Transportation Analysis

Project Whiplash
DRI #3535

City of Dacula, Georgia
(Gwinnett County)

February 2022

Prepared for:

Carter USA

Prepared by:

Kimley-Horn and Associates, Inc.
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Alpharetta, Georgia 30009
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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Project Whiplash* development located in unincorporated Dacula, Georgia. The approximate 43.8-acre site is located along Winder Highway (SR 8/US 29) and Stanley Road. The site is currently undeveloped.

The proposed development will consist of the following land uses and densities contained in **Table 1**. The project is expected to be completed by 2023 (approximately 1 year).

Table 1: Proposed Land Use and Density	
Industrial	607,600 SF

The DRI analysis includes an estimation of the overall vehicle trips projected to be generated by the development, also known as gross trips. Mixed-use and pass-by reductions to gross trips are not included in the trip generation, as outlined in the Georgia Regional Transportation Authority (GRTA) Letter of Understanding (dated January 19, 2022).

Capacity analyses were performed for the study intersections under the Estimated 2022 conditions, the Projected 2023 No-Build conditions, and the Projected 2023 Build conditions.

- Estimated 2022 conditions represent current traffic volumes collected in January 2022 that were calibrated to account for COVID-19's impact on traffic.
- Projected 2023 No-Build conditions represent the Estimated 2022 traffic volumes grown for one (1) year using a 1.0% per year growth rate.
- Projected 2023 Build conditions represent the Projected 2023 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the *Project Whiplash* development.

Estimated 2022 Conditions *(System Improvements)*

The signalized intersection of University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29) (Intersection 1) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2023, and Build 2023 conditions during the AM peak hour. The intersection is projected to operate at an unacceptable overall LOS under the Estimated 2022, No-Build 2023, and Build 2023 conditions during the PM peak hour.

It should be noted that a grade separated interchange (GW-394/PI #0013897) is programmed for University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29). Per the GDOT Approved Concept Report, the interchange is projected to operate at LOS B during both the AM and PM peak hours under 2044 build conditions. A project factsheet and Interchange Concept drawing are included in Appendix D. The interchange is estimated to be completed in 2030, which is after the build-out of the *Project Whiplash* development.

Without the interchange and per GRTA's DRI guidelines, an improvement should be considered if either the overall intersection or an individual approach operates at a failing LOS. 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. In order to improve the overall LOS under the Estimated 2021 conditions, Kimley-Horn notes the following system improvements (shown in red on **Figure 17):**

- Widen the southbound approach along University Parkway (SR 316/US 29) to add one (1) through lane so that it consists of two (2) left-turn lanes, three (3) through-lanes, and one (1) right-turn lane.

Winder Highway (SR 8/US 29) at University Parkway (SR 316/US 29) (Intersection 1) Improved LOS Summary

Overall LOS Standard: D Approach LOS Standard: D			University Parkway (SR 316/US 29)			University Parkway (SR 316/US 29)			Winder Highway (SR 8/US 29)			Winder Highway (SR 8/US 29)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (SIGNAL)	AM	Overall LOS	D (40.7)											
		Approach LOS	C (24.5)			C (20.8)			F (147.8)			F (85.9)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	59	547	23	27	208	0	93	255	0	155	494	226
		95th Queue	36	697	36	112	589	0	217	511	167	338	502	98
	PM	Overall LOS	D (51.6)											
		Approach LOS	D (37.1)			C (33.4)			F (97.6)			F (112.7)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	106	752	39	46	312	0	142	384	0	254	676	343
		95th Queue	65	930	65	191	751	0	303	688	265	485	681	168
2023 NO-BUILD (SIGNAL)	AM	Overall LOS	D (40.8)											
		Approach LOS	C (24.8)			C (21.0)			F (147.2)			F (85.7)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	59	560	28	27	214	0	93	258	0	155	499	231
		95th Queue	108	756	52	48	337	0	164	392	0	261	689	359
	PM	Overall LOS	D (52.4)											
		Approach LOS	D (38.1)			C (34.4)			F (97.4)			F (112.8)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	36	726	36	112	570	0	188	511	160	338	477	97
		95th Queue	67	951	65	201	769	0	303	696	267	490	660	173
2023 BUILD (SIGNAL)	AM	Overall LOS	D (44.5)											
		Approach LOS	C (20.9)			B (17.3)			F (145.6)			F (118.5)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	51	503	26	29	189	0	90	292	0	183	599	272
		95th Queue	92	689	47	53	304	0	159	433	0	296	824	413
	PM	Overall LOS	D (53.8)											
		Approach LOS	D (39.5)			D (35.8)			F (97.9)			F (109.3)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	39	741	42	128	581	0	190	518	160	361	503	132
		95th Queue	67	969	77	220	779	0	306	706	265	520	692	230

Build 2023 Conditions *(Site Access Improvements)*

In addition to the Estimated 2022 Condition system improvements, the following should be considered to serve the Projected 2023 Build Conditions:

- Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2B)
    - Construct relocated Stanley Road as a three-lane roadway with one (1) lane in each direction and a center two-way left-turn lane
    - Construct a channelized eastbound right-turn lane along Winder Highway (SR 8/US 29)
    - Construct a westbound left-turn lane along Winder Highway (SR 8/US 29)
    - Construct a northbound left-turn lane and a channelized right-turn lane along Stanley Road
- Stanley Road at Driveway A (Intersection 5)
    - Construct a southbound left-turn lane along relocated Stanley Road
    - Construct Driveway A to consist of one (1) ingress lane and two (2) egress lanes, consisting of one (1) left-turn lane and one (1) right-turn lane

- Stanley Road at Driveway B (Intersection 6)
    - Construct a southbound left-turn lane along relocated Stanley Road
    - Construct Driveway B to consist of one (1) ingress lane and one (1) egress lane
- Stanley Road at Driveway C (Intersection 7)
    - Construct a southbound left-turn lane along relocated Stanley Road
    - Construct Driveway C to consist of one (1) ingress lane and one (1) egress lane

Stanley Road at Driveway A (Intersection 5) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D			Stanley Road Northbound			Stanley Road Southbound			- Eastbound			Driveway A Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2023 BUILD (TWSC)	AM	Overall LOS	A (4.3)											
		Approach LOS		0			A (4.2)						A (8.4)	
		Storage				100								
		50th Queue												
		95th Queue				3							0	
	PM	Overall LOS	A (4.7)											
		Approach LOS		0			A (4.7)						A (8.7)	
		Storage				100								
		50th Queue												
		95th Queue				0							3	

Stanley Road at Driveway B (Intersection 6) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D			Stanley Road Northbound			Stanley Road Southbound			- Eastbound			Driveway B Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2023 BUILD (TWSC)	AM	Overall LOS	A (2.9)											
		Approach LOS		A (0.0)			A (2.7)						A (8.4)	
		Storage				100								
		50th Queue												
		95th Queue				0							0	
	PM	Overall LOS	A (3.5)											
		Approach LOS		A (0.0)			A (3.5)						A (8.6)	
		Storage				100								
		50th Queue												
		95th Queue				0							0	

Stanley Road at Driveway C (Intersection 7) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D			Stanley Road Northbound			Stanley Road Southbound			- Eastbound			Driveway C Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2023 BUILD (TWSC)	AM	Overall LOS	A (5.7)											
		Approach LOS		A (0.0)			A (6.5)						A (8.5)	
		Storage				100								
		50th Queue												
		95th Queue				0							0	
	PM	Overall LOS	A (7.0)											
		Approach LOS		A (0.0)			A (4.8)						A (8.5)	
		Storage				100								
		50th Queue												
		95th Queue				0							3	

1.0 PROJECT DESCRIPTION

1.1 Introduction

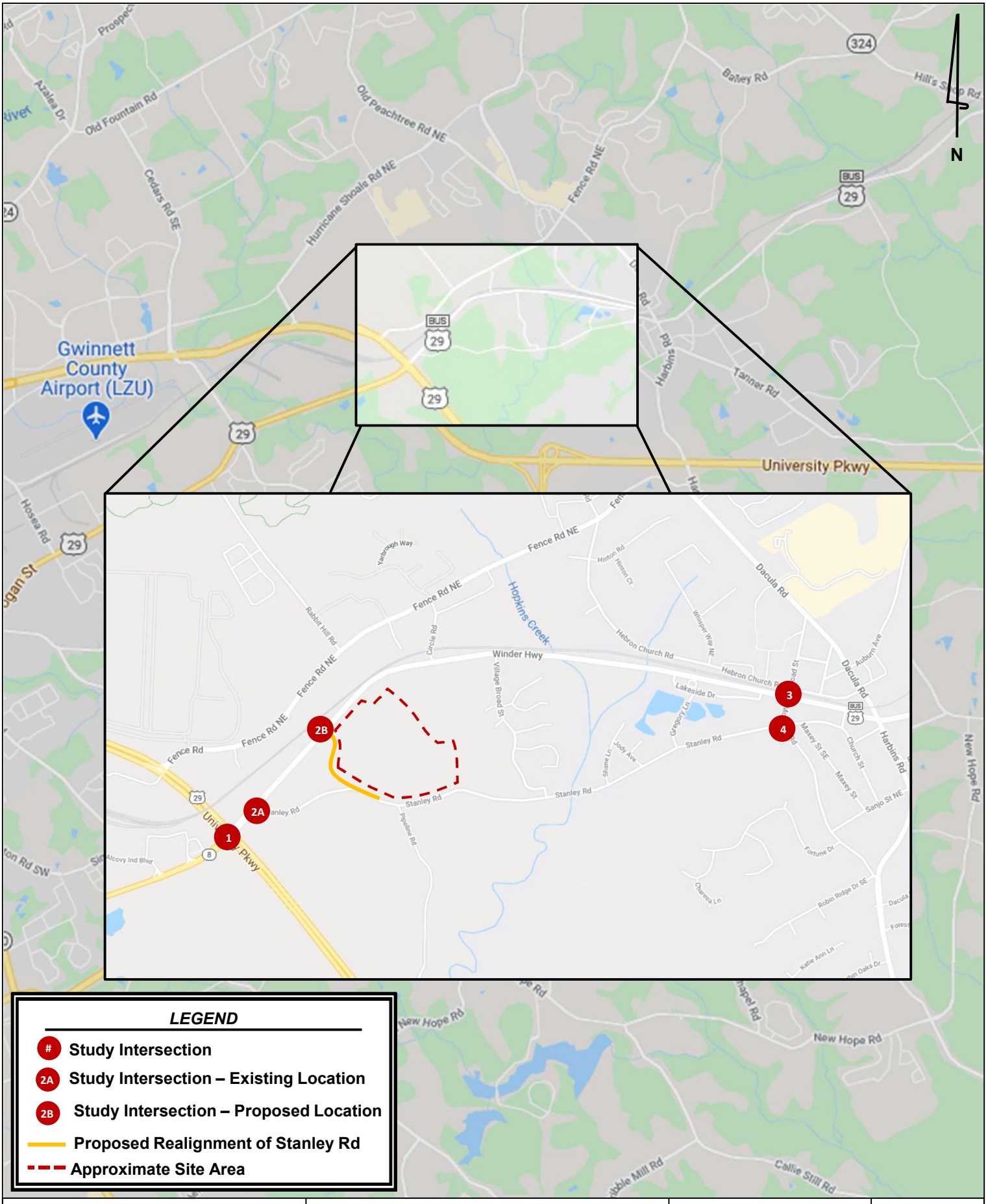
This report presents the analysis of the anticipated traffic impacts of the proposed *Project Whiplash* development located in unincorporated Dacula, Georgia. The approximate 43.8-acre site is located along Winder Highway (US 29/SR 8) and Stanley Road. The project site is currently zoned M-1 (Light Manufacturing). A zoning modification (will remain M-1) was filed on November 10, 2021. **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 2023 (approximately 1 year).

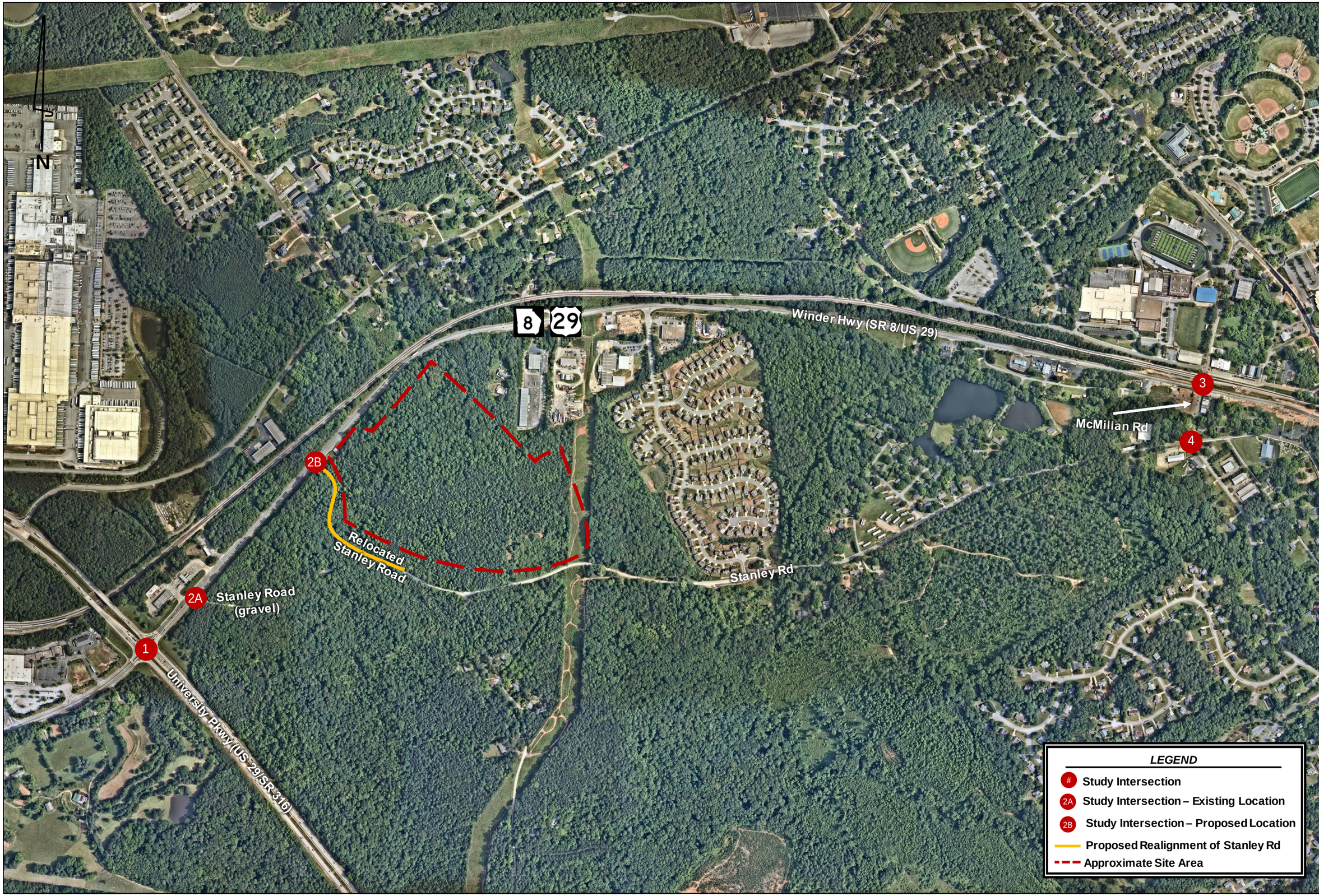
Table 2: Proposed Land Use and Density	
Land Use	**Proposed**
Warehousing	607,600 SF

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 site was previously analyzed as *Peak at University Parkway DRI #2305* in 2012, which proposed a mixed-use development on 157 acres. Per communication with ARC on November 17, 2021, a new DRI for the proposed *Project Whiplash* site is required. 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 in a new industrial development. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on December 3, 2021 by the City of Dacula. 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 19, 2022.



