CMT Travel Plaza
DRI No. 1764
DeKalb County, Georgia

GRTA /ARC
DRI Review Package

Site Plan Elements
Traffic Impact Analysis
Facility Needs Analysis
Area of Influence Analysis
Air Quality Benchmark Statement
DRI Review Criteria

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April 2008

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SITE INFORMATION: This report presents a variety of analyses and documentation for submittal as the major portion of the GRTA/ARC DRI Review Package. This study presents an analysis of the traffic impact expected to result from a large commercial vehicle service plaza, combined with an adjacent general public service center, located on the east side of Moreland Avenue, about a half-mile north of I-285, in DeKalb County, Georgia. The Site is called the CMT Travel Plaza. The Site will be developed in two Phases for marketing purposes, but only Build-Out was analyzed, and this report addresses the analyses and findings at Site Build-Out. The Build-Out Year for the Site is 2010.

The site will consist of a truck parking plaza, a truck maintenance facility, a truck refueling facility, a truck washing facility, a logistics center, six restaurant facilities, a self service auto refueling station, and a bank with a drive thru. The site will cover 87.24 acres, which includes 15.3 acres of landscaped space, and 36.2 acres of open space (leaving approximately 35.8 acres of impervious space).

The Site is proposed to have two driveways from Moreland Avenue; one for passenger cars and one for trucks. The truck only driveway will be further south on the site (the first access drive as one proceeds northward from I-285). Both access points are proposed to be full-movement intersections, with median openings on Moreland Ave.

SITE TRIPS: At Site Build-Out (Year 2010), the Site is expected to generate approximately 8,405 new vehicle trips per day (gross – not including the truck service plaza), but after internal capture and pass-by trips are considered, it will generate approximately 4.137 new external trips (to/from the site – not including the truck service plaza) per day. Approximately 983 new external trips (including the truck service plaza) (522 in and 461 out) will be generated during the AM peak hour, and approximately 926 new external trips (including the truck service plaza) (483 in and 443 out) will be generated during the PM peak hour.

Trucks and non-trucks are expected to have different trip distributions. For trucks, approximately 94% of the trips are expected to use I-285, with approximately 74% oriented to and from the east along I-285, and about 20% oriented to and from the west along I-285. About 6% of the trucks are expected to use Moreland Avenue, with approximately 3% oriented to and from the north, and the remaining 3% oriented to and from the south. For non-trucks, approximately 70% of the trips are expected to use I-285, with approximately 40% oriented to and from the east along I-285, and about 30% oriented to and from the west along I-285. About 30% of the non-trucks are expected to use Moreland Avenue, with approximately 21% oriented to and from the north, and the remaining 9% oriented to and from the south.

AREA OF INFLUENCE: The Site is located within an Area of Influence with housing opportunities such that approximately 100% of the persons who are reasonably anticipated to work at the Site will have an opportunity to find housing within the Area of Influence.

FINDINGS AND CONCLUSIONS: The Site is NOT located in an area where the anticipated level of development and availability of infrastructure within the study network is such that the Site is reasonably anticipated to result in unplanned and poorly served development. As shown in the traffic impact analysis, the roadways and intersections serving the Site can be reasonably expected to operate at adequate Levels of Service (LOS), and/or may be mitigated and improved readily so that they will operate at adequate LOS. The required improvements are shown in the following table.

REQUIRED IMPROVEMENTS

Intersection	Existing Conditions	Future Background Conditions	Future Year Total Conditions
Moreland Avenue at I-285 EB Ramp	None	convert the existing left-most southbound through lane into a shared left-through lane, and optimize the traffic signal timing	convert the existing left-most southbound through lane into a shared left-through lane, and optimize traffic signal timing
Moreland Avenue at I-285 WB Ramp	convert the existing westbound double-right turn lanes into a free right turn lane	convert the existing westbound double-right turn lanes into a free right turn lane, and optimize the traffic signal timing	convert the existing westbound double-right turn lanes into a free right turn lane, and optimize the traffic signal timing
Moreland Avenue at Site Access No. 1 (S)	N.A.	N.A.	Add a new traffic signal (first undertake a Traffic Signal Warrant Analysis)
Moreland Avenue at Site Access No. 2 (N)	N.A.	N.A.	Add a new traffic signal (first undertake a Traffic Signal Warrant Analysis)

PROJECT SUMMARY

Name and Number of DRI	CMT Travel Plaza (DRI #1764)
Jurisdiction	DeKalb County
Local Development Approval Sought	Re-Zoning
Location	Southern DeKalb County, east of Moreland Ave., north of I-285
Uses and Intensities of Use	19,800 SF Sit-Down Restaurant proposed
	4,880 SF Fast-Food Restaurant proposed
	8 Pump Gas Station w/ Convenience Store
	2,000 SF Bank proposed
	Truck Service Plaza with approx. 630 parking spaces, 18 fuel pumps, a truck maintenance facility, a truck washing facility, and a lounge and logistics center
Build-Out	2010
Trip Generation – Net External (ADT, AM, PM Peak)	4,137 ADT (not including the truck service plaza) / 983 AM Peak (including truck service plaza) / 926 PM Peak (including truck service plaza)

1. INTRODUCTION

This report presents a variety of analyses and documentation for submittal as the major portion of the Georgia Regional Transportation Authority (GRTA) Development of Regional Impact (DRI) Review Package for the proposed CMT Travel Plaza development. CMT Travel Plaza is a open-to-the-public travel service plaza, serving both truck and non-truck users, located east of Moreland Avenue and north of I-285 in southern DeKalb County, Georgia.

The site will consist of a truck parking plaza, a truck maintenance facility, a truck refueling facility, a truck washing facility, a logistics center, six restaurant facilities, a self service auto refueling station, and a bank with a drive thru. The site will cover 87.24 acres, which includes 15.3 acres of landscaped space, and 36.2 acres of open space (leaving approximately 35.8 acres of impervious space).

These analyses have been initiated in response to an application for a Special Land Use Permit, required for the proposed use, in the existing M (Industrial) zone. Due to the size and characteristics of the Site, it qualifies for a DRI level of review and analysis per rules and guidelines established by GRTA, the Atlanta Regional Commission (ARC), and the Georgia Department of Community Affairs (DCA). The Applicant has elicited to undertake the GRTA review via the Non-Expedited Review Process.

2.1 Project Description

The proposed DRI, CMT Travel Plaza, a travel service plaza oriented to both trucks and non-truck uses, will consist of the following:

- Family Restaurants – two at 4,486 SF each
- Fast Food Restaurants – two at 2,240 SF each
- Buffet Restaurant – 5,100 SF
- Logistics Center – an office space of 15,740 SF
- Bank with Drive Through Window – 2,000 SF
- General Public (auto) Re-fueling Station with Convenience Store – 8 pumps / 16 fueling stations
- Truck Parking Plaza – 593 truck parking spaces and 38 non-truck parking spaces, gated and managed, available for overnight parking
- Truck Re-fueling and Weigh Facilities – 18 pumps / 36 fueling stations
- Truckers Lounge – 5,100 SF
- Truck Washing Facility – 5,100 SF, and
- Truck Maintenance Facility – 5,100 SF.

Figure 2-1 shows the Site Orientation with respect to the surrounding communities and interstates, plus provides a more detailed Site Location Map showing the roadways in the immediate vicinity of the Site. Figure 2-2 shows two aerial photographs of the near vicinity of the Site.

2.2 Site Plan – Types and Amounts of Development

The Site is proposed to be divided into two major components: (1) a truck service plaza for the exclusive use of trucks and truckers, with approximately 593 truck parking stalls (and 38 auto parking spaces), with exclusive access to the truck re-fueling and weigh facilities and the truck maintenance facility, and with immediately adjacent access to the buffet style restaurant and the truckers lounge; and (2) a general public service plaza, with direct access to two family style restaurants, two fast food restaurants, a gasoline service station, a bank with drive-through window, and an office building (Logistics Center). The truckers will also have easy access via an on-site sidewalk system to the facilities available to the general public, and the general public will have access to the buffet style restaurant, and possibly the truckers lounge. The Site Plan is shown in Figure 2-3.

The Site will be developed in two Phases for marketing purposes, but only Build-Out was analyzed, and this report addresses the analyses and findings at Site Build-Out. The Build-Out Year for the Site is 2010.

The Site's immediate neighbors are, some commercial activities to the immediate northwest and southwest of the site, and generally undisturbed land to the north, east, and south. Moreland Avenue (US 23) is to the site's immediate west.

2.3 Consistency with Adopted Comprehensive Plans

The existing zoning of the Site is M (Industrial), which permits the proposed use upon successful application for a Special Land Use Permit.

2.4 Project Phasing Schedule

The Site will be developed in two Phases for marketing purposes, however the analyses and report focus only upon the conditions at Site Build-Out. The Build-Out Year for the Site is 2010.

2.5 Site Parking Requirements

The parking requirements for the Site, per DeKalb County, are shown below. The parking that the Site will be providing is also shown below.

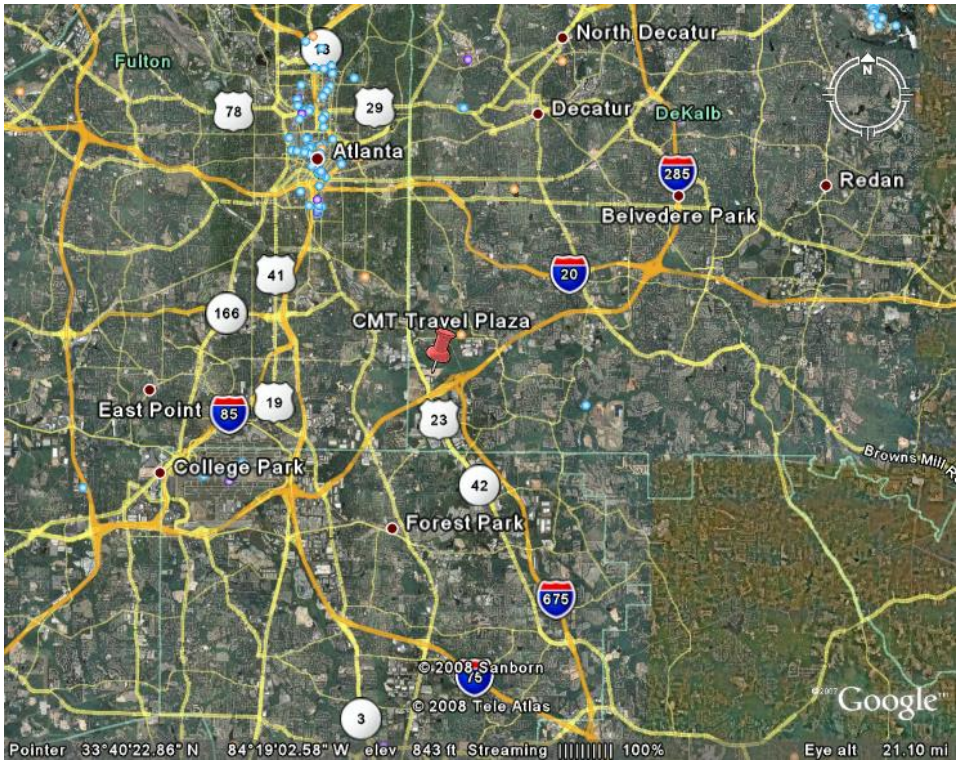
Using the criteria set by DeKalb County, office should have 1 space per 250 S.F. of floor area and restaurants should have 1 space per 75 S.F. of floor area. For this, the minimum Required Spaces for the site are as follows:

