

*Transportation Analysis*

# **Locust Grove Phase III Distribution Center DRI #3805**

City of Locust Grove, Henry County, Georgia

March 2023

*Prepared for:*

The Cubes AT Locust Grove, LLC.

*Prepared by:*

Kimley-Horn and Associates, Inc.  
11720 Amber Park Drive, Suite 600  
Alpharetta, Georgia 30009  
017229003

**Kimley»Horn**

*Transportation Analysis*

# **Locust Grove Phase III Distribution Center DRI #3805**

City of Locust Grove, Henry County, Georgia

March 2023

*Prepared for:*

The Cubes AT Locust Grove, LLC.

*Prepared by:*

Kimley-Horn and Associates, Inc.  
11720 Amber Park Drive, Suite 600  
Alpharetta, Georgia 30009  
017229003



## TABLE OF CONTENTS

Executive Summary .....	1
Bill Gardner Parkway at I-75 Southbound Ramps (Intersection 3) .....	4
Bill Gardner Parkway at I-75 Northbound Ramps (Intersection 4) .....	4
Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard (Intersection 5) .....	5
1.0 Project Description .....	6
1.1 Introduction .....	6
1.2 Site Access .....	9
1.3 Internal Circulation Analysis .....	9
1.4 Parking .....	9
1.5 Alternative Transportation Facilities .....	9
1.6 Dense Urban Environments Enhanced Focus Area .....	9
1.7 Heavy Vehicle Enhanced Focus Area .....	10
2.0 Traffic Analyses, Methodology and Assumptions .....	15
2.1 Study Network Determination .....	15
2.2 Existing Roadway Facilities .....	15
2.3 Traffic Data Collection and Calibration .....	17
2.4 Background Growth .....	17
2.5 Programmed and Planned Projects .....	18
2.6 Level-of-Service Overview .....	19
2.7 Level-of-Service Standards .....	19
3.0 Trip Generation .....	20
4.0 Trip Distribution and Assignment .....	21
5.0 Traffic Analysis .....	21
5.1 Bethlehem Road at Price Drive (Intersection 1) .....	25
5.2 Bill Gardner Parkway at Price Drive/Strong Rock Parkway (Intersection 2) .....	26
5.3 Bill Gardner Parkway at I-75 Southbound Ramps (Intersection 3) .....	27
5.4 Bill Gardner Parkway at I-75 Northbound Ramps (Intersection 4) .....	29
5.5 Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard (Intersection 5) .....	31
5.6 Internal Roadway at Site Driveway A (Intersection 6) .....	33
5.7 Price Drive at Driveway B (Intersection 7) .....	34
5.8 Price Drive at Driveway C (Intersection 8) .....	35
5.9 Price Drive at Driveway D (Intersection 9) .....	36
5.10 Price Drive at Driveway E (Intersection 10) .....	37

## LIST OF TABLES

Table 1: Proposed Land Use and Density .....	1
Table 2: Proposed Land Use and Density .....	6
Table 3: Proposed Parking.....	9
Table 4: Pavement Condition Observations.....	11
Table 5: Roadway Widths .....	13
Table 6: Intersection Control Summary .....	15
Table 7: Roadway Classifications.....	15
Table 8: Traffic Count Summary.....	17
Table 9: Programmed and Planned Projects .....	18
Table 10: Trip Generation .....	20

## LIST OF FIGURES

Figure 1: Site Location Map .....	7
Figure 2: Site Aerial .....	8
Figure 3: Heavy Vehicle Routing.....	10
Figure 4: Northbound Price Drive Gravel Road.....	11
Figure 5: Southbound Price Drive Minor Pavement Cracking.....	12
Figure 6: Westbound Right-Turn (onto Price Drive) Tire Tracks.....	12
Figure 7: Bill Gardner Parkway at Price Drive – Westbound Right (Turn Maneuver) .....	13
Figure 8: Heavy Vehicle Staging .....	14
Figure 9: Study Intersections.....	16
Figure 10: Heavy Vehicle (Truck) Trip Distribution & Assignment .....	22
Figure 11: Employee (Car) Trip Distribution & Assignment .....	23
Figure 12: Project Trips.....	24
Figure 13: Existing 2022 Conditions .....	38
Figure 14: Projected 2027 No-Build Conditions .....	39
Figure 15: Projected 2027 Build Conditions.....	40

## LIST OF APPENDICES

Appendix A	Proposed Site Plan
Appendix B	Trip Generation Analysis
Appendix C	Intersection Volume Worksheets
Appendix D	Programmed Project Fact Sheets
Appendix E	Full Page Truck Exhibits

### Available Upon Request

Raw Traffic Count Data

Synchro Capacity Analyses

## EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Locust Grove Phase III Distribution Center* development located in the City of Locust Grove, Henry County, Georgia. The approximate 100.92-acre site is located in the north of the intersection of Bill Gardner Parkway at Price Drive. The site is currently vacant.

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

Table 1: Proposed Land Use and Density	
Warehousing	962,220 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 October 11, 2022). Note: Per the GRTA LOU, the analysis assumed the Bethlehem Road Interchange has not been constructed.

The site was previously reviewed as *Locust Grove DRI #2699* in March 2018. The project contemplated a 271.00-acre industrial development. At that time, the project went through the DRI review with GRTA/ARC. The ARC Final Report was issued on April 11, 2018. The proposed *Locust Grove Phase III Distribution Center* industrial development is located adjacent to the original site (to the east).

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

- Existing 2022 conditions represent current traffic volumes that were collected in October 2022. (Note: Traffic Count methodology was outlined in a memo approved by GRTA in October 2022).
- Projected 2027 No-Build conditions represent the Existing 2022 traffic volumes grown for five (5) years using a 2.0% per year growth rate.
- Projected 2027 Build conditions represent the Projected 2027 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the *Locust Grove Phase III Distribution Center* development.

### ***Projected 2027 No-Build Conditions (System Improvements)***

The unsignalized intersections of Bethlehem Road at Price Drive (Intersection 1) and Price Drive at Site Driveway A (Intersection 6) and the signalized intersection of Bill Gardner Parkway at Price Drive/Strong Rock Parkway (Intersection 2) are projected to operate at an acceptable overall LOS under the Projected No-Build 2027 conditions. It should be noted that the southbound approach of Intersection 2 is projected to operate at a failing LOS during the PM peak hour under Projected No-Build 2027 conditions. However, because this analysis does not include the Bethlehem Road interchange project (PI 0017182), this intersection is recommended to be further monitored.

Under projected 2027 No-Build conditions, the overall LOS of the signalized intersection of Bill Gardner Parkway at I-75 Southbound Ramps (Intersection 3) is projected to operate at LOS F during the PM peak hour. Similarly, the overall LOS of the signalized intersection of Bill Gardner Parkway at I-75 Northbound Ramps (Intersection 4) is projected to operate at LOS E during the AM peak hour. Additionally, the overall LOS of the signalized intersection of Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard (Intersection 5) is projected to operate at LOS F during the AM and PM peak hours.

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 overall LOS under the 2027 No-Build conditions, Kimley-Horn considered the following system improvement (shown in red on **Figure 14** and **Figure 15**):

- Bill Gardner Parkway at Price Drive (Intersection 2)
  - Improve the westbound right-turn to northbound radius to accommodate heavy vehicles.
- Bill Gardner Parkway at I-75 Southbound Ramps (Intersection 3)
  - Install an eastbound right-turn lane along Bill Gardner Parkway.
    - The eastbound approach would consist of two (2) through lanes and one (1) exclusive right-turn lane along Bill Gardner Parkway.
  - Install an additional westbound left-turn lane along Bill Gardner Parkway.
    - The westbound approach would consist of two (2) exclusive left-turn lanes and one (1) westbound through lane.
  - Install an additional receiving lane along the I-75 Southbound Entrance Ramp.
- Bill Gardner Parkway at I-75 Northbound Ramps (Intersection 4)
  - Restripe the northbound approach creating one (1) exclusive left-turn lane, one (1) shared left-turn/right-turn lane, and one (1) exclusive right-turn lane.
  - Install an additional westbound lane along Bill Gardner Parkway (Widen Bill Gardner Parkway).
    - Westbound Bill Gardner Parkway would consist of two (2) lanes to accommodate the dual northbound left-turn lanes.
- Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard (Intersection 5)
  - Install an additional northbound left-turn lane along Tanger Boulevard.
    - The northbound approach would consist of two (2) exclusive left-turn lanes and one shared through/right-turn lane.
  - Install a westbound right-turn lane along Bill Gardner Parkway.
    - The westbound approach would consist of one (1) exclusive left-turn lane, two (2) through lanes, and one (1) exclusive right-turn lane.

It should be noted that, per the GRTA LOU (October 11, 2022), this analysis does not consider the impact the Bethlehem Road interchange (PI 0017182) will have on future traffic. Once constructed, the new interchange is likely to divert traffic from Bill Gardner Parkway north towards Bethlehem Road, which will likely alleviate congestion and improve delay (overall and per approach). For this reason, Kimley-Horn recommends monitoring these intersections and considering the above improvements if the Bethlehem Road interchange does not occur.

### ***Projected 2027 Build Conditions***

The unsignalized intersections of Bethlehem Road at Price Drive (Intersection 1), Internal Roadway at Driveway A (Intersection 6), Price Drive at Driveway B (Intersection 7), Price Drive at Driveway C (Intersection 8), Price Drive at Driveway D, and Price Drive at Driveway E, and the signalized intersection of Bill Gardner Parkway at Price Drive/Strong Rock Parkway (Intersection 2) are projected to operate at an acceptable overall LOS under the Projected Build 2027 conditions. It should be noted that the southbound approach of Intersection 2 is projected to operate at a failing LOS during the PM peak hour under Projected Build 2027 conditions. However, because this analysis does not include the Bethlehem Road interchange project (PI 0017182), this intersection is recommended to be further monitored.

Under projected 2027 Build conditions, with the system improvement under projected 2027 No-Build conditions (listed above), the intersections will operate at an acceptable overall and approach LOS under Build Improved 2027 conditions.

In order to serve the Site Driveways (B, and C), additional intersection or site access improvements are needed (shown in blue on **Figure 15**):

- Internal Roadway at Driveway A (Intersection 6)
  - On the site, construct a full-movement driveway with one (1) ingress lane entering the site, and one (1) egress lane exiting the site.
- Price Drive at Driveway B (Intersection 7)
  - On the site, construct a full-movement driveway with one (1) ingress lane entering the site, and one (1) egress lane exiting the site.
  - Provide a northbound left-turn lane along Price Drive entering the site. Note: Price Drive is proposed to be reconstructed as part of this overall development to become a three-lane section (one lane in each direction with a center two-way left-turn lane (TWLTL)), tying into the existing three-lane section to the south.
- Price Drive at Driveway C (Intersection 8)
  - On the site, construct a full-movement driveway with one (1) ingress lane entering the site, and one egress lane exiting the site.
  - Provide a northbound left-turn lane along Price Drive entering the site. Note: Price Drive is proposed to be reconstructed as part of this overall development to become a three-lane section (one lane in each direction with a center two-way left-turn lane (TWLTL)), tying into the existing three-lane section to the south.
- Price Drive at Driveway D (Intersection 9)
  - On the site, construct a full-movement driveway with one (1) ingress lane entering the site, and one egress lane exiting the site.
  - Provide a northbound left-turn lane along Price Drive entering the site. Note: Price Drive is proposed to be reconstructed as part of this overall development to become a three-lane section (one lane in each direction with a center two-way left-turn lane (TWLTL)), tying into the existing three-lane section to the south.
- Price Drive at Driveway E (Intersection 10)
  - On the site, construct a full-movement driveway with one (1) ingress lane entering the site, and one egress lane exiting the site.
  - Provide a northbound left-turn lane along Price Drive entering the site. Note: Price Drive is proposed to be reconstructed as part of this overall development to become a three-lane section (one lane in each direction with a center two-way left-turn lane (TWLTL)), tying into the existing three-lane section to the south.

### Bill Gardner Parkway at I-75 Southbound Ramps (Intersection 3)

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

Overall LOS Standard: D/E Approach LOS Standard: D/E							I-75 Southbound Ramps			Bill Gardner Parkway			Bill Gardner Parkway		
				Northbound			Southbound			Eastbound			Westbound		
				L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (23.2)												
		Approach LOS				D (35.3)			C (22.2)			B (17.2)			
		Storage				450		550			150	200			
		50th Queue				151	153	19		193	0	90	112		
		95th Queue				295	300	87		262	39	155	154		
	PM	Overall LOS	D (53.1)												
		Approach LOS				D (49.8)			D (50.0)			E (60.0)			
		Storage				450		550				200			
		50th Queue				490	490	5		323		213	144		
		95th Queue				721	721	55		453		319	188		
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (23.2)												
		Approach LOS				D (35.3)			C (22.7)			B (16.6)			
		Storage				450		550				200			
		50th Queue				151	153	47		200		90	119		
		95th Queue				295	300	144		271		155	163		
	PM	Overall LOS	E (59.6)												
		Approach LOS				D (54.9)			D (51.6)			E (73.2)			
		Storage				450		550				200			
		50th Queue				578	578	16		406		261	172		
		95th Queue				822	822	77		535		373	219		

### Bill Gardner Parkway at I-75 Northbound Ramps (Intersection 4)

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

Overall LOS Standard: D Approach LOS Standard: D/E			I-75 Northbound Ramps						Bill Gardner Parkway			Bill Gardner Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (35.7)											
		Approach LOS	E (70.4)						C (34.8)			C (29.1)		
		Storage			100				100					
		50th Queue	200	103	43				174	205			720	974
		95th Queue	372	207	132				362	247			1,056	1,245
	PM	Overall LOS	C (24.6)											
		Approach LOS	E (65.7)						B (18.4)			B (19.5)		
		Storage			100				100					
		50th Queue	106	156	143				157	510			782	111
		95th Queue	169	259	235				367	719			1,118	252
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (42.1)											
		Approach LOS	E (68.9)						D (39.6)			D (38.2)		
		Storage			100				100					
		50th Queue	206	129	54				259	219			808	992
		95th Queue	373	249	146				451	264			1,130	1,262
	PM	Overall LOS	C (30.1)											
		Approach LOS	E (65.8)						C (28.1)			C (20.7)		
		Storage			100				100					
		50th Queue	109	196	140				281	614			788	113
		95th Queue	184	346	244				457	731			1,126	254

### Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard (Intersection 5)

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

Overall LOS Standard: D Approach LOS Standard: D/E			Tanger Boulevard			Market Place Drive			Bill Gardner Parkway			Bill Gardner Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (53.9)											
		Approach LOS	E (60.6)			E (77.2)			D (50.7)			D (50.6)		
		Storage				200			150			150		
		50th Queue	238	84		57	59	354	376	356	9	13	848	0
		95th Queue	283	137		111	114	617	583	443	62	31	988	0
	PM	Overall LOS	D (53.0)											
		Approach LOS	E (72.8)			E (70.5)			D (40.0)			D (53.9)		
		Storage				200			150			150		
		50th Queue	175	200		159	173	129	442	414	22	42	330	0
		95th Queue	234	356		244	261	371	664	501	100	73	455	0
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (54.6)											
		Approach LOS	E (60.6)			E (77.2)			D (53.6)			D (49.6)		
		Storage				200			150			150		
		50th Queue	238	84		57	58	363	385	363	8	13	865	0
		95th Queue	282	137		110	113	626	592	450	62	31	1,004	0
	PM	Overall LOS	D (53.5)											
		Approach LOS	E (63.5)			E (72.2)			D (50.4)			D (42.6)		
		Storage				200			150			150		
		50th Queue	168	190		160	174	305	513	440	34	45	301	0
		95th Queue	223	287		246	263	545	735	532	124	78	400	0

### Impacted Queue Lengths Exceeding Storage

Intersection	Movement	Storage Length	Projected Build Queue Length (AM/PM)	Recommendation
3. Bill Gardner Parkway at I-75 Northbound Ramps	EBL*	100	216/258 (50 <sup>th</sup> ) 315/457 (95 <sup>th</sup> )	No-Build (System Improvement): Consider extending the eastbound left-turn lane storage.

\*Exceeds available storage in No-Build 2027 conditions.

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 *Locust Grove Phase III Distribution Center* development located in the City of Locust Grove, Henry County, Georgia. The approximate 100.92-acre site is located north of the intersection of Bill Gardner Parkway at Price Drive/Strong Rock Parkway. The project site is currently zoned M1 (Light Industrial), the whole site went under rezoning as part of the *Locust Grove Phase II Distribution Center* DRI #2699. The local trigger for the *Locust Grove Phase III Distribution Center* DRI #3805 development is the filing of the land disturbance or roadway construction permit (extension of Price Drive). **Figure 1** provides a location map of the project site. **Figure 2** provides an aerial view of the project site and surrounding area.

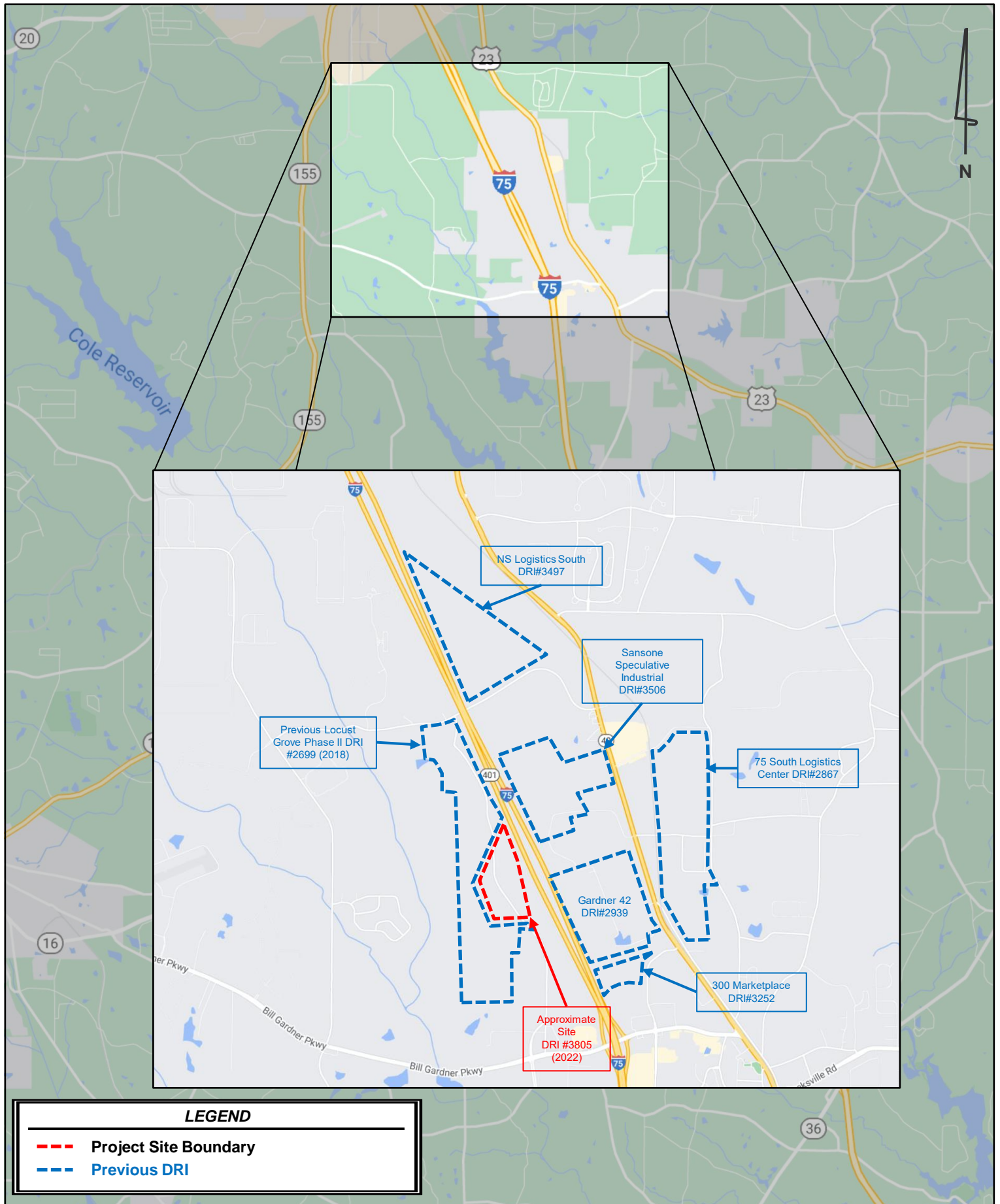
The site is currently undeveloped. The proposed development will consist of the following land uses and densities contained in **Table 2**. The project is expected to be completed by 2027 (approximately 5 years).