Kimley»Horn	**Project Whiplash DRI #3535** ***Transportation Analysis***	**Site Location Map**	**Figure 1** **Page 5**



Site Aerial

Project Whiplash DRI #3535
Transportation Analysis

Kimley»Horn

Figure 2

1.2 Site Access

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

1. **Site Driveway A** – a proposed full-movement driveway located along the new alignment of Stanley Road approximately 1,050 feet from Winder Highway (SR 8/US 29) that will operate under side-street stop control.
2. **Site Driveway B** – a proposed full-movement driveway located along the new alignment of Stanley Road approximately 1,550 feet from Winder Highway (SR 8/US 29) that will operate under side-street stop control.
3. **Site Driveway C** – a proposed full-movement driveway located along the new alignment of Stanley Road approximately 2,350 feet from Winder Highway (SR 8/US 29) that will operate under side-street stop control.

1.3 Internal Circulation Analysis

Internal private roadways throughout the site provide access to all of the buildings 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	Parking Type	Minimum	Maximum	Proposed
Wholesale and Warehousing Establishments	Car	304 min required (1 per 2,000 SF)	N/A	563
Wholesale Business and Industry	Loading	61 min required (1 10'x50' per 10,000 SF)	N/A	132
			Total	**695**

**Parking information obtained from the City of Dacula Zoning Code.*

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 *Project Whiplash* development does not qualify for a "Dense Urban Environment Enhanced Focus Area" review, due to its location in the City Dacula.

1.7 Heavy Vehicle Enhanced Focus Area

Per Section 3.2.4.1 of the GRTA Development of Regional Impact Review Procedures, the *Project Whiplash* development qualifies for a "Heavy Vehicle Enhanced Focus Area" review, due to the development generating heavy vehicles.

1.7.1 Heavy Vehicle Routing

As outlined in the Enhanced Focus Area guidance, roadways segments between the site driveways and the nearest study network intersections were studied. The following segments are included in the Enhanced Focus Area, shown in **Figure 3** (highlighted green):

- Stanley Road between the site and Winder Highway (SR 8/US 29)
    - Stanley Road is proposed to be relocated to border the proposed site
- Winder Highway (SR 8/US 29) between Stanley Road and McMillan Road

It should be noted that the segment of Stanley Road to the east of the site driveway was not included in the observation area, as heavy vehicles are not anticipated to travel along this segment.

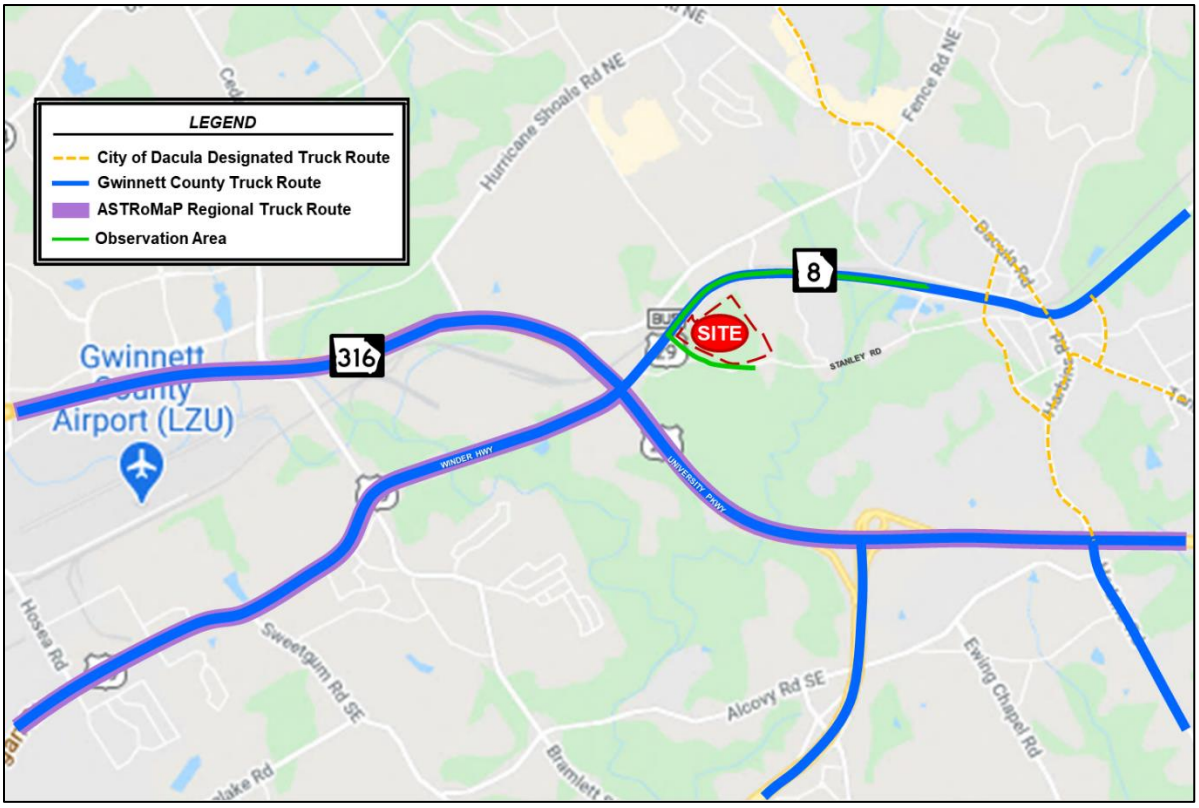


Figure 3: Heavy Vehicle Routing

1.7.2 Pavement Condition

Pavement conditions were observed via Google Earth Street View. The Street View imagery was collected in March 2021.

The pavement along Winder Highway (SR 8/US 29) is generally in good condition. No significant distress was observed. **Figure 4** shows Winder Highway (SR 8/US 29) at the approximate proposed intersection location with relocated Stanley Road. **Figure 5** shows Winder Highway (SR 8/US 29) approximately a half mile east of Stanley Road. These snapshots represent the conditions along Winder Highway (SR 8/US 29) within the observation area.

Stanley Road is currently primarily unpaved. **Figure 6** shows the current conditions of Stanley Road. As part of the *Project Whiplash* development, it is proposed that Stanley Road be relocated to border the site. The new construction of Stanley Road will address the current unpaved conditions between the site and Winder Highway (SR 8/US 29).

Figure 4: Eastbound Winder Highway (SR 8/US 29) – Near Proposed Relocation of Stanley Road

Figure 5: Eastbound Winder Highway (SR 8/US 29) – 0.5 Miles East of Stanley Road

Figure 6: Stanley Road - South of Winder Highway (SR 8/US 29) (to be relocated)

1.7.3 Roadway Width

The lane widths within the study observation area are shown in **Table 4**. The Gwinnett County roadway width standards were taken from the Gwinnett County Street Design Standards (Section 900-60), which specifies roadway width requirements based on street classifications. Lane width dimensions were measured on NearMap.

Table 4: Roadway Widths

Roadway	Roadway Width	Roadway Width Standard (Gwinnett County)
Winder Highway (SR 8/US 29)	35 ft	52 ft to 66 ft desirable (4 through lanes with median)
Stanley Road (Existing – Unimproved)	20 ft	32 ft
Stanley Road (Improved)	36 ft*	32 ft

*Proposed roadway width as part of relocation of Stanley Road.

1.7.4 Corner Radii

The corner radii of four (4) study intersections were analyzed along the Enhanced Focus Area:

1. Winder Highway (SR 8/US 29) at Stanley Road (relocated)
2. Stanley Road at Driveway A
3. Stanley Road at Driveway B
4. Stanley Road at Driveway C

Note: Gwinnett County Street Design Standards outline minimum roadway radii for arterial roads as 40 feet. The *GDOT Regulations for Driveway and Encroachment Control* outlines minimum corner radii for trucks as 75 feet.

1. Winder Highway (SR 8/US 29) at Stanley Road

Figure 7 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making an eastbound right-turn from Winder Highway (SR 8/US 29) onto Stanley Road. The proposed curb radius is approximately 75 feet. **Figure 8** outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a northbound right-turn from Stanley Road onto Winder Highway (SR 8/US 29). The proposed curb radius is approximately 75 feet. Note: the intersection geometry will likely be modified during the GDOT permitting process to better accommodate heavy vehicles.

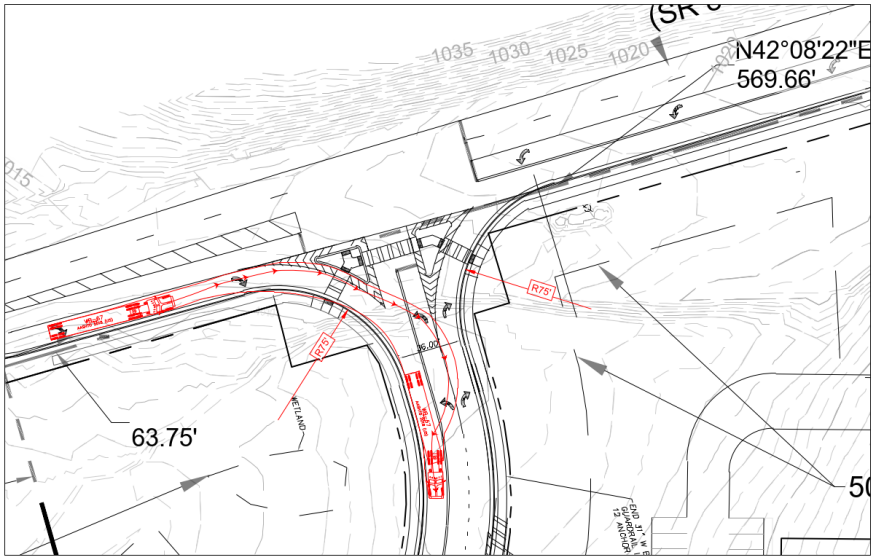


Figure 7: Winder Highway (SR 8/US 29) at Stanley Road – Eastbound Right (Entering Truck)

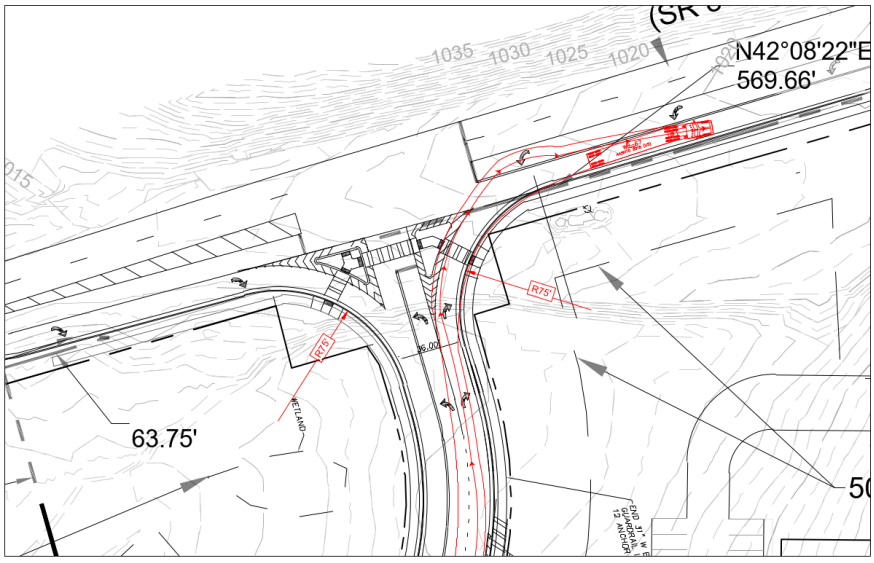


Figure 8: Winder Highway (SR 8/US 29) at Stanley Road – Northbound Right (Exiting Truck)

2. Stanley Road at Driveway A

Figure 9 outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a westbound right-turn from Driveway A onto Stanley Road. The proposed curb radius is approximately 12 feet. Note: during the site design and site permitting phases, the curb radius will be increased to better accommodate heavy trucks.

