)			A (0.0)			B (11.1)	1	
C 03	AM	Storage													
VS(50th Queue													
ΞA		95th Queue	20		10					0		15			
PROJECTED 2024 BUILD (TWSC)		Overall LOS						(3	.0)						
	_	Approach LOS		D (28.5))		A (0.0)			B (10.9))		A (8.6)		
Bl	Μd	Storage													
Δ.	_	50th Queue													
		95th Queue	60		20					0		3			

The unsignalized intersection of Fairburn Road (SR 70/SR 154/SR 166) at Valley Road/Site Driveway A (Intersection 3) is projected to operate at an acceptable <u>overall</u> LOS under the Existing 2023, No-Build 2024, and Build 2024 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. The intersection is proposed to operate as a full-movement driveway under two-way stop-control with stop control for the northbound and southbound approaches. No changes to the approved driveway configuration are required. The driveway has been permitted through GDOT (permit A-097-006885-7), and an Intersection Control Evaluation (ICE) is not required at this time as no changes to the driveway are proposed.





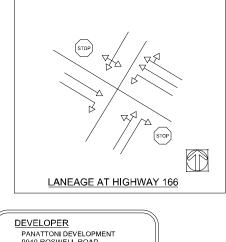


APPENDIX A

Proposed Site Plan



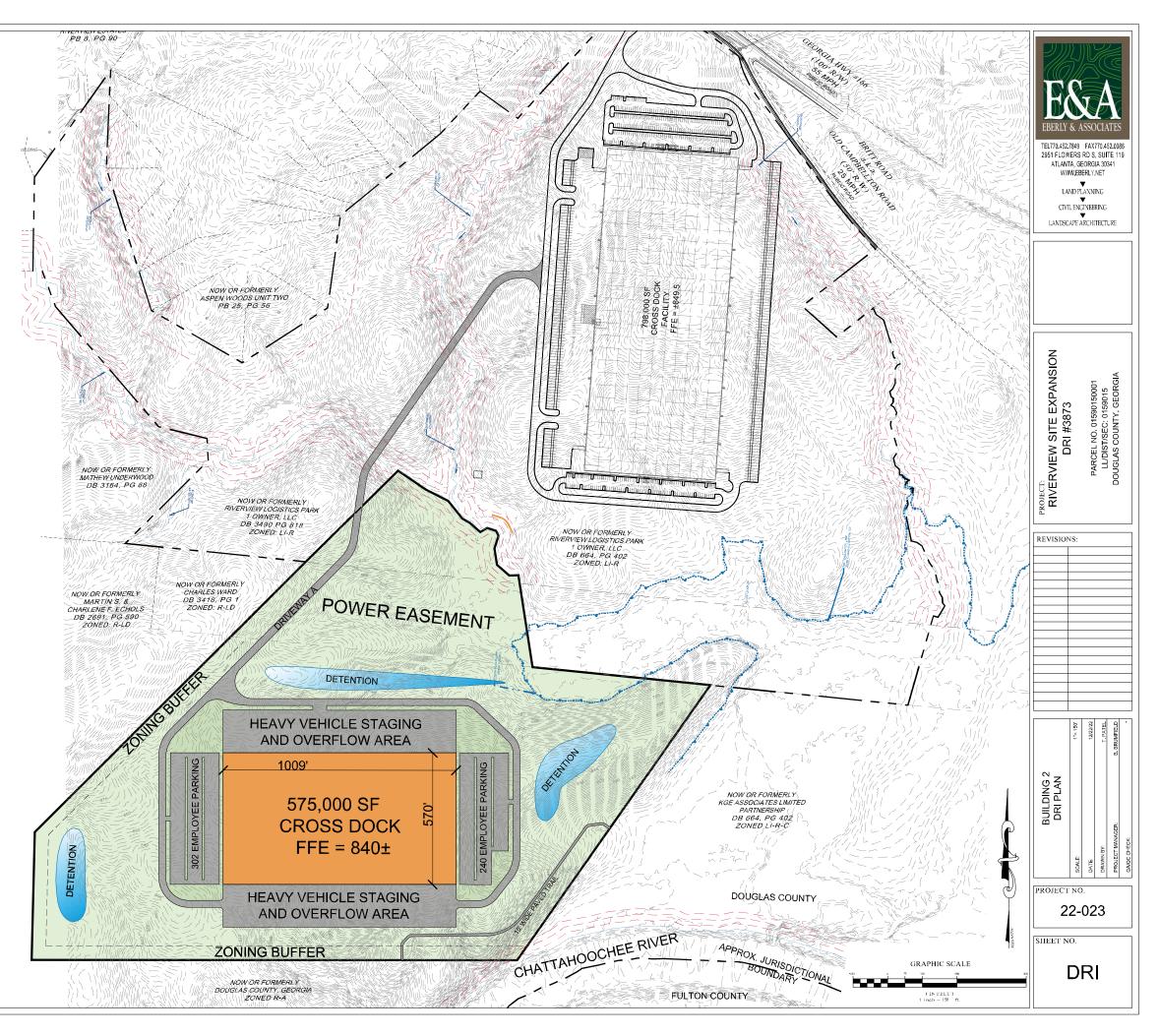
ACREAGE:	TOTAL	83.8 AC
BUILDINGS :		
	BUILDING 2	575,000 S.F.
	BUILDING USE	WAREHOUSING
	ZONING R	ESTRICTED LIGHT INDUSTRIAL
YIELD:	FLOOR AREA RAT	ПО 15.8%
	IMPERVIOUS COV	/ER 35.6%
	OPEN SPACE	64.4%
	DENSITY:	15,509.4 SF/ACRE
PAVEMENT:		
	REQUIRED PARK	NG SPACES 87
	PARKING SPACES	5 ±542
	TRAILER SPACES	±162
LOCATION:	STREET	HIGHWAY 166 (FAIRBURN RD)
	JURISDICTION	DOUGLAS COUNTY, GA
	PARCEL NO.	01590150001
SERVICES:	SEWER DEMAND	13,550 GPD