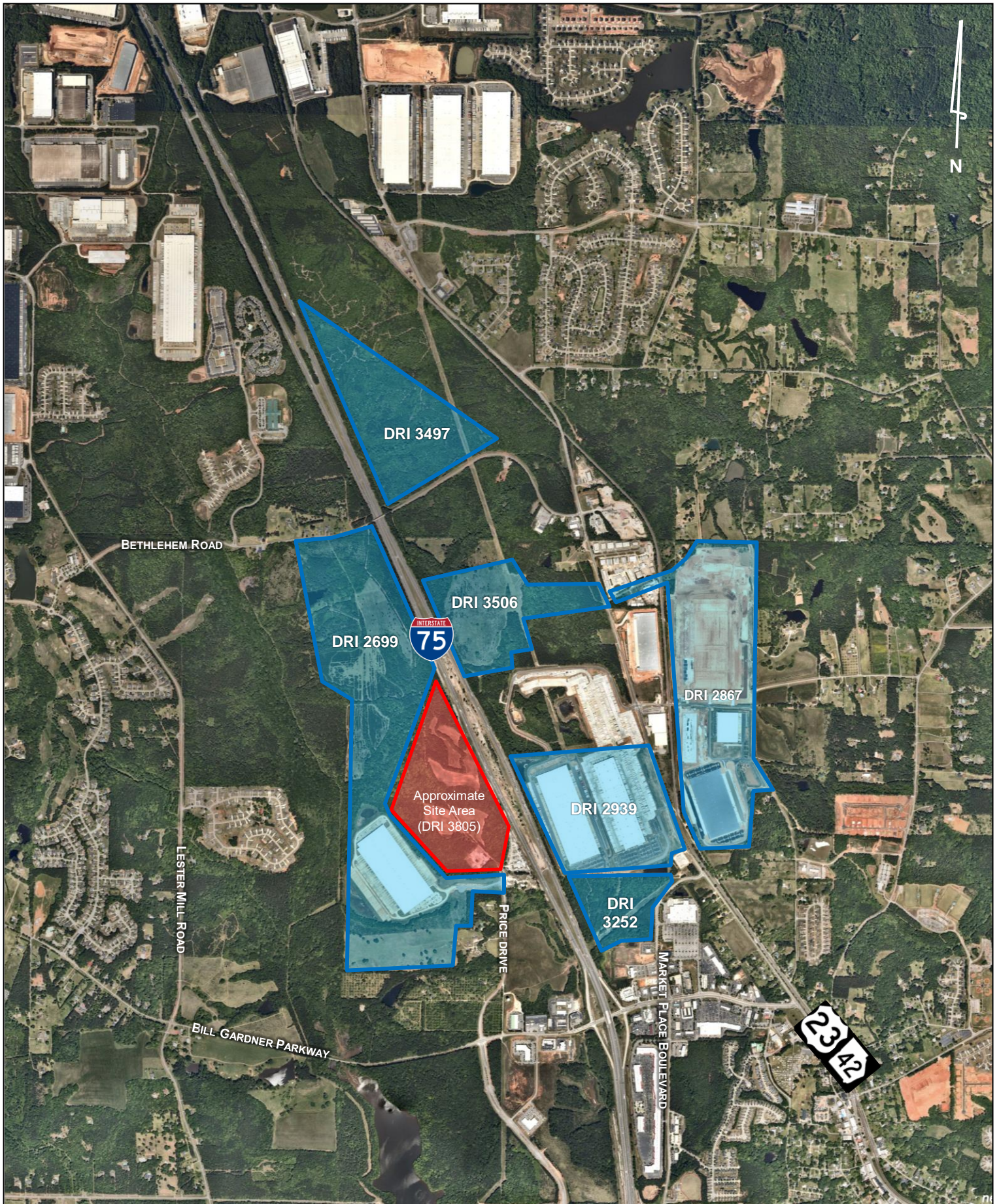
Table 2: Proposed Land Use and Density	
Land Use	Proposed
Warehousing	962,220 SF

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 September 06, 2022 by the City of Locust Grove. 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 October 11, 2022.

The site was previously reviewed as the *Locust Grove Phase II DRI #2699* in March 2018. The project contemplated a 271-acre industrial development. At that time, the project went through the DRI review with GRTA/ARC. The ARC Final Report was issued on September 4, 2018. The proposed *Locust Grove Phase III Distribution Center DRI #3805* industrial development is located on adjacent to the original site (to the east).





## 1.2 Site Access

As currently envisioned, the proposed development will be accessible via five (5) new access points:

1. **Driveway A** – a proposed, full-movement driveway located along the existing three-lane (with center TWLTL) Internal Roadway that currently serves a warehouse building constructed as part of Locust Grove Phase I. Driveway A will provide vehicular access to Building B in the development. Internal, private roadways throughout the site provide access to the building and parking facilities.
2. **Driveway B** – a proposed, full-movement driveway located along Price Drive approximately 300 feet north of the existing Internal Roadway that will operate under side-street stop control. Driveway B will provide vehicular access to Building B in the development. Internal, private roadways throughout the site provide access to the building and parking facilities.
3. **Driveway C** – a proposed, full-movement driveway located along Price Drive approximately 340 feet north of Driveway B that will operate under side-street stop control. Driveway C will provide vehicular access to Building B in the development. Internal, private roadways throughout the site provide access to the building and parking facilities.
4. **Driveway D** – a proposed, full-movement driveway located along Price Drive approximately 275 feet north of Driveway C that will operate under side-street stop control. Driveway D will provide vehicular access to Building C in the development. Internal, private roadways throughout the site provide access to the building and parking facilities.
5. **Driveway E** – a proposed, full-movement driveway located along Price Drive approximately 575 feet north of Driveway D that will operate under side-street stop control. Driveway E will provide vehicular access to Building C 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	1 per employee on maximum shift	N/A	924

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

## 1.5 Alternative Transportation Facilities

There are sidewalks for pedestrian along Bill Gardner Parkway, Strong Rock Parkway, and Market Place Boulevard. However, there are no dedicated pedestrian or bicycle facilities along the site frontage, Price Drive, I-75 Ramps, or Tanger Boulevard. 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 *Locust Grove Phase III Distribution Center* development does not qualify for a “Dense Urban Environment Enhanced Focus Area” review, due to its location in the City of Locust Grove.

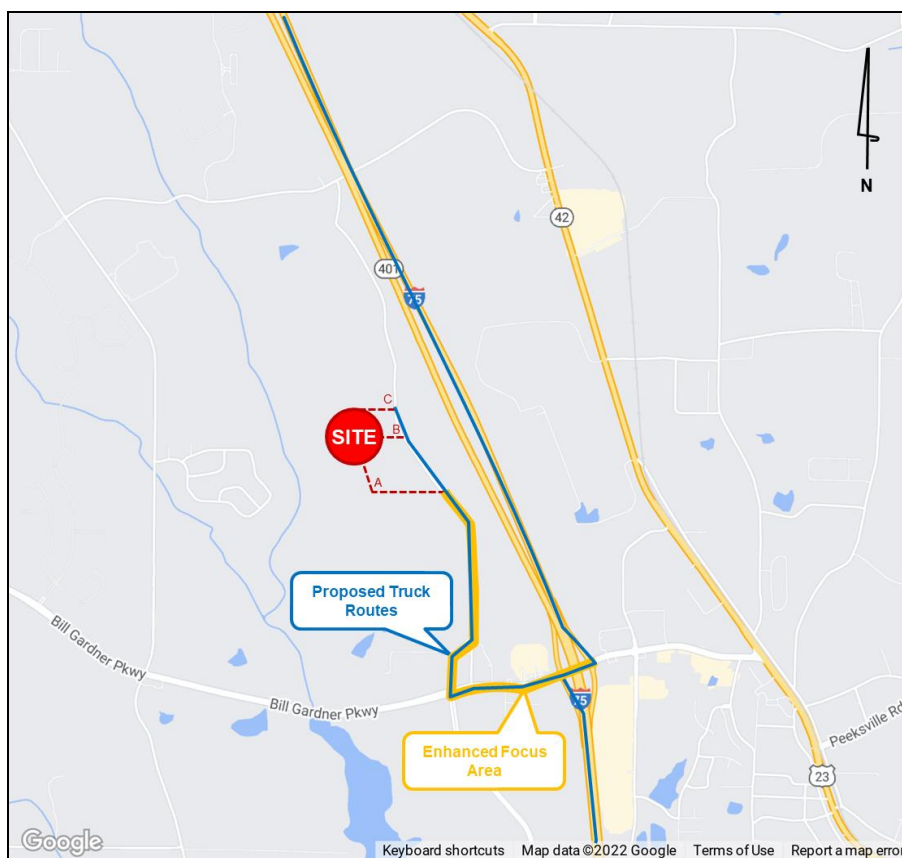
## 1.7 Heavy Vehicle Enhanced Focus Area

Per Section 3.2.4.1 of the GRTA Development of Regional Impact Review Procedures, the *Locust Grove Phase III Distribution Center* 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):

- Price Drive from Bill Gardner Parkway to Site Driveway A
- Bill Gardner Parkway from Price Drive to I-75 Southbound Ramps



**Figure 3: Heavy Vehicle Routing**

### 1.7.2 Pavement Condition

A site visit was conducted on November 29, 2022. 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. Minor pavement distress/cracking was observed in three (3) locations, as outlined in **Table 4**. **Figure 4** shows the transition from pavement to gravel, along northbound Price Drive. **Figure 5** shows the minor pavement cracking along northbound/southbound Price Drive, at Site Driveway A. **Figure 6** shows the off-road tire tracks northbound Price Drive, originating from a westbound right-turn movement.

Table 4: Pavement Condition Observations			
Number	Roadway	Location	Observed Distress
1	Price Drive	Site Driveway A (looking north)	Gravel
2	Price Drive	Site Driveway A (looking south)	Minor Pavement Cracking
3	Price Drive	Bill Gardner Parkway	Tire Tracks off road



Figure 4: Northbound Price Drive Gravel Road



**Figure 5: Southbound Price Drive Minor Pavement Cracking**



**Figure 6: Westbound Right-Turn (onto Price Drive) Tire Tracks**

### 1.7.3 Roadway Width

The lane widths for the Enhanced Focus Area are shown in **Table 5**. The City of Locust Grove roadway width standards were taken from the [City of Locust Grove Municipal Code](#) document, which notes that “all grading, subgrade, base and pavement for industrial commercial and arterial street construction shall be in accordance with” the following:

- Curbs/shoulder construction
  - 24-inch × six-inch concrete "L" back curb; 18-inch gutter; six-inch high; six-inch curb width
- Street Surface width
  - 30 feet width with curb and gutter; back of curb.
  - 30 feet width with curb and gutter, back of curb.

It is important to note that the recently completed Price Drive was constructed without curb and gutter. It is recommended to coordinate the design of the proposed Price Drive extension with the City of Locust Grove to provide consistency with the existing typical section that does not include curb and gutter.

Approximate lane width dimensions were measured on NearMap.

Table 5: Roadway Widths		
Roadway	Lane Width	Lane Width Standard (City of Locust Grove)
Price Drive	12.5 ft	13 ft desirable
Bill Gardner Parkway	13 ft	13 ft desirable

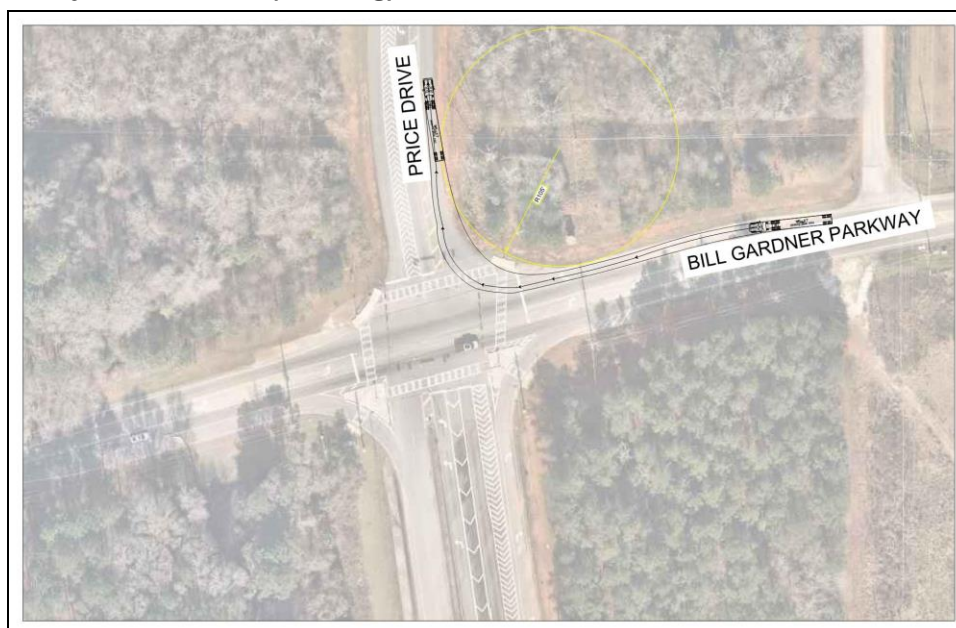
### 1.7.4 Corner Radii

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

- Bill Gardner Parkway at Price Drive (Intersection 2)

Note: The *GDOT Regulations for Driveway and Encroachment Control* outlines minimum corner radii for trucks as 75 feet.

#### **Bill Gardner Parkway at Price Drive (Entering)**

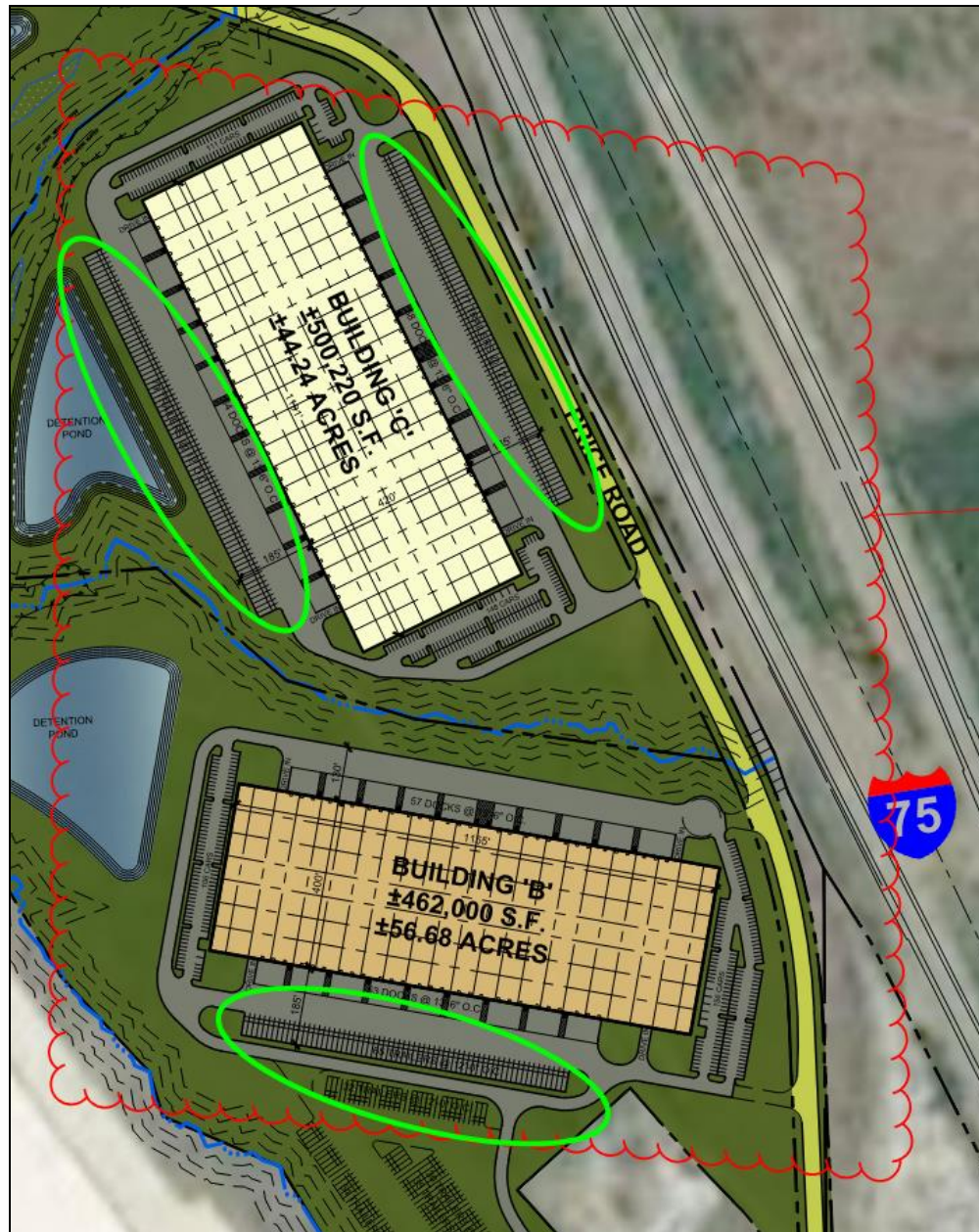


**Figure 7: Bill Gardner Parkway at Price Drive – Westbound Right (Turn Maneuver)**

**Figure 7** outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making a westbound right-turn from Bill Gardner Parkway onto Price Drive. The existing curb radius is approximately 75 feet. The WB-67 truck slightly runs off the roadway on the east side of Price Drive, which aligns with the tire tracks in **Figure 6**.