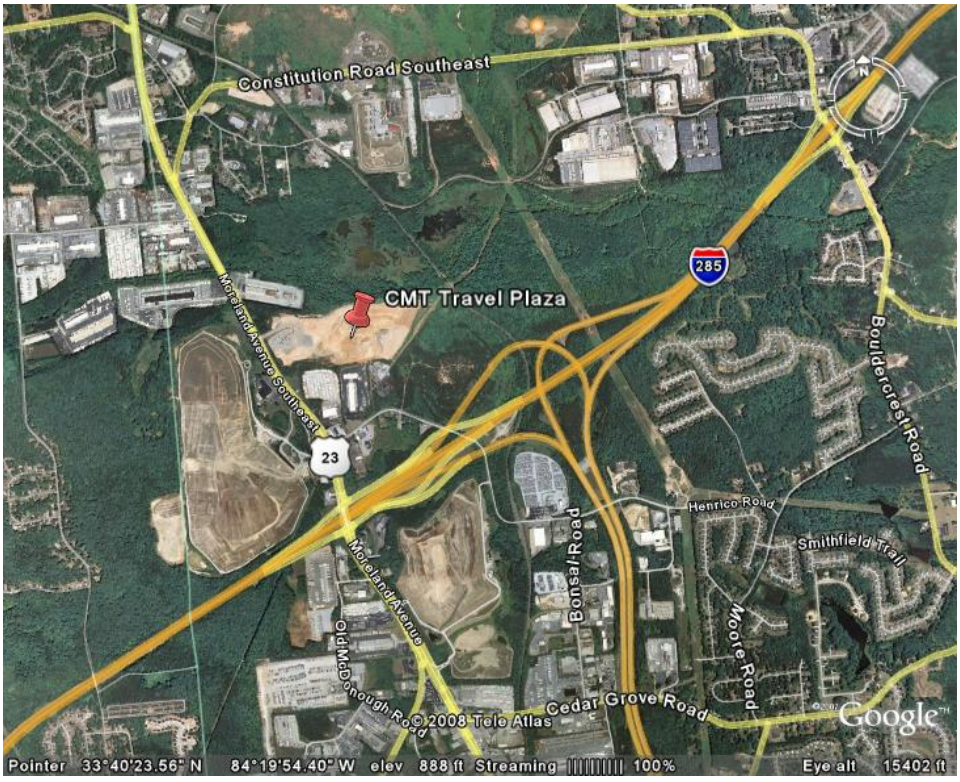
- Bank – 8 spaces minimum,
- Logistics Center – 63 spaces minimum,
- Service Station with Convenience Store – 12 spaces minimum,
- Family Restaurants – 120 spaces minimum,
- Fast-Food Restaurants – 65 spaces minimum, and
- Truck Restaurant and Lounge – 136 spaces minimum.

See the Site Plan, Figure 2-3. The parking spaces being Provided are:

- Bank – 21 spaces
- Logistics Center – 72 spaces
- Service Station with Convenience Store – 15 spaces,
- Family Restaurants – 149 spaces
- Fast-Food Restaurants – 84 spaces, and
- Truck Restaurant and Lounge – up to 38 auto parking spaces and 593 truck parking spaces

Figure 2-1. Site Orientation and Site Location Maps



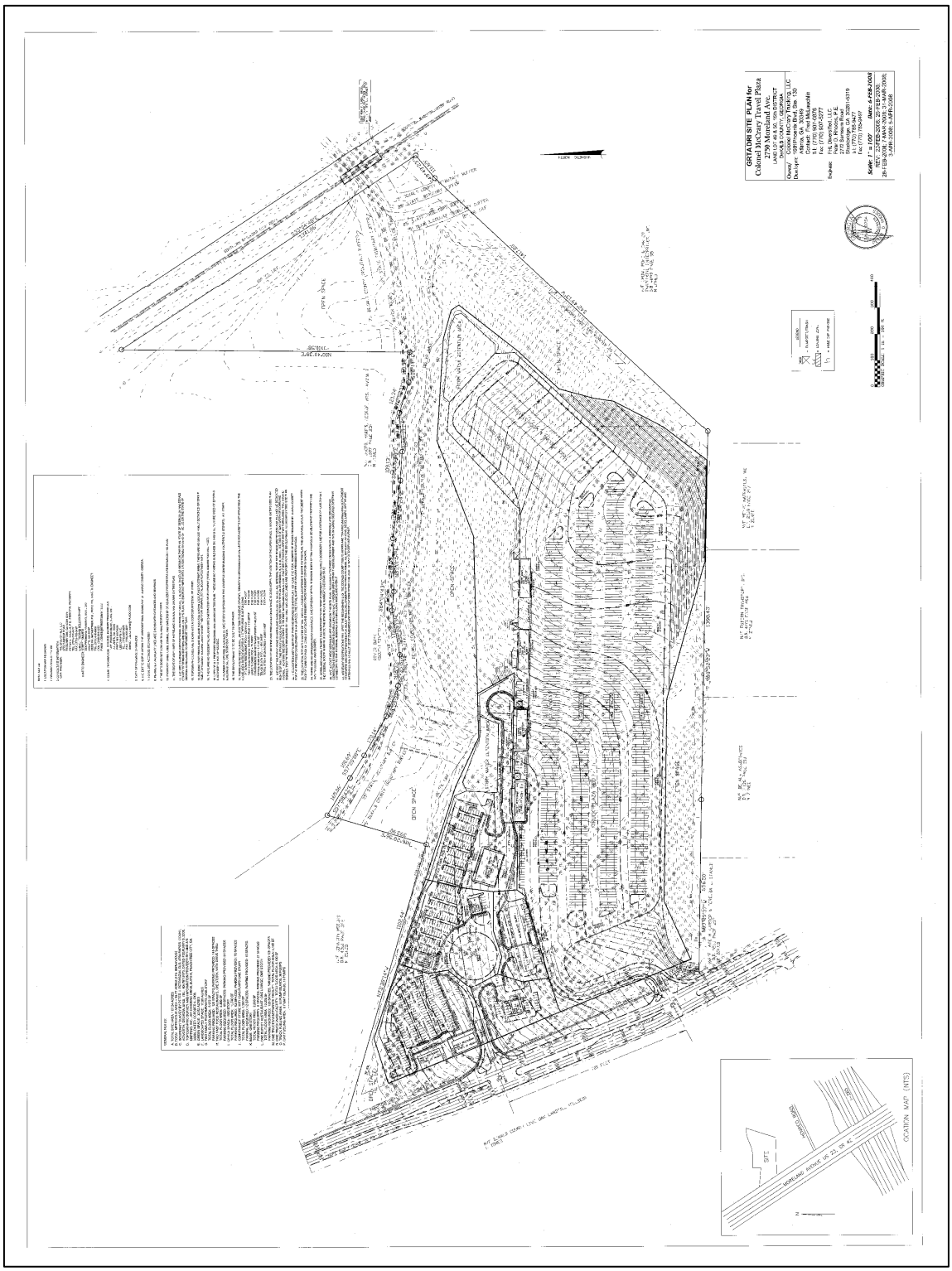


Source: Google Earth

Figure 2-2. Site Aerials

Source: Google Earth

Figure 2-3. Site Plan



2.6 Site Access Points and Driveways

DeKalb County and the Georgia Department of Transportation (GDOT) are the permitting agencies for driveway access. The Site is proposed to have two driveways from Moreland Avenue; one for passenger cars and one for trucks. The truck only driveway will be further south on the site (the first access drive as one proceeds northward from I-285). The truck access drive will be gated. Both access points are proposed to be full-movement intersections, with median openings on Moreland Ave.

2.7 Pedestrian and Transit Facilities

External to the Site, there are no existing sidewalks. DeKalb County will be requiring sidewalks external to the site, along the east side of Moreland Avenue. The Site Plan proposes an extensive system of internal sidewalks, generally allowing multiple path choices between each of the various land uses and site facilities. The internal sidewalk system will be connected to the external sidewalks at two locations.

Besides the external sidewalks that this developer will provide, there are no other sidewalks within the vicinity of the site.

There are currently no existing or planned bicycle facilities off-site within 3/4 miles of the Site.

Although there are a number of MARTA routes that serve Moreland Avenue, most notably Routes 4 and 32, there are currently no existing or planned transit facilities within 1/2 mile of the Site.

3.1 Trip Generation

As noted above, the Site will consist of:

- Family Restaurants – two at 4,486 SF each
- Fast Food Restaurants – two at 2,240 SF each
- Buffet Restaurant – 5,100 SF
- Logistics Center – an office space of 15,740 SF
- Bank with Drive Through Window – 2,000 SF
- General Public (auto) Re-fueling Station with Convenience Store – 8 pumps / 16 fueling stations
- Truck Parking Plaza – 593 truck parking spaces and 38 non-truck parking spaces, gated and managed, available for overnight parking
- Truck Re-fueling and Weigh Facilities – 18 pumps / 36 fueling stations
- Truckers Lounge – 5,100 SF
- Truck Washing Facility – 5,100 SF, and
- Truck Maintenance Facility – 5,100 SF.

The number of vehicle trips expected from the Site was estimated. The trip generation was based on the Site Plan and information provided by the developer/owner, and their site civil engineer.

The typical procedure for determining the traffic generated by a new development is to apply the rates or equations developed by the Institute of Transportation Engineers (ITE) as published in *Trip Generation, 7th Edition*, 2003, an ITE Informational Report, and related information in the *Trip Generation Handbook*, an ITE Recommended Practice, June 2004. The rates and equations in these documents are calculated from nationally collected data. The rates and equations were used to estimate the number of trips expected for the Site for all land uses except the Truck Service Plaza itself. The ITE Land Use Codes used in the analyses are shown in Table 3-1. Also below is a discussion of how trips were developed for the Truck Service Plaza.

Internal capture rates, published in ITE's *Trip Generation Handbook*, June 2004, between retail and other uses were used to reduce trips based on the mixed-use nature of the Site.

Pass-by trips were also reduced from the trip generation for some of the land uses. The pass-by rates were calculated using ITE's *Trip Generation Handbook*, June 2004. The pass-by rate was found to be: 43% for sit-down (family style) restaurants; 50% for fast-food restaurants; 62% AM (56% PM) for gasoline service stations; and 47% for banks. GRTA caps pass-by trips at 10% of the average daily traffic (ADT) on the adjacent roadway. The limits test was performed to determine whether the pass-by trips that would be expected based on the rates given in ITE's *Trip Generation Handbook* would be more than 10% of the ADT

for the adjacent roadway. It was determined that the pass-by trips were expected to be less than the 10% threshold, thus no reductions in the pass-by rate were needed.

There are no trip generation rates or equations for truck travel plazas in the ITE *Trip Generation* manual. Thus rates for this land use had to be developed based upon existing truck travel plazas in the Atlanta region. After consultation with GRTA, two study sites were selected: (1) the Petro Stopping Center (on US 78 at I-285), and (2) the Pilot Travel Center (on Bouldercrest at I-285). The Petro Stopping Center was selected because it is remarkably similar in size and amenities to DRI No. 1764 (the subject site). The Pilot Travel Center was selected because it is conveniently located, has some similarities to the subject site, and to help judge the credibility of Site No. 1 data.

For example, Site No. 1 has 499 truck parking stalls, 16 truck fuel lanes, 6 lube bays, 1 family style restaurant, 1 fast food restaurant, scales, truck wash facilities, TSE, and numerous trucker amenities (including ATM's and check cashing, a barber shop, a CB shop, a movie theater, internet connections, drop boxes for delivery services, a laundry room, showers and a shoe shine, a TV room, a video arcade, audio and video rentals, a chapel, a number of specialized stores geared for truckers, and much more).

Site No. 2, by contrast, has 75 parking stalls, 8 truck fuel lanes, 1 fast food restaurant, scales, and a number of trucker amenities (including ATM's and check cashing, internet connections, a game room, showers, audio rentals, and more).

An assessment of the data collected at the two study sites led to the following preliminary conclusions. First and foremost, this assessment focused on peak period trip production, NOT on daily trip production. Thus the conclusions are ONLY for peak periods, and not for daily or off-peak trip production.

The first preliminary conclusion is that these facilities are not particularly sensitive to facility size (either amount, variety and types of services offered, or gross or net acreage of the site). The second is that "number of truck parking stalls" is also not a good indicator of trip production. Although only two sites were studied, the findings seemed to indicate that there is not good correlation between trip production and the number of parking stalls provided – at least during peak traffic periods. Perhaps with a larger sample size, this may be refuted. Certainly some minimum number of parking stalls is required to allow a site to operate properly. Beyond that, additional parking stalls may not be a significant contributor to trip production. It seems likely that a trip generation curve will result that will show larger trip productions per selected variable for very small to small sites, with a gradually tapering off rate for large to very large sites, and likely the rate may flatten for very large sites. That is, beyond a certain point, for peak traffic periods at least, adding more fuel lanes or parking stalls or restaurants or movie theaters and fax machines for truckers just won't attract more trips to the site. However, for non-peak and daily trip production, it is almost certain that adding more parking stalls, and very likely that adding more fueling stations, will attract more trips to the site.