PANATTONI DEVELOPMENT 9040 ROSWELL ROAD SUITE 420 ATLANTA, GA 30350 (404) 921-2011 JGUION@PANATTONI.COM ENGINEER BRIAN BRUMFIELD, P.E. BBRIAN BRUMFIELD, P.E. EBERLY & ASSOCIATES, INC. 2951 FLOWERS ROAD SOUTH SUITE 119 ATLANTA, GEORGIA 30341 (720) 450 - 2040

(770) 452-7849 BBRUMFIELD@EBERLY.NET TRAFFIC ENGINEER

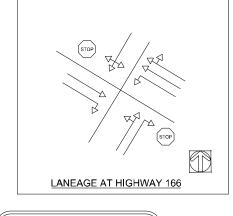




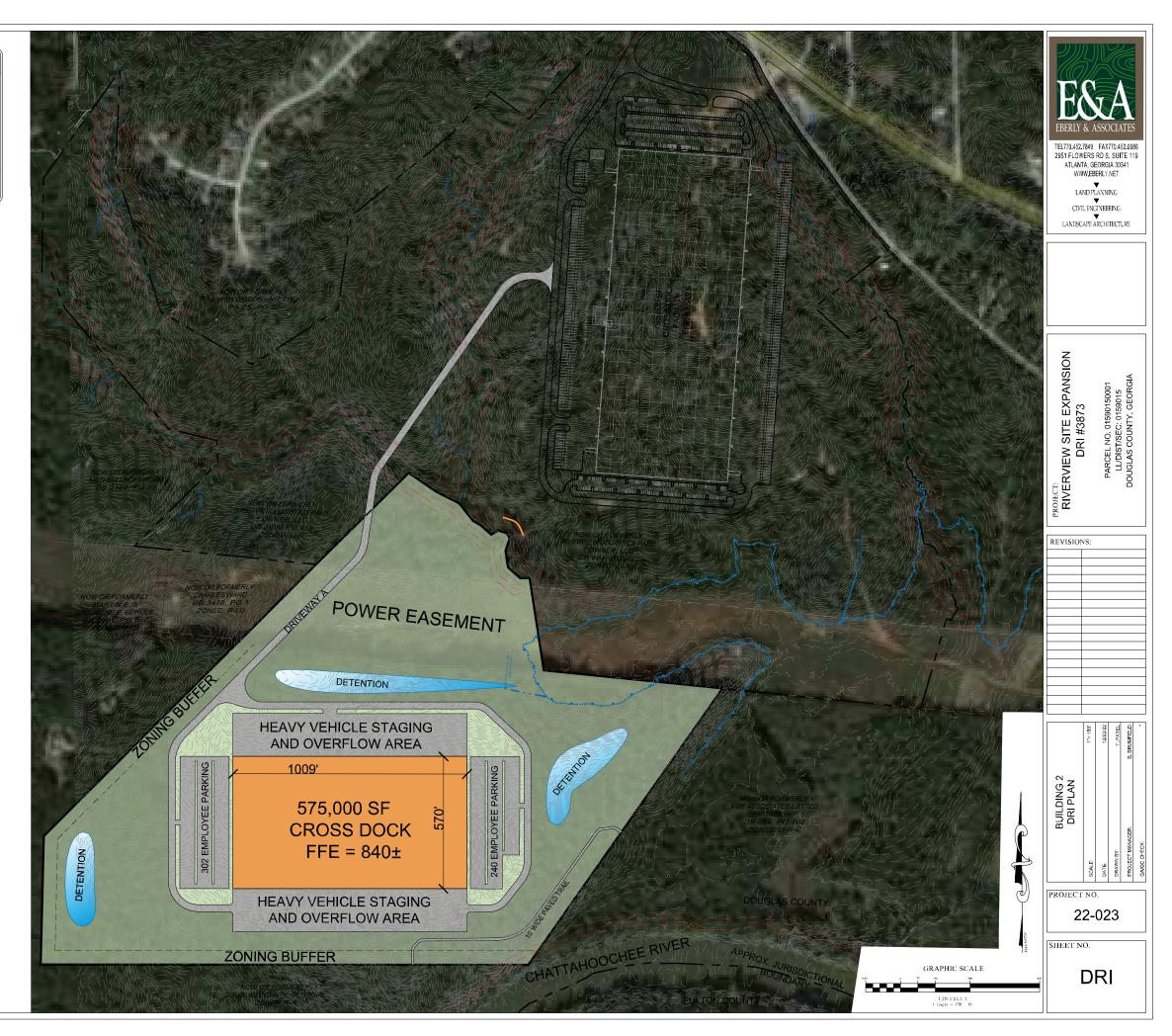


Ν.	T.S.	

ACREAGE:	TOTAL	83.8 AC
BUILDINGS :		
	BUILDING 2	575,000 S.F.
	BUILDING USE	WAREHOUSING
	ZONING F	ESTRICTED LIGHT INDUSTRIAL
YIELD:	FLOOR AREA RA	TIO 15.8%
	IMPERVIOUS COV	/ER 35.6%
	OPEN SPACE	64.4%
	DENSITY:	15,509.4 SF/ACRE
PAVEMENT:		
	REQUIRED PARK	
	PARKING SPACES	
	TRAILER SPACES	±162
LOCATION:	STREET	HIGHWAY 166 (FAIRBURN RD)
	JURISDICTION	DOUGLAS COUNTY, GA
	PARCEL NO.	01590150001
SERVICES:	SEWER DEMAND	13,550 GPD



DEVELOPER PANATTONI DEVELOPMENT 9040 ROSWELL ROAD SUITE 420 ATLANTA, GA 30350 (404) 921-2011 JGUION@PANATTONI.COM ENGINEER BRIAN BRUMFIELD, P.E. EBERLY & ASSOCIATES, INC. 2951 FLOWERS ROAD SOUTH SUITE 119 ATLANTA, GEORGIA 30341 (770) 452-7849 BBRUMFIELD@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) 619-4280