### 1.7.5 Heavy Vehicle Staging

The site plan includes a designated truck court to accommodate heavy vehicle queueing, staging, and overflow. **Figure 8** indicates the designated truck staging/overflow areas on the site plan.



**Figure 8: Heavy Vehicle Staging**

### 1.7.6 Pedestrian Safety

There are no sidewalk requirements for non-residential areas, per the City of Locust Grove development ordinances. Therefore, sidewalks are not required along opposing road frontages. Sidewalks will also be provided adjacent to the buildings and will connect both accessible and non-accessible spaces to the building entrances.

## 2.0 TRAFFIC ANALYSES, METHODOLOGY AND ASSUMPTIONS

### 2.1 Study Network Determination

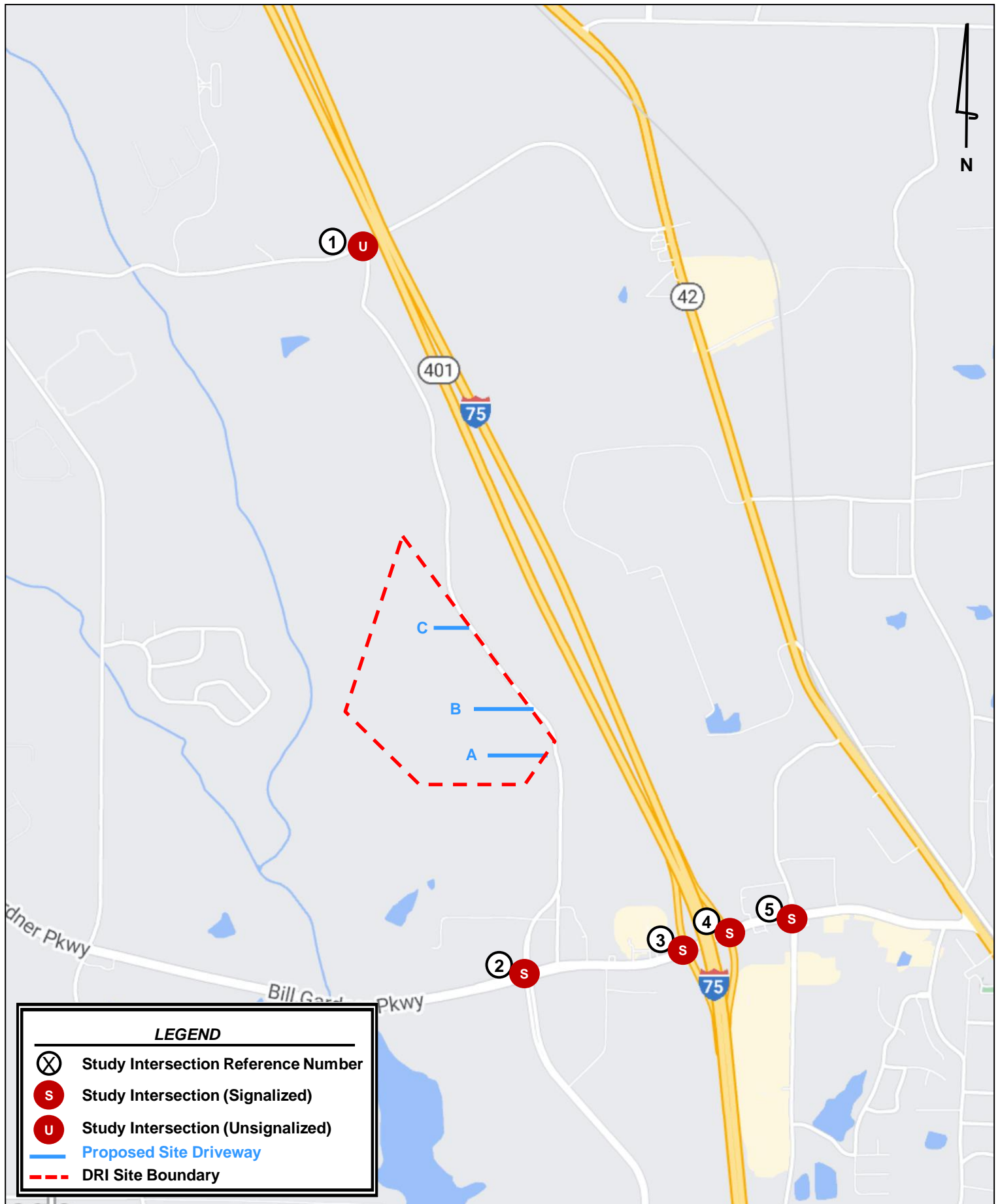
The study area was determined at the methodology meeting with input from GRTA, ARC, and other local agency stakeholders. The study includes the following five (5) off-site intersections described in **Table 6** and shown visually in **Figure 9**.

<b>Table 6: Intersection Control Summary</b>		
<b>Intersection</b>	<b>Jurisdiction</b>	<b>Control</b>
1. Bethlehem Road at Price Drive	Henry County	Unsignalized
2. Bill Gardner Parkway at Price Drive/Strong Rock Parkway	Henry County	Signalized
3. Bill Gardner Parkway at I-75 Southbound Ramps	GDOT/Henry County	Signalized
4. Bill Gardner Parkway at I-75 Northbound Ramps	GDOT/Henry County	Signalized
5. Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard	Henry County	Signalized

### 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).

<b>Table 7: Roadway Classifications</b>				
<b>Roadway</b>	<b>Lanes</b>	<b>Posted Speed Limit</b>	<b>AADT</b>	<b>GDOT Functional Classification</b>
Bethlehem Road	2	45 MPH	3,400	Local
<b>Price Drive</b>	<b>2</b>	<b>35 MPH</b>	-	<b>Local</b>
Bill Gardner Parkway	4	45 MPH	23,700	Minor Arterial
Strong Rock Parkway	4	45 MPH	-	Local
I-75 Southbound Ramps	3	45 MPH	11,000	Interstate
I-75 Northbound Ramps	3	45 MPH	4,390	Interstate
Market Place Boulevard	2	35 MPH	-	Local
Tanger Boulevard	4	25 MPH	-	Local



## 2.3 Traffic Data Collection and Calibration

Traffic counts were collected at all five (5) existing study intersections on Tuesday, October 25, 2022. 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. Bethlehem Road at Price Drive	10/2022	7:15 AM – 8:15 AM	4:30 PM – 5:30 PM
2. Bill Gardner Parkway at Price Drive/Strong Rock Parkway	10/2022	7:00 AM – 8:00 AM	4:00 PM – 5:00 PM
3. Bill Gardner Parkway at I-75 Southbound Ramps	10/2022	7:15 AM – 8:15 AM	4:45 PM – 5:45 PM
4. Bill Gardner Parkway at I-75 Northbound Ramps	10/2022	7:15 AM – 8:15 AM	4:45 PM – 5:45 PM
5. Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard	10/2022	7:15 AM – 8:15 AM	4:30 PM – 5:30 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 *Locust Grove Phase III Distribution Center* 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 2022 to 2027 (5 years) was used for all roadways.

The Projected 2027 No-Build conditions represent the Estimated 2027 traffic volumes grown for five (5) years at 2.0% per year throughout the study network.

The Projected 2027 Build conditions represent the project trips generated by the *Locust Grove Phase III Distribution Center* development (discussed in Section 3.0 and 4.0) added to the Projected 2027 No-Build Conditions.

## 2.5 Programmed and Planned Projects

Programmed and planned projects near the project site were researched to account for any improvements or modifications within the study network before or by the build-out year of the development. The programmed and planned projects were discussed in the methodology meeting with GRTA, ARC, and other local stakeholders. Ten (10) projects are currently programmed/planned by GDOT, Henry County, or the City of Locust Grove in the vicinity of the project site.

The following projects shown in **Table 9** is programmed 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 155 Widening	I-75 to Hampton-Locust Grove Road/Bill Gardner Parkway	GDOT	<a href="#">0015284</a>	<a href="#">HE-189</a>	2026	2028	2030
I-75/Bethlehem Road Interchange	Intersection of I-75 and Bethlehem Road	GDOT	<a href="#">0017182</a>	<a href="#">AR-955</a>	2022	2023	2024
CR-650/Bill Gardner Parkway Widening	SR 155 to I-75	Henry County	<a href="#">0000562</a>	<a href="#">HE-126B</a>	2030	2052	2052
I-75 Managed Lanes	I-475 to SR 155	GDOT	<a href="#">0014203</a>	<a href="#">AR-318</a>	2017	2026	2027
SR 42 – Bridge Replacement Scoping Only	MLK JR Boulevard to Marketplace Boulevard	GDOT	<a href="#">0017770</a>	-	2021	-	-
Operational Imp on Bill Gardner Parkway	Eagles Brook Drive to Price Drive	GDOT	<a href="#">S015788</a>	-	2023	-	-
SR 42 at NS #718418R Bridge Replacement	Harris Drive to Bethlehem Road	GDOT	<a href="#">0013995</a>	-	2017	2021	2025
SR 42 / US 23 Widening	From Bill Gardner Pkwy to Peeksville Rd	GDOT	<a href="#">0015823</a>	<a href="#">HE-202</a>	2021	2023	2023
SR 155 Widening	From I-75 S to SR 81	GDOT	<a href="#">0007856</a>	<a href="#">HE-113</a>	2016	2024	2024
SR 42 Traffic Signal Installation	@Harrison Road @ Market Place Boulevard	Locust Grove	-	-	-	-	2022
SR 155 Widening	CR 508/North 2 <sup>nd</sup> Street to Henry County Line	GDOT	<a href="#">0007870</a>	-	2051	2051	2051

*\*Project information was obtained from GeoPI (GDOT), the Georgia STIP, the Atlanta Region's Plan (ARC), and the Henry County TSP/OST list.*

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 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, 11<sup>th</sup> Edition, 2021*, using equations where available. Reductions to gross trips including mixed-use reductions, alternative transportation mode, 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 *Locust Grove Phase III Distribution Center* development.

Table 10: Trip Generation								
Land Use	Density	Daily Traffic			AM Peak Hour		PM Peak Hour	
		Total	Enter	Exit	Enter	Exit	Enter	Exit
150 – Warehousing	962,220 SF	1,558	779	779	108	32	40	102
<b>Gross Project Trips</b>		<b>1,558</b>	<b>779</b>	<b>779</b>	<b>108</b>	<b>32</b>	<b>40</b>	<b>102</b>
<i>Mixed-Use Reductions</i>		0	0	0	0	0	0	0
<i>Alternative Mode Reductions</i>		0	0	0	0	0	0	0
<i>Pass-By Reductions</i>		0	0	0	0	0	0	0
<b>New Trips</b>		<b>1,558</b>	<b>779</b>	<b>779</b>	<b>108</b>	<b>32</b>	<b>40</b>	<b>102</b>
<i>Employee (Car Trips)</i>		1,030	515	515	98	23	25	88
<i>Heavy Vehicle (Trucks)</i>		528	264	264	10	9	15	14

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 10**. The anticipated distribution and assignment of the trips throughout the study roadway network is shown for employee (car) trips in **Figure 11**. 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 12**.

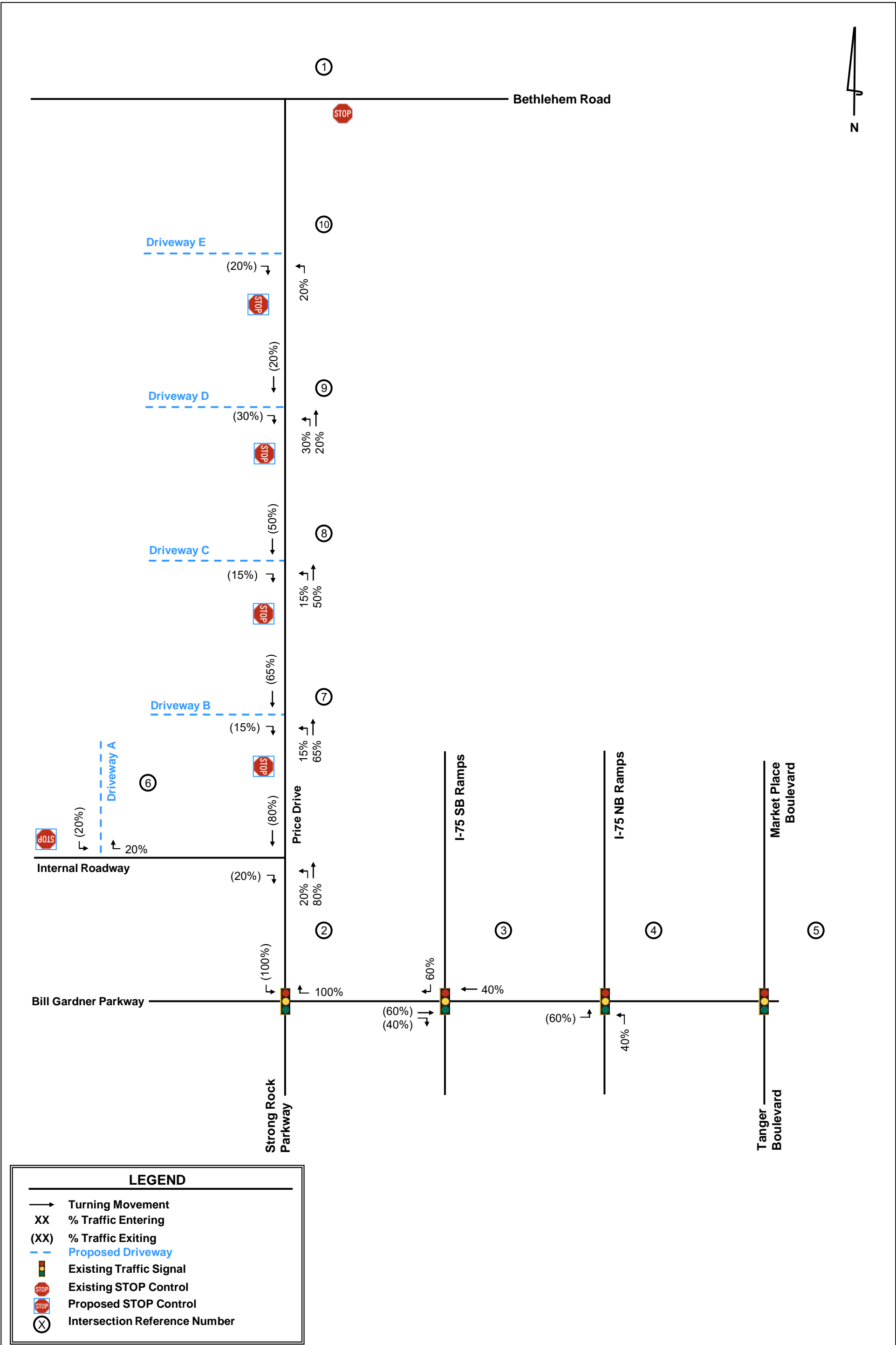
Detailed intersection volume worksheets are provided in **Appendix C**.