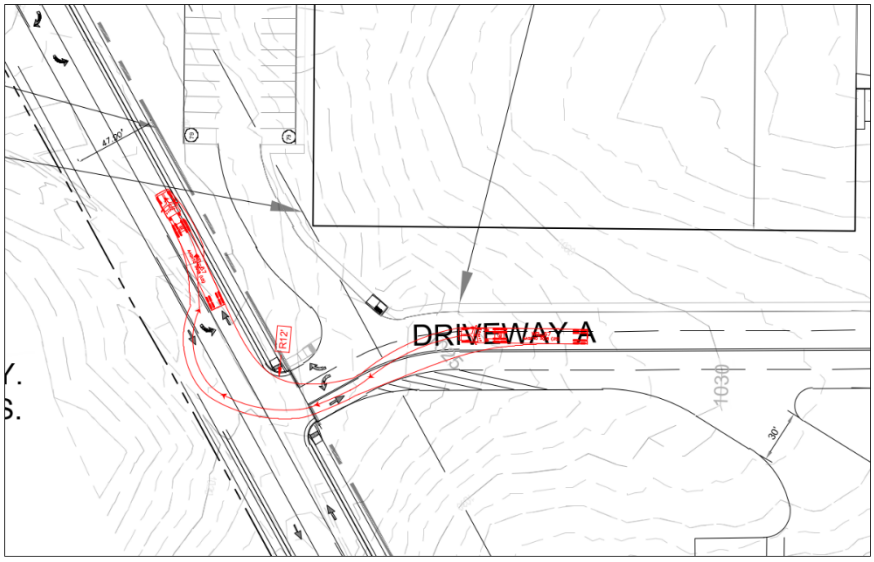


Figure 9: Stanley Road at Driveway A – Westbound Right (Exiting Truck)

4. Stanley Road at Driveway B

Figure 10 outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a westbound right-turn from Driveway B onto Stanley Road. The proposed curb radius is approximately 10 feet. Note: during the site design and site permitting phases, the curb radius will be increased to better accommodate heavy trucks.

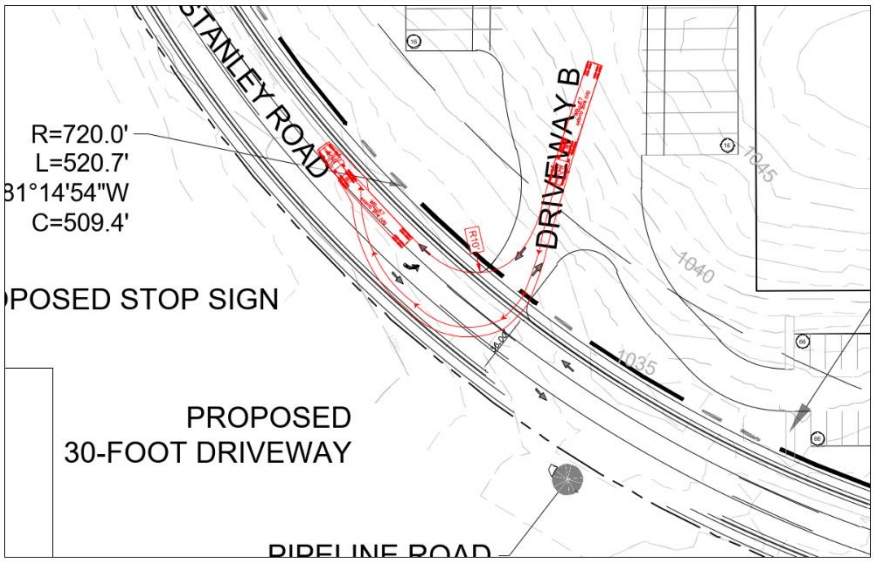


Figure 10: Stanley Road at Driveway B – Westbound Right (Exiting Truck)

5. Stanley Road at Driveway C

Figure 11 outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a westbound right-turn from Driveway C onto Stanley Road. The proposed curb radius is approximately 50 feet. Note: during the site design and site permitting phases, the curb radius will be increased to better accommodate heavy trucks.

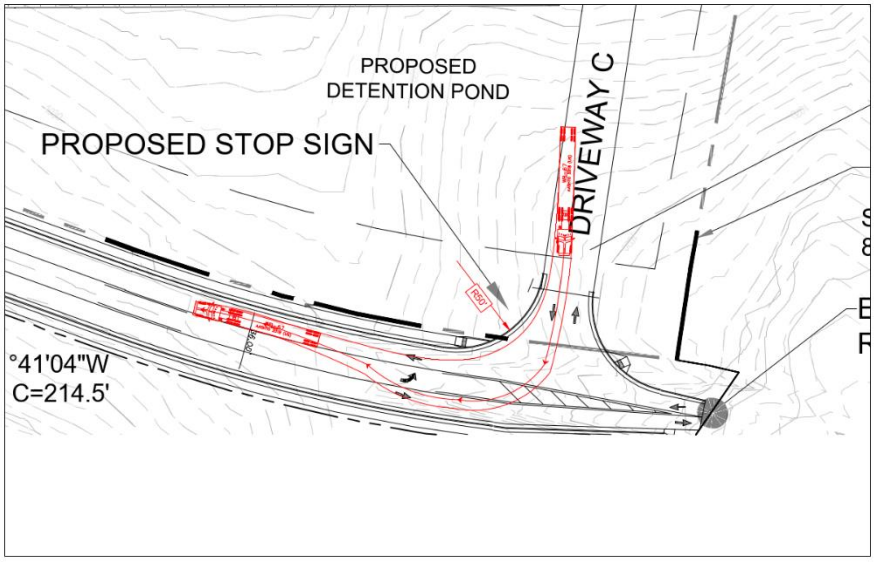


Figure 11: Stanley Road at Driveway C – Westbound Right (Exiting Truck)

1.7.5 Heavy Vehicle Staging

The site plan includes a designated truck court to accommodate heavy vehicle queueing, staging, and overflow**.** **Figure 12** indicates the designated truck staging/overflow areas on the site plan.

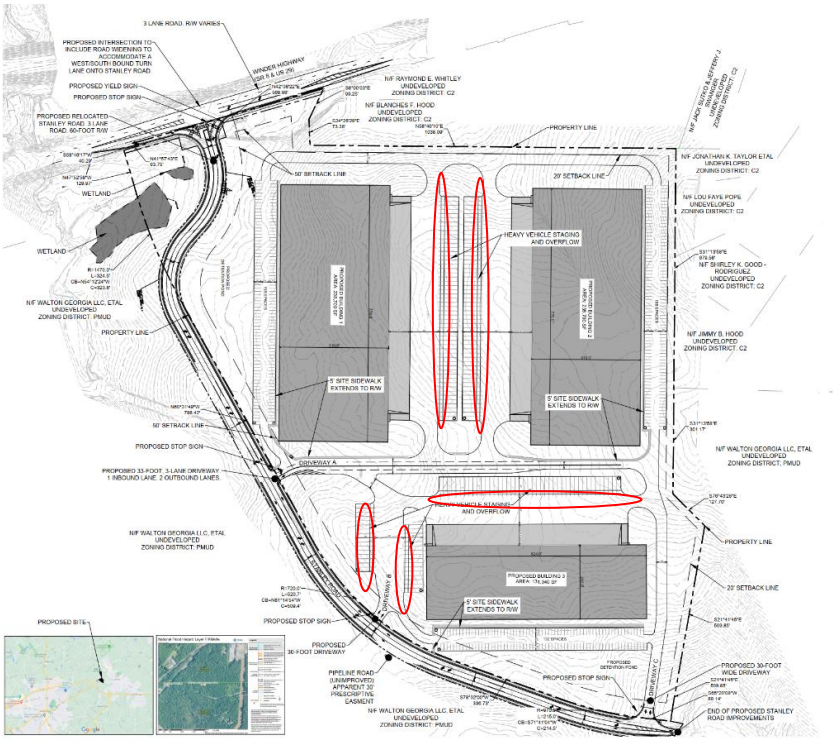


Figure 12: Heavy Vehicle Staging

1.7.6 Pedestrian Safety

The proposed development will include a minimum 5' sidewalk along Stanley Road and along Winder Highway, per City of Dacula and GDOT requirements. 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 and to the right-of-way of Stanley Road.

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 5** and shown in **Figure 13**.

Table 5: Intersection Control Summary		
Intersection	**Jurisdiction**	**Control**
1. Winder Highway (SR 8/US 29) at University Parkway (SR 316/US 29)	GDOT	Signalized
2a. Winder Highway (SR 8/US 29) at Stanley Road	GDOT	Unsignalized (TWSC)
3. Winder Highway (SR 8/US 29) at Broad Street/McMillan Road	GDOT	Signalized
4. Stanley Road at McMillan Road	City of Dacula	Unsignalized (AWSC)

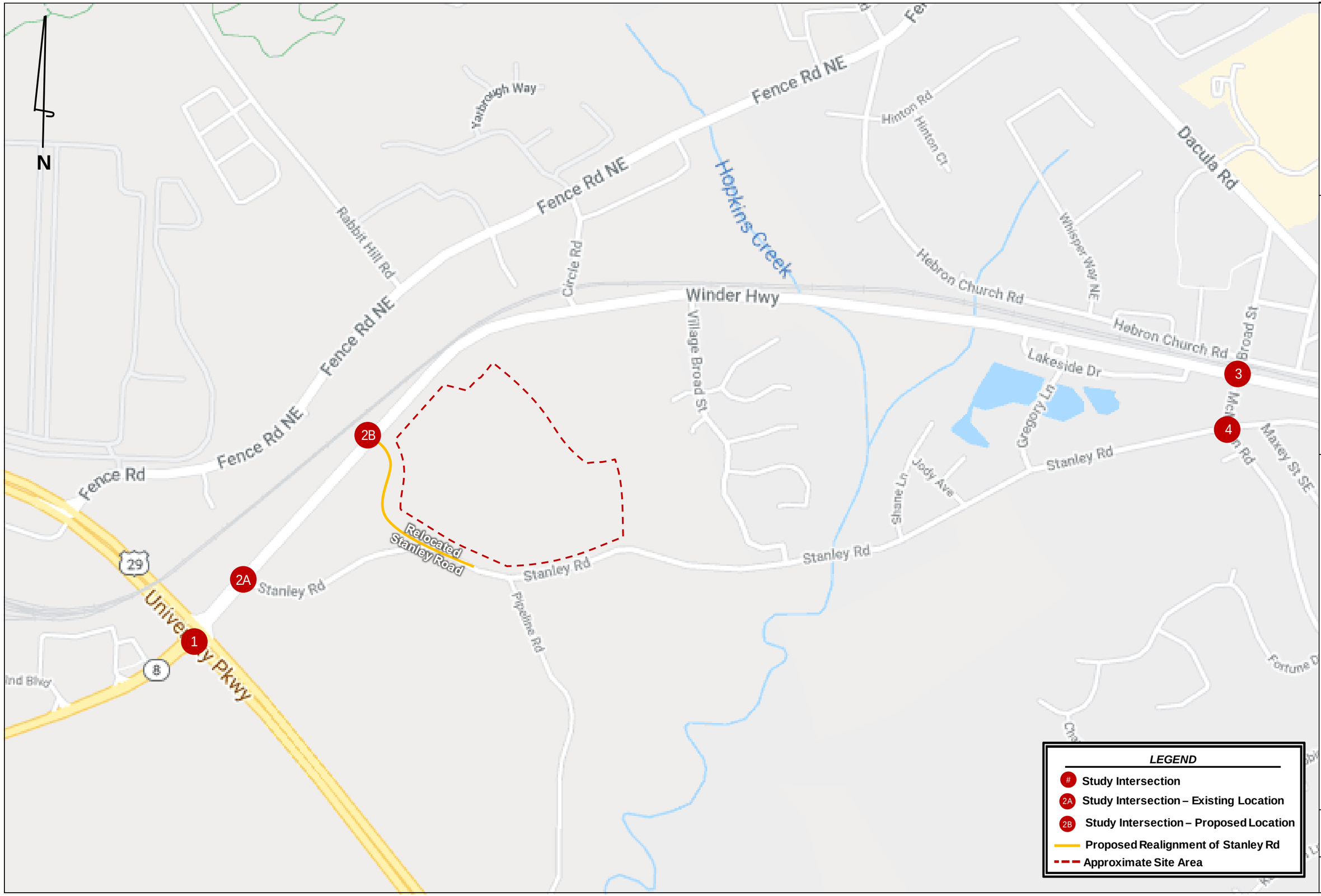
Note: TWSC = Two Way Stop Control, AWSC = All Way Stop Control

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

Table 6: Roadway Classifications				
Roadway	**Lanes**	**Posted Speed Limit**	**AADT (GDOT, 2019)**	**GDOT Functional Classification**
Winder Highway (SR 8/US 29)	**3**	**45 MPH**	**10,600**	**Minor Arterial**
University Parkway (SR 316/US 29)	4	55 MPH	59,200	Principal Arterial
Stanley Road	**3***	**25 MPH**	**-**	**Local**
McMillan Road	2	25 MPH	-	Local

*Proposed number of lanes with relocation.



Study Intersections

Project Whiplash DRI #3535
Transportation Analysis

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Figure 13

2.3 Traffic Data Collection and Calibration

Traffic counts were collected at all four (4) existing study intersections on Thursday, January 20, 2022. The collected counts were then calibrated using adjustment factors to account for the potential impacts of COVID-19 to typical traffic volumes and patterns.

The peak hour adjustment factors were determined by comparing the GDOT 2018 AM and PM peak hour volumes collected along Winder Highway (SR 8/US 29) east of Village Broad Street (to align with the GDOT TADA count station 135-0040) to the collected 2022 volumes in the same location. As a result of this comparison, it was determined that no adjustment factor should be used for the existing AM turning movement counts, and an adjustment factor of 1.10 should be used for the existing PM turning movement counts. The methodologies used in this analysis for traffic count calibration were approved by GRTA and ARC.

Traffic count peak hours for all the study intersections are shown in **Table 7**.

Table 7: Traffic Count Summary

Intersection	Count Date	AM Peak Hour	PM Peak Hour
1. Winder Highway (SR 8/US 29) at University Parkway (SR 316/US 29)	1/2022	7:45 AM – 8:45 AM	4:15 PM – 5:15 PM
2a. Winder Highway (SR 8/US 29) at Stanley Road	1/2022	7:00 AM – 8:00 AM	4:15 PM – 5:15 PM
3. Winder Highway (SR 8/US 29) at Broad Street/McMillan Road	1/2022	7:00 AM – 8:00 AM	4:00 PM – 5:00 PM
4. Stanley Road at McMillan Road	1/2022	7:00 AM – 8:00 AM	4:00 PM – 5:00 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 *Project Whiplash* development. Background traffic includes a base growth rate, which is based on historical count data and population growth data. It can also include trips anticipated from nearby or adjacent other projects.

Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 1.0% per year background traffic growth rate from 2022 to 2023 (1 year) was used for all roadways.

The Projected 2023 No-Build conditions represent the Estimated 2022 traffic volumes grown for one (1) year at 1.0% per year throughout the study network.

The Projected 2023 Build conditions represent the project trips generated by the *Project Whiplash* development (discussed in Section 3.0 and 4.0) added to the Projected 2023 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 8** are programmed or planned to occur near the development.