After further consultation with GRTA, to be conservative, trip generation for truck service plazas was developed based upon an average of the two study sites, and based upon number of truck fueling stations.

Trip Generation has been determined for the Site Build-Out (Year 2010). The results of the trip generation are shown in Table 3-1. The Trip Generation and Internal Capture Worksheets are included in Appendix B.

Table 3-1. Site Build-Out Trip Generation

Land Use	(ITE Code)	Intensity		Daily		AM Peak Hr		PM Peak Hr	
				In	Out	In	Out	In	Out
Sit Down Restaurant	**932**	**19.77**	**ksf**	**1,218**	**1,218**	**116**	**106**	**128**	**82**
Internal				35	24	1	3	3	2
External				1,183	1,194	115	103	125	80
Passby		43% PM		509	513			54	34
New External Trips				674	681	115	103	71	46
Fast Food Restaurant	**934**	**4.88**	**ksf**	**1,212**	**1,210**	**132**	**128**	**88**	**82**
Internal				35	24	1	4	2	2
External		AM		1,177	1,186	131	124	86	80
Passby		50% PM		589	593			43	40
New External Trips				588	593	131	124	43	40
Gas Sta W/ Convenience Mkt	**945**	**16**	**Pumps**	**1,302**	**1,302**	**81**	**81**	**111**	**111**
Internal				0	0	0	0	0	0
External				1,302	1,302	81	81	111	111
Passby		62% AM,	56% PM	768	768	50	50	62	62
New External Trips				534	534	31	31	49	49
Logistics Center	**710**	**15.74**	**ksf**	**161**	**160**	**38**	**5**	**16**	**80**
Internal				48	70	7	2	4	5
External				113	90	31	3	12	75
Passby				0	0	0	0	0	0
New External Trips				113	90	31	3	12	75
Bank	**912**	**2**	**ksf**	**311**	**311**	**14**	**11**	**46**	**46**
Internal				0	0	0	0	0	0
External				311	311	14	11	46	46
Passby		47 % PM		146	146			22	22
New External Trips				311	311	14	11	46	46
Truck Plaza - Truck Fuel Pumps and Rates	**n/a**	**36**	**units**			5.56	5.25	7.88	5.81
Calculated Trips						200	189	284	209
Internal						0	0	0	0
External						200	189	284	209
Passby								0	0
New External Trips						200	189	284	209
TOTAL	Daily Volumes do NOT include the Truck Plaza	AM Peak Hour volumes and PM Peak Hour volumes include Truck Plaza		4,204	4,201	581	520	673	610
TOTAL INTERNAL				118	118	9	9	9	9
TOTAL EXTERNAL				4,086	4,083	572	511	664	601
TOTAL PASSBY				2,012	2,020	50	50	181	158
TOTAL NEW EXTERNAL				2,074	2,063	522	461	483	443

3.2 Trip Distribution and Traffic Assignment

For the purposes of determining trip distribution, Maptitude Version 4.8 was used to develop the trip distributions for the restaurants, bank, office and gasoline station. Population data

within 5 miles was used to determine the distribution and assignment of these trips coming to and leaving the site. This, along with engineering judgment, was used to develop trip distributions for the truck facilities. The engineering judgment used for trucks took into consideration the site's purpose, and its strategic location related to I-285, I-75 (S), and I-675, and to a lesser degree I-85 (S), I-85 (N), and I-20 (E).

Trucks and non-trucks are expected to have different trip distributions. For trucks, approximately 94% of the trips are expected to use I-285, with approximately 74% oriented to and from the east along I-285, and about 20% oriented to and from the west along I-285. About 6% of the trucks are expected to use Moreland Avenue, with approximately 3% oriented to and from the north, and the remaining 3% oriented to and from the south. For non-trucks, approximately 70% of the trips are expected to use I-285, with approximately 40% oriented to and from the east along I-285, and about 30% oriented to and from the west along I-285. About 30% of the non-trucks are expected to use Moreland Avenue, with approximately 21% oriented to and from the north, and the remaining 9% oriented to and from the south.

The trip distributions developed for the Site are shown in Figure 3-1 for Site Build-Out (Year 2010). The appropriate distribution percentages were applied to the trips generated by the Site as shown in Table 3-1 for Site Build-Out (Year 2010), and the traffic volumes were assigned to the road network. The weekday AM and PM peak hour turning volumes expected at the study intersections from the Site are shown in Figure 3-2 for Site Build-Out (Year 2010).

Figure 3-1. Site Build-Out Trip Distribution

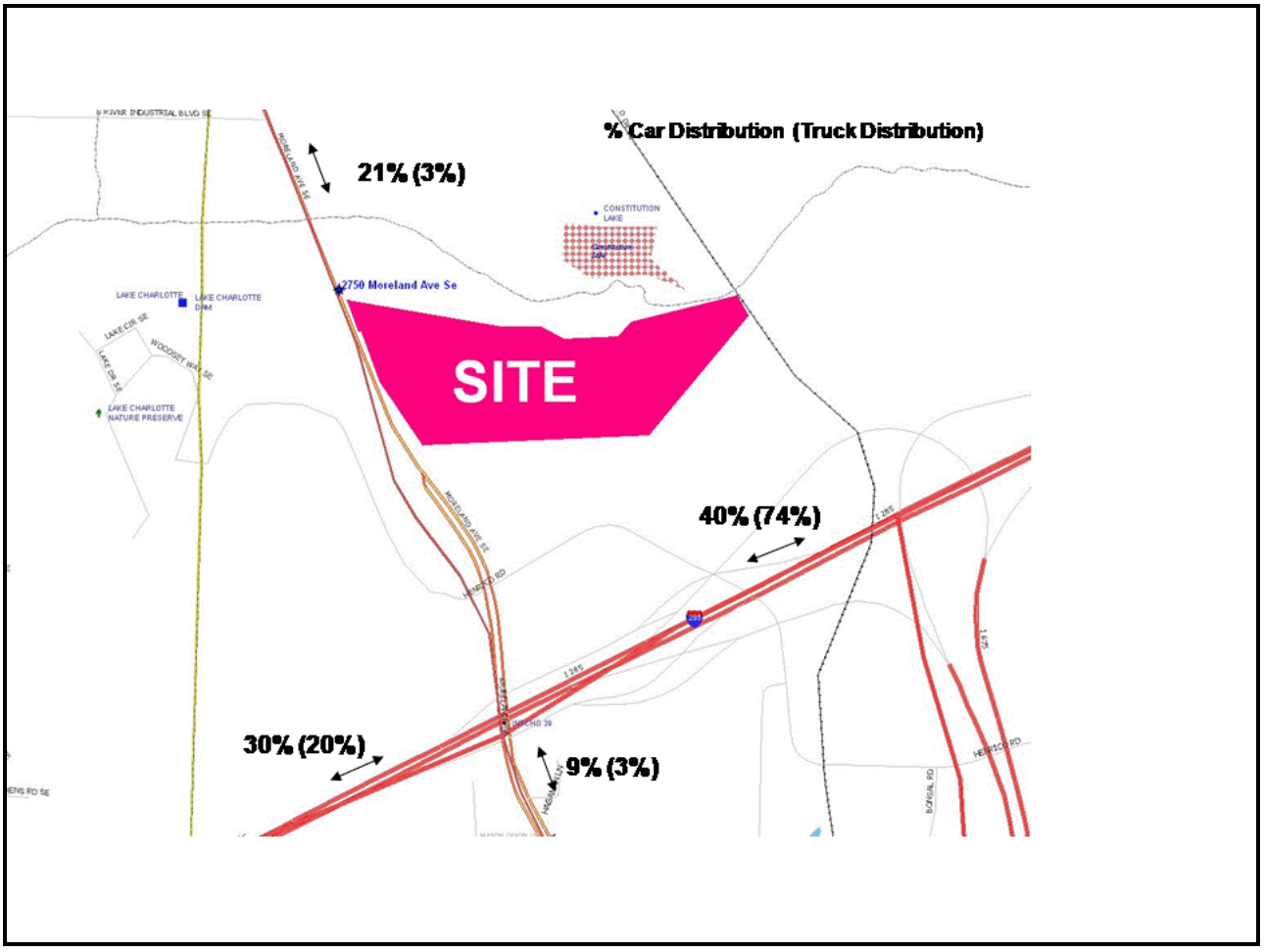
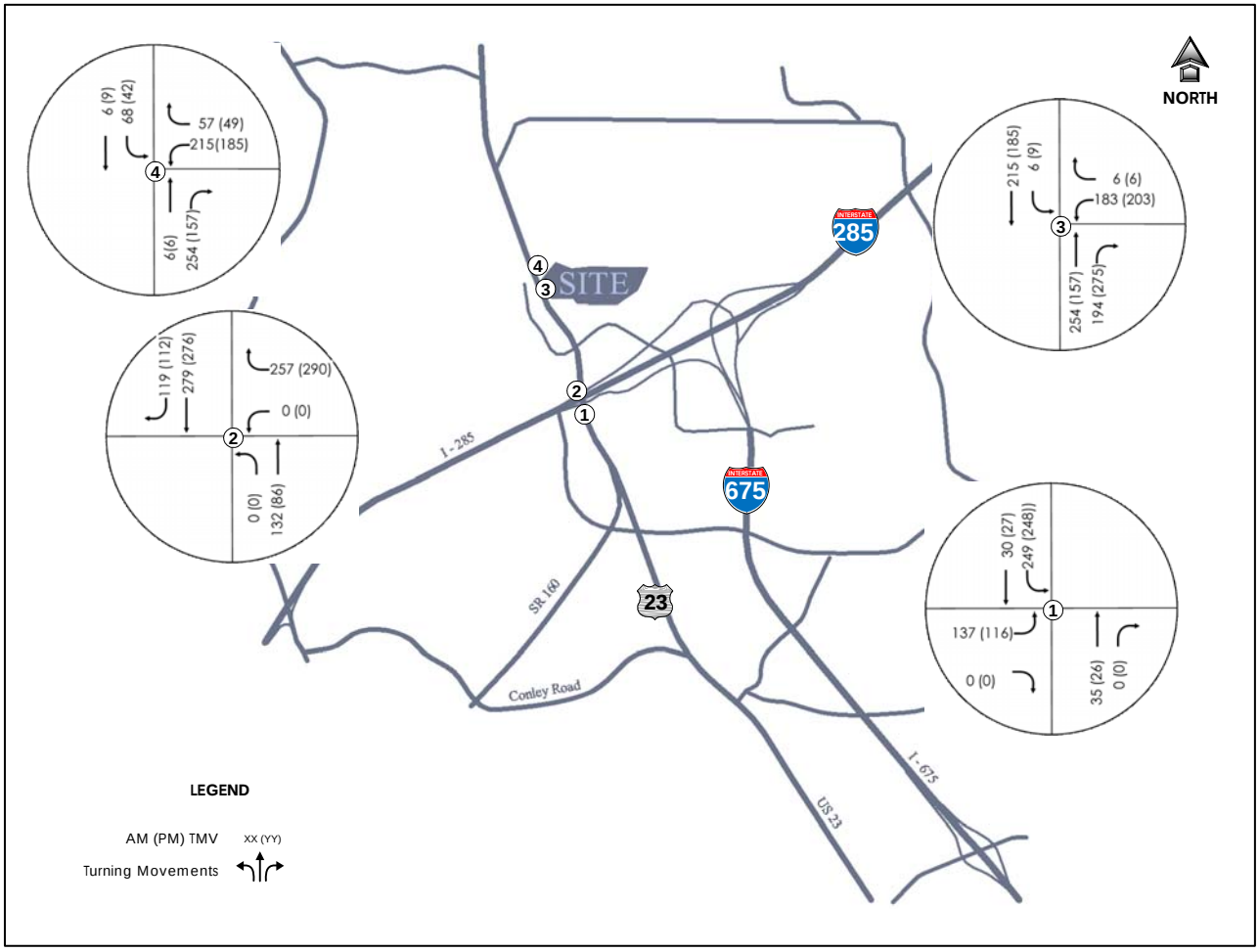


Figure 3-2. Site Build-Out Traffic Volumes



4. IDENTIFICATION OF THE STUDY NETWORK

An early step in the GRTA DRI Non-Expedited Review Process is the determination of the Study Network utilizing the 7% Rule. The 7% Rule requires study of each roadway segment that is impacted to determine if traffic from the Site consumes 7% or more of the Service Volume (traffic volume at a specific Level of Service (LOS)) of that roadway segment. LOS D is generally used as a default value for urban areas. The LOS standard for DeKalb County is assumed to be LOS D.