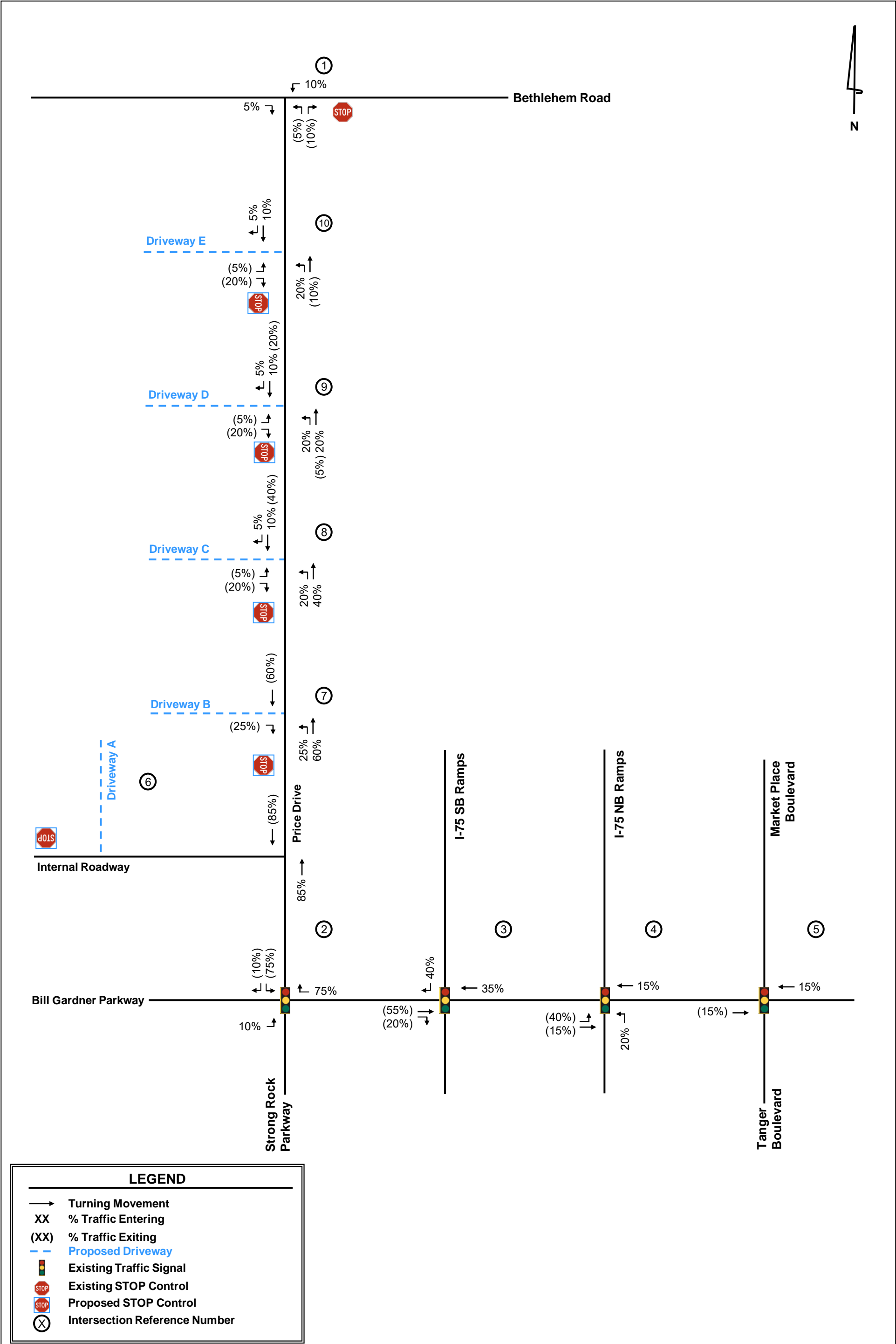
## 5.0 TRAFFIC ANALYSIS

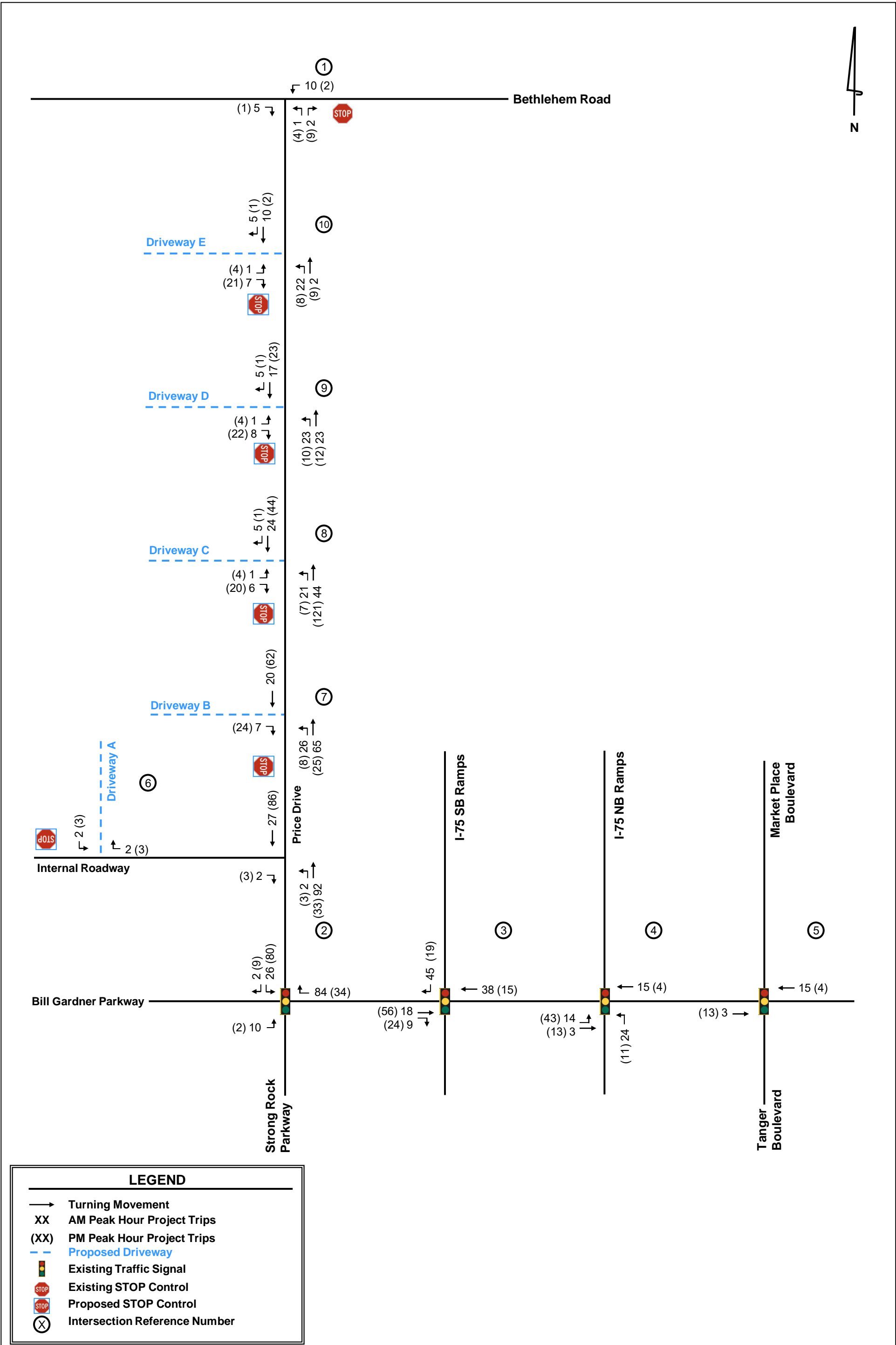
Capacity analyses were performed using *Synchro 11* for the AM and PM peak hours under the Existing 2022 conditions, Projected 2027 No-Build conditions, and Projected 2027 Build conditions. The capacity analyses were performed using methodologies from the *Highway Capacity Manual (HCM)*, 6<sup>th</sup> 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 13** for Existing 2022 conditions, **Figure 14** for Projected 2027 No-Build conditions, and **Figure 15** for Projected 2027 Build conditions.

**Sections 5.1 – 5.6** provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.







### 5.1 Bethlehem Road at Price Drive (Intersection 1)

Overall LOS Standard: D  
Approach LOS Standard: D

Overall LOS Standard: D Approach LOS Standard: D			Price Drive						Bethlehem Road			Bethlehem Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R					T	R	L	T	
EXISTING 2022 (TWSC)	AM	Overall LOS	(0.2)											
		Approach LOS	A (0.0)						A (0.0)			A (7.7)		
		Storage												
		50th Queue												
		95th Queue									0			
	PM	Overall LOS	(0.1)											
		Approach LOS	B (10.1)						A (0.0)			A (7.9)		
		Storage												
		50th Queue												
		95th Queue		0							0			
PROJECTED 2027 NO-BUILD (TWSC)	AM	Overall LOS	(1.1)											
		Approach LOS	B (13.4)						A (0.0)			A (9.0)		
		Storage			150									
		50th Queue												
		95th Queue	3		3						5			
	PM	Overall LOS	(1.1)											
		Approach LOS	B (14.1)						A (0.0)			A (9.3)		
		Storage			150									
		50th Queue												
		95th Queue	3		5						3			
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(1.3)											
		Approach LOS	B (13.4)						A (0.0)			A (8.9)		
		Storage			150									
		50th Queue												
		95th Queue	3		3						5			
	PM	Overall LOS	(1.3)											
		Approach LOS	B (13.7)						A (0.0)			A (9.2)		
		Storage			150									
		50th Queue												
		95th Queue	5		8						3			

The unsignalized intersection of Bethlehem Road at Price Drive (Intersection 1) is projected to operate at an acceptable overall LOS under the Existing 2022, No-Build 2027, and Build 2027 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

Note: Following the proposed Build conditions of the previous DRI #2699, the northbound approach was modeled as two (2) lanes under all future scenarios.

## 5.2 Bill Gardner Parkway at Price Drive/Strong Rock Parkway (Intersection 2)

Overall LOS Standard: D  
Approach LOS Standard: D

		Strong Rock Parkway			Price Drive			Bill Gardner Parkway			Bill Gardner Parkway		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	B (19.5)										
		Approach LOS	C (24.7)			C (26.5)			C (24.4)			B (15.3)	
		Storage	400			450			250		150	250	150
		50th Queue	28		0	3	3		1	193	0	79	68
		95th Queue	63		0	12	16		5	301	18	196	164
	PM	Overall LOS	B (17.6)										
		Approach LOS	C (20.5)			C (21.3)			C (21.5)			B (12.9)	
		Storage	400			450			250		150	250	150
		50th Queue	13		0	4	0		0	192	0	8	100
		95th Queue	34		0	15	0		2	357	0	21	245
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	C (26.4)										
		Approach LOS	C (32.7)			C (34.4)			C (31.2)			C (21.7)	
		Storage	400			450			250		150	250	150
		50th Queue	31		0	55	4		8	277	0	203	154
		95th Queue	64		0	119	24		21	468	12	376	236
	PM	Overall LOS	D (54.8)										
		Approach LOS	C (34.6)			F (185.7)			D (35.1)			C (21.5)	
		Storage	400			450			250		150	250	150
		50th Queue	19		0	142	0		3	318	0	14	185
		95th Queue	43		0	292	0		11	514	0	31	361
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	C (27.4)										
		Approach LOS	C (32.9)			D (49.3)			C (32.6)			C (20.4)	
		Storage	400			450			250		150	250	150
		50th Queue	32		0	72	4		9	272	16	169	147
		95th Queue	67		0	163	26		23	465	64	339	236
	PM	Overall LOS	D (54.9)										
		Approach LOS	C (39.3)			F (124.7)			D (46.9)			C (26.1)	
		Storage	400			450			250		150	250	150
		50th Queue	18		0	202	0		4	366	0	17	222
		95th Queue	41		0	379	0		14	587	0	37	413

The signalized intersection of Bill Gardner Parkway at Price Drive/strong Rock Parkway (Intersection 2) is projected to operate at an acceptable overall LOS under the Existing 2022, No-Build 2027, and Build 2027 conditions. Under future conditions the southbound approach is projected to operate at LOS F during the PM peak hour.

Per GRTA's DRI guidelines, an improvement should be considered if either the overall intersection, or an individual approach operates at a failing LOS. However, it should be noted that this analysis assumes the new interchange at Bethlehem Road (PI 0017182) is not constructed. Once constructed, the new interchange is likely to divert employee (car) and heavy vehicle (truck) traffic from Intersection 2 north towards Bethlehem Road, which is anticipated to improve the southbound approach. Additionally, the intersection operates at an overall acceptable LOS, with only one approach failing during the PM peak hour. Signal timing improvements such as dual-serving the southbound left-turn could be considered, Kimley-Horn recommends further monitoring of this intersection.

In order to improve the intersection under 2027 No-Build conditions, Kimley-Horn recommends the following:

- Bill Gardner Parkway at Price Drive (Intersection 2)
  - Improve the westbound right-turn to northbound radius to accommodate heavy vehicles.

### 5.3 Bill Gardner Parkway at I-75 Southbound Ramps (Intersection 3)

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

Overall LOS Standard: D/E Approach LOS Standard: D/E							I-75 Southbound Ramps			Bill Gardner Parkway			Bill Gardner Parkway		
				Northbound			Southbound			Eastbound			Westbound		
				L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	C (23.1)												
		Approach LOS				D (44.3)			C (21.4)			A (14.5)			
		Storage				450		550				200			
		50th Queue				162	162	0		243		115	295		
		95th Queue				247	247	45		334		221	477		
	PM	Overall LOS	E (58.4)												
		Approach LOS				E (67.8)			D (40.7)			E (63.6)			
		Storage				450		550				200			
		50th Queue				563	563	0		368		210	339		
		95th Queue				661	661	48		437		565	508		
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	C (34.7)												
		Approach LOS				D (52.4)			D (35.2)			C (24.3)			
		Storage				450		550				200			
		50th Queue				272	276	15		453		249	655		
		95th Queue				423	433	94		552		260	685		
	PM	Overall LOS	F (152.0)												
		Approach LOS				E (68.5)			E (59.3)			F (339.2)			
		Storage				450		550				200			
		50th Queue				764	764	0		676		901	571		
		95th Queue				1,053	1,053	59		833		1,143	736		
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	D (36.2)												
		Approach LOS				D (52.4)			D (38.3)			C (25.0)			
		Storage				450		550				200			
		50th Queue				272	276	66		474		252	683		
		95th Queue				423	433	171		611		253	695		
	PM	Overall LOS	F (172.2)												
		Approach LOS				E (68.1)			E (68.4)			F (400.5)			
		Storage				450		550				200			
		50th Queue				764	764	15		776		947	593		
		95th Queue				1,053	1,053	83		940		1,189	763		

The intersection of Bill Gardner Parkway at I-75 Southbound Ramps (Intersection 3) is projected to operate at an acceptable overall LOS under Estimated 2022 conditions during the AM peak hour and LOS E during the PM peak hour. Under No-Build 2027 and Build 2027 conditions, the intersection is projected to operate at LOS F during the PM peak hour. There are several approach deficiencies.

Per GRTA's DRI guidelines, an improvement should be considered if either the overall intersection, or an individual approach operates at a failing LOS. In order to improve the approach LOS under the No-Build 2027 and Build 2027 conditions, Kimley-Horn considered the following system improvements (shown in red on **Figure 14** and **Figure 15**):

- Bill Gardner Parkway at I-75 Southbound Ramps (Intersection 3)
  - Install an eastbound right-turn lane along Bill Gardner Parkway.
    - The eastbound approach would consist of two (2) through lanes and one (1) exclusive right-turn lane along Bill Gardner Parkway.
  - Install an additional westbound left-turn lane along Bill Gardner Parkway.
    - The westbound approach would consist of two (2) exclusive left-turn lanes and one (1) westbound through lane.
  - Install an additional receiving lane along the I-75 Southbound Entrance Ramp.

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

			I-75 Southbound Ramps			Bill Gardner Parkway Eastbound			Bill Gardner Parkway Westbound		
			Northbound			Southbound					
			L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (23.2)								
		Approach LOS				D (35.3)			C (22.2)		
		Storage				450		550		150	200
		50th Queue				151	153	19		193	0
		95th Queue				295	300	87		262	39
	PM	Overall LOS	D (53.1)								
		Approach LOS				D (49.8)			D (50.0)		
		Storage				450		550			200
		50th Queue				490	490	5		323	
		95th Queue				721	721	55		453	
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	C (23.2)								
		Approach LOS				D (35.3)			C (22.7)		
		Storage				450		550			200
		50th Queue				151	153	47		200	
		95th Queue				295	300	144		271	
	PM	Overall LOS	E (59.6)								
		Approach LOS				D (54.9)			D (51.6)		
		Storage				450		550			200
		50th Queue				578	578	16		406	
		95th Queue				822	822	77		535	

With the noted system improvements, the intersection is projected to operate at an acceptable overall LOS and each approach is projected to operate acceptably LOS under No-Build and Build 2027 conditions.

It should be noted that this analysis does not consider the impact the Bethlehem Road interchange (PI 0017182) will have on future traffic. Once constructed, the new interchange is likely to divert traffic from this interchange north towards Bethlehem Road, which will likely alleviate congestion and improve delay (overall and per approach). For this reason, Kimley-Horn recommends monitoring this intersection and considering the above improvements if a considerable delay in the Bethlehem Road interchange construction occurs.

## 5.4 Bill Gardner Parkway at I-75 Northbound Ramps (Intersection 4)

Overall LOS Standard: D

Approach LOS Standard:

D/E

		I-75 Northbound Ramps						Bill Gardner Parkway			Bill Gardner Parkway		
		Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	B (11.6)										
		Approach LOS	E (71.4)						A (4.7)			A (9.9)	
		Storage			100				100				
		50th Queue	127	0	0				6	1		274	144
		95th Queue	192	0	0				9	1		337	165
	PM	Overall LOS	B (11.6)										
		Approach LOS	E (66.4)						A (4.4)			A (8.1)	
		Storage			100				100				
		50th Queue	67	92	91				12	218		126	1
		95th Queue	112	168	168				32	372		265	35
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	E (56.3)										
		Approach LOS	F (126.1)						D (46.5)			D (49.3)	
		Storage			100				100				
		50th Queue	268	26	26				183	1		440	422
		95th Queue	450	104	104				291	1		394	451
	PM	Overall LOS	C (22.3)										
		Approach LOS	E (65.1)						B (15.5)			B (17.4)	
		Storage			100				100				
		50th Queue	109	180	138				181	558		726	56
		95th Queue	176	296	235				367	719		775	84
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	E (62.5)										
		Approach LOS	F (163.8)						D (54.9)			D (45.9)	
		Storage			100				100				
		50th Queue	321	24	24				216	1		408	995
		95th Queue	506	103	103				315	1		394	457
	PM	Overall LOS	C (25.9)										
		Approach LOS	E (66.2)						C (22.1)			B (17.4)	
		Storage			100				100				
		50th Queue	119	181	138				258	568		731	56
		95th Queue	191	297	235				457	731		778	84

The intersection of Bill Gardner Parkway at I-75 Northbound Ramps (Intersection 4) is projected to operate at an overall acceptable LOS under Estimated 2022 conditions during the AM and PM peak hours. Under No-Build 2027 and Build 2027 conditions, the intersection is projected to operate at LOS E during the AM peak hour. Under Existing 2022 conditions, the northbound approach operates at LOS E during the AM and PM peak hours. Under No-Build 2027 and Build 2027 the northbound approach is projected to operate at LOS F during the AM peak hour.

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 overall LOS under the No-Build 2027 and Build 2027 conditions, Kimley-Horn considered the following system improvements (shown in red on **Figure 14** and **Figure 15**):

- Bill Gardner Parkway at I-75 Northbound Ramps (Intersection 4)
  - Restripe the northbound approach creating one (1) exclusive left-turn lane, one (1) shared left-turn/right-turn lane, and one (1) exclusive right-turn lane.
  - Install an additional westbound lane along Bill Gardner Parkway (Widen Bill Gardner Parkway).
    - Westbound Bill Gardner Parkway would consist of two (2) lanes to accommodate the dual northbound left-turn lanes.

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

Overall LOS Standard: D Approach LOS Standard: D/E			I-75 Northbound Ramps						Bill Gardner Parkway			Bill Gardner Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (35.7)											
		Approach LOS	E (70.4)						C (34.8)			C (29.1)		
		Storage			100				100					
		50th Queue	200	103	43				174	205			720	974
		95th Queue	372	207	132				362	247			1,056	1,245
	PM	Overall LOS	C (24.6)											
		Approach LOS	E (65.7)						B (18.4)			B (19.5)		
		Storage			100				100					
		50th Queue	106	156	143				157	510			782	111
		95th Queue	169	259	235				367	719			1,118	252
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (42.1)											
		Approach LOS	E (68.9)						D (39.6)			D (38.2)		
		Storage			100				100					
		50th Queue	206	129	54				259	219			808	992
		95th Queue	373	249	146				451	264			1,130	1,262
	PM	Overall LOS	C (30.1)											
		Approach LOS	E (65.8)						C (28.1)			C (20.7)		
		Storage			100				100					
		50th Queue	109	196	140				281	614			788	113
		95th Queue	184	346	244				457	731			1,126	254

With the noted system improvements, the intersection is projected to operate at an acceptable overall LOS and each approach is projected to operate acceptably LOS under No-Build and Build 2027 conditions.

It should be noted that this analysis does not consider the impact the Bethlehem Road interchange (PI 0017182) will have on future traffic. Once constructed, the new interchange is likely to divert traffic from this interchange north towards Bethlehem Road, which will likely alleviate congestion and improve delay (overall and per approach). For this reason, Kimley-Horn recommends monitoring this intersection and considering the above improvements if a considerable delay in the Bethlehem Road interchange construction occurs.