Table 8: Programmed Projects

Project Name	From / To Points:	Sponsor	GDOT PI #	ARC ID # (TIP)	Design FY	ROW / UTL FY	CST FY
ITS Enhancements Phase 2	Nearby: Harbins Road	Gwinnett/ GDOT	PI #0016070	GW-415	--	--	2021-TBD
SR 316 Interchange at US 29/SR 8	Interchange	Gwinnett/ GDOT	PI #0013897	GW-394	2017	2022	2024-2030
Fence Road Connector	Fence Road to US 29/SR 8	Gwinnett/ GDOT	PI #0013896	GW-184D	2017	2022	2024-2030

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

Although the SR 316 Interchange at US 29/SR 8 will not be completed by the *Project Whiplash* buildout year, it is understood that the project will likely improve operations at the intersection once completed. 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, 10th Edition*, *2017*, 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 9 summarizes the gross trip generation, reductions, net trip generation, and driveway volumes for the proposed *Project Whiplash* development.

Table 9: Trip Generation

Land Use	Density	Daily Traffic			AM Peak Hour		PM Peak Hour	
		Total	Enter	Exit	Enter	Exit	Enter	Exit
150 – Warehousing	607,600 SF	1,006	503	503	75	23	27	73
Gross Project Trips		**1,006**	**503**	**503**	**75**	**23**	**27**	**73**
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		**1,006**	**503**	**503**	**75**	**23**	**27**	**73**
Employee (Car Trips)		*670*	*335*	*335*	*69*	*17*	*18*	*64*
Heavy Vehicle (Trucks)		*336*	*168*	*168*	*6*	*6*	*9*	*9*

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 non-residential land uses in **Figure 14.** The anticipated distribution and assignment of the trips throughout the study roadway network is shown for residential land uses in **Figure 15**. 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 16**.

Detailed intersection volume worksheets are provided in Appendix C.

5.0 TRAFFIC ANALYSIS

Capacity analyses were performed using *Synchro 11* for the AM and PM peak hours under the Estimated 2021 conditions, Projected 2023 No-Build conditions, and Projected 2023 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 17** for Estimated 2022 conditions, **Figure 18** for Projected 2023 No-Build conditions, and **Figure 19** for Projected 2023 Build conditions.

Sections 5.1 – 5.8 provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.

N

1

50%

(50%)
(10%)
(30%)

10%

30%

QT Driveway

2A

2B

Relocated Stanley Road

10%

90%

STOP

(90%)
(10%)

3

10%

(10%)

Winder Hwy (SR 8/US 29)

20%
80%

(80%)

Driveway A

5

(20%)

4

STOP

STOP

Stanley Rd

STOP

20%

(20%)

Driveway B

PROJECT SITE

6

Driveway C

7

Existing Stanley Rd (Gravel Rd)

University Pkwy (SR 216/US 29)

McMillan Rd

LEGEND

- Turning Movement
- XX% % Traffic Entering
- (XX%) % Traffic Exiting
- Existing Traffic Signal
- Existing Stop Control
- (X) Intersection Reference Number
- Proposed Driveway

Trip Distribution & Assignment: Heavy Vehicles

Project Whiplash DRI #3535
Transportation Analysis

Kimley»Horn

Figure 14

N

Relocated Stanley Road

QT Driveway

Existing Stanley Rd (Gravel Rd)

University Pkwy (SR 216/US 29)

Winder Hwy (SR 8/US 29)

Stanley Rd

McMillan Rd

Driveway A

Driveway B

Driveway C

PROJECT SITE

1 — 40%; (40%) (25%) (15%); 25%; 15%

2A

2B — 15%; 80%; STOP; (80%) (15%)

3 — 15%; (15%)

4 — STOP; STOP; 5%; (5%); STOP

5 — 40% 55%; (50%); (45%)

6 — 25% 15%; (20%); (25%)

7 — 25%; (25%) (5%); 5%

LEGEND

- Turning Movement
- XX% % Traffic Entering
- (XX%) % Traffic Exiting
- Existing Traffic Signal
- Existing Stop Control
- (X) Intersection Reference Number
- Proposed Driveway

Trip Distribution & Assignment: Passenger Vehicles

Project Whiplash DRI #3535
Transportation Analysis

Kimley»Horn

Figure 15

N

Relocated Stanley Road

QT Driveway

Existing Stanley Rd (Gravel Rd)

University Pkwy (SR 216/US 29)

Winder Hwy (SR 8/US 29)

Stanley Rd

McMillan Rd

Driveway A

Driveway B

Driveway C

PROJECT SITE

1 — 31 (13); 9 (30), 5 (17), 4 (12); (6) 18; (6) 12

2A

2B — 11 (4); (23) 60; (59) 19, (11) 4; STOP

3 — 11 (4); (10) 2

4 — STOP; STOP; 3 (1); (3) 1; STOP

5 — 29 (10), 43 (17); 14 (39); (28) 8

6 — 17 (5), 11 (5); 4 (15); (16) 4

7 — 17 (5); 4 (16), 1 (3); (1) 3

LEGEND

- Turning Movement
- XX — AM Project Trips
- (XX) — PM Project Trips
- Existing Traffic Signal
- Existing Stop Control
- (X) — Intersection Reference Number
- Proposed Driveway

Project Trips

Project Whiplash DRI #3535
Transportation Analysis

Kimley»Horn

Figure 16

5.1 Winder Highway (SR 8/US 29) at University Parkway (SR 316/US 29) (Intersection 1)

Overall LOS Standard: D Approach LOS Standard: D			University Parkway (SR 316/US 29) Northbound			University Parkway (SR 316/US 29) Southbound			Winder Highway (SR 8/US 29) Eastbound			Winder Highway (SR 8/US 29) Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (SIGNAL)	AM	Overall LOS	D (43.5)											
		Approach LOS	C (20.5)			B (19.4)			F (149.7)			F (113.3)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	51	488	21	24	315	0	90	261	31	165	583	248
		95th Queue	92	671	36	40	166	0	158	395	0	271	795	381
	PM	Overall LOS	E (71.1)											
		Approach LOS	C (26.6)			C (32.3)			F (130.9)			F (276.4)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	41	571	29	81	921	0	271	271	162	462	506	97
		95th Queue	72	770	52	147	1,176	0	421	421	267	729	694	173
2023 NO-BUILD (SIGNAL)	AM	Overall LOS	D (43.8)											
		Approach LOS	C (20.5)			B (19.5)			F (149.2)			F (114.9)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	51	495	26	24	321	0	90	263	0	168	589	253
		95th Queue	95	681	46	40	474	0	158	397	0	273	805	389
	PM	Overall LOS	E (72.6)											
		Approach LOS	C (27.1)			C (33.2)			F (131.9)			F (282.8)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	44	582	29	86	949	0	273	541	165	470	514	100
		95th Queue	77	786	55	155	1,205	0	423	734	272	742	702	178
2023 BUILD (SIGNAL)	AM	Overall LOS	D (45.3)											
		Approach LOS	C (21.1)			B (19.5)			F (145.6)			F (118.5)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	51	503	26	29	321	0	90	292	0	183	599	272
		95th Queue	95	689	47	53	474	0	159	433	0	296	824	413
	PM	Overall LOS	E (76.6)											
		Approach LOS	C (27.8)			C (34.0)			F (138.4)			F (283.8)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	44	592	34	97	962	0	273	551	162	512	558	140
		95th Queue	77	796	61	174	1,120	0	434	747	270	801	755	240

The signalized intersection of University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29) (Intersection 1) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2023, and Build 2023 conditions during the AM peak hour. The intersection is projected to operate at an unacceptable overall LOS under the Estimated 2022, No-Build 2023, and Build 2023 conditions during the PM peak hour.

It should be noted that a grade separated interchange (GW-394/PI #0013897) is programmed for University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29). Per the GDOT Approved Concept Report, the interchange is projected to operate at LOS B during both the AM and PM peak hours under 2044 build conditions. A project factsheet and Interchange Concept drawing are included in Appendix D. The interchange is estimated to be completed in 2030, which is after the build-out of the *Project Whiplash* development.

Without the interchange and per GRTA's DRI guidelines, an improvement should be considered if either the overall intersection or an individual approach operates at a failing LOS. 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. The intersection operates at an acceptable overall LOS, and existing signal timings and cycle lengths prioritize vehicular progression on the mainline (University Parkway) at the expense of side street operations. In order to improve the overall LOS under the Estimated 2021 conditions, Kimley-Horn notes the following system improvements (shown in red on **Figure 17):**

- Widen the southbound approach along university parkway (SR 8/US 29) to add one (1) through lane, so that it consists of two (2) left-turn lanes, three (3) through-lanes, and one (1) right-turn lane.

The analysis results shown in the table below are for the improved conditions at University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29) (Intersection 1), which assume the noted geometric changes.

Overall LOS Standard: D Approach LOS Standard: D			University Parkway (SR 316/US 29)			University Parkway (SR 316/US 29)			Winder Highway (SR 8/US 29)			Winder Highway (SR 8/US 29)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (SIGNAL)	AM	Overall LOS	D (40.7)											
		Approach LOS	C (24.5)			C (20.8)			F (147.8)			F (85.9)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	59	547	23	27	208	0	93	255	0	155	494	226
		95th Queue	36	697	36	112	589	0	217	511	167	338	502	98
	PM	Overall LOS	D (51.6)											
		Approach LOS	D (37.1)			C (33.4)			F (97.6)			F (112.7)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	106	752	39	46	312	0	142	384	0	254	676	343
		95th Queue	65	930	65	191	751	0	303	688	265	485	681	168
2023 NO-BUILD (SIGNAL)	AM	Overall LOS	D (40.8)											
		Approach LOS	C (24.8)			C (21.0)			F (147.2)			F (85.7)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	59	560	28	27	214	0	93	258	0	155	499	231
		95th Queue	108	756	52	48	337	0	164	392	0	261	689	359
	PM	Overall LOS	D (52.4)											
		Approach LOS	D (38.1)			C (34.4)			F (97.4)			F (112.8)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	36	726	36	112	570	0	188	511	160	338	477	97
		95th Queue	67	951	65	201	769	0	303	696	267	490	660	173
2023 BUILD (SIGNAL)	AM	Overall LOS	D (44.5)											
		Approach LOS	C (20.9)			B (17.3)			F (145.6)			F (118.5)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	51	503	26	29	189	0	90	292	0	183	599	272
		95th Queue	92	689	47	53	304	0	159	433	0	296	824	413
	PM	Overall LOS	D (53.8)											
		Approach LOS	D (39.5)			D (35.8)			F (97.9)			F (109.3)		
		Storage	375		275	175		275	275		275	125		950
		50th Queue	39	741	42	128	581	0	190	518	160	361	503	132
		95th Queue	67	969	77	220	779	0	306	706	265	520	692	230

5.2 Winder Highway (SR 8/US 29) at Stanley Road (Intersection 2B)

Overall LOS Standard: D Approach LOS Standard: D			Stanley Road			QT Driveway			Winder Highway (SR 8/US 29)			Winder Highway (SR 8/US 29)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (TWSC) 2A	AM	Overall LOS	A (3.2)											
		Approach LOS	C (22.3)			B (14.7)			A (2.9)			A (0.0)		
		Storage									500			
		50th Queue									0			
		95th Queue									0			
	PM	Overall LOS	A (3.1)											
		Approach LOS	E (35.3)			C (16.8)			A (2.1)			A (0.0)		
		Storage									500			
		50th Queue									0			
		95th Queue									0			
2023 NO-BUILD (TWSC) 2A	AM	Overall LOS	A (3.2)											
		Approach LOS	C (22.8)			B (14.9)			A (2.9)			A (0.0)		
		Storage									500			
		50th Queue									0			
		95th Queue									0			
	PM	Overall LOS	A (3.1)											
		Approach LOS	E (35.5)			C (16.7)			A (2.2)			A (0.0)		
		Storage									500			
		50th Queue			`						0			
		95th Queue									0			
2023 BUILD (TWSC) 2B*	AM	Overall LOS	A (0.5)											
		Approach LOS	B (14.1)						A (0.0)			A (0.2)		
		Storage	225								75	125		
		50th Queue									0	0		
		95th Queue	0								0	0		
	PM	Overall LOS	A (1.2)											
		Approach LOS	C (22.1)						A (0.0)			A (0.1)		
		Storage	225								75	125		
		50th Queue									0	0		
		95th Queue	28								0	0		

*Intersection relocation removes northern leg of intersection

The intersection of Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2023 and Build 2023 conditions. The northbound approach operates at LOS E under the Estimated 2022 and Projected 2023 No-Build conditions. It should be noted that the northbound approach is projected to operate at an acceptable LOS under the Build 2023 conditions with the relocation of Stanley Road and the construction of a second northbound approach lane. The recommended lane configuration for Intersection 2 is shown in **Figure 19** and on the site plan.