APPENDIX B

Trip Generation Analysis

Trip Generation Analysis	s (11th Ed. with <i>2nd Edition Handboo</i> Riverview Site Expansion DRI Douglas County, GA	•	Edition A	M/PM I	C)			
Land Use	Intensity	Daily	AM	Peak H	our	PN	I Peak H	lour
		Trips	Total	In	Out	Total	In	Out
Proposed Site Traffic								T
150 Warehousing	575,000 s.f.	946	92	71	21	96	27	69
Gross Trips		946	92	71	21	<u>96</u>	27	69
Truck Trips (per ITE 10th Edition Supplement)		318	12	6	6	17	9	8
Mixed-Use Reductions		0	0	0	0	0	0	0
Alternative Mode Reductions		0	0	0	0	0	0	0
Adjusted Truck Trips		318	12	6	6	17	9	8
Car Trips (per ITE 10th Edition Supplement)		628	80	65	15	79	18	61
Mixed-Use Reductions		0	0	0	0	0	0	0
Alternative Mode Reductions		0	0	0	0	0	0	0
Adjusted Car Trips		628	80	65	15	79	18	61
			-		-			
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		946	92	71	21	96	27	69
Driveway Volumes		946	92	71	21	96	27	69

k:\alp_tpto\013527006_riverview site dri update, douglas county, january 2023\dri phase ii\analysis\[riverview analysis.xls]trip generation

APPENDIX C

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

Intersection #1: Fairburn Road (SR 92) / Fairburn Road (SR 70/SR 154/SR 166) @ Highway 92 (SR 70/SR 154/SR 166) / Old Lower River Road AM PEAK HOUR

	ohway 92	(SR 70/SR	154/SR 1	Old I	ower River	Road	I	airburn R	oad (SR 92)	burn Road	1 (SR 70/SI	R 154/SR
		orthboun			Southboun				ound	<i>,</i>		Westbound	
Description	Left	Through		Left	Through	Right	U-Turn	Left	Through	Right	Left	Through	Right
	Len	Through	Right	Len	Through	Right	e rum	Len	Through	Right	Len	Through	Right
Observed 2023 Traffic Volumes	632	85	110	13	75	40	8	9	710	843	40	260	16
Pedestrians		0			0				0			0	
Conflicting Pedestrians	0		0	0		0	0	0		0	0		0
Heavy Vehicles	30	1	2	0	2	2	0	0	9	44	1	10	0
Heavy Vehicle %	5%	2%	2%	2%	3%	5%	2%	2%	2%	5%	3%	4%	2%
Peak Hour Factor		0.93			0.93			0.	93			0.93	
Adjustment													
Adjusted 2023 Volumes	632	85	110	13	75	40	8	9	710	843	40	260	16
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
Riverside West DRI #3072									10			34	
Riverside Pkwy Warehouse DRI #3080									12			43	
Riverview Site DRI #3095			13						21		3	5	
Riverview Site DRI #3095 (Truck)									2			2	
2024 Background Traffic	645	87	125	13	77	41	8	9	769	860	44	349	16
2024 No-Build Heavy Vehicle %	5%	2%	2%	2%	3%	5%	2%	2%	2%	5%	2%	3%	2%
Project Trips													
Trip Distribution IN			5%						25%				
Trip Distribution OUT											5%	25%	
Truck Trips	0	0	0	0	0	0	0	0	2	0	0	2	0
Trip Distribution IN			15%						25%				
Trip Distribution OUT											15%	25%	
Car Trips	0	0	12	0	0	0	0	0	20	0	3	5	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	12	0	0	0	0	0	22	0	3	7	0
2024 Buildout Total	645	87	137	13	77	41	8	9	791	860	47	356	16
2024 Build Heavy Vehicle %	5%	2%	2%	2%	3%	5%	2%	2%	2%	5%	2%	4%	2%