### 5.5 Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard (Intersection 5)

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

Overall LOS Standard: D Approach LOS Standard: D/E			Tanger Boulevard			Market Place Boulevard			Bill Gardner Parkway			Bill Gardner Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (SIGNAL)	AM	Overall LOS	D (37.2)											
		Approach LOS	E (64.7)			E (75.1)			B (19.9)			C (27.4)		
		Storage				200			150			150		
		50th Queue	248	245		43	41	137	58	195	29	9	392	
		95th Queue	349	346		88	84	303	88	282	55	23	474	
	PM	Overall LOS	D (41.2)											
		Approach LOS	E (66.5)			E (75.6)			C (25.3)			C (29.3)		
		Storage				200			150			150		
		50th Queue	262	247		146	153	55	119	373	7	42	219	
		95th Queue	362	347		242	249	181	166	386	22	77	300	
PROJECTED 2027 NO-BUILD (SIGNAL)	AM	Overall LOS	F (206.2)											
		Approach LOS	E (66.0)			F (724.3)			F (170.5)			D (40.6)		
		Storage				200			150			150		
		50th Queue	286	290		64	65	740	528	274	7	10	502	
		95th Queue	443	475		117	120	976	731	364	21	26	603	
	PM	Overall LOS	F (112.6)											
		Approach LOS	E (68.9)			F (262.7)			F (93.3)			D (45.1)		
		Storage				200			150			150		
		50th Queue	291	277		174	189	533	591	403	23	49	313	
		95th Queue	438	407		300	324	772	816	543	119	83	389	
PROJECTED 2027 BUILD (SIGNAL)	AM	Overall LOS	F (206.9)											
		Approach LOS	E (66.0)			F (724.3)			F (174.1)			D (41.3)		
		Storage				200			150			150		
		50th Queue	286	290		64	65	741	532	268	7	10	513	
		95th Queue	443	475		117	120	977	738	366	21	26	622	
	PM	Overall LOS	F (112.6)											
		Approach LOS	E (68.9)			F (262.7)			F (93.4)			D (45.3)		
		Storage				200			150			150		
		50th Queue	291	277		174	189	535	594	414	26	49	315	
		95th Queue	438	407		300	324	774	822	554	122	86	392	

The signalized intersection of Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard (Intersection 5) is projected to operate at an acceptable overall LOS under the Existing 2022 conditions. The northbound and southbound approaches operate at LOS E. Under No-Build 2027 and Build 2027 conditions, the intersection is projected to operate overall at LOS F. There are several approach deficiencies under future 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 overall LOS under the No-Build 2027 and Build 2027 conditions, Kimley-Horn considered the following system improvements (shown in red on **Figure 14** and **Figure 15**):

- Bill Gardner Parkway at Market Place Boulevard/Tanger Boulevard (Intersection 5)
  - Install an additional northbound left-turn lane along Tanger Boulevard.
    - The northbound approach would consist of two (2) exclusive left-turn lanes and one shared through/right-turn lane.
  - Install a westbound right-turn lane along Bill Gardner Parkway.
    - The westbound approach would consist of one (1) exclusive left-turn lane, two (2) through lanes, and one (1) exclusive right-turn lane.

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

Overall LOS Standard: D Approach LOS Standard: D/E			Tanger Boulevard			Market Place Drive			Bill Gardner Parkway			Bill Gardner Parkway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (53.9)											
		Approach LOS	E (60.6)			E (77.2)			D (50.7)			D (50.6)		
		Storage				200			150			150		
		50th Queue	238	84		57	59	354	376	356	9	13	848	0
		95th Queue	283	137		111	114	617	583	443	62	31	988	0
	PM	Overall LOS	D (53.0)											
		Approach LOS	E (72.8)			E (70.5)			D (40.0)			D (53.9)		
		Storage				200			150			150		
		50th Queue	175	200		159	173	129	442	414	22	42	330	0
		95th Queue	234	356		244	261	371	664	501	100	73	455	0
PROJECTED 2027 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	D (54.6)											
		Approach LOS	E (60.6)			E (77.2)			D (53.6)			D (49.6)		
		Storage				200			150			150		
		50th Queue	238	84		57	58	363	385	363	8	13	865	0
		95th Queue	282	137		110	113	626	592	450	62	31	1,004	0
	PM	Overall LOS	D (53.5)											
		Approach LOS	E (63.5)			E (72.2)			D (50.4)			D (42.6)		
		Storage				200			150			150		
		50th Queue	168	190		160	174	305	513	440	34	45	301	0
		95th Queue	223	287		246	263	545	735	532	124	78	400	0

With the noted system improvements, the overall intersection and the eastbound approach in both No-Build 2027 and Build 2027 scenarios is projected to operate at an acceptable LOS.

It should be noted that this analysis does not consider the impact the Bethlehem Road interchange will have on future traffic. Once constructed, the new interchange is likely to divert traffic from Bill Gardner Parkway north towards Bethlehem Road, which will likely alleviate congestion and improve delay (overall and per approach). For this reason, Kimley-Horn recommends monitoring this intersection and considering the above improvements if a considerable delay in the Bethlehem Road interchange construction occurs.

## 5.6 Internal Roadway at Site Driveway A (Intersection 6)

Overall LOS Standard: D  
Approach LOS Standard: D

Overall LOS Standard: D Approach LOS Standard: D						Driveway A			Internal Roadway			Internal Roadway		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(0.3)											
		Approach LOS				B (10.2)			A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue					0		0					
	PM	Overall LOS	(0.4)											
		Approach LOS				B (10.2)			A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue					0		0					

The unsignalized intersection of Internal Roadway at Driveway A (Intersection 6) is projected to operate at an acceptable overall LOS under Build 2027 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

## 5.7 Price Drive at Driveway B (Intersection 7)

Overall LOS Standard: D  
Approach LOS Standard: D

Overall LOS Standard: D Approach LOS Standard: D			Price Drive			Price Drive			Driveway B					
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(0.6)											
		Approach LOS	A (7.6)			A (0.0)			A (9.2)					
		Storage												
		50th Queue												
		95th Queue	3						0					
	PM	Overall LOS	(0.7)											
		Approach LOS	A (8.2)			A (0.0)			B (10.3)					
		Storage												
		50th Queue												
		95th Queue	0						3					

The unsignalized intersection of Price Drive at Driveway B (Intersection 7) is projected to operate at an acceptable overall LOS under Build 2027 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

## 5.8 Price Drive at Driveway C (Intersection 8)

Overall LOS Standard: D  
Approach LOS Standard: D

		Price Drive			Price Drive			Driveway C					
		Northbound			Southbound			Eastbound			Westbound		
					L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(0.5)										
		Approach LOS	A (7.6)			A (0.0)			A (9.5)				
		Storage											
		50th Queue											
		95th Queue	0						0				
	PM	Overall LOS	(0.7)										
		Approach LOS	A (8.2)			A (0.0)			B (10.3)				
		Storage											
		50th Queue											
		95th Queue	0						3				

The unsignalized intersection of Price Drive at Driveway C (Intersection 8) is projected to operate at an acceptable overall LOS under Build 2027 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

## 5.9 Price Drive at Driveway D (Intersection 9)

Overall LOS Standard: D  
Approach LOS Standard: D

		Price Drive			Price Drive			Driveway D					
		Northbound			Southbound			Eastbound			Westbound		
					L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(0.6)										
		Approach LOS	A (7.7)			A (0.0)			A (9.6)				
		Storage											
		50th Queue											
		95th Queue	3						0				
	PM	Overall LOS	(0.8)										
		Approach LOS	A (8.2)			A (0.0)			B (10.1)				
		Storage											
		50th Queue											
		95th Queue	0						3				

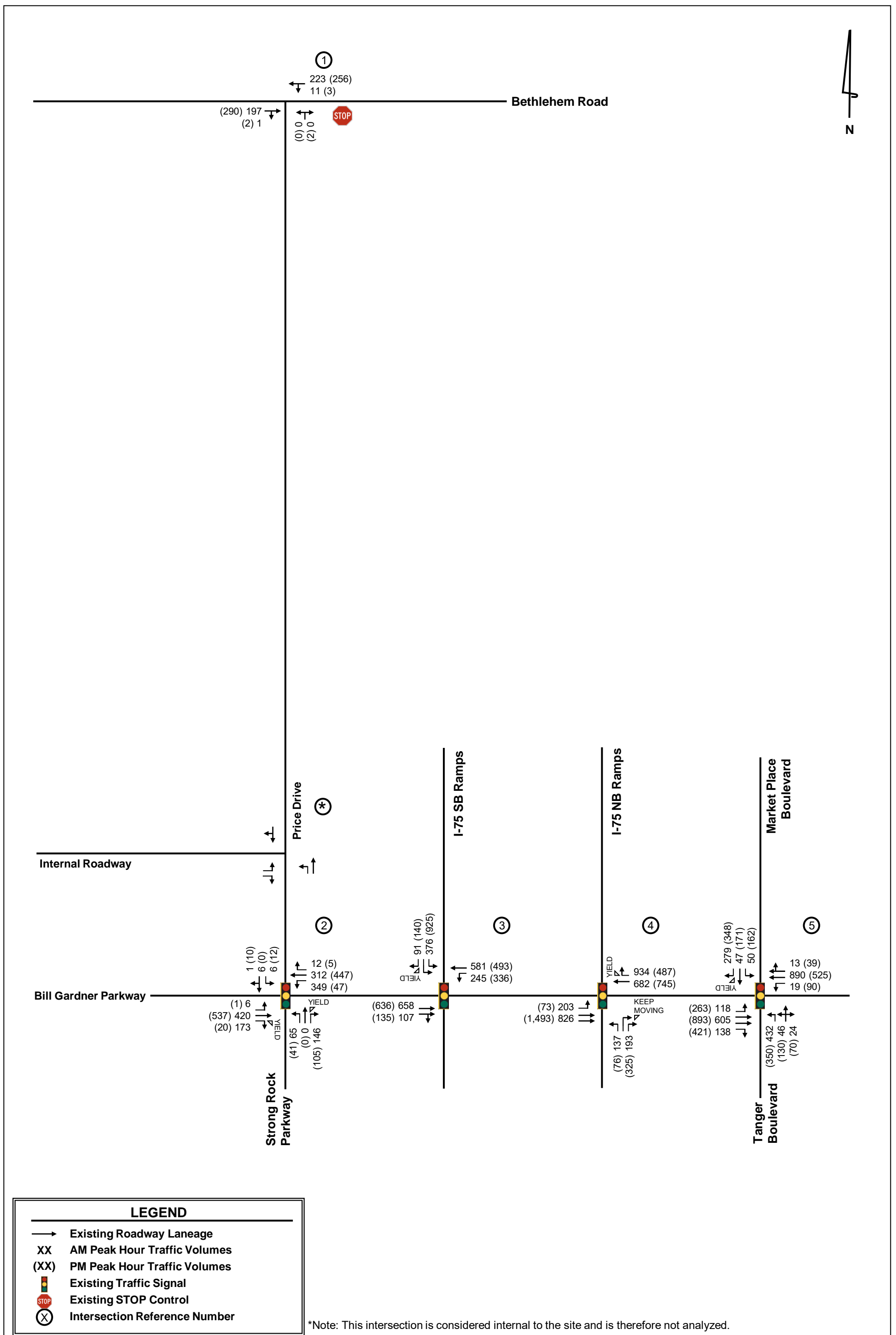
The unsignalized intersection of Price Drive at Driveway D (Intersection 9) is projected to operate at an acceptable overall LOS under Build 2027 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

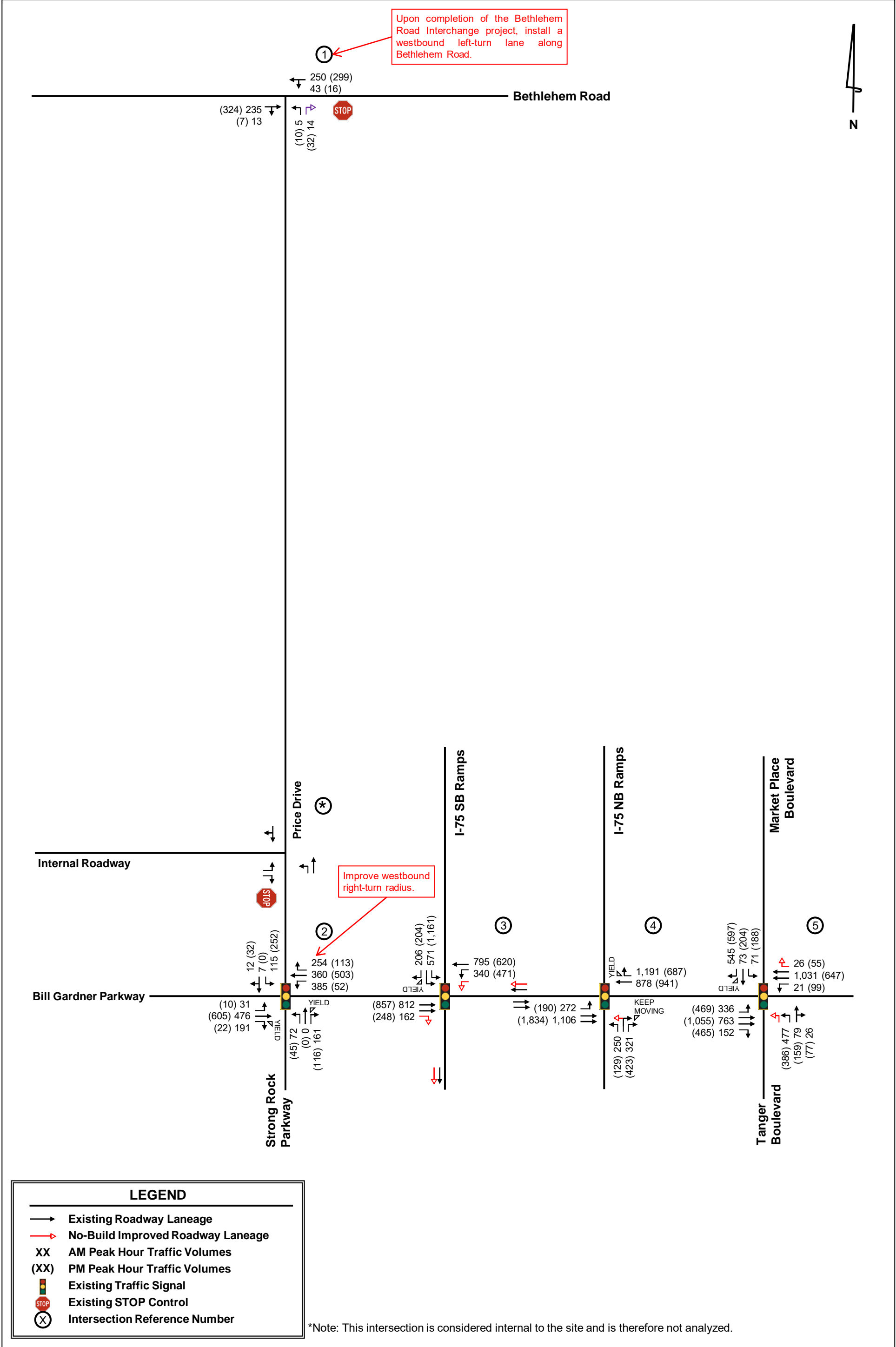
### 5.10 Price Drive at Driveway E (Intersection 10)

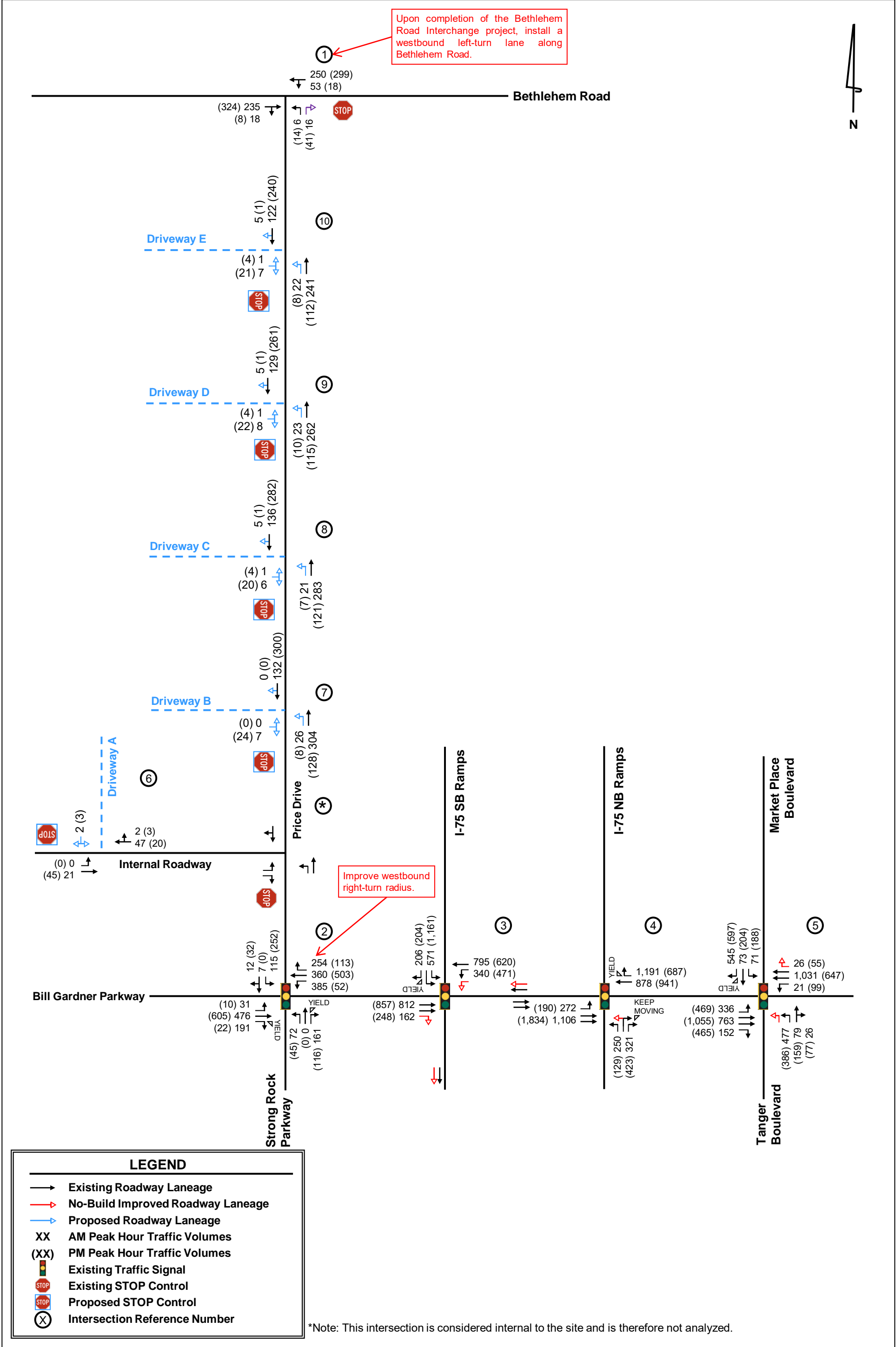
Overall LOS Standard: D  
Approach LOS Standard: D

		Price Drive			Price Drive			Driveway E					
		Northbound			Southbound			Eastbound			Westbound		
					L	T	R	L	T	R	L	T	R
PROJECTED 2027 BUILD (TWSC)	AM	Overall LOS	(0.6)										
		Approach LOS	A (7.6)			A (0.0)			A (9.5)				
		Storage											
		50th Queue											
		95th Queue	3						0				
	PM	Overall LOS	(0.8)										
		Approach LOS	A (8.2)			A (0.0)			B (10.1)				
		Storage											
		50th Queue											
		95th Queue	0						3				

The unsignalized intersection of Price Drive at Driveway E (Intersection 10) is projected to operate at an acceptable overall LOS under Build 2027 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.