At the intersection of Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2B), to serve the 2023 Build Conditions, the following laneage is recommended:

- Construct a channelized eastbound right-turn lane along Winder Highway (SR 8/US 29)
- Construct a westbound left-turn lane along Winder Highway (SR 8/US 29)
- Construct a northbound left-turn lane and a channelized northbound right-turn lane along Stanley Road

5.3 Winder Highway (SR 8/US 29) at McMillan Road (Intersection 3)

Overall LOS Standard: D Approach LOS Standard: D			McMillan Road			McMillan Road			Winder Highway (SR 8/US 29)			Winder Highway (SR 8/US 29)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (SIGNAL)	**AM**	Overall LOS	C (22.9)											
		Approach LOS	D (35.5)			D (35.6)			B (12.7)			C (23.6)		
		Storage							225			75		
		50th Queue	61			87			36			0		
		95th Queue	107			159			64			0		
	PM	Overall LOS	C (32.7)											
		Approach LOS	C (25.7)			C (29.0)			C (33.2)			D (37.1)		
		Storage							225			75		
		50th Queue	53			185			48			8		
		95th Queue	94			300			89			16		
2023 NO-BUILD (SIGNAL)	**AM**	Overall LOS	C (23.0)											
		Approach LOS	D (35.6)			D (35.6)			B (12.8)			C (23.8)		
		Storage							225			75		
		50th Queue	61			87			36			0		
		95th Queue	109			159			64			0		
	PM	Overall LOS	C (32.9)											
		Approach LOS	C (25.7)			C (29.1)			C (33.4)			D (37.2)		
		Storage							225			75		
		50th Queue	53			188			48			8		
		95th Queue	94			302			89			18		
2023 BUILD (SIGNAL)	**AM**	Overall LOS	C (23.2)											
		Approach LOS	D (35.6)			D (35.6)			B (12.9)			C (24.2)		
		Storage							225			75		
		50th Queue	61			87			36			0		
		95th Queue	109			159			64			0		
	PM	Overall LOS	C (33.1)											
		Approach LOS	C (25.7)			C (29.1)			C (33.9)			D (37.4)		
		Storage							225			75		
		50th Queue	53			188			48			8		
		95th Queue	94			302			89			16		

The intersection of Winder Highway (SR 8/US 29) at McMillan Road (Intersection 3) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2023, and Build 2023 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.4 Stanley Road at Broad Street (Intersection 4)

Overall LOS Standard: D Approach LOS Standard: D			Broad Street Northbound			Broad Street Southbound			Stanley Road Eastbound			Stanley Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (AWSC)	AM	Overall LOS	A (7.5)											
		Approach LOS	A (7.6)			A (7.3)			A (7.4)			A (7.2)		
		Storage												
		50th Queue												
		95th Queue		10			5			3			0	
	PM	Overall LOS	A (7.9)											
		Approach LOS	A (7.6)			A (8.1)			A (7.6)			A (7.6)		
		Storage												
		50th Queue												
		95th Queue		8			20			3			0	
2023 NO-BUILD (AWSC)	AM	Overall LOS	A (7.5)											
		Approach LOS	A (7.6)			A (7.3)			A (7.4)			A (7.2)		
		Storage												
		50th Queue												
		95th Queue		10			5			3			0	
	PM	Overall LOS	A (7.9)											
		Approach LOS	A (7.6)			A (8.1)			A (7.6)			A (7.6)		
		Storage												
		50th Queue												
		95th Queue		8			20			3			0	
2023 BUILD (AWSC)	AM	Overall LOS	A (7.5)											
		Approach LOS	A (7.6)			A (7.3)			A (7.5)			A (7.3)		
		Storage												
		50th Queue												
		95th Queue		10			5			3			0	
	PM	Overall LOS	A (7.9)											
		Approach LOS	A (7.6)			A (8.1)			A (7.7)			A (7.6)		
		Storage												
		50th Queue												
		95th Queue		8			20			3			0	

The intersection of Stanley Road at Broad Street (Intersection 4) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2023, and Build 2023 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.5 Stanley Road at Driveway A (Intersection 5)

Overall LOS Standard: D Approach LOS Standard: D			Stanley Road Northbound			Stanley Road Southbound			- Eastbound			Driveway A Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2023 BUILD (TWSC)	AM	Overall LOS	A (4.3)											
		Approach LOS		0			A (4.2)						A (8.4)	
		Storage				100								
		50th Queue												
		95th Queue				3							0	
	PM	Overall LOS	A (4.7)											
		Approach LOS		0			A (4.7)						A (8.7)	
		Storage				100								
		50th Queue												
		95th Queue				0							3	

The intersection of Stanley Road at Driveway A (Intersection 5) is projected to operate at an acceptable LOS under the Build 2023 scenario. Each approach of the intersection is projected to operate acceptably under all studied scenarios. The recommended lane configuration for Driveway A is one lane entering the site and two lanes exiting the site and a southbound left-turn lane along Stanley Road, as shown in the site plan. The recommended build improvements are shown in **Figure 19.**

5.6 Stanley Road at Driveway B (Intersection 6)

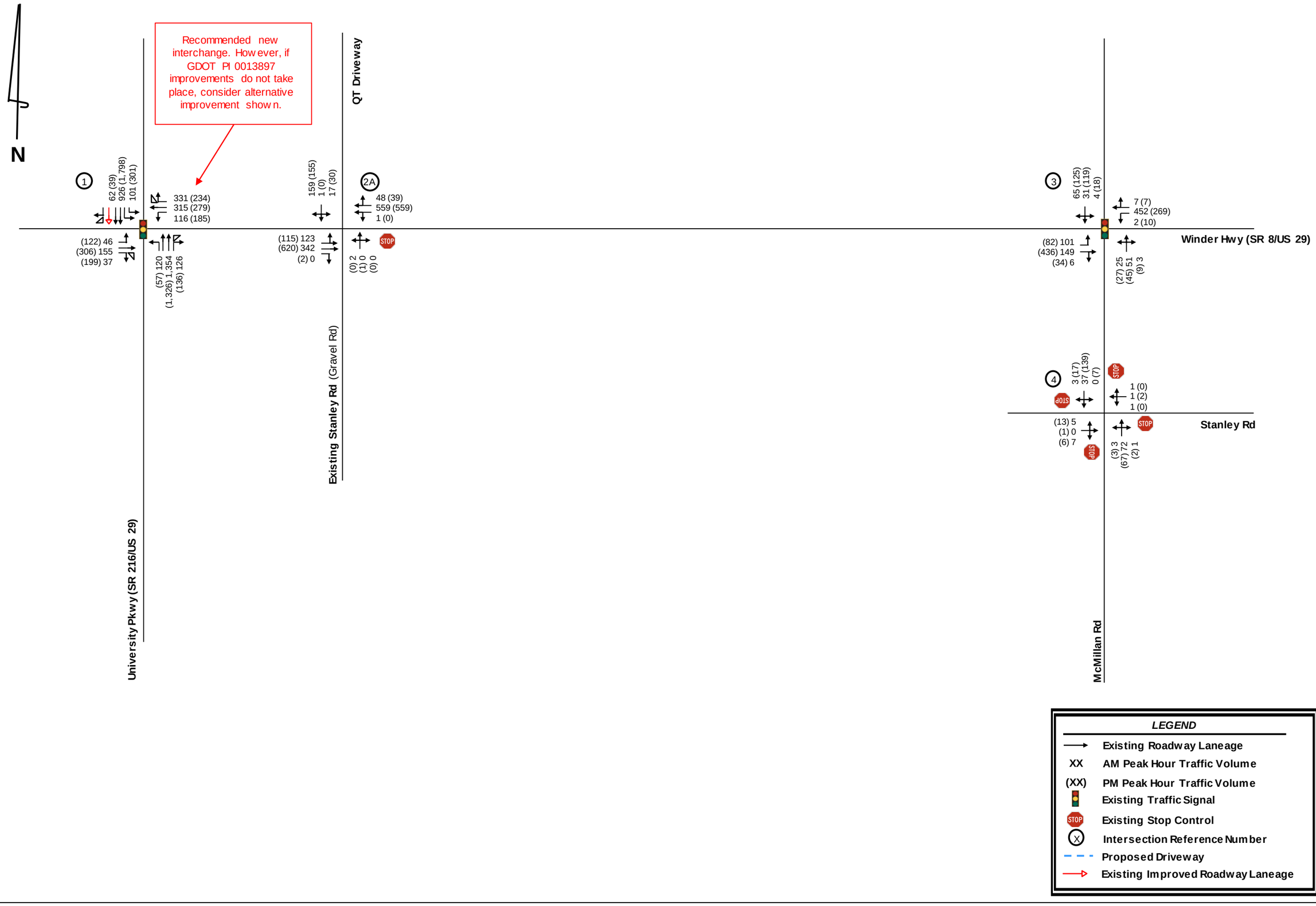
Overall LOS Standard: D Approach LOS Standard: D			Stanley Road Northbound			Stanley Road Southbound			- Eastbound			Driveway B Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2023 BUILD (TWSC)	AM	Overall LOS	A (2.9)											
		Approach LOS	A (0.0)			A (2.7)						A (8.4)		
		Storage				100								
		50th Queue												
		95th Queue				0							0	
	PM	Overall LOS	A (3.5)											
		Approach LOS	A (0.0)			A (3.5)						A (8.6)		
		Storage				100								
		50th Queue												
		95th Queue				0							0	

The intersection of Stanley Road at Driveway B (Intersection 6) is projected to operate at an acceptable LOS under the Build 2023 scenario. Each approach of the intersection is projected to operate acceptably under all studied scenarios. The recommended lane configuration for Driveway B is one lane entering the site and one lane exiting the site and a southbound left-turn lane along Stanley Road, as shown in the site plan. The recommended build improvements are shown in **Figure 19.**

5.7 Stanley Road at Driveway C (Intersection 7)

Overall LOS Standard: D Approach LOS Standard: D			Stanley Road Northbound			Stanley Road Southbound			- Eastbound			Driveway C Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2023 BUILD (TWSC)	AM	Overall LOS	A (5.7)											
		Approach LOS	A (0.0)			A (6.5)						A (8.5)		
		Storage				100								
		50th Queue												
		95th Queue				0							0	
	PM	Overall LOS	A (7.0)											
		Approach LOS	A (0.0)			A (4.8)						A (8.5)		
		Storage				100								
		50th Queue												
		95th Queue				0							3	

The intersection of Stanley Road at Driveway C (Intersection 7) is projected to operate at an acceptable LOS under the Build 2023 scenario. Each approach of the intersection is projected to operate acceptably under all studied scenarios. The recommended lane configuration for Driveway C is one lane entering the site and one lane exiting the site and a southbound left-turn lane along Stanley Road, as shown in the site plan. The recommended build improvements are shown in **Figure 19.**