After consultation with GRTA, the following intersections were agreed upon for investigation as part of the Traffic Impact Analysis.

- Both site driveway access points;
- Moreland Avenue at I-285 WB Ramps; and
- Moreland Avenue at I-285 EB Ramps.

Figure 4-1 shows the location of the study intersections.

Figure 4-1. Location of Study Intersections

Source: Google Earth

5.1 Level of Service Standards

Operating conditions at intersections and roadway segments are evaluated in terms of Levels of Service (LOS). For the GRTA DRI process, DeKalb County's LOS Standards for the roadways in the Study Area are assumed to be LOS D. Therefore, LOS A through D are considered to be adequate peak hour operations, and LOS E and F are considered inadequate peak hour conditions. It is desirable, after new development has been put in place, that no less than an LOS D be maintained. However, if a specific location operates at LOS E or F under existing traffic conditions, then GRTA finds as acceptable, after background traffic, and also after the Site's traffic, has been added to the specific location, a return to LOS E.

5.2 Intersection Capacity Analysis Methodology

Capacity analyses of the study intersections were completed using procedures in the *Highway Capacity Manual (HCM), Millennium Edition*. This is the usual methodology for the analysis of traffic conditions. The software program *Synchro 7* (a nationally recognized computer software package for analyzing capacities and Levels of Service) was used to perform the capacity analyses for the study intersections.

Levels of Service for signalized intersections are reported in composite fashion, i.e., one LOS for the entire intersection, and are presented in terms of average control delay. Individual turning movements at signalized intersections may experience inadequate LOS, even when those volumes are relatively low, while the intersection as a whole has an adequate LOS. This is because the major movements on the major roadway are given priority in assigning signal green time.

Traffic conditions at unsignalized intersections, with stop sign control on the minor street only, are evaluated for the minor street approach(es) and for the left turns from the major street. This is because the major street traffic is assumed to have no delay since there is no control (no stop sign). Inadequate Levels of Service for minor street approaches to unsignalized intersections are not uncommon, as the continuous flow traffic will always get the priority. For two-way stop controlled intersections, the *Highway Capacity Manual* does not calculate a composite Level of Service for the entire intersection.

Levels of Service for all-way STOP controlled intersections are reported both for study intersection movements, and in composite fashion, i.e., one LOS for the entire intersection, and are based on average control delay.

The *Highway Capacity Manual* Level of Service criteria for signalized and unsignalized intersections are shown in Table 5-1.

Table 5-1. Highway Capacity Manual Intersection LOS Criteria

Level of Service	Control Delay (seconds per vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10	≤ 10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	> 80	> 50

Source: Highway Capacity Manual, Millennium Edition.

6.1 Existing Roadway Facilities

To determine existing traffic conditions of the identified study roadway segments and study intersections in the area, an inventory was made of the major roads surrounding the Site. The physical and traffic control elements of each of the roadways, as well as the functional classification and other important elements for the study roadways, follows:

- **Moreland Avenue (US 23).** This roadway is a six-lane, median divided arterial that runs north-south thru the study site with a speed limit of 45 mph. There are turning lanes at most intersections, and traffic signals at most key intersections.

- **I-285.** This roadway is an eight-lane interstate principal arterial and is median-divided with a speed limit of 70 mph. The primary function of I-285 is to provide vehicles high speed access around the Atlanta metro area. I-285 is a loop around Atlanta, but runs east-west along the study area.

Figure 6-1 shows the existing traffic controls and lane configurations at the study intersections.

6.2 Existing Traffic Volumes

After consultation with GRTA and ARC, it was determined that capacity analyses would be performed at the study intersections for the weekday AM peak hour and the weekday PM peak hour. For these two peak periods, turning movement counts were collected on Tuesday and Thursday, March 25 and 27, 2008 at the following intersections:

- Moreland Avenue at I-285 WB Ramps; and
- Moreland Avenue at I-285 EB Ramps.

In addition, 48-hour machine traffic volume (classification) counts were collected on Moreland Avenue, north of Henrico Road, from Tuesday through Thursday, March 25 to 27, 2006. Figure 6-2 shows the existing volumes at the study intersections for the weekday AM peak hour and the weekday PM peak hour.

Average Daily Traffic (ADT) volumes were acquired from GDOT permanent counting stations located in the study area for the six year period 2001 to 2006.

The count data is included in Appendix C.

Figure 6-1. Existing Traffic Controls and Lane Configurations

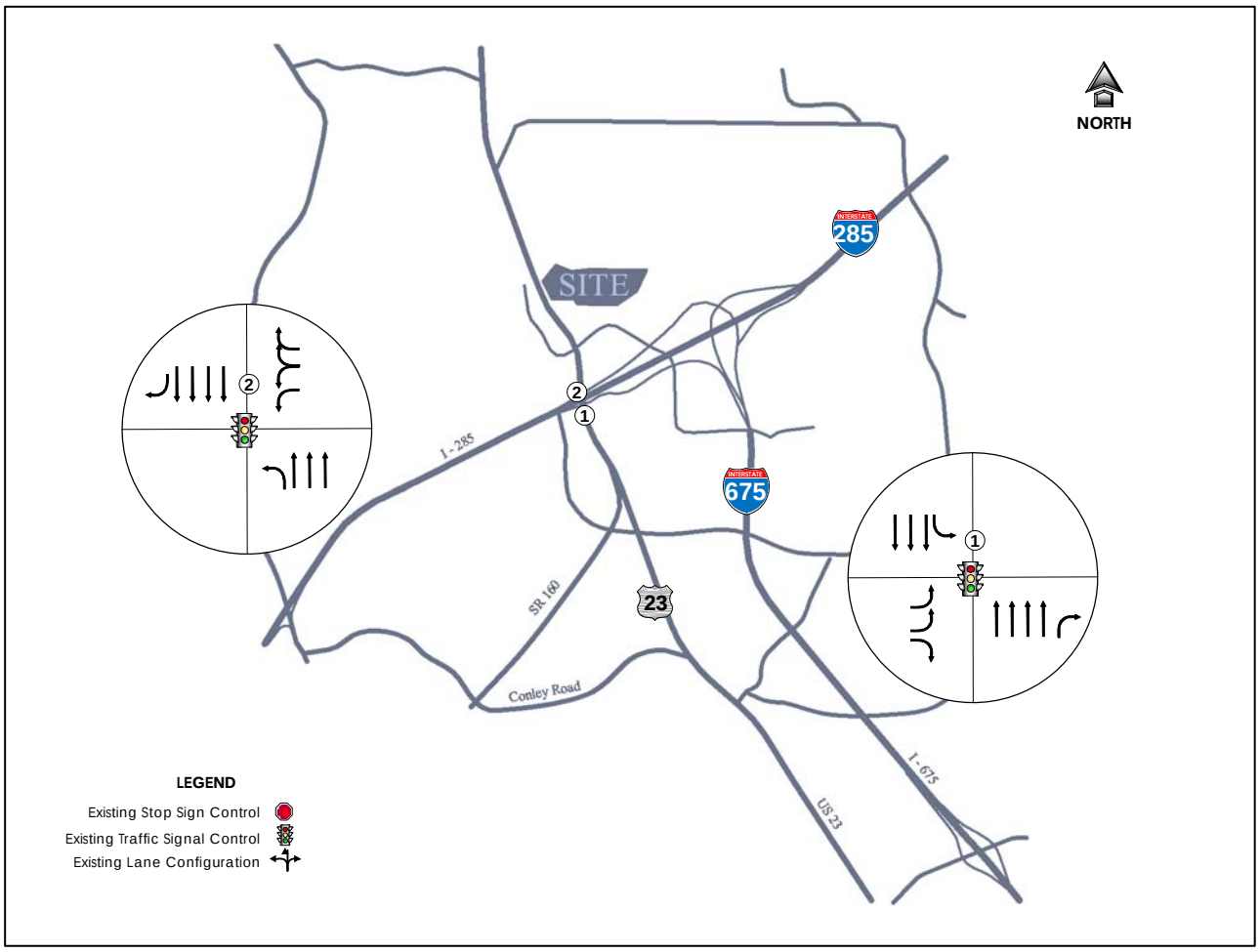
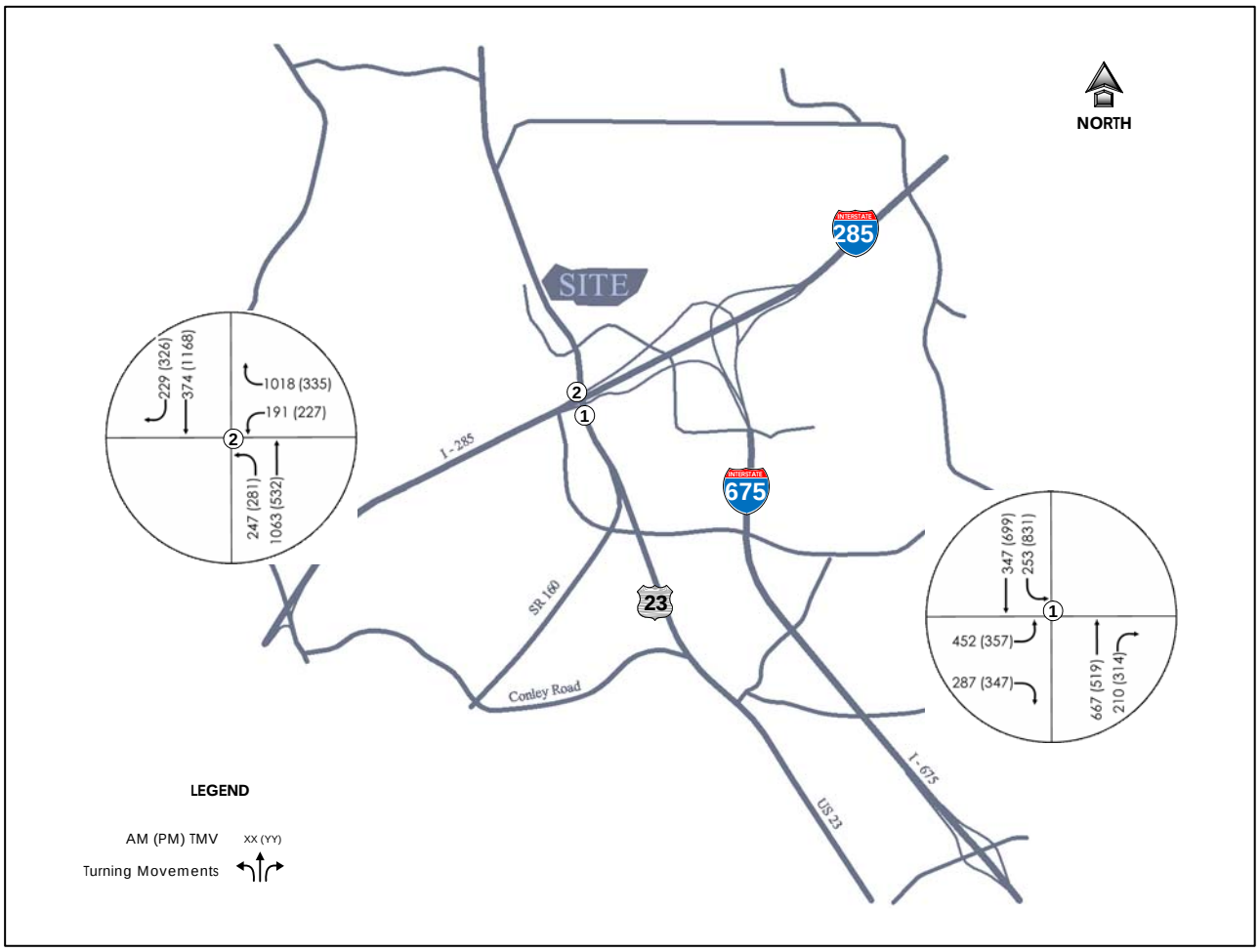


Figure 6-2. Existing Traffic Volumes



6.3 Intersection Capacity Analysis – Existing Conditions

Using the methodologies previously described, intersection Levels of Service were determined for the study intersections for Existing conditions. Table 6-1 presents the results of the intersection capacity analysis for Existing conditions. Printouts of these analyses are included in Appendix D.