# Proposed Site Plan

1675 PACES FERRY ROAD, SUITE 30339  
ATLANTA, GEORGIA 30339  
Ph 770.767.6342

257 Chesterfield Business Parkway St. Louis, MO 63005  
PH. (636) 530-9100 FAX (636) 530-9130  
e-mail: [general@stockassoc.com](mailto:general@stockassoc.com) Web: [www.stockassoc.com](http://www.stockassoc.com)

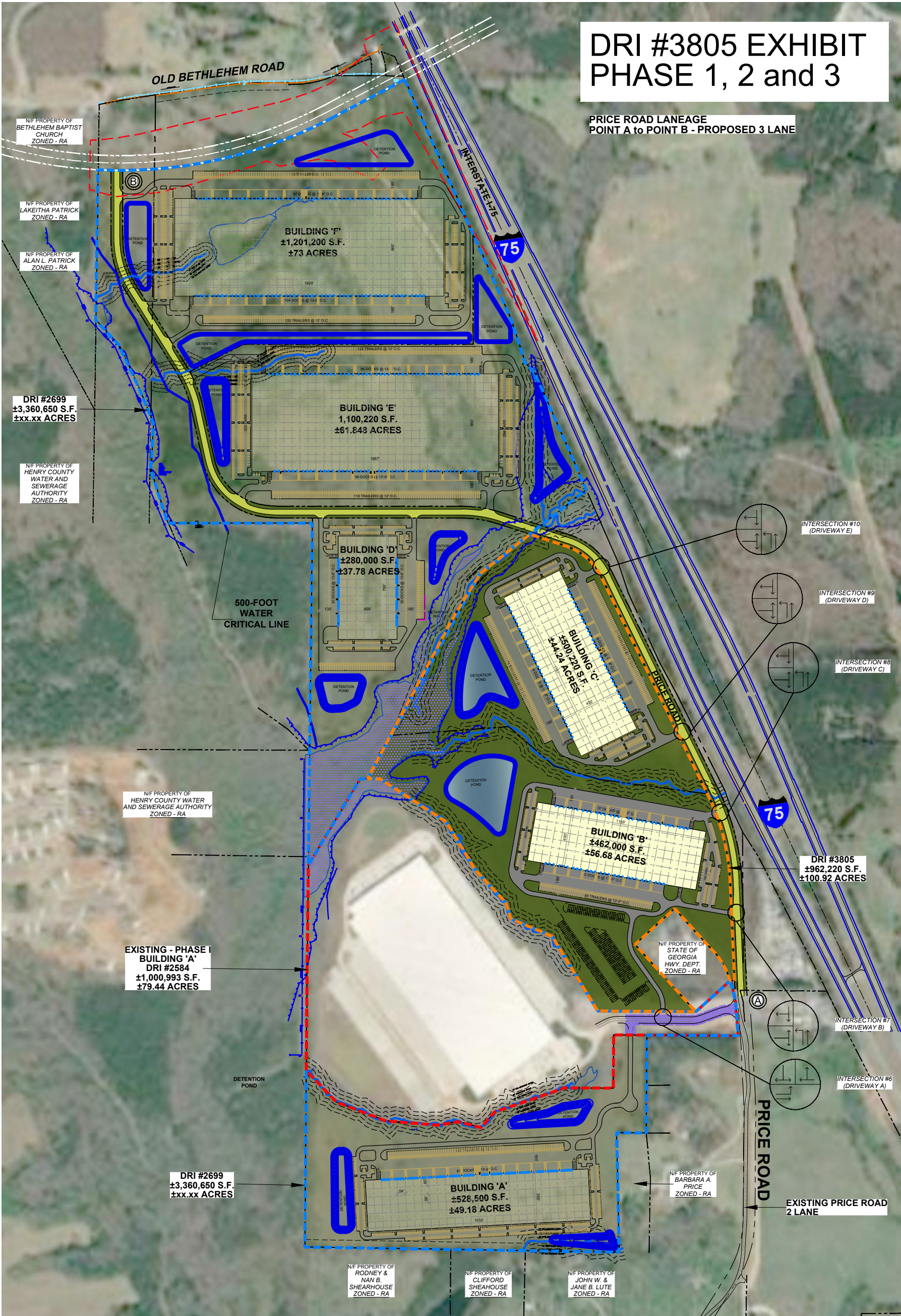
**CITY OF LOCUST GROVE, GA**  
**DRI #3805 PLAN**

01/03/2023	Date
------------	------

## PLAN

f2

DRI #3805 EXHIBIT  
PHASE 1, 2 and 3



<p>Drawing Title <b>DRI #3805 PLAN EXHIBIT</b></p> <p>Drawing No. <b>EX 2 of 2</b></p> <p>DATE 12/20/2022</p> <p>DESCRIPTION DRI #3805 PLAN EXHIBIT</p>	<p>PROJECT: <b>LOCUST GROVE - PHASE 3 DISTRIBUTION CENTER</b> CITY OF LOCUST GROVE, GA <b>DRI #3805 PLAN</b></p>	<p>PREPARED BY: <b>STOCK &amp; ASSOCIATES</b> Consulting Engineers, Inc. 257 Chesterfield Business Parkway St. Louis, MO 63005 PH. (636) 530-9100 FAX (636) 530-9130 e-mail: general@stockassoc.com Web: www.stockassoc.com</p>	<p>developed by: <b>CRG</b> INTEGRATED REAL ESTATE SOLUTIONS realcrg.com 2675 PACES FERRY ROAD, SUITE 30339 ATLANTA, GEORGIA 30339 Ph 770.767.6342</p>	<p>SEAL</p>
---	--	---	--	-------------

# Trip Generation Analysis

**Trip Generation Analysis (11th Ed. with 2nd Edition Handbook Daily IC & 3rd Edition AM/PM IC)**  
**Locust Grove DRI #3805**  
**City of Locust Grove, GA**

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
<b>Proposed Site Traffic</b>								
150 Warehousing	962,220 s.f.	1,558	140	108	32	142	40	102
<b>Gross Trips</b>		<b>1,558</b>	<b>140</b>	<b>108</b>	<b>32</b>	<b>142</b>	<b>40</b>	<b>102</b>
Truck Trips (per ITE 11th Edition Supplement)		528	19	10	9	29	15	14
Mixed-Use Reductions		0	0	0	0	0	0	0
Alternative Mode Reductions		0	0	0	0	0	0	0
Adjusted Truck Trips		528	19	10	9	29	15	14
Car Trips (per ITE 11th Edition Supplement)		1,030	121	98	23	113	25	88
Mixed-Use Reductions		0	0	0	0	0	0	0
Alternative Mode Reductions		0	0	0	0	0	0	0
Adjusted Car Trips		1,030	121	98	23	113	25	88
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
<b>New Trips</b>		<b>1,558</b>	<b>140</b>	<b>108</b>	<b>32</b>	<b>142</b>	<b>40</b>	<b>102</b>
<b>Driveway Volumes</b>		<b>1,558</b>	<b>140</b>	<b>108</b>	<b>32</b>	<b>142</b>	<b>40</b>	<b>102</b>

k:\alp\_tpto\017229003\_locust grove iii dri - henry county - august 2022\dri phase ii\analysis\[locust grove-updated.xls]trip generation

# Intersection Volume Worksheets

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #1: Bethlehem Road @ Price Drive AM PEAK HOUR

Description	Price Drive Northbound			Southbound			Bethlehem Road Eastbound			Bethlehem Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	197	1	11	223	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	4	0	0	4	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%	0%
Peak Hour Factor	0.83			0.83			0.83			0.83		
Adjusted 2022 Volumes	0	0	0	0	0	0	0	197	1	11	223	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699	5		14						12	31		
Sansone Speculative Industrial DRI 3506												
NS Logistics South DRI #3497								17			4	
2027 Background Traffic	5	0	14	0	0	0	0	235	13	43	250	0
2027 No-Build Heavy Vehicle %	100%	0%	100%	0%	0%	0%	0%	2%	92%	73%	2%	0%
<b>Project Trips</b>												
Trip Distribution IN												
Trip Distribution OUT												
Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN									5%	10%		
Trip Distribution OUT	5%		10%									
Car Trips	1	0	2	0	0	0	0	0	5	10	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	1	0	2	0	0	0	0	0	5	10	0	0
<b>2027 Buildout Total</b>	<b>6</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>235</b>	<b>18</b>	<b>53</b>	<b>250</b>	<b>0</b>
<b>2027 Build Heavy Vehicle %</b>	<b>83%</b>	<b>0%</b>	<b>88%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>2%</b>	<b>67%</b>	<b>59%</b>	<b>2%</b>	<b>0%</b>

### PM PEAK HOUR

Description	Price Drive Northbound			Southbound			Bethlehem Road Eastbound			Bethlehem Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	2	0	0	0	0	290	2	3	256	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	3	0	0	5	0
Heavy Vehicle %	0%	0%	2%	0%	0%	0%	0%	2%	2%	2%	2%	0%
Peak Hour Factor	0.89			0.89			0.89			0.89		
Adjusted 2022 Volumes	0	0	2	0	0	0	0	290	2	3	256	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699	10		30						5	13		
Sansone Speculative Industrial DRI 3506												
NS Logistics South DRI #3497								4			16	
2027 Background Traffic	10	0	32	0	0	0	0	324	7	16	299	0
2027 No-Build Heavy Vehicle %	100%	0%	94%	0%	0%	0%	0%	2%	72%	82%	2%	0%
<b>Project Trips</b>												
Trip Distribution IN												
Trip Distribution OUT												
Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN									5%	10%		
Trip Distribution OUT	5%		10%									
Car Trips	4	0	9	0	0	0	0	0	1	2	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	0	9	0	0	0	0	0	1	2	0	0
<b>2027 Buildout Total</b>	<b>14</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>324</b>	<b>8</b>	<b>18</b>	<b>299</b>	<b>0</b>
<b>2027 Build Heavy Vehicle %</b>	<b>71%</b>	<b>0%</b>	<b>73%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>2%</b>	<b>63%</b>	<b>73%</b>	<b>2%</b>	<b>0%</b>

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #2: Bill Gardner Parkway @ Strong Rock Parkway / Price Drive AM PEAK HOUR

Description	Strong Rock Parkway Northbound			Price Drive Southbound			Bill Gardner Parkway Eastbound			Bill Gardner Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	65	0	146	6	6	1	6	420	173	349	312	12
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	0	0	0	0	11	0	1	8	3
Heavy Vehicle %	2%	0%	2%	2%	2%	2%	2%	3%	2%	2%	3%	25%
Peak Hour Factor		0.89			0.89			0.89			0.89	
Adjusted 2022 Volumes	65	0	146	6	6	1	6	420	173	349	312	12
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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699				108		11	24					241
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252							12				16	
2027 Background Traffic	72	0	161	115	7	12	31	476	191	385	360	254
2027 No-Build Heavy Vehicle %	2%	0%	2%	94%	2%	92%	78%	5%	2%	2%	7%	96%
Project Trips												
Trip Distribution IN												100%
Trip Distribution OUT				100%								
Truck Trips	0	0	0	9	0	0	0	0	0	0	0	10
Trip Distribution IN							10%					75%
Trip Distribution OUT				75%		10%						
Car Trips	0	0	0	17	0	2	10	0	0	0	0	74
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	26	0	2	10	0	0	0	0	84
2027 Buildout Total	72	0	161	141	7	14	41	476	191	385	360	338
2027 Build Heavy Vehicle %	2%	0%	2%	83%	2%	79%	59%	5%	2%	2%	7%	75%

### PM PEAK HOUR

Description	Strong Rock Parkway Northbound			Price Drive Southbound			Bill Gardner Parkway Eastbound			Bill Gardner Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	41	0	105	12	0	10	1	537	20	47	447	5
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	2	2	0	0	1	8	0	1	8	1
Heavy Vehicle %	2%	0%	2%	17%	0%	2%	100%	2%	2%	2%	2%	20%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjusted 2022 Volumes	41	0	105	12	0	10	1	537	20	47	447	5
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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699				239		21	9					107
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252							12				9	
2027 Background Traffic	45	0	116	252	0	32	10	605	22	52	503	113
2027 No-Build Heavy Vehicle %	2%	0%	2%	96%	0%	66%	100%	2%	2%	2%	2%	96%
Project Trips												
Trip Distribution IN												100%
Trip Distribution OUT				100%								
Truck Trips	0	0	0	14	0	0	0	0	0	0	0	15
Trip Distribution IN							10%					75%
Trip Distribution OUT				75%		10%						
Car Trips	0	0	0	66	0	9	2	0	0	0	0	19
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	80	0	9	2	0	0	0	0	34
2027 Buildout Total	45	0	116	332	0	41	12	605	22	52	503	147
2027 Build Heavy Vehicle %	2%	0%	2%	77%	0%	52%	83%	2%	2%	2%	2%	84%

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #3: Bill Gardner Parkway @ I-75 Southbound Ramp AM PEAK HOUR

Description	I-75 Southbound Ramp <u>Northbound</u>			I-75 Southbound Ramp <u>Southbound</u>			Bill Gardner Parkway <u>Eastbound</u>			Bill Gardner Parkway <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	376	3	91	0	658	107	245	581	0
Pedestrians		1			2			0			0	
Conflicting Pedestrians	0		0	0		0	0		1	1		2
Heavy Vehicles	0	0	0	31	2	3	0	11	2	26	11	0
Heavy Vehicle %	0%	0%	0%	8%	67%	3%	0%	2%	2%	11%	2%	0%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjusted 2022 Volumes	0	0	0	376	3	91	0	658	107	245	581	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867				56				10		9	3	
Locust Grove Phase II DRI 2699						106		64	44		135	
Sansone Speculative Industrial DRI 3506				23						8		
300 Marketplace DRI 3252				77				12		53	16	
2027 Background Traffic	0	0	0	571	3	206	0	812	162	340	795	0
2027 No-Build Heavy Vehicle %	0%	0%	0%	19%	74%	53%	0%	11%	29%	24%	21%	0%
<b>Project Trips</b>												
Trip Distribution IN						60%					40%	
Trip Distribution OUT								60%	40%			
Truck Trips	0	0	0	0	0	6	0	5	4	0	4	0
Trip Distribution IN						40%					35%	
Trip Distribution OUT								55%	20%			
Car Trips	0	0	0	0	0	39	0	13	5	0	34	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	45	0	18	9	0	38	0
<b>2027 Buildout Total</b>	0	0	0	571	3	251	0	830	171	340	833	0
<b>2027 Build Heavy Vehicle %</b>	0%	0%	0%	19%	74%	46%	0%	12%	29%	24%	20%	0%

### PM PEAK HOUR

Description	I-75 Southbound Ramp <u>Northbound</u>			I-75 Southbound Ramp <u>Southbound</u>			Bill Gardner Parkway <u>Eastbound</u>			Bill Gardner Parkway <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	925	0	140	0	636	135	336	493	0
Pedestrians		4			1			3			0	
Conflicting Pedestrians	3		0	0		3	0		4	4		1
Heavy Vehicles	0	0	0	23	0	3	0	6	5	18	9	0
Heavy Vehicle %	0%	0%	0%	2%	0%	2%	0%	2%	4%	5%	2%	0%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjusted 2022 Volumes	0	0	0	925	0	140	0	636	135	336	493	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867				23				3		44	9	
Locust Grove Phase II DRI 2699						49		140	99		58	
Sansone Speculative Industrial DRI 3506				10						23		
300 Marketplace DRI 3252				107				12		33	9	
2027 Background Traffic	0	0	0	1,161	0	204	0	857	248	471	620	0
2027 No-Build Heavy Vehicle %	0%	0%	0%	11%	0%	26%	0%	19%	42%	11%	13%	0%
<b>Project Trips</b>												
Trip Distribution IN						60%					40%	
Trip Distribution OUT								60%	40%			
Truck Trips	0	0	0	0	0	9	0	8	6	0	6	0
Trip Distribution IN						40%					35%	
Trip Distribution OUT								55%	20%			
Car Trips	0	0	0	0	0	10	0	48	18	0	9	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	19	0	56	24	0	15	0
<b>2027 Buildout Total</b>	0	0	0	1,161	0	223	0	913	272	471	635	0
<b>2027 Build Heavy Vehicle %</b>	0%	0%	0%	11%	0%	27%	0%	19%	41%	11%	13%	0%

k:\alp\_tpo\017229003\_locust\_grove\_iii\_dri - henry county - august 2022\dri phase ii analysis\locust\_grove-updated.xls\int-3

1/5/2023 8:42

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #4: Bill Gardner Parkway @ I-75 Northbound Ramp AM PEAK HOUR

Description	I-75 Northbound Ramp <u>Northbound</u>			I-75 Northbound Ramp <u>Southbound</u>			Bill Gardner Parkway <u>Eastbound</u>			Bill Gardner Parkway <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	137	0	193	0	0	0	203	826	0	0	682	934
Pedestrians		1			1			0			0	
Conflicting Pedestrians	0		0	0		0	0		1	1		1
Heavy Vehicles	5	0	18	0	0	0	2	41	0	0	32	34
Heavy Vehicle %	4%	0%	9%	0%	0%	0%	2%	5%	0%	0%	5%	4%
Peak Hour Factor		0.96			0.96			0.96			0.96	
Adjusted 2022 Volumes	137	0	193	0	0	0	203	826	0	0	682	934
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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867			31					66			12	17
Locust Grove Phase II DRI 2699	99						48	16			36	
Sansone Speculative Industrial DRI 3506			24					23			8	8
300 Marketplace DRI 3252			53					89			69	135
2027 Background Traffic	250	0	321	0	0	0	272	1,106	0	0	878	1,191
2027 No-Build Heavy Vehicle %	42%	0%	23%	0%	0%	0%	19%	14%	0%	0%	16%	14%
<b>Project Trips</b>												
Trip Distribution IN	40%											
Trip Distribution OUT							60%					
Truck Trips	4	0	0	0	0	0	5	0	0	0	0	0
Trip Distribution IN	20%										15%	
Trip Distribution OUT							40%	15%				
Car Trips	20	0	0	0	0	0	9	3	0	0	15	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	24	0	0	0	0	0	14	3	0	0	15	0
<b>2027 Buildout Total</b>	274	0	321	0	0	0	286	1,109	0	0	893	1,191
<b>2027 Build Heavy Vehicle %</b>	40%	0%	23%	0%	0%	0%	20%	14%	0%	0%	16%	14%