Estimated 2022 Traffic Conditions

Project Whiplash DRI #3535
Transportation Analysis

Kimley»Horn

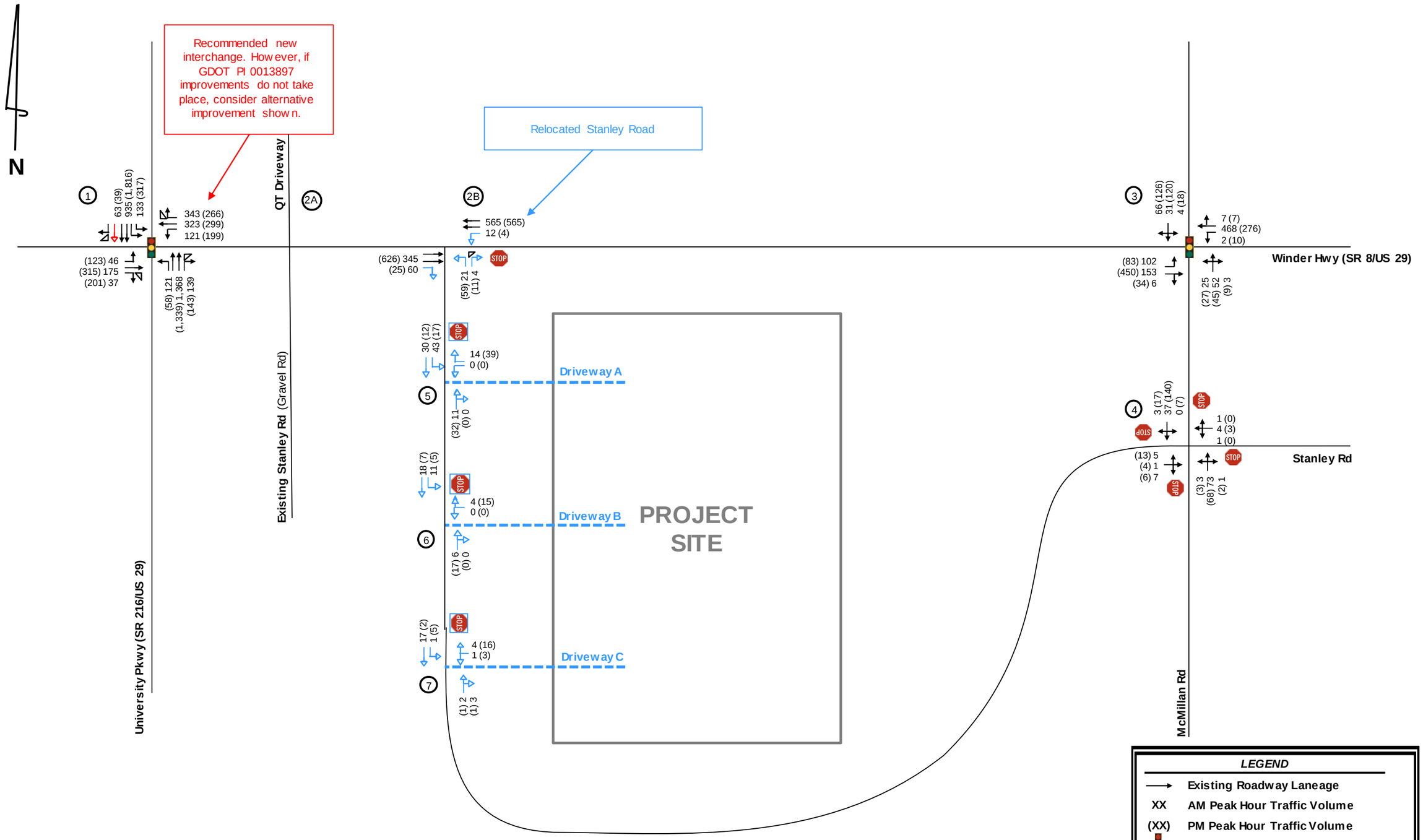
Figure 17

Projected 2023 No-Build Traffic Conditions

Project Whiplash DRI #3535
Transportation Analysis

Kimley»Horn

Figure 18



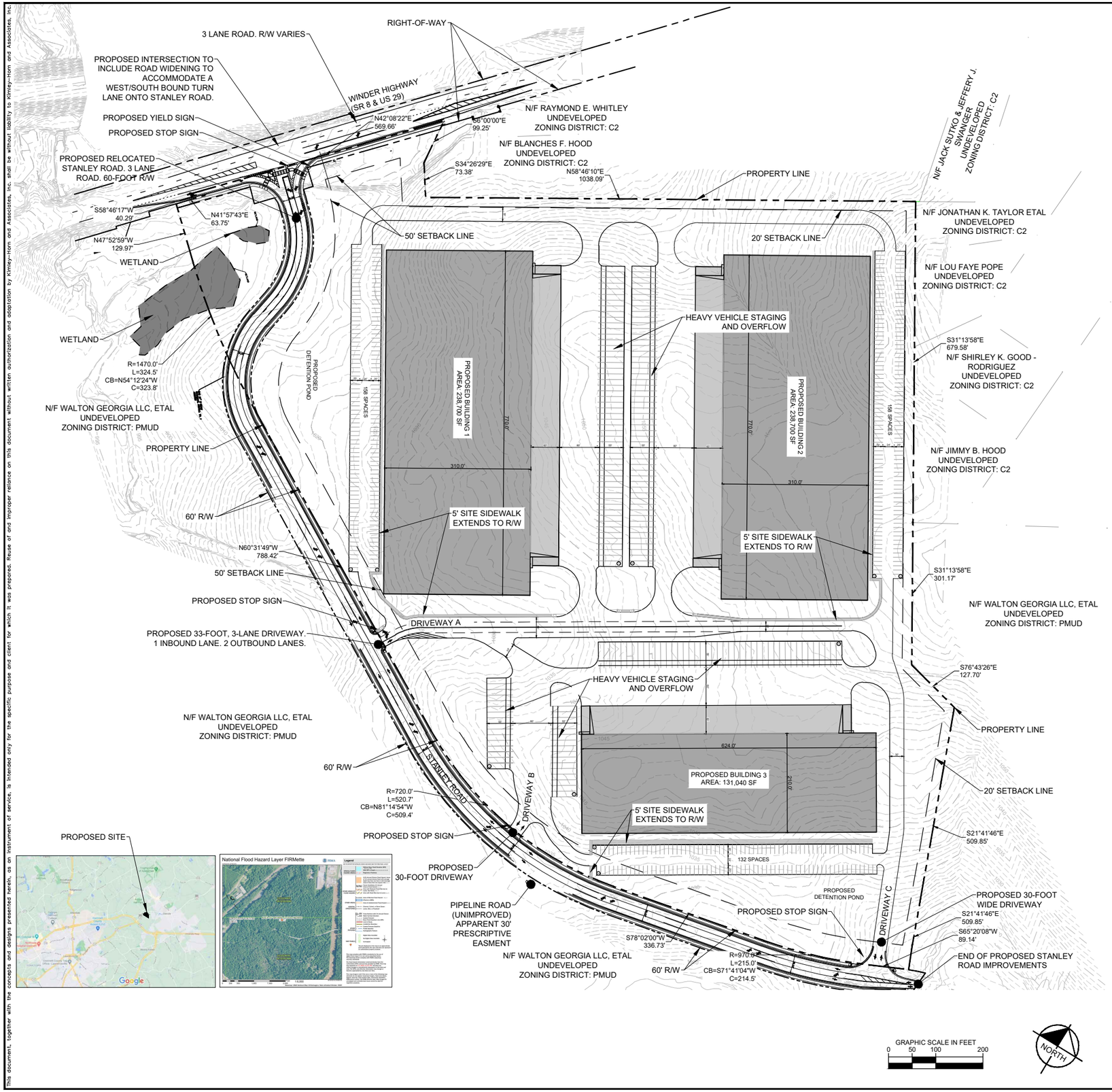
Projected 2023 Build Traffic Conditions

Project Whiplash DRI #3535
Transportation Analysis

Kimley»Horn

Figure 19

Proposed Site Plan



Zoning Summary Chart (AHJ = City of Dacula)			
Zoning District:	M1 - Light Manufacturing District		
Proposed Use:	INDUSTRIAL WAREHOUSE/DISTRIBUTION PROJECT		
Land District	5th District		
Land Lot	270 & 271		
Parcel Number	R5270 001 & R5271 009		
Zoning Regulation: (Lease Area)	**ZONING DISTRICT: M1**	**PROPOSED: M1**	**Compliant**
Minimum Lot Size	43,560 SF	43.82 ACRE (1,908,482 SF)	Y
Minimum Front Yard Setback	50 FT (MINOR STREET); 50 FT (MAJOR STREET)	50 FT (MINOR STREET); 50 FT (MAJOR STREET)	Y
Minimum Rear Yard Setback	20 FT	20 FT	Y
Minimum Side Yard Setback	20 FT	20 FT	Y
Maximum Improved Lot Coverage	--	--	Y
Maximum Building Coverage	--	--	Y
Minimum Lot Width	100 FT	100 FT	Y
Minimum Lot Depth	NONE	NONE	Y
Maximum FAR	--	--	Y
Minimum Parking *	304 (1 PER 2,000 SF GROSS STORAGE AREA)	448 CAR SPACES	Y
Trailer Parking	--	177 TRAILER SPACES	Y

* THERE IS NO CODE LIMITING THE MAXIMUM PARKING ALLOWED

GENERAL INFORMATION:
DATE OF DRAWINGS: 2/14/2022
JURISDICTIONAL BOUNDARIES: CITY OF DACULA, GWINNETT COUNTY

GENERAL INFORMATION:
SITE AREA: 43.82 ACRES

NATURAL FEATURES:
A TRIBUTARY TO HOPKINS CREEK RUNS ALONG THE SOUTH RIGHT-OF-WAY OF WINDER HIGHWAY. THERE ARE WETLANDS ASSOCIATED WITH THE CREEK AND ARE SHOWN ON THE PLAN.

LOCATION, SIZE & CHARACTER:
BUILDING 1: 238,700 SQ. FT., 1 STORY WAREHOUSE
BUILDING 2: 238,700 SQ. FT., 1 STORY WAREHOUSE
BUILDING 3: 131,040 SQ. FT., 1 STORY WAREHOUSE
TOTAL PROPOSED BUILDING AREA: 608,440 SQ. FT.
DENSITY CALCULATION (FAR): 3.14

SITE NOTES
1. EXISTING CONDITIONS HEREIN ARE FROM AERIAL MAPPING AND GIS.
2. STANLEY ROAD RELOCATION FROM GDOT FILE PROVIDED BY THE CLIENT DATED OCTOBER 2020.
3. THIS CONCEPT WAS PREPARED STRICTLY BASED UPON THE INFORMATION REFERENCED ABOVE AND A PRELIMINARY REVIEW OF THE MUNICIPAL ZONING AND LAND DEVELOPMENT REQUIREMENTS. THIS SITE PLAN IS NOT INTENDED FOR CONSTRUCTION AND SHOULD NOT BE USED FOR THAT PURPOSE
4. THE FEASIBILITY OF SECURING THE REQUISITE LOCAL, COUNTY AND STATE AGENCY APPROVALS NECESSARY TO PERMIT THE PROPOSED DEVELOPMENT PROGRAM CANNOT BE ASSESSED AT THIS TIME DUE TO THE PRELIMINARY NATURE OF THE AVAILABLE INFORMATION. THIS PLAN IS NOT INTENDED TO BE USED FOR DETAILED ZONING ANALYSIS AND THE INFORMATION CONTAINED HEREIN IS SUBJECT TO CHANGE UPON THE COMPLETION OF ADDITIONAL DUE DILIGENCE EFFORTS, WHICH MAY INCLUDE MEETING WITH THE JURISDICTIONAL AGENCIES.
5. SANITARY SEWER TO BE CONNECTED TO THE HOPKINS CREEK SEWER LINE ONCE INSTALLED AND ACTIVE.
6. BOUNDARY INFORMATION SHOWN HEREON FROM BOUNDARY SURVEY FOR KIMLEY-HORN (DISPATCH DACULA), PREPARED BY TERAMARK LAND SURVEYING, INC. DATED 01/15/2021.
7. PROPERTY CONSIST OF 2 EXISTING TRACTS. TRACT 1 TAX PARCEL ID R5270 001 DB. 57524 PG. 800, DB. 56953 PG. 617, 625, & 633. TRACT 2 TAX PARCEL ID R5271 009 DB. 56669 PG. 713.
8. ADDITIONAL PARKING IS PROVIDED TO ACCOMMODATE THE FUTURE OFFICE USE WITHIN THE WAREHOUSE BUILDINGS THAT CANNOT BE DEFINED AT THIS TIME.

OWNER / DEVELOPER:
CARTER USA
1440 DUTCH VALLEY PLACE
SUITE 1200
ATLANTA, GA 30324
BRADY PANIS
770-722-8231
bpanis@carterusa.com

ENGINEER:
KIMLEY-HORN
11720 AMBER PARK DRIVE
SUITE 600
ALPHARETTA, GA
A. REID IARWIN, P.E.
770-545-6106
reid.irwin@kimley-horn.com

ENGINEER:
KIMLEY-HORN
11720 AMBER PARK DRIVE
SUITE 600
ALPHARETTA, GA
JOHN WALKER, P.E., PTOE
678-793-4836
john.walker@kimley-horn.com

FOR REVIEW

No.	REVISIONS	DATE	BY

Kimley»Horn
2000 RIVEREDGE PARKWAY, SUITE 600
11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GEORGIA 30009
PHONE (770) 619-4280
WWW.KIMLEY-HORN.COM

KHA PROJECT TBD

SCALE	AS SHOWN
DRAWN BY	DBA
DESIGNED BY	BBW
CHECKED BY	ARI

CARTER ACQUISITIONS, LLC
39 GEORGIA AVE SE, SUITE 200
ATLANTA, GA 30312

811 Know what's below. Call before you dig.

DRI #3535
PROJECT WHIPLASH
INDUSTRIAL DEVELOPMENT
1860 WINDER HWY, DACULA, GA.
GWINNETT COUNTY

SHEET NUMBER
DRI SITE PLAN

Zoning Summary Chart (AHJ = City of Dacula)			
Zoning District:	M1 - Light Manufacturing District		
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Land District	5th District		
Land Lot	270 & 271		
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Minimum Front Yard Setback	50 FT (MINOR STREET); 50 FT (MAJOR STREET)	50 FT (MINOR STREET); 50 FT (MAJOR STREET)	Y
Minimum Rear Yard Setback	20 FT	20 FT	Y
Minimum Side Yard Setback	20 FT	20 FT	Y
Maximum Improved Lot Coverage	--	--	Y
Maximum Building Coverage	--	--	Y
Minimum Lot Width	100 FT	100 FT	Y
Minimum Lot Depth	NONE	NONE	Y
Maximum FAR	--	--	Y
Minimum Parking *	304 (1 PER 2,000 SF GROSS STORAGE AREA)	448	Y
Trailer Parking	--	177	Y

* THERE IS NO CODE LIMITING THE MAXIMUM PARKING ALLOWED

GENERAL INFORMATION:
DATE OF DRAWINGS: 2/14/2022
JURISDICTIONAL BOUNDARIES: CITY OF DACULA, GWINNETT COUNTY

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ENGINEER:
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11720 AMBER PARK DRIVE
SUITE 600
ALPHARETTA, GA
JOHN WALKER, P.E., PTOE
678-793-4836
john.walker@kimley-horn.com

FOR REVIEW

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
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ALPHARETTA, GEORGIA 30009
PHONE (770) 619-4280
WWW.KIMLEY-HORN.COM

KHA PROJECT TBD

SCALE	AS SHOWN
DRAWN BY	DBA
DESIGNED BY	BBW
CHECKED BY	ARI

CARTER ACQUISITIONS, LLC
39 GEORGIA AVE SE, SUITE 200
ATLANTA, GA 30312

811 Know what's below. Call before you dig.

DRI #3535
PROJECT WHIPLASH
INDUSTRIAL DEVELOPMENT
1860 WINDER HWY, DACULA, GA.
GWINNETT COUNTY

SHEET NUMBER
DRI SITE PLAN W/ AERIAL

Trip Generation Analysis

Trip Generation Analysis (10th Ed. With *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Project Whiplash DRI #3535
City of Dacula / Gwinnett County, Georgia

Land Use		Density		Daily Trips			AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out	Total	In	Out
Proposed Project Trips												
LUC	Land Use	Density	Units	**HIDE THIS ROW**								
150	Warehousing	607,600	Sq. Ft. GFA	1,006	503	503	98	75	23	100	27	73
Total Proposed Trips				**1,006**	**503**	**503**	**98**	**75**	**23**	**100**	**27**	**73**
Gross Project Trips				**1,006**	**503**	**503**	**98**	**75**	**23**	**100**	**27**	**73**
Warehouse Trips				1,006	503	503	98	75	23	100	27	73
Truck Trips (of Warehousing Trips)				336	168	168	12	6	6	18	9	9
Car Trips (of Warehousing Trips)				670	335	335	86	69	17	82	18	64
Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Car Trips				*670*	335	335	86	69	17	82	18	64
Mixed-Use Reductions - TOTAL				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions - TOTAL				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips				**1,006**	**503**	**503**	**98**	**75**	**23**	**100**	**27**	**73**

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #1
GA-8 Winder Hwy NE/GA-8 Winder Hwy at GA-316 University Pkwy (South)/GA-316 University Pkwy (North)

AM PEAK HOUR

	GA-316 University Pkwy (South) Northbound				GA-316 University Pkwy (North) Southbound				GA-8 Winder Hwy NE Eastbound				GA-8 Winder Hwy Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	120	1,354	126	1	100	926	62	0	46	155	37	0	116	315	331
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0			0	0			0	0			0	0			0
Heavy Vehicles	0	4	57	5	0	8	107	14	0	14	6	5	0	5	22	36
Heavy Vehicle %	2%	3%	4%	4%	2%	8%	12%	23%	2%	30%	4%	14%	2%	4%	7%	11%
Peak Hour Factor	0.97				0.97				0.97				0.97			
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Estimated 2022 Volumes	**0**	**120**	**1,354**	**126**	**1**	**100**	**926**	**62**	**0**	**46**	**155**	**37**	**0**	**116**	**315**	**331**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	121	1368	127	1	101	935	63	0	46	157	37	0	117	318	334
2023 No-Build Traffic	**0**	**121**	**1,368**	**127**	**1**	**101**	**935**	**63**	**0**	**46**	**157**	**37**	**0**	**117**	**318**	**334**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN				30%		50%					10%					
Trip Distribution OUT														(30%)	(10%)	(50%)
Warehouse Truck Trips	0	0	0	2	0	3	0	0	0	0	1	0	0	2	1	3
Trip Distribution IN				15%		40%					25%					
Trip Distribution OUT														(15%)	(25%)	(40%)
Warehouse Car Trips	0	0	0	10	0	28	0	0	0	0	17	0	0	3	4	7
Total Vehicular Project Trips	0	0	0	12	0	31	0	0	0	0	18	0	0	5	5	10
2023 Build Traffic	**0**	**121**	**1,368**	**139**	**1**	**132**	**935**	**63**	**0**	**46**	**175**	**37**	**0**	**122**	**323**	**344**
2023 Build Heavy Vehicle %	**2%**	**3%**	**4%**	**5%**	**2%**	**8%**	**12%**	**22%**	**2%**	**31%**	**4%**	**14%**	**2%**	**6%**	**7%**	**11%**