PM PEAK HOUR

	ghway 92	ghway 92 (SR 70/SR 154/SR 1)				Road	I	⁷ airburn R	oad (SR 92	!)	burn Road (SR 70/SR 154/SR			
	1	Northboun	d	5	Southboun	<u>d</u>		Eastl	oound		Westbound			
Description	Left	Through	Right	Left	Through	Right	U-Turn	Left	Through	Right	Left	Through	Right	
Observed 2023 Traffic Volumes	632	30	50	12	32	48	2	22	394	759	111	944	28	
Pedestrians	032	0	30	12	0	40	2		0 0	139	111	944 0	20	
Conflicting Pedestrians	0	0	0	0	0	0	0	0		0	0	0	0	
Heavy Vehicles	38	2	1	0	1	1	0	2	24	20	0	26	0	
Heavy Vehicle %	6%	7%	2%	2%	3%	2%	2%	9%	6%	3%	2%	3%	2%	
Peak Hour Factor	0 70	0.95	2 70	2 70	0.95	2 70	2 70		.95	370	2 70	0.95	2 70	
Adjustment		0.95			0.95			0.	.95			0.95		
Adjusted 2023 Volumes	632	30	50	12	32	48	2	22	394	759	111	944	28	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	
Riverside West DRI #3072	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	30	1.020	1.020	1.020	1.020	
Riverside Pkwy Warehouse DRI #3080									41			15		
Riverview Site DRI #3095			3						5		12	20		
Riverview Site DRI #3095 (Truck)			1						3		12	3		
2024 Background Traffic	645	31	55	12	33	49	2	22	481	774	126	1.012	29	
2024 No-Build Heavy Vehicle %	6%	7%	4%	2%	3%	2%	2%	9%	6%	3%	3%	3%	2%	
Project Trips									1			1		
Trip Distribution IN			5%						25%					
Trip Distribution OUT											5%	25%		
Truck Trips	0	0	1	0	0	0	0	0	3	0	1	3	0	
Trip Distribution IN			15%						25%					
Trip Distribution OUT											15%	25%		
Car Trips	0	0	3	0	0	0	0	0	5	0	11	19	0	
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	0	0	4	0	0	0	0	0	8	0	12	22	0	
2024 Buildout Total	645	31	59	12	33	49	2	22	489	774	138	1,034	29	
2024 Build Heavy Vehicle %	6%	7%	5%	2%	3%	2%	2%	9%	6%	3%	3%	3%	2%	

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INTERSECTION VOLUME DEVELOPMENT

ion #2: Cascade Palmetto Highway / Fulton Industrial Boulevard (SR 70) @ Campbellton Road (SR 70/SR 154/SR 166) / Campbellton Road (SR 154 AM PEAK HOUR

	Ca	scade Paln	netto Highv	vay	ulton Indus	trial Boule	vard (SR 7	bellton Ro	ad (SR 70/	SR 154/SI	mpbellton Road (SR 154/SR 10			
		North	bound		Southbound				Eastbound	1	Westbound			
Description	U-Turn	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
Observed 2023 Traffic Volumes	3	89	750	186	26	149	102	431	493	40	78	202	63	
Pedestrians			0			0			0			0		
Conflicting Pedestrians	0	0		0	0		0	0		0	0		0	
Heavy Vehicles	0	5	11	3	5	15	1	5	10	1	6	5	8	
Heavy Vehicle %	2%	6%	2%	2%	19%	10%	2%	2%	2%	3%	8%	2%	13%	
Peak Hour Factor		0.96			0.96			0.96			0.96			
Adjustment														
Adjusted 2023 Volumes	3	89	750	186	26	149	102	431	493	40	78	202	63	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	
Riverside West DRI #3072		8					13	4	4	2		13		
Riverside Pkwy Warehouse DRI #3080		7					18	5	5	2		18		
Riverview Site DRI #3095		9					21	5	5	2		21		
Riverview Site DRI #3095 (Truck)							3	3	2			2		
2024 Background Traffic	3	115	765	190	27	152	159	457	519	47	80	260	64	
2024 No-Build Heavy Vehicle %	2%	4%	2%	2%	19%	10%	3%	3%	2%	2%	8%	3%	13%	
Project Trips														
Trip Distribution IN		5%					40%					25%		
Trip Distribution OUT								40%	25%	5%				
Truck Trips	0	0	0	0	0	0	3	3	2	0	0	2	0	
Trip Distribution IN		10%					25%					25%		
Trip Distribution OUT								25%	25%	10%				
Car Trips	0	8	0	0	0	0	20	5	5	2	0	20	0	
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	0	8	0	0	0	0	23	8	7	2	0	22	0	
2024 Buildout Total	3	123	765	190	27	152	182	465	526	49	80	282	64	
2024 Build Heavy Vehicle %	2%	4%	2%	2%	19%	10%	4%	3%	3%	2%	8%	3%	13%	