Table 6-1. Intersection LOS – Existing

Intersection		Control	Movement	A.M. Peak Hour		P.M. Peak Hour	
Number	Name			Movement	Overall	Movement	Overall
1	Moreland Avenue at I-285 EB Ramp	Traffic Signal	Overall	*	D	*	F
2	Moreland Avenue at I-285 WB Ramp	Traffic Signal	Overall	*	F	*	C

*Composite LOS given for signalized intersections

As can be seen from Table 6-1, the overall intersection operations function at inadequate Levels of Service for Existing conditions at both intersections, the PM Peak Hour at Intersection No. 1, Moreland Avenue at the I-285 Eastbound, and the AM Peak Hour at Intersection No. 2, Moreland Avenue at the I-285 Westbound Ramp.

6.3.1 Required Improvements

Table 6-1 identifies deficiencies that already exist at the study intersections. Improvements have been identified, that if implemented immediately, could correct the Existing deficiencies. Their impacts on the Existing deficiencies are shown in Table 6-2. Printouts of these analyses are included in Appendix E.

Table 6-2. Intersection LOS – Existing with Required Improvements

Intersection		Improvement	Movement	A.M. Peak Hour		P.M. Peak Hour	
Number	Name			Movement	Overall	Movement	Overall
1	Moreland Avenue at I-285 EB Ramp	Add Shared SB Left Turn – Through Lane	Overall	*	C	*	C
2	Moreland Avenue at I-285 WB Ramp	Preferred: WB Free Right	Overall	*	B	*	C
2	Moreland Avenue at I-285 WB Ramp	Alternate: WB Triple Right	Overall	*	E	*	C

*Composite LOS given for signalized intersections

As can be seen from Table 6-2, the following required improvements are expected to bring the intersections back into adequacy for Existing conditions:

- Intersection No. 1, Moreland Avenue at I-285 Eastbound Ramp: convert the existing left-most southbound through lane into a shared left-through lane;
- Preferred Option: convert the existing westbound double-right turn lanes into a free right turn lane; or,
- Alternative Option: add a third westbound right turn lane.

Figure 6-3 shows the lane configurations and traffic control that would be required to mitigate the Existing intersection deficiencies.

6.5 Calculated Level of Service Standards

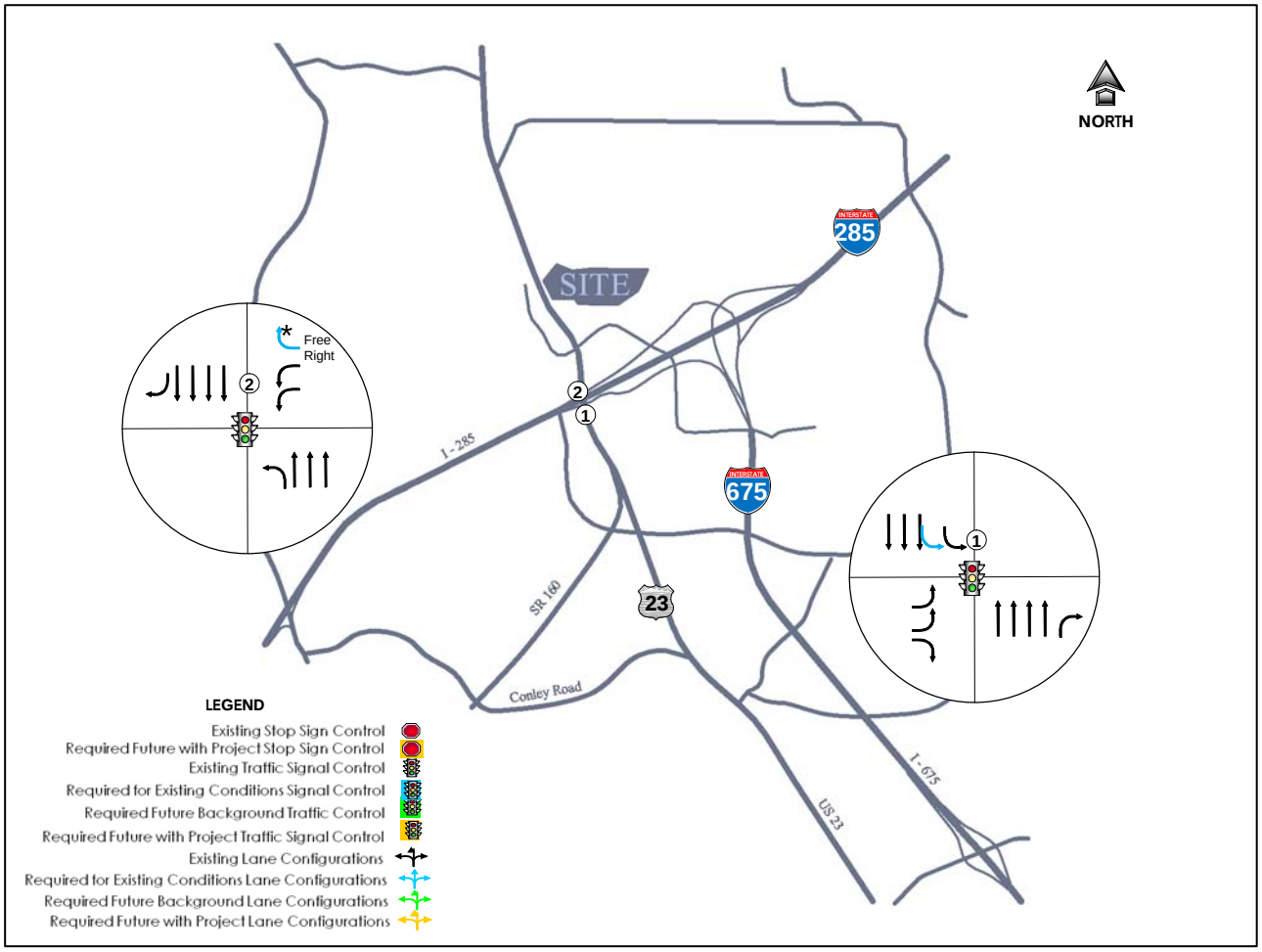
Based upon the results of the analysis of the Existing conditions, Table 6-3 presents the calculated Level of Service Standards for intersections that must be met when considering Future Background and Future Year Total conditions.

Table 6-3. Calculated Intersection LOS Standards

Intersection		Control	Movement	A.M. Peak Hour		P.M. Peak Hour	
Number	Name			Movement	Overall	Movement	Overall
1	Moreland Avenue at I-285 EB Ramp	Traffic Signal	Overall	*	D	*	E
2	Moreland Avenue at I-285 WB Ramp	Traffic Signal	Overall	*	E	*	D

*Composite LOS given for signalized intersections

Figure 6-3. Existing – Required Intersection Improvements



7. PLANNED AND PROGRAMMED IMPROVEMENTS

The local Transportation Improvement Program (TIP), the State Transportation Improvement Program (STIP), the Regional Transportation Plan (RTP), and the GDOT Construction Work Program have been researched to determine if there are any proposed transportation improvements, either programmed or planned, that would impact the Site. For identified projects, the opening-to-traffic dates, sponsors, costs of projects, funding sources, and logical termini are usually also identified.

There are NO improvements scheduled to be completed by the Site Build-Out (Year 2010).

There is one relevant transportation improvement that is programmed well beyond the Site Build-Out (Year 2010). It is:

- **STP 037-2(54), CL-012A** – US 23 (Moreland Avenue) widening along a 3.49 mile stretch from Lake Harbin Road to Anvil Block Road; Roadway Capacity Improvements (widening from two lanes to four lanes); estimated completion date set at 2030; est. $37,951,000; Federal and State Funding Sources;

8.1 Future Background Traffic Volumes

Between the time this study is performed and the Site is built out in Year 2010, the traffic volumes on the adjacent roadways are expected to increase. This is due to other development which will take place both in the study area by the Year 2010, as well as growth outside of it, whether or not the Site being studied is built. This growth is called background traffic growth. There are generally two components to background traffic growth:

(a) growth close to the Site due to specific, identified developments already in the "pipeline" (that is, actual nearby developments already approved, or further along in the approval process, that can reasonably be expected to be built by Site Build-Out (Year 2010)), sometimes called "background development"; and

(b) general traffic growth along major roadways due to the expanding nature of the region, and to other non-specific development further from the Site, often simply referred to as "background growth". Growth of this nature can generally be determined by examining historic trends in the vicinity of the Site, and by applying those trends to the appropriate roadways.

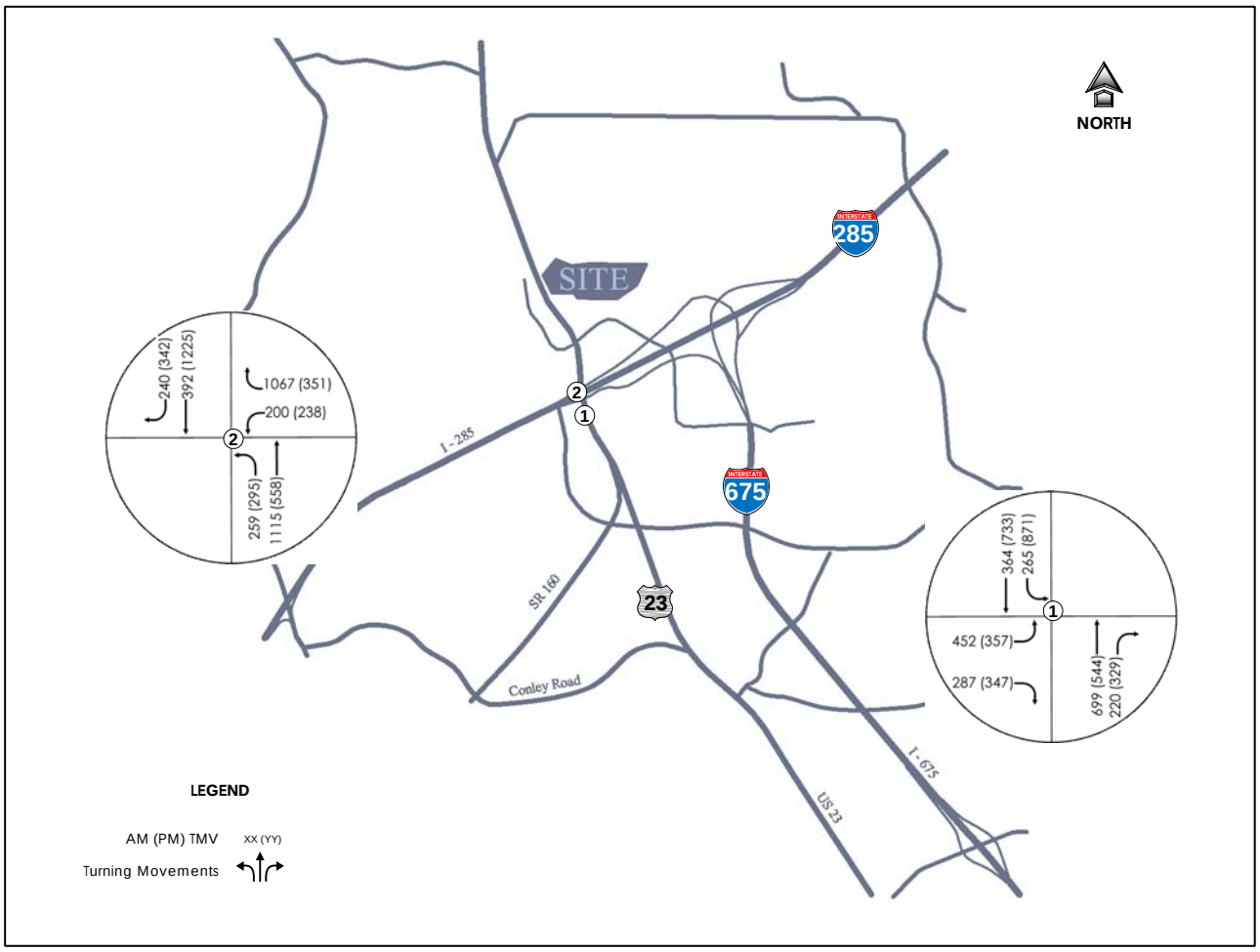
No background developments have been identified close enough to the Site, and proposed to either reach build-out, or sustain some amount of development, either before or in the same time frame as Site Build-Out (Year 2010).