PM PEAK HOUR

	GA-316 University Pkwy (South) Northbound				GA-316 University Pkwy (North) Southbound				GA-8 Winder Hwy NE Eastbound				GA-8 Winder Hwy Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	51	1,184	121	1	268	1,605	35	0	109	273	178	0	165	249	209
Pedestrians	0				0				0				0			
Heavy Vehicles	0	2	70	6	0	5	57	12	0	10	1	10	0	2	14	12
Heavy Vehicle %	2%	4%	6%	5%	2%	2%	4%	34%	2%	9%	2%	6%	2%	2%	6%	6%
Peak Hour Factor	0.97				0.97				0.97				0.97			
Adjustment Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Estimated 2022 Volumes	**0**	**57**	**1,326**	**136**	**1**	**300**	**1,798**	**39**	**0**	**122**	**306**	**199**	**0**	**185**	**279**	**234**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	58	1339	137	1	303	1816	39	0	123	309	201	0	187	282	236
2023 No-Build Traffic	**0**	**58**	**1,339**	**137**	**1**	**303**	**1,816**	**39**	**0**	**123**	**309**	**201**	**0**	**187**	**282**	**236**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN				30%		50%					10%					
Trip Distribution OUT														(30%)	(10%)	(50%)
Warehouse Truck Trips	0	0	0	3	0	5	0	0	0	0	1	0	0	3	1	4
Trip Distribution IN				15%		40%					25%					
Trip Distribution OUT														(15%)	(25%)	(40%)
Warehouse Car Trips	0	0	0	3	0	7	0	0	0	0	4	0	0	10	16	26
Total Vehicular Project Trips	0	0	0	6	0	12	0	0	0	0	5	0	0	13	17	30
2023 Build Traffic	**0**	**58**	**1,339**	**143**	**1**	**315**	**1,816**	**39**	**0**	**123**	**314**	**201**	**0**	**200**	**299**	**266**
2023 Build Heavy Vehicle %	**2%**	**4%**	**6%**	**7%**	**2%**	**3%**	**4%**	**35%**	**2%**	**9%**	**2%**	**6%**	**2%**	**3%**	**6%**	**7%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #2
GA-8 Winder Hwy (West)/GA-8 Winder Hwy (East) at Stanley Rd/QT Driveway

AM PEAK HOUR

	Stanley Rd Northbound				QT Driveway Southbound				GA-8 Winder Hwy (West) Eastbound				GA-8 Winder Hwy (East) Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	2	0	0	0	17	1	159	0	123	342	0	0	1	559	48
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0			0	0			0	0			0	0			0
Heavy Vehicles	0	0	0	0	0	1	0	18	0	7	26	0	0	0	31	3
Heavy Vehicle %	2%	2%	2%	2%	2%	6%	2%	11%	2%	6%	8%	2%	2%	2%	6%	6%
Peak Hour Factor	0.95				0.95				0.95				0.95			
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Estimated 2022 Volumes	**0**	**2**	**0**	**0**	**0**	**17**	**1**	**159**	**0**	**123**	**342**	**0**	**0**	**1**	**559**	**48**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	2	0	0	0	17	1	161	0	124	345	0	0	1	565	48
2023 No-Build Traffic	**0**	**2**	**0**	**0**	**0**	**17**	**1**	**161**	**0**	**124**	**345**	**0**	**0**	**1**	**565**	**48**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN												90%		10%		
Trip Distribution OUT		(90%)		(10%)												
Warehouse Truck Trips	0	5	0	1	0	0	0	0	0	0	0	6	0	1	0	0
Trip Distribution IN												80%		15%		
Trip Distribution OUT		(80%)		(15%)												
Warehouse Car Trips	0	14	0	3	0	0	0	0	0	0	0	55	0	10	0	0
Total Vehicular Project Trips	0	19	0	4	0	0	0	0	0	0	0	61	0	11	0	0
2023 Build Traffic	**0**	**21**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**345**	**61**	**0**	**12**	**565**	**0**
2023 Build Heavy Vehicle %	**2%**	**24%**	**2%**	**25%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**8%**	**10%**	**2%**	**8%**	**6%**	**2%**

PM PEAK HOUR

	Stanley Rd Northbound				QT Driveway Southbound				GA-8 Winder Hwy (West) Eastbound				GA-8 Winder Hwy (East) Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	1	0	0	27	0	138	0	103	554	2	0	0	499	35
Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	2	0	9	0	2	14	0	0	0	26	0
Heavy Vehicle %	2%	2%	2%	2%	2%	7%	2%	7%	2%	2%	3%	2%	2%	2%	5%	2%
Peak Hour Factor	0.92				0.92				0.92				0.92			
Adjustment Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Estimated 2022 Volumes	**0**	**0**	**1**	**0**	**0**	**30**	**0**	**155**	**0**	**115**	**620**	**2**	**0**	**0**	**559**	**39**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	0	1	0	0	30	0	157	0	116	626	2	0	0	565	39
2023 No-Build Traffic	**0**	**0**	**1**	**0**	**0**	**30**	**0**	**157**	**0**	**116**	**626**	**2**	**0**	**0**	**565**	**39**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN												90%		10%		
Trip Distribution OUT		(90%)		(10%)												
Warehouse Truck Trips	0	8	0	1	0	0	0	0	0	0	0	8	0	1	0	0
Trip Distribution IN												80%		15%		
Trip Distribution OUT		(80%)		(15%)												
Warehouse Car Trips	0	51	0	10	0	0	0	0	0	0	0	14	0	3	0	0
Total Vehicular Project Trips	0	59	0	11	0	0	0	0	0	0	0	22	0	4	0	0
2023 Build Traffic	**0**	**59**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**626**	**24**	**0**	**4**	**565**	**0**
2023 Build Heavy Vehicle %	**2%**	**14%**	**2%**	**9%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**3%**	**33%**	**2%**	**25%**	**5%**	**2%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #3
GA-8 Winder Hwy (West)/GA-8 Winder Hwy (East) at Mcmillan Rd/Broad St

AM PEAK HOUR

	Mcmillan Rd Northbound				Broad St Southbound				GA-8 Winder Hwy (West) Eastbound				GA-8 Winder Hwy (East) Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	25	51	3	0	4	31	65	0	101	149	6	0	2	452	7
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0			0	0			0	0			0	0			0
Heavy Vehicles	0	0	0	1	0	1	0	1	0	0	16	0	0	0	46	0
Heavy Vehicle %	2%	2%	2%	33%	2%	25%	2%	2%	2%	2%	11%	2%	2%	2%	10%	2%
Peak Hour Factor	0.82				0.82				0.82				0.82			
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Estimated 2022 Volumes	**0**	**25**	**51**	**3**	**0**	**4**	**31**	**65**	**0**	**101**	**149**	**6**	**0**	**2**	**452**	**7**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	25	52	3	0	4	31	66	0	102	150	6	0	2	457	7
2023 No-Build Traffic	**0**	**25**	**52**	**3**	**0**	**4**	**31**	**66**	**0**	**102**	**150**	**6**	**0**	**2**	**457**	**7**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN															10%	
Trip Distribution OUT											(10%)					
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Trip Distribution IN															15%	
Trip Distribution OUT											(15%)					
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	10	0
Total Vehicular Project Trips	0	0	0	0	0	0	0	0	0	0	4	0	0	0	11	0
2023 Build Traffic	**0**	**25**	**52**	**3**	**0**	**4**	**31**	**66**	**0**	**102**	**154**	**6**	**0**	**2**	**468**	**7**
2023 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**34%**	**2%**	**25%**	**2%**	**2%**	**2%**	**2%**	**11%**	**2%**	**2%**	**2%**	**10%**	**2%**

PM PEAK HOUR

	Mcmillan Rd Northbound				Broad St Southbound				GA-8 Winder Hwy (West) Eastbound				GA-8 Winder Hwy (East) Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	24	40	8	0	16	106	112	0	73	389	30	0	9	240	6
Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	2	0	0	0	2	0	0	0	14	1	0	1	23	0
Heavy Vehicle %	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%	4%	3%	2%	11%	10%	2%
Peak Hour Factor	0.90				0.90				0.90				0.90			
Adjustment Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Estimated 2022 Volumes	**0**	**27**	**45**	**9**	**0**	**18**	**119**	**125**	**0**	**82**	**436**	**34**	**0**	**10**	**269**	**7**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	27	45	9	0	18	120	126	0	83	440	34	0	10	272	7
2023 No-Build Traffic	**0**	**27**	**45**	**9**	**0**	**18**	**120**	**126**	**0**	**83**	**440**	**34**	**0**	**10**	**272**	**7**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN															10%	
Trip Distribution OUT											(10%)					
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Trip Distribution IN															15%	
Trip Distribution OUT											(15%)					
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	10	0	0	0	3	0
Total Vehicular Project Trips	0	0	0	0	0	0	0	0	0	0	11	0	0	0	4	0
2023 Build Traffic	**0**	**27**	**45**	**9**	**0**	**18**	**120**	**126**	**0**	**83**	**451**	**34**	**0**	**10**	**276**	**7**
2023 Build Heavy Vehicle %	**2%**	**2%**	**5%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**4%**	**3%**	**2%**	**11%**	**10%**	**2%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #4
Stanley Rd (West)/Stanley Rd (East) at Mcmillan Rd (South)/Mcmillan Rd (North)

AM PEAK HOUR

	Mcmillan Rd (South) Northbound				Mcmillan Rd (North) Southbound				Stanley Rd (West) Eastbound				Stanley Rd (East) Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	3	72	1	0	0	37	3	0	5	0	7	0	1	1	1
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0			0	0			0	0			0	0			0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	1	0	2	0	0	1	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	20%	2%	29%	2%	2%	100%	2%
Peak Hour Factor	0.70				0.70				0.70				0.70			
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Estimated 2022 Volumes	**0**	**3**	**72**	**1**	**0**	**0**	**37**	**3**	**0**	**5**	**0**	**7**	**0**	**1**	**1**	**1**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	3	73	1	0	0	37	3	0	5	0	7	0	1	1	1
2023 No-Build Traffic	**0**	**3**	**73**	**1**	**0**	**0**	**37**	**3**	**0**	**5**	**0**	**7**	**0**	**1**	**1**	**1**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN																
Trip Distribution OUT																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
Total Vehicular Project Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
2023 Build Traffic	**0**	**3**	**73**	**1**	**0**	**0**	**37**	**3**	**0**	**5**	**1**	**7**	**0**	**1**	**4**	**1**
2023 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**20%**	**2%**	**29%**	**2%**	**2%**	**25%**	**2%**

PM PEAK HOUR

	Mcmillan Rd (South) Northbound				Mcmillan Rd (North) Southbound				Stanley Rd (West) Eastbound				Stanley Rd (East) Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	3	60	2	0	6	124	15	0	12	1	5	0	0	2	0
Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	2	0	0	0	4	0	0	0	0	2	0	0	2	0
Heavy Vehicle %	2%	2%	3%	2%	2%	2%	3%	2%	2%	2%	2%	40%	2%	2%	100%	2%
Peak Hour Factor	0.86				0.86				0.86				0.86			
Adjustment Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Estimated 2022 Volumes	**0**	**3**	**67**	**2**	**0**	**7**	**139**	**17**	**0**	**13**	**1**	**6**	**0**	**0**	**2**	**0**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	3	68	2	0	7	140	17	0	13	1	6	0	0	2	0
2023 No-Build Traffic	**0**	**3**	**68**	**2**	**0**	**7**	**140**	**17**	**0**	**13**	**1**	**6**	**0**	**0**	**2**	**0**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN																
Trip Distribution OUT																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
Total Vehicular Project Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
2023 Build Traffic	**0**	**3**	**68**	**2**	**0**	**7**	**140**	**17**	**0**	**13**	**4**	**6**	**0**	**0**	**3**	**0**
2023 Build Heavy Vehicle %	**2%**	**2%**	**3%**	**2%**	**2%**	**2%**	**3%**	**2%**	**2%**	**2%**	**2%**	**38%**	**2%**	**2%**	**75%**	**2%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #5
Driveway A at Stanley Rd

AM PEAK HOUR

	Stanley Rd Northbound				Stanley Rd Southbound				Eastbound				Driveway A Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0			0	0			0	0			0	0			0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.95				0.95				0.95				0.95			
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Estimated 2022 Volumes	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
2023 No-Build Traffic	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN						80%	20%									
Trip Distribution OUT			(20%)													(80%)
Warehouse Truck Trips	0	0	1	0	0	5	1	0	0	0	0	0	0	0	0	5
Trip Distribution IN						55%	40%									
Trip Distribution OUT			(45%)													(50%)
Warehouse Car Trips	0	0	8	0	0	38	28	0	0	0	0	0	0	0	0	9
Total Vehicular Project Trips	0	0	9	0	0	43	29	0	0	0	0	0	0	0	0	14
2023 Build Traffic	**0**	**0**	**11**	**0**	**0**	**43**	**31**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**
2023 Build Heavy Vehicle %	**2%**	**2%**	**9%**	**2%**	**2%**	**12%**	**3%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**36%**

PM PEAK HOUR

	Stanley Rd Northbound				Stanley Rd Southbound				Eastbound				Driveway A Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.92				0.92				0.92				0.92			
Adjustment Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Estimated 2022 Volumes	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
2023 No-Build Traffic	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN						80%	20%									
Trip Distribution OUT			(20%)													(80%)
Warehouse Truck Trips	0	0	2	0	0	7	2	0	0	0	0	0	0	0	0	7
Trip Distribution IN						55%	40%									
Trip Distribution OUT			(45%)													(50%)
Warehouse Car Trips	0	0	29	0	0	10	7	0	0	0	0	0	0	0	0	32
Total Vehicular Project Trips	0	0	31	0	0	17	9	0	0	0	0	0	0	0	0	39
2023 Build Traffic	**0**	**0**	**32**	**0**	**0**	**17**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**
2023 Build Heavy Vehicle %	**2%**	**2%**	**6%**	**2%**	**2%**	**41%**	**18%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**18%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #6
Driveway B at Stanley Rd