PM PEAK HOUR

	Cascade Palmetto Highway Northbound					strial Boule Southboun			Empbellton Road (SR 154/SR 16 Westbound				
Description	U-Turn	Left	Through	Right	Left	Through		Left	Eastbound Through	I Right	Left	Through	I Right
Description	0-1011	Len	Thiough	Rigin	Len	Through	Right	Leit	Through	Right	Leit	Through	Kigiit
Observed 2023 Traffic Volumes	19	112	259	45	104	672	542	127	220	64	94	394	14
Pedestrians			0			0			0			0	
Conflicting Pedestrians	0	0		0	0		0	0		0	0		0
Heavy Vehicles	0	6	34	2	7	24	22	9	9	4	2	9	8
Heavy Vehicle %	2%	5%	13%	4%	7%	4%	4%	7%	4%	6%	2%	2%	57%
Peak Hour Factor		0.95				0.95			0.95			0.95	
Adjustment													
Adjusted 2023 Volumes	19	112	259	45	104	672	542	127	220	64	94	394	14
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
Riverside West DRI #3072		2					5	13	13	4		4	
Riverside Pkwy Warehouse DRI #3080		3					6	18	17	6		6	
Riverview Site DRI #3095		2					5	20	20	8		5	
Riverview Site DRI #3095 (Truck)		1					5	5	3	1		3	
2024 Background Traffic	19	122	264	46	106	685	574	186	277	84	96	420	14
2024 No-Build Heavy Vehicle %	2%	6%	13%	4%	7%	4%	5%	8%	4%	6%	2%	3%	58%
Project Trips													
Trip Distribution IN		5%					40%					25%	. <u> </u>
Trip Distribution OUT								40%	25%	5%			. <u> </u>
Truck Trips	0	1	0	0	0	0	4	4	3	1	0	3	0
Trip Distribution IN		10%					25%					25%	
Trip Distribution OUT								25%	25%	10%			
Car Trips	0	2	0	0	0	0	5	19	19	7	0	5	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	3	0	0	0	0	9	23	22	8	0	8	0
2024 Buildout Total	19	125	264	46	106	685	583	209	299	92	96	428	14
2024 Build Heavy Vehicle %	2%	6%	13%	4%	7%	4%	5%	9%	5%	7%	2%	4%	58%

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INTERSECTION VOLUME DEVELOPMENT

Intersection #3: Fairburn Road (SR 70/SR 154/SR 166) @ Site Driveway / Valley Road AM PEAK HOUR

	S	ite Drivewa	ау		Valley Roa	d	burn Road	d (SR 70/SI	R 154/SR	burn Road (SR 70/SR 154/SR 1			
	N	orthboun	d	5	Southbound			Eastbound			Westbound		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
Observed 2023 Traffic Volumes	0	0	0	0	0	3	0	859	0	0	296	0	
Pedestrians		0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0	
Heavy Vehicles	0	0	0	0	0	0	0	10	0	0	10	0	
Heavy Vehicle %	0%	0%	0%	0%	0%	2%	0%	2%	0%	0%	3%	0%	
Peak Hour Factor		0.93			0.93			0.93			0.93		
Adjustment													
Adjusted 2023 Volumes	0	0	0	0	0	3	0	859	0	0	296	0	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	
Riverside West DRI #3072								10			34		
Riverside Pkwy Warehouse DRI #3080								12			43		
Riverview Site DRI #3095	8		12						34	51			
Riverview Site DRI #3095 (Truck)	2		6						2	6			
2024 Background Traffic	10	0	18	0	0	3	0	898	36	57	379	0	
2024 No-Build Heavy Vehicle %	20%	0%	33%	0%	0%	2%	0%	2%	6%	11%	3%	0%	
Project Trips													
Trip Distribution IN									30%	70%			
Trip Distribution OUT	30%		70%										
Truck Trips	2	0	5	0	0	0	0	0	2	6	0	0	
Trip Distribution IN									40%	60%			
Trip Distribution OUT	40%		60%										
Car Trips	8	0	11	0	0	0	0	0	32	48	0	0	
•													
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	10	0	16	0	0	0	0	0	34	54	0	0	
E -													
2024 Buildout Total	20	0	34	0	0	3	0	898	70	111	379	0	
2024 Build Heavy Vehicle %	20%	0%	32%	0%	0%	2%	0%	2%	6%	11%	3%	0%	