Historical traffic volume trends on the study network were taken into account. The last six years (2001 – 2006) of historical Annual Average Daily Traffic (AADT) collected by GDOT were used to help develop traffic volume trends on the study area roadways.

Based on the historical traffic volumes collected in the vicinity of the Site and after discussion with GRTA staff, a 2.4% annual traffic growth was used.

The Future Background traffic volumes were developed by adding to existing traffic the background growth out to the Year 2010. The Future Background traffic volumes are shown in Figure 8-1.

Figure 8-1. Future Background Traffic Volumes



8.2 Intersection Capacity Analysis – Future Background Conditions

Using the methodologies previously described, intersection Levels of Service were determined for the study intersections for Future Background conditions. Table 8-1 presents the results of the intersection capacity analyses for Future Background traffic conditions, assuming existing lane configurations and traffic control. Printouts of these analyses are included in Appendix F.

Table 8-1. Intersection LOS – Future Background

Intersection		Control	Movement	A.M. Peak Hour		P.M. Peak Hour	
Number	Name			Movement	Overall	Movement	Overall
1	Moreland Avenue at I-285 EB Ramp	Traffic Signal	Overall	*	D	*	F
2	Moreland Avenue at I-285 WB Ramp	Traffic Signal	Overall	*	F	*	C

*Composite LOS given for signalized intersections

As can be seen from Table 8-1, all of the overall intersection operations are expected to function at adequate Levels of Service for Future Background conditions, except at the following locations:

- Intersection No. 1, Moreland Avenue at I-285 Eastbound Ramp during the PM Peak Hour; and,
- Intersection No. 2, Moreland Avenue at I-285 Westbound Ramp during the AM Peak Hour.

8.2.1 Required Improvements

Table 8-1 identifies deficiencies that are expected to exist at the study intersections for Future Background conditions. Improvements have been identified that would be expected to correct the Future Background deficiencies. Their impacts on the Future Background deficiencies are shown in Table 8-2. Printouts of these analyses are included in Appendix G.

Table 8-2. Intersection LOS – Future Background with Required Improvements

Intersection		Improvement	Movement	A.M. Peak Hour		P.M. Peak Hour	
Number	Name			Movement	Overall	Movement	Overall
1	Moreland Avenue at I-285 EB Ramp	Add Shared SB Left Turn - Through Lane	Overall	*	D	*	D
2	Moreland Avenue at I-285 WB Ramp	WB Free Right PLUS Optimized Traffic Signal Timing **	Overall	*	B	*	C

*Composite LOS given for signalized intersections

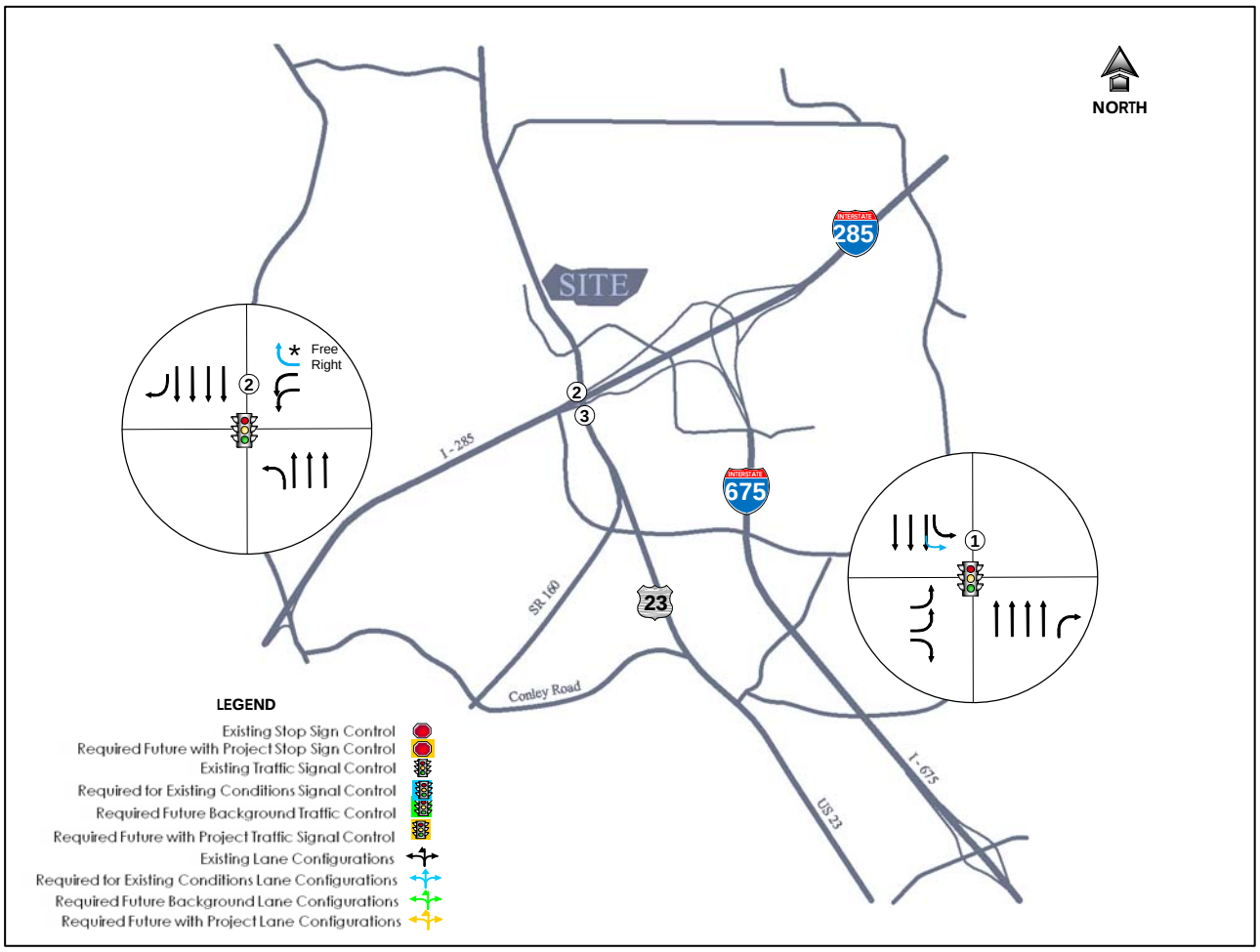
** Optimized signal timings also include the WB Free Right for Intersection 2 and the Combined Left-Through Lane in SB Direction for Intersection 1. The combination of all three help lower the LOS below an E.

As can be seen from Table 8-2, the following required improvements would be expected to bring the intersections back into adequacy for Future Background conditions:

- Intersection No. 1, Moreland Avenue at I-285 Eastbound Ramp: convert the existing left-most southbound through lane into a shared left-through lane;
- Intersection No. 2, Moreland Avenue at I-285 Westbound Ramp: convert the existing westbound double-right turn lanes into a free right turn lane, and optimized the traffic signal timing; and,
- Intersection No. 2, Moreland Avenue at I-285 Westbound Ramp Alternative Option: add a third westbound right turn lane – this alternative will no longer work, even when combined with optimized traffic signal timing.

Figure 8-2 shows the intersection lane configurations and traffic control that would be required to mitigate the Future Background deficiencies.

Figure 8-2. Future Background – Required Intersection Improvements



The projected volumes for Site Build-Out were added to the Future Background traffic volumes to represent the total traffic expected in the area when the Site is complete. The Future Year Total traffic volumes are shown in Figure 9-1.

9.1 Intersection Capacity Analysis – Future Year Total Conditions

Using the methodologies previously described, intersection Levels of Service were determined for the study intersections for Future Year Total traffic conditions. Table 9-1 presents the results of the intersection capacity analysis for Future Year Total traffic conditions, but still assuming the existing lane configurations and traffic control. Printouts of these analyses are included in Appendix H.

Table 9-1. Intersection LOS – Future Year Total

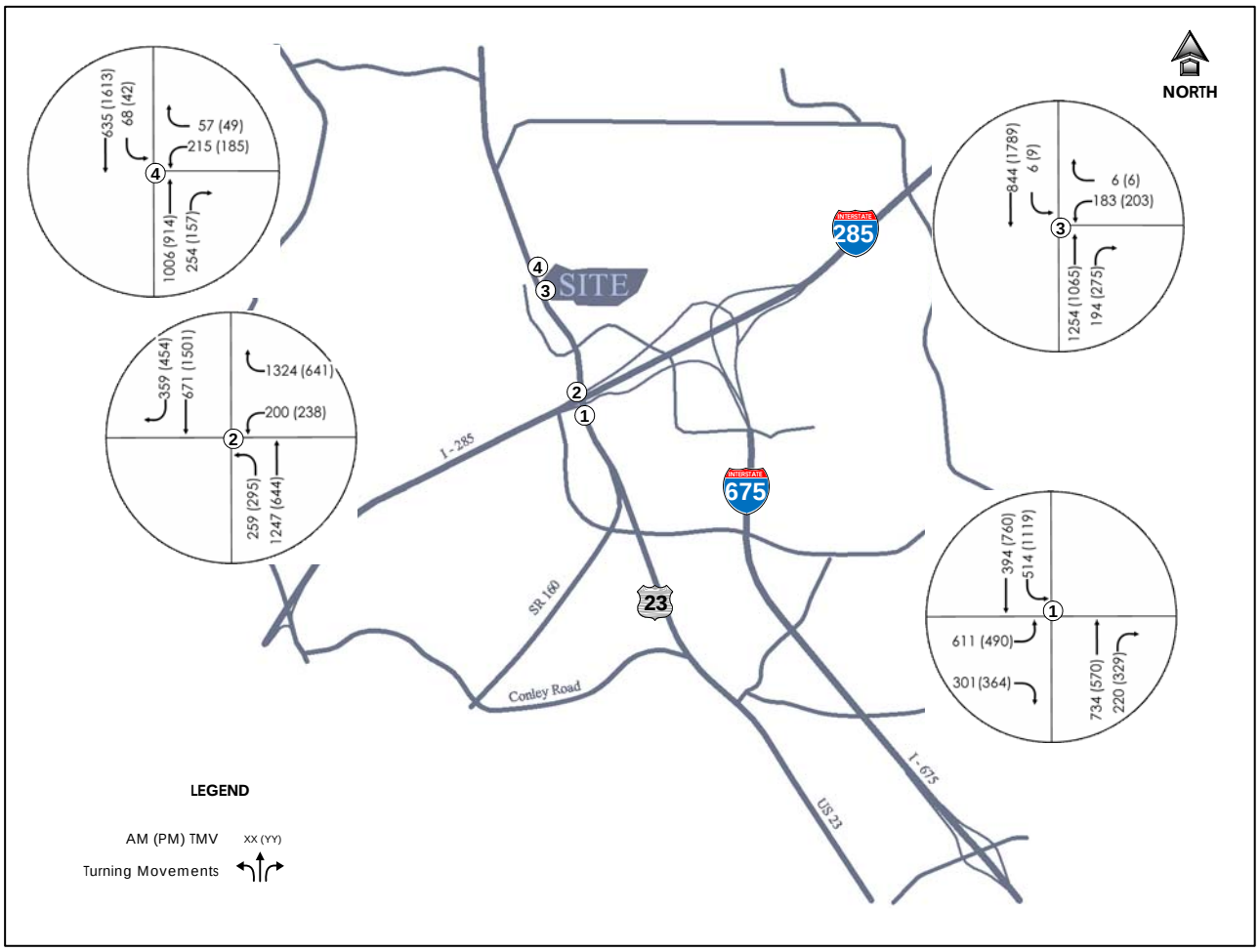
Intersection		Control	Movement	A.M. Peak Hour		P.M. Peak Hour	
Number	Name			Movement	Overall	Movement	Overall
1	Moreland Avenue at I-285 EB Ramp	Traffic Signal	Overall	*	F	*	F
2	Moreland Avenue at I-285 WB Ramp	Traffic Signal	Overall	*	F	*	D
3	Moreland Avenue at Site 1 Entrance	STOP Sign on Side Street	SBL	D	N/A	D	N/A
			WBL+R	F		F	
4	Moreland Avenue at Site 2 Entrance	STOP Sign on Side Street	SBL	B	N/A	B	N/A
			WBL+R	F		F	

*Composite LOS given for signalized intersections

As can be seen from Table 9-1, many of the movements and the overall intersection operations are expected to function at inadequate Levels of Service for Future Year Total traffic conditions:

- Intersection No. 1, Moreland Avenue at I-285 Eastbound Ramp during both the AM and PM Peak Hours;
- Intersection No. 2, Moreland Avenue at I-285 Westbound Ramp during the AM Peak Hour;
- Intersection No. 3, Moreland Avenue at Site Access No. 1, the exiting movements during both the AM and PM Peak Hours; and,
- Intersection No. 4, Moreland Avenue at Site Access No. 2, the exiting movements during both the AM and PM Peak Hours.