AM PEAK HOUR

	Stanley Rd Northbound				Stanley Rd Southbound				Eastbound				Driveway B Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0			0	0			0	0			0	0			0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.95				0.95				0.95				0.95			
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Estimated 2022 Volumes	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
2023 No-Build Traffic	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN						20%										
Trip Distribution OUT																(20%)
Warehouse Truck Trips	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Trip Distribution IN						15%	25%									
Trip Distribution OUT			(25%)													(20%)
Warehouse Car Trips	0	0	4	0	0	10	17	0	0	0	0	0	0	0	0	3
Total Vehicular Project Trips	0	0	4	0	0	11	17	0	0	0	0	0	0	0	0	4
2023 Build Traffic	**0**	**0**	**6**	**0**	**0**	**11**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
2023 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**9%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**25%**

PM PEAK HOUR

	Stanley Rd Northbound				Stanley Rd Southbound				Eastbound				Driveway B Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.92				0.92				0.92				0.92			
Adjustment Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Estimated 2022 Volumes	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
2023 No-Build Traffic	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN						20%										
Trip Distribution OUT																(20%)
Warehouse Truck Trips	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Trip Distribution IN						15%	25%									
Trip Distribution OUT			(25%)													(20%)
Warehouse Car Trips	0	0	16	0	0	3	4	0	0	0	0	0	0	0	0	13
Total Vehicular Project Trips	0	0	16	0	0	5	4	0	0	0	0	0	0	0	0	15
2023 Build Traffic	**0**	**0**	**17**	**0**	**0**	**5**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**
2023 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**40%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**13%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #7
Driveway C at Stanley Rd

AM PEAK HOUR

	Stanley Rd Northbound				Stanley Rd Southbound				Eastbound				Driveway C Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0			0	0			0	0			0	0			0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.95				0.95				0.95				0.95			
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Estimated 2022 Volumes	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
2023 No-Build Traffic	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN																
Trip Distribution OUT																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				5%		25%										
Trip Distribution OUT														(5%)		(25%)
Warehouse Car Trips	0	0	0	3	0	17	0	0	0	0	0	0	0	1	0	4
Total Vehicular Project Trips	0	0	0	3	0	17	0	0	0	0	0	0	0	1	0	4
2023 Build Traffic	**0**	**0**	**2**	**3**	**0**	**17**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**
2023 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**

PM PEAK HOUR

	Stanley Rd Northbound				Stanley Rd Southbound				Eastbound				Driveway C Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.92				0.92				0.92				0.92			
Adjustment Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Estimated 2022 Volumes	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Background Growth Trips	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
2023 No-Build Traffic	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2023 No-Build Pedestrians	**0**				**0**				**0**				**0**			
Trip Distribution IN																
Trip Distribution OUT																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				5%		25%										
Trip Distribution OUT														(5%)		(25%)
Warehouse Car Trips	0	0	0	1	0	4	0	0	0	0	0	0	0	3	0	16
Total Vehicular Project Trips	0	0	0	1	0	4	0	0	0	0	0	0	0	3	0	16
2023 Build Traffic	**0**	**0**	**1**	**1**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**16**
2023 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**

Programmed Project Fact Sheets

GW-394

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

Short Title	SR 316 INTERCHANGE AT US 29
GDOT Project No.	0013897
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Interchange Capacity
Sponsor	Gwinnett County
Jurisdiction	Regional - Northeast
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	N/A	**LCI**		**Network Year**	2030
Planned Thru Lane	N/A	**Flex**		**Corridor Length**	0.8 miles

Detailed Description and Justification

This is a grade-seperated diamond interchange project along SR 316 at US 29.

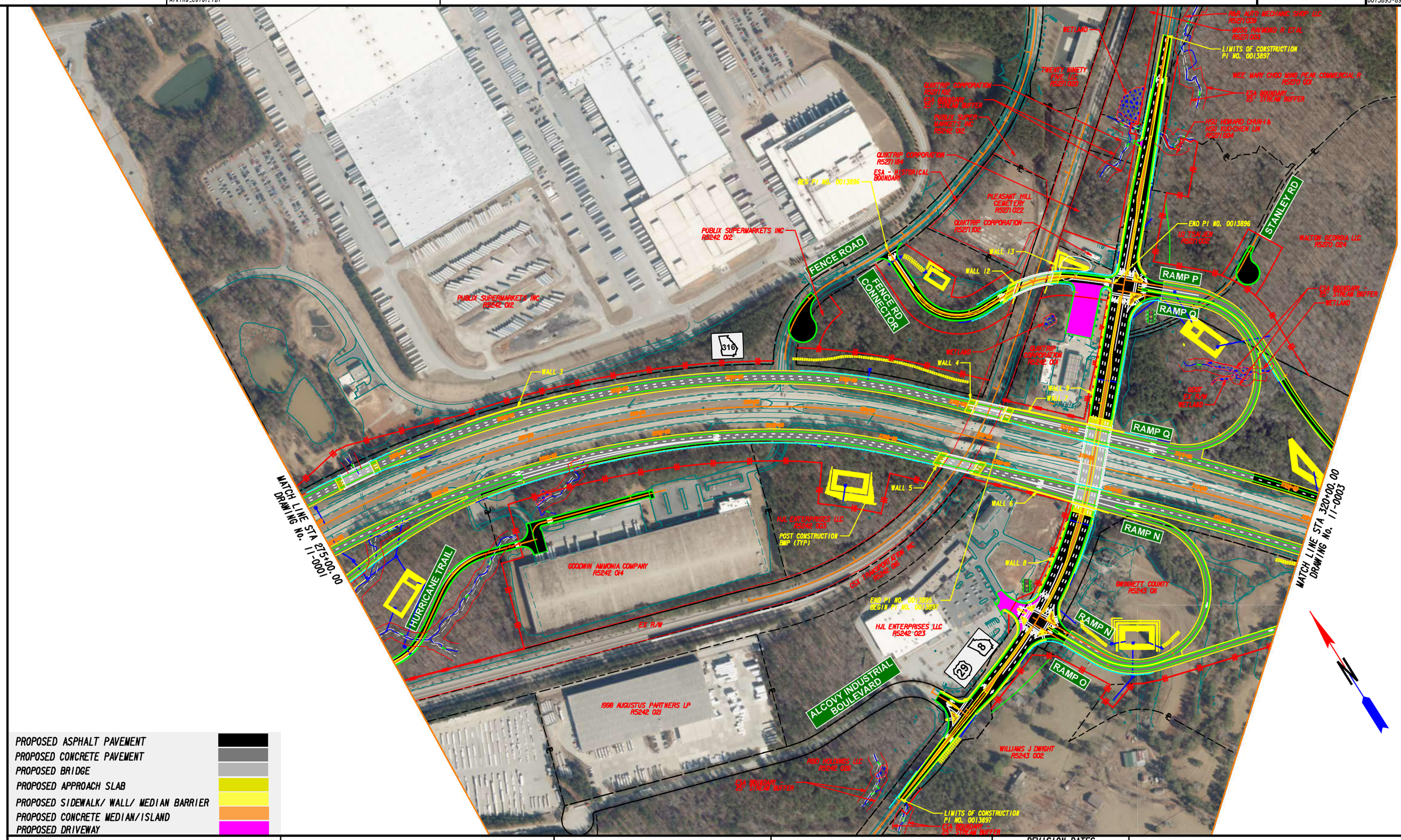
Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Transportation Funding Act (HB 170)	AUTH	2017	**$1,016,000**	~~$0,000~~	~~$1,016,000~~	~~$0,000~~	~~$0,000~~
PE	Transportation Funding Act (HB 170)	AUTH	2020	**$1,750,000**	~~$0,000~~	~~$1,750,000~~	~~$0,000~~	~~$0,000~~
PE	Transportation Funding Act (HB 170)	AUTH	2021	**$10,159,568**	~~$0,000~~	~~$10,159,568~~	~~$0,000~~	~~$0,000~~
ROW	Transportation Funding Act (HB 170)		2022	**$18,000,000**	$0,000	$18,000,000	$0,000	$0,000
UTL	Transportation Funding Act (HB 170)		2024	**$4,000,000**	$0,000	$4,000,000	$0,000	$0,000
CST	Transportation Funding Act (HB 170)		2024	**$47,000,000**	$0,000	$47,000,000	$0,000	$0,000
				$81,925,568	**$0,000**	**$81,925,568**	**$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: 8/25/2021

10/29/2019 5:31:14 PM USER:TSEP5307	GPLOT-V81 Atkins_Color.tbl	H:\GWIN\SR 316 at US 29\DGN\CR_SH2.dgn	GDOT P.I. No. 0013895-896-897



PROPOSED ASPHALT PAVEMENT
PROPOSED CONCRETE PAVEMENT
PROPOSED BRIDGE
PROPOSED APPROACH SLAB
PROPOSED SIDEWALK/ WALL/ MEDIAN BARRIER
PROPOSED CONCRETE MEDIAN/ISLAND
PROPOSED DRIVEWAY

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE

PROPOSED SIGNAL

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

ATKINS
Member of the SNC-Lavalin Group
1600 RiverEdge Parkway, NW
Suite 700
Atlanta, GA 30328
Tel: (770)933-0280
Fax: (770)933-1920

SCALE IN FEET
0 200 400 800

REVISION DATES

CONSTRUCTION LAYOUT

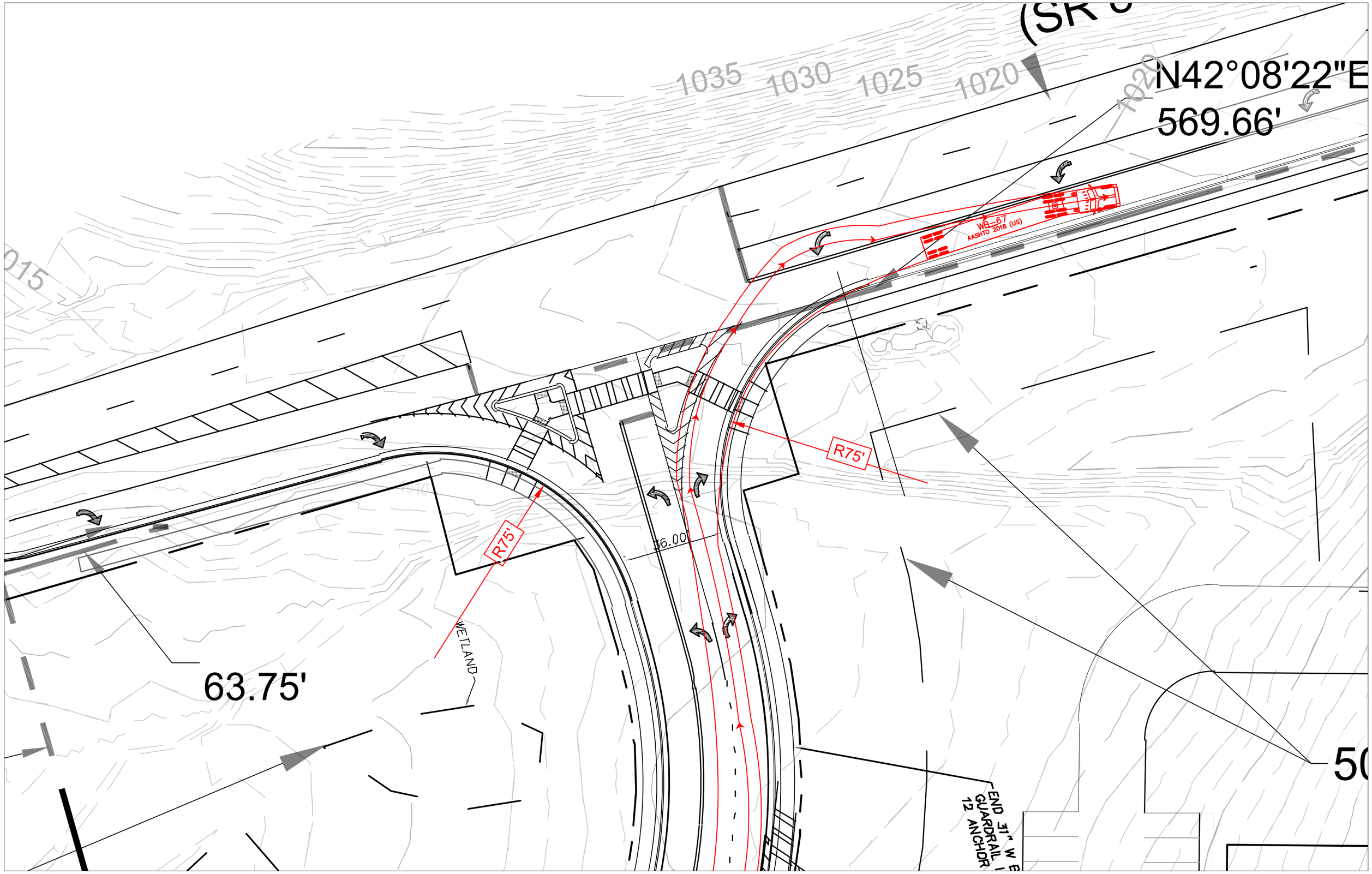
SR 316 FM CEDARS RD TO SUGARLOAF PWKY
PI 0013895 PI 0013896 PI 0013897

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		11-0002
VERIFIED:		DATE:		

10/23/2015 GPLN

Full Page Truck Exhibits

1035
1030
1025
1020
1015
N42°08'22"E
569.66'
63.75'
R75'
R75'
36.00'
WB-67
AASHTO 2018 (US)
WB-67
AASHTO 2018 (US)
WETLAND
END 31" W
GUARDRAIL
12 ANCHOR


(SR
1035
1030
1025
1020
1015
N42°08'22"E
569.66'
WB-67
AASHTO 2018 (US)
R75'
R75'
36.00'
63.75'
WETLAND
END 31" W
GUARDRAIL
12 ANCHOR
50

47.00'

79

79

WB-67
AASHTO 2018 (US)

R12'

DRIVEWAY A

1030

30'

Y.

S.

R=720.0'
L=520.7'
31°14'54"W
C=509.4'

OPOSED STOP SIGN

PROPOSED
30-FOOT DRIVEWAY

PIPELINE ROAD

STANLEY ROAD

DRIVEWAY B

R10'

36.00'

WB-67
AASHTO 2018 (US)

1045

1040

1035

16

66

PROPOSED
DETENTION POND

PROPOSED STOP SIGN

DRIVEWAY C

WB-67
AASHTO 2018 (US)

R50'

WB-67
AASHTO 2018 (US)

56.00'

°41'04"W
C=214.5'