PM PEAK HOUR

		Site Driveway			Valley Roa					burn Road (SR 70/SR 154/SR			
	-	orthboun		-	Southboun	_		Eastbound	-		Westboun	_	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
Observed 2023 Traffic Volumes	0	0	0	0	0	0	1	442	0	0	1.082	1	
Pedestrians	Ŭ	0	0		0	0		0			0	-	
Conflicting Pedestrians	0		0	0		0	0		0	0	Ŭ	0	
Heavy Vehicles	0	0	0	0	0	0	0	24	0	0	25	0	
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	2%	5%	0%	0%	2%	2%	
Peak Hour Factor		0.99			0.99			0.99			0.99		
Adjustment													
Adjusted 2023 Volumes	0	0	0	0	0	0	1	442	0	0	1082	1	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	
Riverside West DRI #3072								30			11		
Riverside Pkwy Warehouse DRI #3080								41			15		
Riverview Site DRI #3095	32		47						8	13			
Riverview Site DRI #3095 (Truck)	4		8						4	8			
2024 Background Traffic	36	0	55	0	0	0	1	522	12	21	1,130	1	
2024 No-Build Heavy Vehicle %	11%	0%	15%	0%	0%	0%	2%	5%	33%	38%	2%	2%	
Project Trips													
Trip Distribution IN									30%	70%			
Trip Distribution OUT	30%		70%						5070	1070			
Truck Trips	3	0	8	0	0	0	0	0	3	8	0	0	
Trip Distribution IN									40%	60%			
Trip Distribution OUT	40%		60%						4070	0070			
Car Trips	30	0	44	0	0	0	0	0	8	12	0	0	
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	33	0	52	0	0	0	0	0	11	20	0	0	
2024 Buildout Total	69	0	107	0	0	0	1	522	23	41	1,130	1	
2024 Build Heavy Vehicle %	10%	0%	15%	0%	0%	0%	2%	5%	30%	39%	2%	2%	

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APPENDIX D

Programmed Project Fact Sheets

00-019	Atlanta Region's Plan RTP (2	020) PROJECT FACT SHEET
Short Title	SR 166 (FAIRBURN ROAD / CAMPBELLTON ROAD) WIDENING FROM OLD LOWER RIVER ROAD IN DOUGLAS COUNTY TO SR 70 IN FULTON COUNTY	Riverside PKwY
GDOT Project No.	721770-	70
Federal ID No.	STP00-0186-01(022)	Campbeliton
Status	Long Range	
Service Type	Roadway / General Purpose Capacity	
Sponsor	GDOT	
Jurisdiction	Douglas County	ndary
Analysis Level	In the Region's Air Quality Conformity Analysis	iters #16
Existing Thru Lane Planned Thru Lane		Network Year 2040
		Corridor Length 3.4 miles

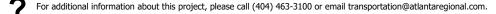
Detailed Description and Justification

The project begins in Douglas County on SR 166 east of the intersection with Old Lower River Road and continues to the Douglas/Fulton County line. The project then crosses the Chattahoochee River into Fulton County and ends just east of the intersection of SR 166 and Fulton Industrial Boulevard. Proposed Typical Section: Four 12 foot travel lanes in each direction with a 24 foot raised median and 10 foot (6.5 foot paved, 3.5 foot grassed) rural shoulders. Proposed Bridge Configuration: The existing 48 foot bridge will be widened 48 feet to accommodate four 12 foot travel lanes and a 24 foot raised median.