Figure 9-1. Future Year Total Traffic Volumes



9.1.1 Required Improvements

Table 9-1 identifies deficiencies that are expected to exist at the study intersections for Future Year Total traffic conditions. Improvements have been identified that would be expected to correct the Future Year Total deficiencies. Their impacts on the Future Year Total deficiencies are shown in Table 9-2. Printouts of these analyses are included in Appendix I.

Table 9-2. Intersection LOS – Future Year Total with Required Improvements

Intersection		Improvement	Movement	A.M. Peak Hour		P.M. Peak Hour	
Number	Name			Movement	Overall	Movement	Overall
1	Moreland Avenue at I-285 EB Ramp	Add Combined Left-Through Lane in SB Direction	Overall	*	E	*	E
1	Moreland Avenue at I-285 EB Ramp	**PLUS Optimized Signal Timing	Overall	*	C	*	D
2	Moreland Avenue at I-285 WB Ramp	WB Free Right	Overall	*	D	*	D
2	Moreland Avenue at I-285 WB Ramp	**PLUS Optimized Signal Timing	Overall	*	D	*	B
3	Moreland Avenue at Site 1 Entrance	Traffic Signal	Overall	*	B	*	B
4	Moreland Avenue at Site 2 Entrance	Traffic Signal	Overall	*	B	*	A

*Composite LOS given for signalized intersections
** Optimized signal timings also include the WB Free Right for Intersection 2 and the Combined Left-Through Lane in SB Direction for Intersection 1. The combination of all three help lower the LOS below an E.

As can be seen from Table 9-2, the following required improvements are expected to bring the intersections back into adequacy for Future Year Total conditions:

- Intersection No. 1, Moreland Avenue at I-285 Eastbound Ramp: convert the existing left-most southbound through lane into a shared left-through lane, and optimize the traffic signal timing;
- Intersection No. 2, Moreland Avenue at I-285 Westbound Ramp: convert the existing westbound double-right turn lanes into a free right turn lane, and optimize the traffic signal timing;
- Intersection No. 3, Moreland Avenue at Site Access No. 1: add a traffic signal: and,
- Intersection No. 4, Moreland Avenue at Site Access No. 2: add a traffic signal.

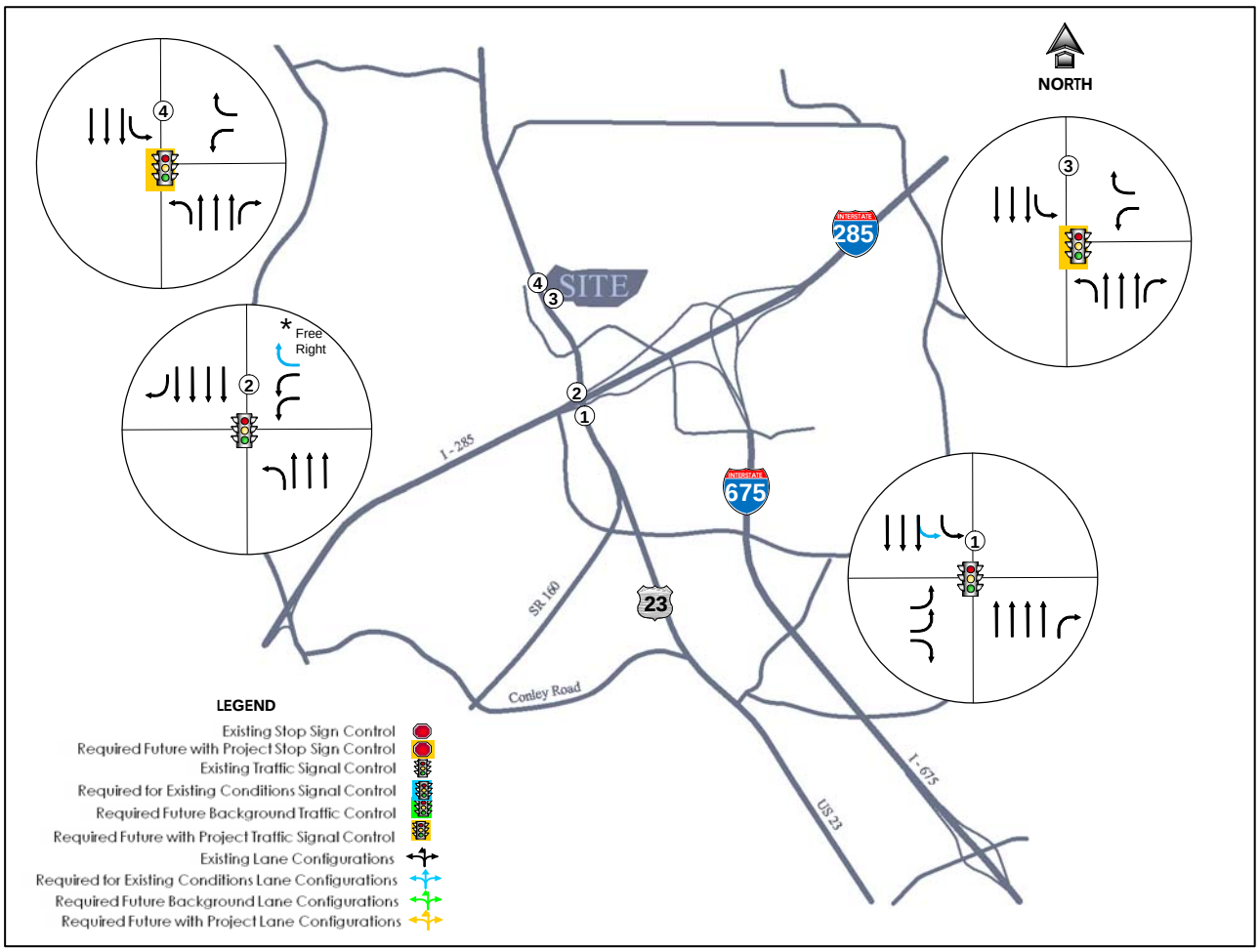
A new traffic signal may not be installed until it can be shown that an intersection meets one or more of the GDOT accepted Traffic Signal Warrants. GDOT will use this information, combined with engineering judgment, to make a determination as to whether or not they will allow the installation of a traffic signal.

Figure 9-2 shows the intersection lane configurations and traffic control that would be required to mitigate the Future Year Total traffic deficiencies.

9.2 Site Access Analysis

As can be seen in Tables 9-1 and 9-2, the site access driveways operate at acceptable Levels of Service, if they are provided with the appropriate lane configurations and traffic control. See Figure 9-2 for the desired site access lane configurations and traffic control.

Figure 9-2. Future Year Total – Required Intersection Improvements



10.1 Introduction

The Area of Influence (AOI) is the area within six road miles of the Site. This section of the study presents an analysis of the opportunities for the workers at the Site to live within the AOI. The Site is classified as exclusively employment for the purpose of the AOI analysis. This analysis will focus on comparing the 254 workers at the Site to the 30,334 owner-occupied housing units in the AOI. This section will describe the study parameters and methodologies, the sources of data used for the analysis, and information concerning the demographics and economic conditions in the Site and the AOI.

The following sections of the report will address Criterion 7b of Section 3-103 of GRTA's DRI requirements. Criterion 7b states:

7. The proposed DRI:

   (c) Is located in an Area of Influence where the proposed DRI is reasonably anticipated to contribute to a balancing of land uses within the Area of Influence such that twenty-five percent (25%) of the persons who are reasonably anticipated to be employed in the proposed DRI have the opportunity to live within the Area of Influence.

A map of the AOI is provided in Figure 10-1.

10.2 Study Parameters and Methodology

In order to identify the housing and other data for the AOI, the boundaries were created in a geographic information system (GIS) format and were placed over a GIS layer of the census tracts containing the applicable data from the 2000 U.S. Census. Where 2000 U.S. Census data were not available, the analysis incorporated data from other sources, including GRTA, U.S. Bureau of Labor Statistics, and ESRI. The sources and methodologies for obtaining data for various elements of the AOI analysis have been referenced throughout the document.

Figure 10-1. Area of Influence

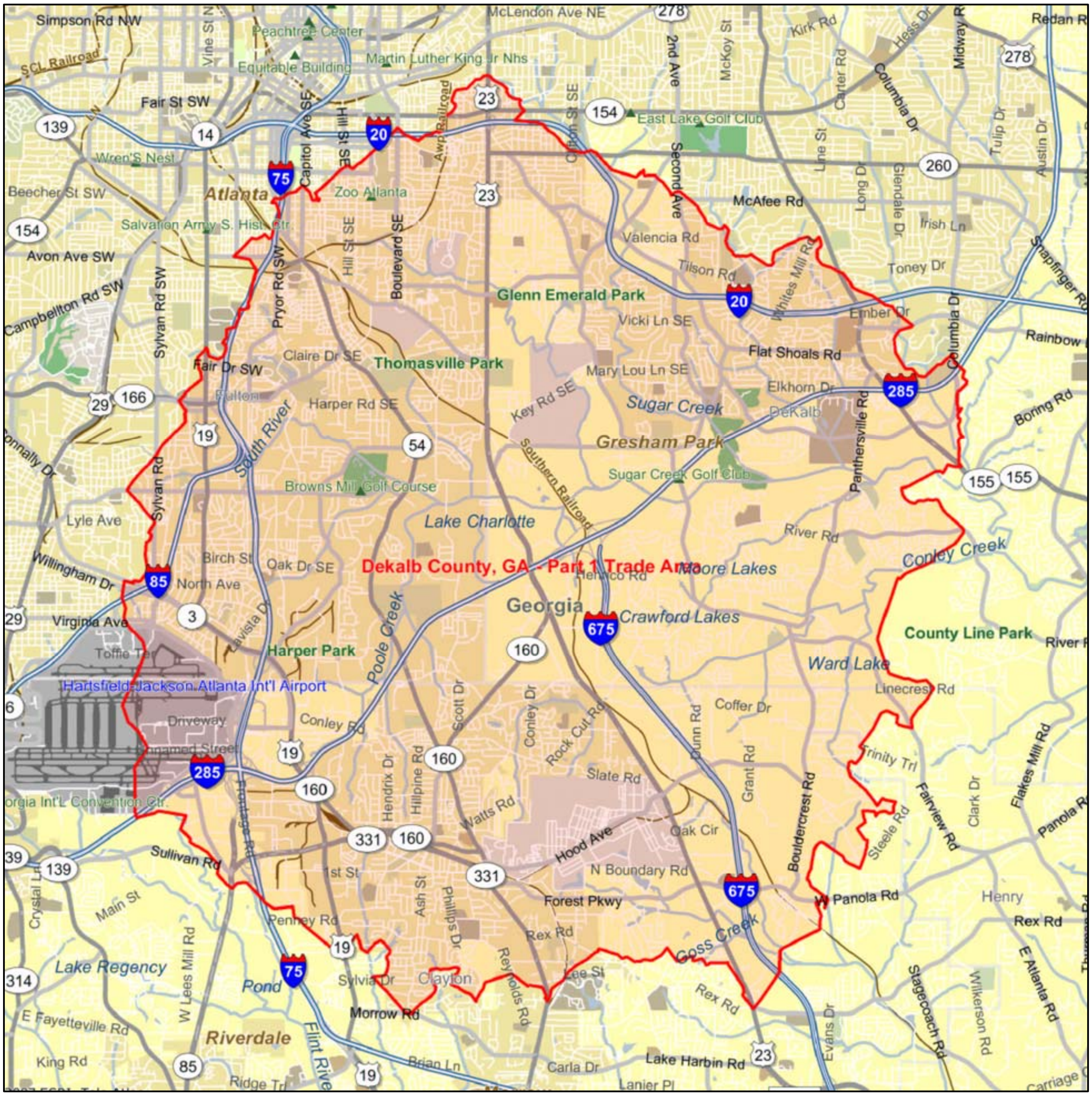


Table 10-1 presents characteristics of the AOI.