### PM PEAK HOUR

Description	I-75 Northbound Ramp <u>Northbound</u>			I-75 Northbound Ramp <u>Southbound</u>			Bill Gardner Parkway <u>Eastbound</u>			Bill Gardner Parkway <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	76	6	325	0	0	0	73	1,493	0	0	745	487
Pedestrians		2			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		2	2		0
Heavy Vehicles	8	4	41	0	0	0	4	26	0	0	19	27
Heavy Vehicle %	11%	67%	13%	0%	0%	0%	5%	2%	0%	0%	3%	6%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjusted 2022 Volumes	76	6	325	0	0	0	73	1,493	0	0	745	487
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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867			12					26			52	54
Locust Grove Phase II DRI 2699	45						109	31			14	
Sansone Speculative Industrial DRI 3506			11					10			10	24
300 Marketplace DRI 3252			41					119			42	71
2027 Background Traffic	129	7	423	0	0	0	190	1,834	0	0	941	687
2027 No-Build Heavy Vehicle %	42%	63%	20%	0%	0%	0%	60%	10%	0%	0%	8%	15%
<b>Project Trips</b>												
Trip Distribution IN	40%											
Trip Distribution OUT							60%					
Truck Trips	6	0	0	0	0	0	8	0	0	0	0	0
Trip Distribution IN	20%										15%	
Trip Distribution OUT							40%	15%				
Car Trips	5	0	0	0	0	0	35	13	0	0	4	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	11	0	0	0	0	0	43	13	0	0	4	0
<b>2027 Buildout Total</b>	140	7	423	0	0	0	233	1,847	0	0	945	687
<b>2027 Build Heavy Vehicle %</b>	43%	63%	20%	0%	0%	0%	52%	10%	0%	0%	8%	15%

k:\ulp\_tpo\017229003\_locust\_grove\_iii\_dri - henry county - august 2022\dri phase ii analysis\locust\_grove-updated.xls\int 4

1/5/2023 8:42

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #5: Bill Gardner Parkway @ Tanger Boulevard / Market Place Boulevard AM PEAK HOUR

Description	Tanger Boulevard Northbound			Market Place Boulevard Southbound			Bill Gardner Parkway Eastbound			Bill Gardner Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	432	46	24	50	47	279	118	605	138	19	890	13
Pedestrians		3			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		3	3		0
Heavy Vehicles	5	4	2	2	3	13	9	45	7	0	49	1
Heavy Vehicle %	2%	9%	8%	4%	6%	5%	8%	7%	5%	2%	6%	8%
Peak Hour Factor		0.93			0.93			0.93			0.93	
Adjusted 2022 Volumes	432	46	24	50	47	279	118	605	138	19	890	13
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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867						20	23	73			9	
Locust Grove Phase II DRI 2699								16			36	
Sansone Speculative Industrial DRI 3506						13	41	6			3	
300 Marketplace DRI 3252		28		16	21	204	142					12
2027 Background Traffic	477	79	26	71	73	545	336	763	152	21	1,031	26
2027 No-Build Heavy Vehicle %	2%	41%	8%	26%	33%	40%	45%	9%	5%	2%	9%	50%
Project Trips												
Trip Distribution IN												
Trip Distribution OUT												
Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Car Trips	0	0	0	0	0	0	0	3	0	0	15	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	0	0	3	0	0	15	0
2027 Buildout Total	477	79	26	71	73	545	336	766	152	21	1,046	26
2027 Build Heavy Vehicle %	2%	41%	8%	26%	33%	40%	45%	9%	5%	2%	9%	50%

### PM PEAK HOUR

Description	Tanger Boulevard Northbound			Market Place Boulevard Southbound			Bill Gardner Parkway Eastbound			Bill Gardner Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	350	130	70	162	171	348	263	893	421	90	525	39
Pedestrians		3			0			1			3	
Conflicting Pedestrians	1		3	3		1	0		3	3		0
Heavy Vehicles	8	2	1	1	1	5	12	57	6	1	37	1
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	5%	6%	2%	2%	7%	3%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjusted 2022 Volumes	350	130	70	162	171	348	263	893	421	90	525	39
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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867						60	3	34			47	
Locust Grove Phase II DRI 2699								31			14	
Sansone Speculative Industrial DRI 3506						41	17	4			6	
300 Marketplace DRI 3252		15		9	15	112	159					12
2027 Background Traffic	386	159	77	188	204	597	469	1,055	465	99	647	55
2027 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	37%	9%	2%	2%	8%	24%
Project Trips												
Trip Distribution IN												
Trip Distribution OUT												
Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											15%	
Trip Distribution OUT								15%				
Car Trips	0	0	0	0	0	0	0	13	0	0	4	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	0	0	13	0	0	4	0
2027 Buildout Total	386	159	77	188	204	597	469	1,068	465	99	651	55
2027 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	37%	9%	2%	2%	8%	24%

k:\ulp\_tpo\017229003\_locust grove iii dri - henry county - august 2022\dri phase ii analysis\locust grove-updated.xls\int 5

1/5/2023 8:42

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #6: Driveway A @ Internal Roadway AM PEAK HOUR

Description	Northbound			Driveway A Southbound			Internal Roadway Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	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	3	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92			0.92			0.92			0.92		
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699								21			47	
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	0	0	0	0	0	0	21	0	0	47	0
2027 No-Build Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%
<b>Project Trips</b>												
Trip Distribution IN												20%
Trip Distribution OUT				20%								
Truck Trips	0	0	0	2	0	0	0	0	0	0	0	2
Trip Distribution IN												
Trip Distribution OUT												
Car Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	2	0	0	0	0	0	0	0	2
<b>2027 Buildout Total</b>	0	0	0	2	0	0	0	21	0	0	47	2
<b>2027 Build Heavy Vehicle %</b>	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	100%	100%

### PM PEAK HOUR

Description	Northbound			Driveway A Southbound			Internal Roadway Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	6	0	0	22	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	2	0	0	2	0	0	0	0	0	0	0
Heavy Vehicle %	0%	33%	0%	0%	9%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.94			0.94			0.94			0.94		
Adjusted 2022 Volumes	0	6	0	0	22	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699								45			20	
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	7	0	0	24	0	0	45	0	0	20	0
2027 No-Build Heavy Vehicle %	0%	32%	0%	0%	9%	0%	0%	100%	0%	0%	100%	0%
<b>Project Trips</b>												
Trip Distribution IN												20%
Trip Distribution OUT				20%								
Truck Trips	0	0	0	3	0	0	0	0	0	0	0	3
Trip Distribution IN												
Trip Distribution OUT												
Car Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	3	0	0	0	0	0	0	0	3
<b>2027 Buildout Total</b>	0	7	0	3	24	0	0	45	0	0	20	3
<b>2027 Build Heavy Vehicle %</b>	0%	32%	0%	100%	9%	0%	0%	100%	0%	0%	100%	100%

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #7: Price Drive @ Driveway B AM PEAK HOUR

Description	Price Drive Northbound			Price Drive Southbound			Driveway B Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	18	0	0	13	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	3	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	17%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92			0.92			0.92			0.92		
Adjusted 2022 Volumes	0	18	0	0	13	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699		219			98							
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	239	0	0	112	0	0	0	0	0	0	0
2027 No-Build Heavy Vehicle %	0%	93%	0%	0%	88%	0%	0%	0%	0%	0%	0%	0%
<b>Project Trips</b>												
Trip Distribution IN	15%	65%			65%				15%			
Trip Distribution OUT												
Truck Trips	1	6	0	0	6	0	0	0	1	0	0	0
Trip Distribution IN	25%	60%			60%				25%			
Trip Distribution OUT												
Car Trips	25	59	0	0	14	0	0	0	6	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	26	65	0	0	20	0	0	0	7	0	0	0
<b>2027 Buildout Total</b>	26	304	0	0	132	0	0	0	7	0	0	0
<b>2027 Build Heavy Vehicle %</b>	4%	75%	0%	0%	79%	0%	0%	0%	14%	0%	0%	0%

### PM PEAK HOUR

Description	Price Drive Northbound			Price Drive Southbound			Driveway B Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	6	0	0	22	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	2	0	0	2	0	0	0	0	0	0	0
Heavy Vehicle %	0%	33%	0%	0%	9%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.94			0.94			0.94			0.94		
Adjusted 2022 Volumes	0	6	0	0	22	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699		96			214							
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	103	0	0	238	0	0	0	0	0	0	0
2027 No-Build Heavy Vehicle %	0%	95%	0%	0%	91%	0%	0%	0%	0%	0%	0%	0%
<b>Project Trips</b>												
Trip Distribution IN	15%	65%			65%				15%			
Trip Distribution OUT												
Truck Trips	2	10	0	0	9	0	0	0	2	0	0	0
Trip Distribution IN	25%	60%			60%				25%			
Trip Distribution OUT												
Car Trips	6	15	0	0	53	0	0	0	22	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	8	25	0	0	62	0	0	0	24	0	0	0
<b>2027 Buildout Total</b>	8	128	0	0	300	0	0	0	24	0	0	0
<b>2027 Build Heavy Vehicle %</b>	25%	85%	0%	0%	75%	0%	0%	0%	8%	0%	0%	0%

k:\alp\_tpo\01729003\_locust\_grove\_ii\_dri - henry county - august 2022\dri phase ii analysis[locust\_grove-updated.xls]int 7

1/5/2023 8:42

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #8: Price Drive @ Driveway C AM PEAK HOUR

Description	Price Drive Northbound			Price Drive Southbound			Driveway C Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	18	0	0	13	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	3	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	17%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92			0.92			0.92			0.92		
Adjusted 2022 Volumes	0	18	0	0	13	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699		219			98							
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	239	0	0	112	0	0	0	0	0	0	0
2027 No-Build Heavy Vehicle %	0%	93%	0%	0%	88%	0%	0%	0%	0%	0%	0%	0%
<b>Project Trips</b>												
Trip Distribution IN	15%	50%										
Trip Distribution OUT					50%				15%			
Truck Trips	1	5	0	0	5	0	0	0	1	0	0	0
Trip Distribution IN	20%	40%			10%	5%						
Trip Distribution OUT					40%		5%		20%			
Car Trips	20	39	0	0	19	5	1	0	5	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	21	44	0	0	24	5	1	0	6	0	0	0
<b>2027 Buildout Total</b>	<b>21</b>	<b>283</b>	<b>0</b>	<b>0</b>	<b>136</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2027 Build Heavy Vehicle %</b>	<b>5%</b>	<b>80%</b>	<b>0%</b>	<b>0%</b>	<b>76%</b>	<b>2%</b>	<b>2%</b>	<b>0%</b>	<b>17%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

### PM PEAK HOUR

Description	Price Drive Northbound			Price Drive Southbound			Driveway C Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	6	0	0	22	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	2	0	0	2	0	0	0	0	0	0	0
Heavy Vehicle %	0%	33%	0%	0%	9%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.94			0.94			0.94			0.94		
Adjusted 2022 Volumes	0	6	0	0	22	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699		96			214							
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	103	0	0	238	0	0	0	0	0	0	0
2027 No-Build Heavy Vehicle %	0%	95%	0%	0%	91%	0%	0%	0%	0%	0%	0%	0%
<b>Project Trips</b>												
Trip Distribution IN	15%	50%										
Trip Distribution OUT					50%				15%			
Truck Trips	2	8	0	0	7	0	0	0	2	0	0	0
Trip Distribution IN	20%	40%			10%	5%						
Trip Distribution OUT					40%		5%		20%			
Car Trips	5	10	0	0	37	1	4	0	18	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	7	18	0	0	44	1	4	0	20	0	0	0
<b>2027 Buildout Total</b>	<b>7</b>	<b>121</b>	<b>0</b>	<b>0</b>	<b>282</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2027 Build Heavy Vehicle %</b>	<b>29%</b>	<b>88%</b>	<b>0%</b>	<b>0%</b>	<b>79%</b>	<b>2%</b>	<b>2%</b>	<b>0%</b>	<b>10%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #8: Price Drive @ Driveway D AM PEAK HOUR

Description	Price Drive Northbound			Price Drive Southbound			Driveway D Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	18	0	0	13	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	3	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	17%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92			0.92			0.92			0.92		
Adjusted 2022 Volumes	0	18	0	0	13	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699		219			98							
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	239	0	0	112	0	0	0	0	0	0	0
2027 No-Build Heavy Vehicle %	0%	93%	0%	0%	88%	0%	0%	0%	0%	0%	0%	0%
<b>Project Trips</b>												
Trip Distribution IN	30%	20%										
Trip Distribution OUT					20%				30%			
Truck Trips	3	2	0	0	2	0	0	0	3	0	0	0
Trip Distribution IN	20%	20%			10%	5%						
Trip Distribution OUT		5%			20%		5%		20%			
Car Trips	20	21	0	0	15	5	1	0	5	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	23	23	0	0	17	5	1	0	8	0	0	0
<b>2027 Buildout Total</b>	<b>23</b>	<b>262</b>	<b>0</b>	<b>0</b>	<b>129</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2027 Build Heavy Vehicle %</b>	<b>13%</b>	<b>86%</b>	<b>0%</b>	<b>0%</b>	<b>78%</b>	<b>2%</b>	<b>2%</b>	<b>0%</b>	<b>38%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

### PM PEAK HOUR

Description	Price Drive Northbound			Price Drive Southbound			Driveway D Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	6	0	0	22	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	2	0	0	2	0	0	0	0	0	0	0
Heavy Vehicle %	0%	33%	0%	0%	9%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.94			0.94			0.94			0.94		
Adjusted 2022 Volumes	0	6	0	0	22	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699		96			214							
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	103	0	0	238	0	0	0	0	0	0	0
2027 No-Build Heavy Vehicle %	0%	95%	0%	0%	91%	0%	0%	0%	0%	0%	0%	0%
<b>Project Trips</b>												
Trip Distribution IN	30%	20%										
Trip Distribution OUT					20%				30%			
Truck Trips	5	3	0	0	3	0	0	0	4	0	0	0
Trip Distribution IN	20%	20%			10%	5%						
Trip Distribution OUT		5%			20%		5%		20%			
Car Trips	5	9	0	0	20	1	4	0	18	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	10	12	0	0	23	1	4	0	22	0	0	0
<b>2027 Buildout Total</b>	<b>10</b>	<b>115</b>	<b>0</b>	<b>0</b>	<b>261</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2027 Build Heavy Vehicle %</b>	<b>50%</b>	<b>88%</b>	<b>0%</b>	<b>0%</b>	<b>84%</b>	<b>2%</b>	<b>2%</b>	<b>0%</b>	<b>18%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

k:\alp\_tpo\017229003\_locust\_grove\_iii\_dri - henry county - august 2022\dri phase ii analysis\locust\_grove-updated.xls\int 9

1/5/2023 8:42

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #8: Price Drive @ Driveway E AM PEAK HOUR

Description	Price Drive Northbound			Price Drive Southbound			Driveway E Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	18	0	0	13	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	3	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	17%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92			0.92			0.92			0.92		
Adjusted 2022 Volumes	0	18	0	0	13	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699		219			98							
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	239	0	0	112	0	0	0	0	0	0	0
2027 No-Build Heavy Vehicle %	0%	93%	0%	0%	88%	0%	0%	0%	0%	0%	0%	0%
<b>Project Trips</b>												
Trip Distribution IN	20%											
Trip Distribution OUT									20%			
Truck Trips	2	0	0	0	0	0	0	0	2	0	0	0
Trip Distribution IN	20%				10%	5%						
Trip Distribution OUT		10%					5%		20%			
Car Trips	20	2	0	0	10	5	1	0	5	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	22	2	0	0	10	5	1	0	7	0	0	0
<b>2027 Buildout Total</b>	<b>22</b>	<b>241</b>	<b>0</b>	<b>0</b>	<b>122</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2027 Build Heavy Vehicle %</b>	<b>9%</b>	<b>92%</b>	<b>0%</b>	<b>0%</b>	<b>81%</b>	<b>2%</b>	<b>2%</b>	<b>0%</b>	<b>29%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

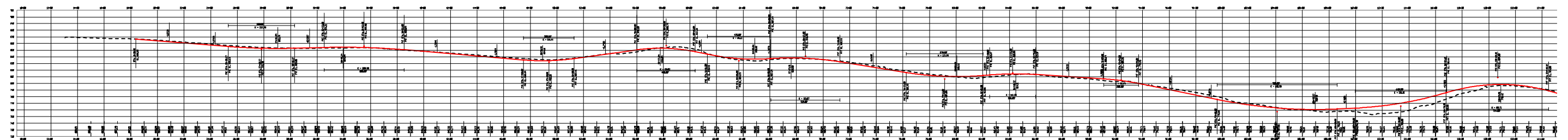
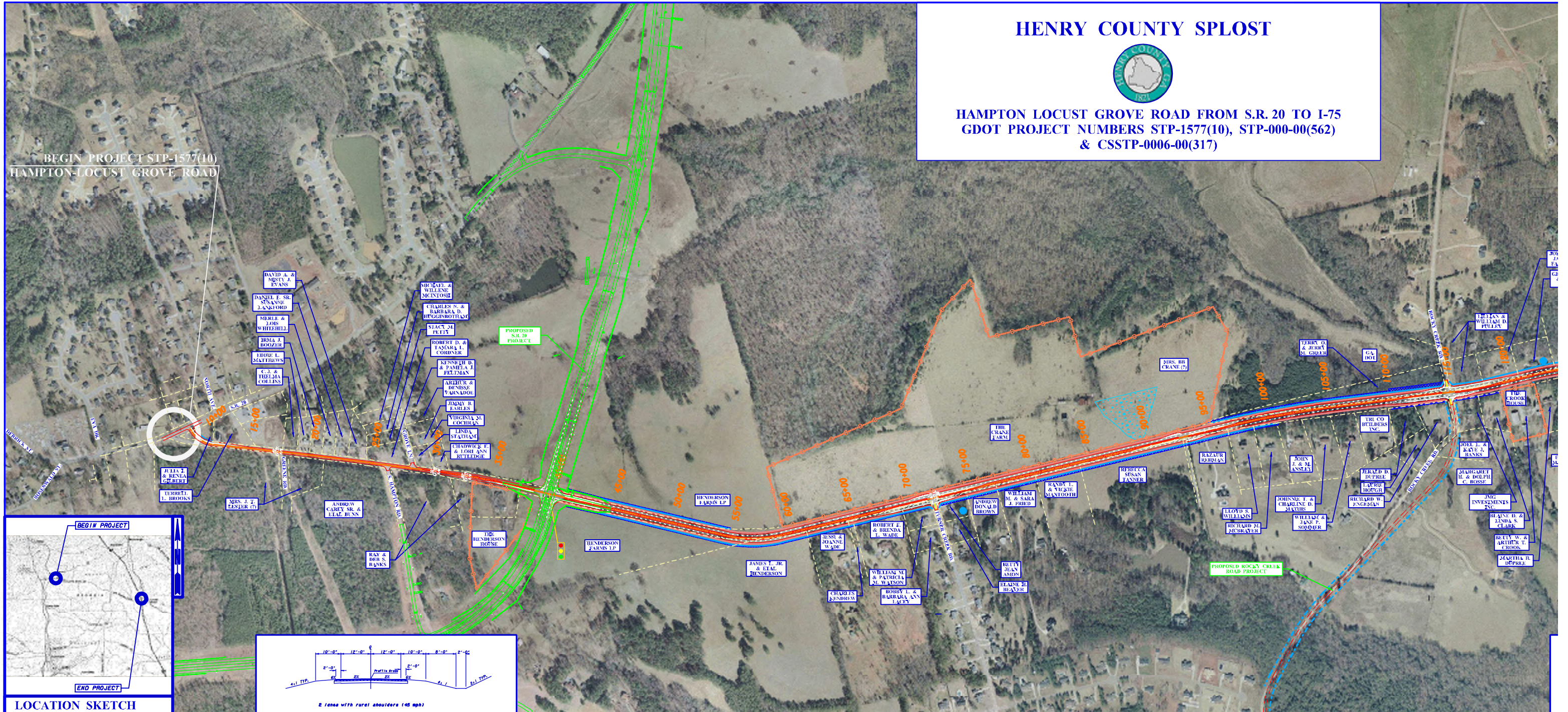
### PM PEAK HOUR