Pha	se Status & Funding	Status	FISCAL	TOTAL PHASE	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE							
Info	rmation		YEAR	COST	FEDERAL	STATE	BONDS	LOCAL/PRIVATE				
PE	STP - Urban (>200K) (ARC)	AUTH	1992	\$1,602,919	\$1,282,335	\$320,584	\$0,000	\$0,000				
PE	Transportation Funding Act (HB 170)	AUTH	2016	\$500,000	\$0,000	\$500,000	\$0,000	\$0,000				
PE	Transportation Funding Act (HB 170)		LR 2026- 2030	\$1,500,000	\$0,000	\$1,500,000	\$0,000	\$0,000				
ALL	Transportation Funding Act (HB 170)		LR 2031- 2040	\$32,953,312	\$0,000	\$32,953,312	\$0,000	\$0,000				
				\$36,556,231	\$1,282,335	\$35,273,896	\$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
 ROW: Right-of-way Acquistion



00-298	Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET					
Short Title	CHC REGIONAL GREENWAY TRAIL - DOUGLAS COUNTY EXTENSION FROM BOUNDARY OF WATERS PARK TO SWEETWATER CREEK STATE PARK	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				
GDOT Project No.	0012877	Reneral and Barn				
Federal ID No.	N/A	make and the man To sw				
Status	Programmed	100 - Campbellion Rasti				
Service Type	Last Mile Connectivity / Sidepaths and Trails					
Sponsor	Douglas County	Tom Lowe Shooting				
Jurisdiction	Douglas County	15 Total 1 State - Sta				
Analysis Level	Exempt from Air Quality Analysis (40 CFR 93)	Buller				
Existing Thru Lane	N/A LCI	Network Year TBD				
Planned Thru Lane	N/A Flex	Corridor Length N/A miles				
Detailed Description a	and Justification					

Develop final design for the Douglas County portion of the Chattahoochee Hill Country Regional Greenway (CHCRG) Trail System; connects the Douglas County pilot segment of the CHCRG Trail in Boundary Waters Park to Sweetwater Creek State Park, existing trails, and historic sites.

Phase Status & Funding Status		tus FISCAL	TOTAL PHASE	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE				
Information			YEAR	COST	FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	TAP - Urban (>200K) (ARC)	AUTH	2014	\$1,625,000	\$1,300,000	\$0,000	\$0,000	\$325,000
ROW	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)		2023	\$7,206,600	\$2,150,400	\$0,000	\$0,000	\$5,056,200
CST	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)		2025	\$33,717,640	\$6,009,600	\$0,000	\$0,000	\$27,708,040
		\$42,549,240	\$9,460,000	\$0,000	\$0,000	\$33,089,240		

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



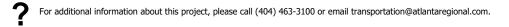
For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

S-011	Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET					
Short Title	CASCADE-PALMETTO HIGHWAY WIDENING FROM SR 92 (CAMPBELLTON-FAIRBURN ROAD) TO SR 154 (CAMPBELLTON ROAD)	Langewale Rd Big the Rd To Camp ellion Rd SH				
GDOT Project No.	N/A					
Federal ID No.	N/A					
Status	Long Range	nougus the second				
Service Type	Roadway / General Purpose Capacity	Cumpber Cambo				
Sponsor	GDOT	ab thomas the Estuble of a g				
Jurisdiction	Fulton County (South)	0.05 1 Miles Ridenato 22 001 Ra				
Analysis Level	In the Region's Air Quality Conformity Analysis					
Existing Thru Lane	2 LCI	Network Year 2050				
Planned Thru Lane	4 Flex	Corridor Length 4.4 miles				
Detailed Description a	and Justification					
This project will widen Case	ade-Palmetto Highway to 4 lanes from SR 92 to SR 154.					

Phase Status & Funding St		Status	FISCAL	TOTAL PHASE	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
Information			YEAR	COST	FEDERAL	STATE	BONDS	LOCAL/PRIVATE
	Local Jurisdiction/Municipality Funds		LR 2041- 2050	\$35,000,000	\$0,000	\$0,000	\$0,000	\$35,000,000
				\$35,000,000	\$0,000	\$0,000	\$0,000	\$35,000,000

 SCP: Scoping
 PE: Preliminary engineering / engineering / design / planning
 PE-OV: GDOT oversight services for engineering
 ROW: Right-of-way Acquistion

 UTL: Utility relocation
 CST: Construction / Implementation
 ALL: Total estimated cost, inclusive of all phases
 ROW: Right-of-way Acquistion



APPENDIX E

Full Page Truck Exhibits