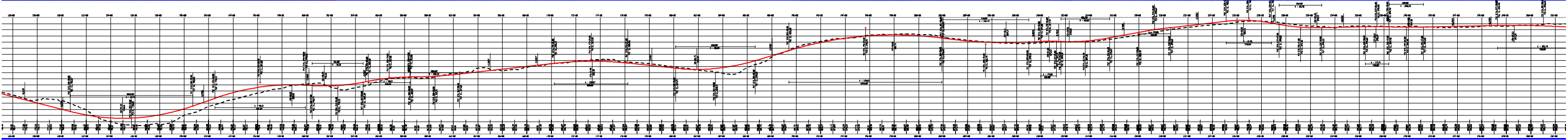
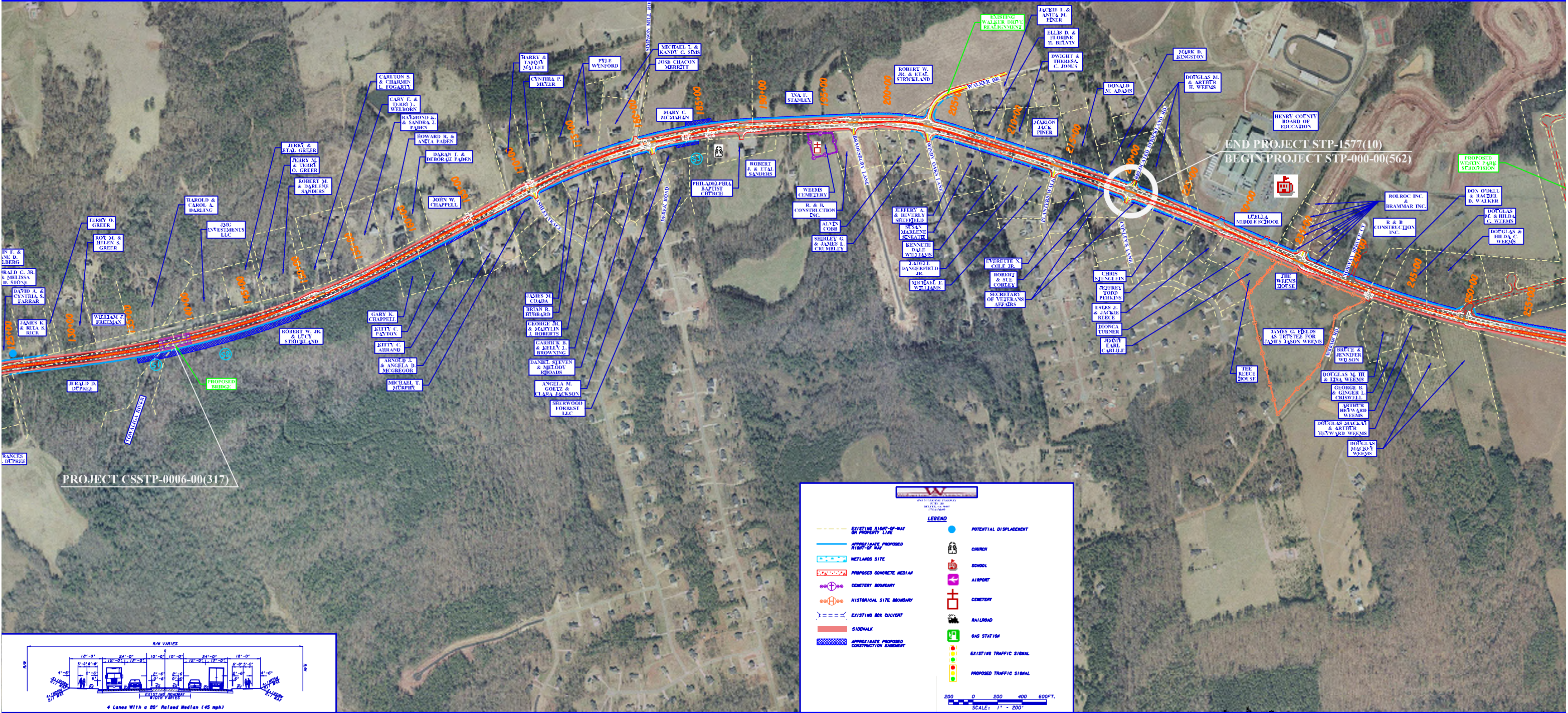
Description	Price Drive Northbound			Price Drive Southbound			Driveway E Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	6	0	0	22	0	0	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	2	0	0	2	0	0	0	0	0	0	0
Heavy Vehicle %	0%	33%	0%	0%	9%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.94			0.94			0.94			0.94		
Adjusted 2022 Volumes	0	6	0	0	22	0	0	0	0	0	0	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	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104	1.104
I-75 South Logistics Center DRI 2867												
Locust Grove Phase II DRI 2699		96			214							
Sansone Speculative Industrial DRI 3506												
300 Marketplace DRI 3252												
2027 Background Traffic	0	103	0	0	238	0	0	0	0	0	0	0
2027 No-Build Heavy Vehicle %	0%	95%	0%	0%	91%	0%	0%	0%	0%	0%	0%	0%
<b>Project Trips</b>												
Trip Distribution IN	20%											
Trip Distribution OUT									20%			
Truck Trips	3	0	0	0	0	0	0	0	3	0	0	0
Trip Distribution IN	20%				10%	5%						
Trip Distribution OUT		10%					5%		20%			
Car Trips	5	9	0	0	2	1	4	0	18	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	8	9	0	0	2	1	4	0	21	0	0	0
<b>2027 Buildout Total</b>	<b>8</b>	<b>112</b>	<b>0</b>	<b>0</b>	<b>240</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2027 Build Heavy Vehicle %</b>	<b>38%</b>	<b>88%</b>	<b>0%</b>	<b>0%</b>	<b>90%</b>	<b>2%</b>	<b>2%</b>	<b>0%</b>	<b>14%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

# Programmed Project Fact Sheets



**BEGIN PROJECT STP-1577(10)**  
**HAMPTON-LOCUST GROVE ROAD**

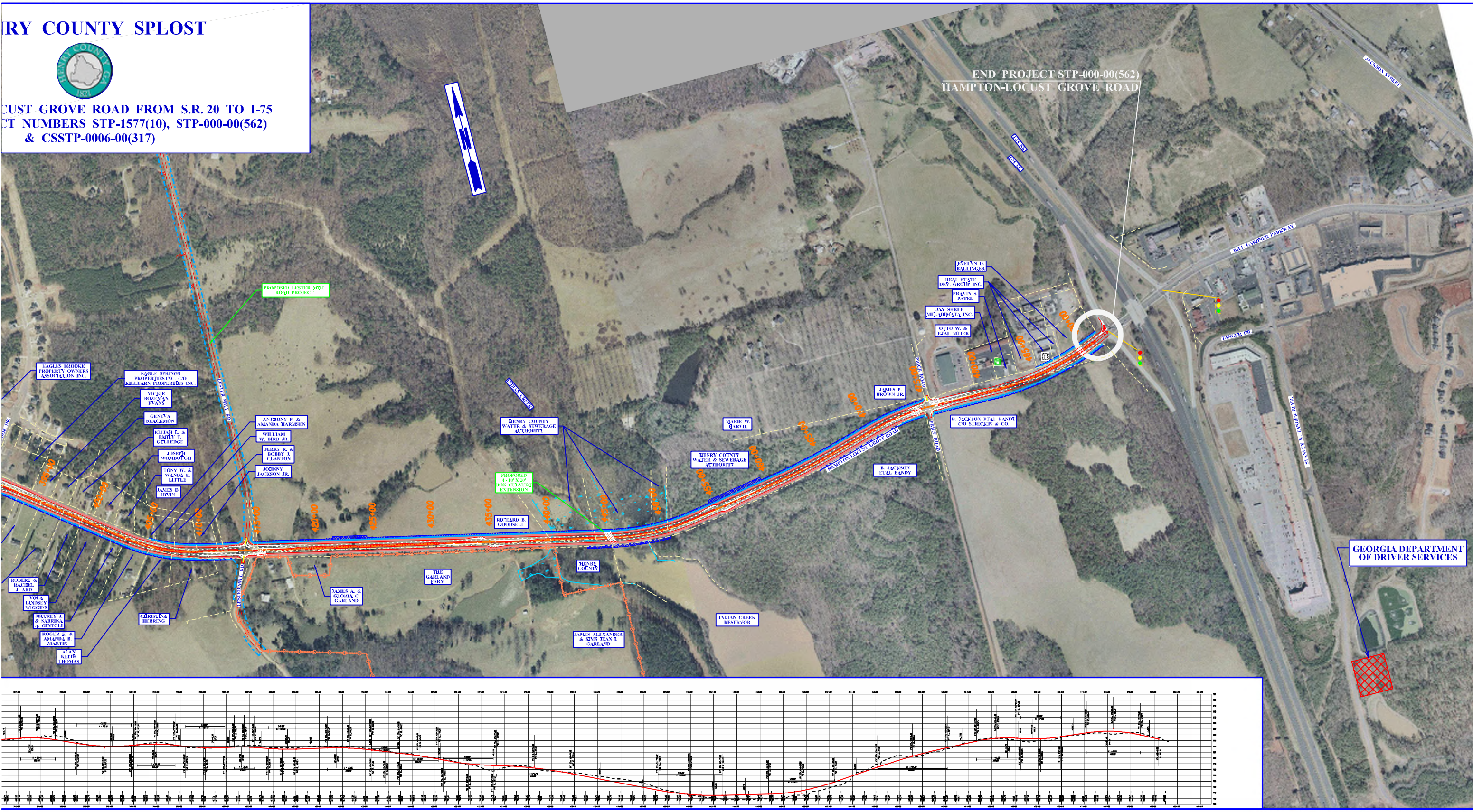


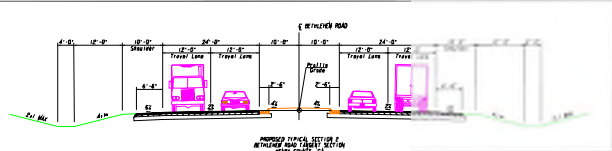
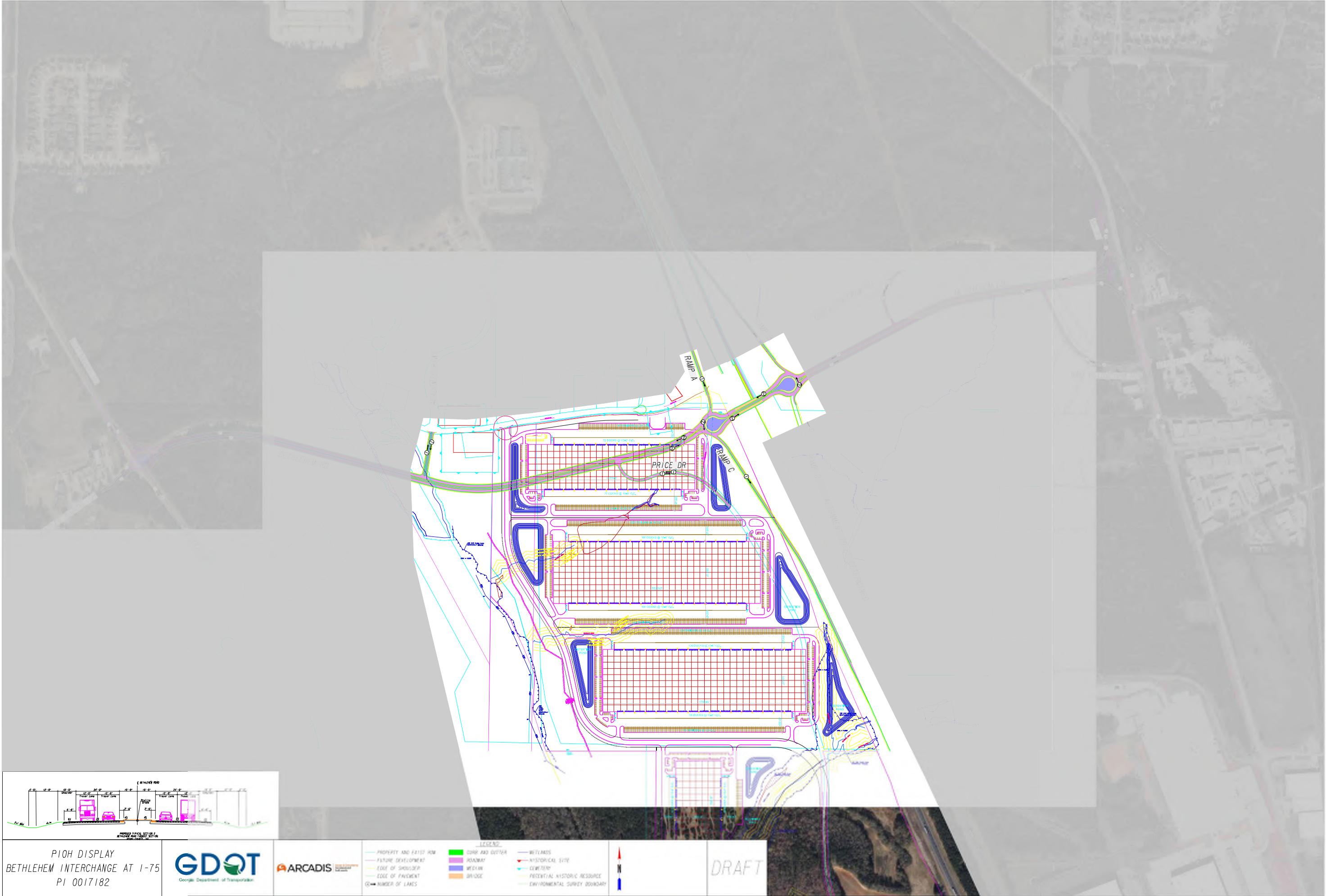


HENRY COUNTY SPLOST



LOCUST GROVE ROAD FROM S.R. 20 TO I-75  
PROJECT NUMBERS STP-1577(10), STP-000-00(562)  
& CSSTP-0006-00(317)

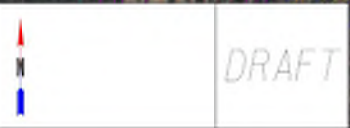


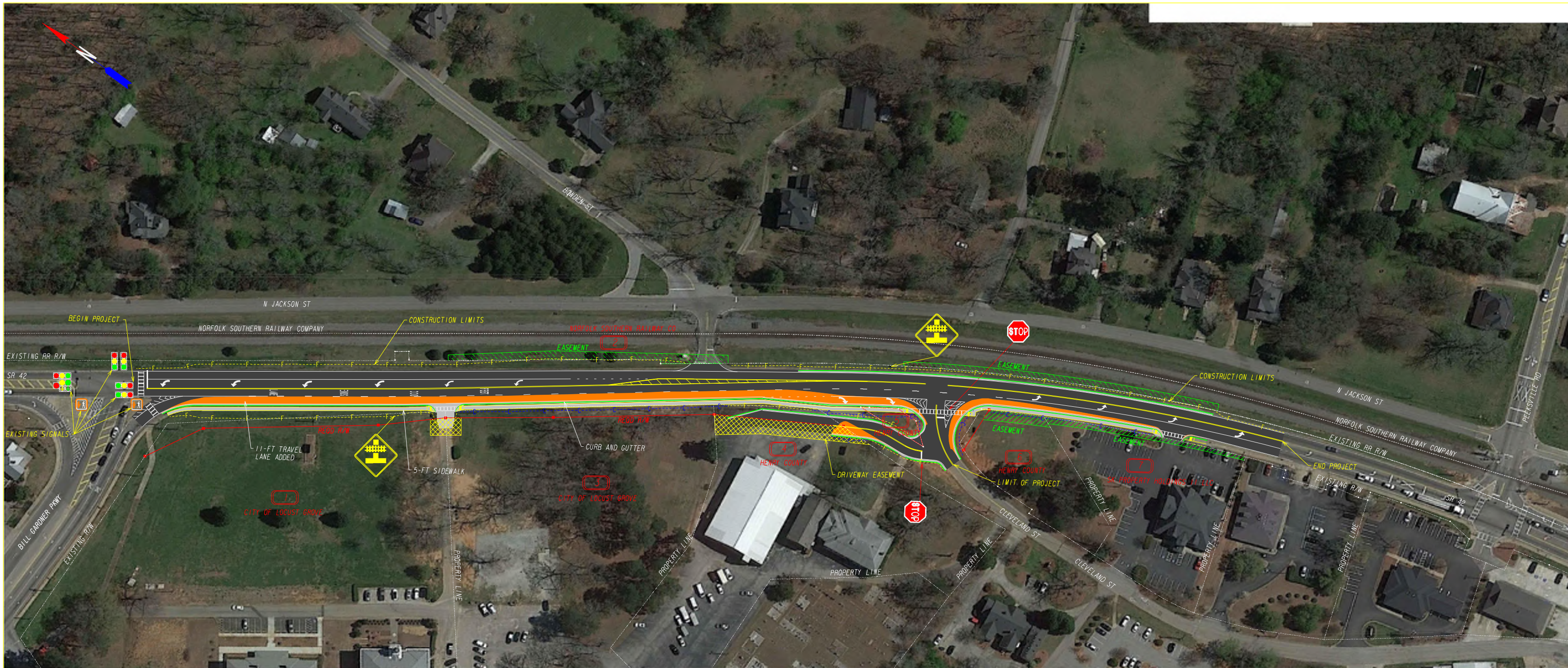


PIOH DISPLAY  
BETHLEHEM INTERCHANGE AT I-75  
PI 0017182



- LEGEND
- PROPERTY AND EXIST. ROW
  - FUTURE DEVELOPMENT
  - EDGE OF SHOULDER
  - EDGE OF PAVEMENT
  - NUMBER OF LANES
  - CORR. AND CUTTER
  - ROADWAY
  - WETLAND
  - BRIDGE
  - WETLANDS
  - HISTORICAL SITE
  - CULTURAL
  - POTENTIAL HISTORIC RESOURCE
  - ENVIRONMENTAL SURVEY BOUNDARY





**GDOT**  
PI0H LAYOUT

SR 42 WIDENING  
BILL GARDNER PKWY TO PEEKSVILLE RD  
LOCUST GROVE, GA HENRY COUNTY  
PI 0015823

# Full Page Truck Exhibits



PRICE DRIVE

BILL GARDNER PARKWAY

R105