Table 10-1. Summary of AOI Characteristics

Characteristic	Year 2012
Size (acres)	50,509 acres
Jurisdiction(s)	Dekalb County/Clayton County/Fulton County/Henry County/City of Atlanta/City of East Point/City of Forest Park/City of Hapeville/Lake City/City of Morrow
Population	189,066
Number of Housing Units	69,948
Rental / Owner / Vacant	42.2% / 47.1% / 10.7%
Price of Housing / Rent*	Range of Owner Occupied Housing Units by Value: less than $50,000 to greater than $1,000,000 Average Home Value: $95,211 Average Rent: $463

Source: ESRI and TransCAD
**Year 2000*

10.3 Criterion 7b Evaluation

The Site is proposed to contain 27,800 square feet of restaurant uses, a 20,000 square foot Verizon office, 10,200 square feet of vehicle maintenance uses, a 2,000 square foot bank, and a gas station with a 1,200 square foot convenience store. The number of workers for each of the land uses was based on employment per square foot data contained in GRTA's *Area of Influence Guidebook for Non-Expedited Reviews, April 10, 2003*. The number of workers at the Site was calculated to be 254.

The wages paid for each job type in were identified from the U.S. Department of Labor, Bureau of Labor Statistics (BLS) website for Dekalb County for the Year 2006. Table 10-2 shows the estimated number of site employees and the associated average annual incomes.

Table 10-2. Anticipated DRI Employees Salaries

NAICS Industry	Industry	Number of Jobs in DRI	2006 Average Annual Salary
447110	Gasoline stations with convenience stores	8	$21,822
517212	Cellular and other wireless carriers	67	$53,689*
522110	Commercial banking	8	$37,822
722	Food services and drinking places	103	$15,218
8111	Automotive repair and maintenance	68	$30,589

Source: US Dept of Labor, Bureau of Labor Statistics, Quarterly Estimate of Employment and Wages
* 2004 Salary

A conservative approach was used for the calculation of household incomes for the DRI workers by applying a factor of 1.5 to the monthly wage to approximate the contributions made by other workers in the households.

To determine an individual's or family's ability to afford the monthly housing costs of the AOI's owner-occupied housing, the recommended ratio of monthly housing costs to monthly household income (30%) was applied to determine the maximum affordable owner-occupied housing unit cost for each category of workers. Table 10-3 shows the affordable monthly housing costs for DRI workers' households.

Table 10-3. Affordability of Housing Costs for Workers in DRI

NAICS Industry	Industry	Number of Jobs in DRI	Monthly Worker Salary	Monthly Household Salary	Affordable Housing Payment
447110	Gasoline stations with convenience stores	8	$1,824	$2,736	$821
517212	Cellular and other wireless carriers	67	$4,474*	$6,711	$2,013
522110	Commercial banking	8	$3,152	$4,728	$1,418
722	Food services and drinking places	103	$1,268	$1,902	$571
8111	Automotive repair and maintenance	68	$2,549	$3,824	$1,147

Source: GRTA's Area of Influence Guidebook, April 10, 2003
* 2004 Salary

The median home value in the AOI of $82,382 in 2000 was compared to the projected median home value of $115,732 in 2007 to provide an assumed annual increase in home values of 5.8%. The 5.8% annual increase in home values was applied for six (6) years to the 2000 home value ranges to determine the number of available homes in each applicable purchase price range in 2006.

The affordable maximum monthly housing costs for owner-occupied housing units in the AOI were determined using the Government National Mortgage Association (Ginnie Mae) Affordability Calculator. Ginnie Mae uses this tool to assess an individual's or family's ability to afford an owner-occupied unit depending on the cost of the home, its geographic location, and the market rates for mortgage loans.

The numbers of DRI workers' households for each range of monthly housing costs were compared to the monthly housing costs for the AOI owner-occupied housing, using monthly housing costs calculated as described above. Table 10-4 shows the number of DRI workers whose household incomes would be expected to allow them the opportunity to live within the AOI.

Table 10-4. Affordability of DRI Housing for AOI Workers' Households

2006 No. of Units in AOI		2006 Range of Housing Unit Values	2006 Range of Monthly Mortgage Payments	Number of DRI Worker Households per Housing Cost Range	Number of Worker HHs Who Can Be Housed in AOI
3,003		<$67,348	<$487	0	0
18,595		$67,349 to $134,698	$487 to $975	111	111
5,460		$134,699 to $202,047	$975 to $1,462	76	76
1,941		$202,048 to $269,397	$1,462 to $1,950	0	0
1,062		$269,398 to $404,096	$1,950 to $2,925	67	67
243		$404,097 to $673,494	$2,925 to $4,874	0	0
30		>$673,495	>$4,874	0	0
TOTAL	**30,334**	**N/A**	**N/A**	**254**	**254**

Source: Government National Mortgage Association Loan Estimator Calculator
* Based on 2006 Salaries

As can be seen in Table 10-4, 254 of the 254 Site workers have the opportunity to find housing within the AOI. Therefore, the Site is located within an AOI with housing opportunities such that approximately 100% of the persons who are anticipated to work at the Site will have an opportunity to find housing within the AOI. The Site meets GRTA's evaluation Criterion 7b.

11.1 Introduction

This section of the report presents a summary of the data and information that address the GRTA DRI Review Criteria that are contained in Section 3-103(A) of the *Procedures and Principles for GRTA Development of Regional Impact Review*, January 14, 2002.

11.2 Section 3-103(A) Review Criteria

1. *Indicate whether or not the proposed DRI is likely to promote improved regional mobility in terms of the quality, character, convenience and flexibility of transportation options.* The Site may promote improved regional mobility in terms of the quality, character, convenience, and flexibility of transportation options that exist at this time. It will be providing useful services, with easy access from the Interstate System, and may provide more convenient and efficient access to those services than presently exists, at least for some users.

2. *Indicate whether or not the proposed DRI is likely to promote improved regional mobility by reducing Vehicle Miles of Travel.* The Site is likely to promote improved regional mobility by reducing Vehicle Miles of Travel (VMT) because 100% of the persons who are reasonably anticipated to work at the Site have an opportunity to find housing within the Area of Influence, thus potentially reducing the VMT for work. In addition, due to the mixed-use nature of the Site, a small percentage of the Site's trips will be internally captured and will not add traffic to the external roadway system.

Table 11-1. Summary of Site Trip Reductions

TOTAL TRIPS	Daily Volumes do NOT include the Truck Plaza	AM Peak Hour volumes and PM Peak Hour volumes include Truck Plaza	4,204	4,201	581	520	673	610
TOTAL INTERNALLY CAPTURED			118	118	9	9	9	9
TOTAL EXTERNAL			4,086	4,083	572	511	664	601
TOTAL PASSBY			2,012	2,020	50	50	181	158
TOTAL NEW EXTERNAL			2,074	2,063	522	461	483	443

3. *Indicate whether or not the proposed DRI is likely to promote improved regional mobility because it is located in an urban core, town center, an activity center previously designated by an RDC, a rail/transit station development or is part of a publicly sponsored redevelopment or infill initiative.* The Site is not located in an urban core, a town center, an activity center previously designated by an RDC, or a rail/transit station development, and it is not part of a publicly sponsored redevelopment or infill initiative.

4. *Indicate whether or not the proposed DRI is located sufficiently close to existing or planned transit facilities to indicate a likelihood of significant use of transit by residents, employees and visitors of the proposed DRI.* There are currently no existing or planned transit facilities within 1/2 mile of the Site. The lack of existing or planned transit facilities is beyond the control of the developer.

5. *Indicate whether or not the proposed DRI is located within an established Transportation Management Area which creates a likelihood that the proposed DRI is reasonably anticipated to result in improved regional mobility as a result of the Transportation Management Area.* The Site is not located within an established Transportation Management Area.

6. *Indicate whether or not off-site trip generation from the proposed DRI is reduced by at least fifteen percent (15%), or, in the event that a proposed DRI is unable to satisfy the trip reduction standard established in this subsection because of other conditions which are beyond the control of the developer or the affected local government, the proposed DRI implements all available trip reduction techniques which are reasonably practical.* Off-site trip reduction from the Site is not reduced by at least 15%. However, the Site plans to implement all available trip reduction techniques that are reasonably practical. There are currently no existing or planned transit facilities within 1/2 mile of the Site, and there are currently no existing or planned bicycle and pedestrian facilities off-site within 3/4 miles of the Site (other than those that the developer is already committed to building) that would accommodate a reduction for alternative modes of transportation. The lack of existing or planned transit, bicycle, and pedestrian facilities is beyond the control of the developer.

7. *Indicate whether or not the proposed DRI:*
   (a) Contains a mix of uses which are reasonably anticipated to contribute to a balancing of land uses such that it would be affordable for at least ten percent (10%) of the persons who are reasonably anticipated to be employed in the proposed DRI are reasonably anticipated to have an opportunity reside within the DRI; or,
   (b) Is located in an Area of Influence where the proposed DRI is reasonably anticipated to contribute to a balancing of land uses within the Area of Influence such that twenty-five percent (25%) of the persons who are reasonably anticipated to be employed in the proposed DRI have the opportunity to live within the Area of Influence; or,
   (c) Is located in an Area of Influence with employment opportunities which are such that at least twenty-five percent (25%) of the persons who are reasonably anticipated to live in the proposed DRI and are reasonably expected to be employed will have an opportunity to find employment appropriate to such persons' qualifications and experience within the Area of Influence.

   The Site is located within an Area of Influence with housing opportunities such that approximately 100% of the persons who are reasonably

anticipated to work at the Site will have an opportunity to find housing within the Area of Influence.

8. *Indicate whether or not the proposed DRI is located in an area where the existing level of development and availability of infrastructure within the Area of Influence of the proposed DRI is such that the proposed DRI is reasonably anticipated to result in unplanned and poorly served development which would not otherwise occur until well-planned growth and development and adequate public facilities are available.*
The Site is not located in an area where the anticipated level of development and availability of infrastructure within the study network is such that the Site is reasonably anticipated to result in unplanned and poorly served development. The site is located in an area where other similar types of uses have already congregated. Further, the roadways serving the site are (1) a six-lane divided arterial roadway, and (2) an Interstate highway. As shown in the traffic impact analysis, the roadways and intersections serving the Site can be reasonably expected to operate at adequate Levels of Service, and/or may be mitigated and improved readily so that they will operate at adequate LOS.

12. AIR QUALITY BENCHMARK STATEMENT

12.1 Introduction

This section of the study presents an analysis of the site layout for the Site in relation to its compliance with the air quality guidelines established by the Atlanta Regional Commission (ARC). The ARC procedure for reviewing and approving Developments of Regional Impact (DRI) requires the establishment of Air Quality "Performance Benchmarks." These benchmarks are necessary for the region to identify air quality progress in accordance with federal air quality regulations. Each development must incorporate transportation-related measures that contribute to a 15% reduction in vehicle miles traveled (VMT), which are directly linked to improvements in air quality.

12.2 Evaluation

The primary land use proposed for the site, a travel service plaza, open to the general public, but with a primary focus on the needs of trucks/truckers/freight movement, does not seem to have been envisioned or considered when the VMT Criteria were set up. The site is basically oriented towards service (not retail, office, or residential), with some secondary uses devoted to both retail and office. Thus, it does not easily fit in to the ARC VMT Criteria, and thus it can not reach the ARC goal of 15% using that criteria. None-the-less, it provides a necessary service to travelers, and is strategically located just off the Interstate System. It may provide a more convenient and efficient interim destination for many travelers, and thus may actually reduce VMT more than can be documented here.

However, it does fit in to one VMT Criterion. The developer is proposing construction of sidewalks external to the site, along the east side of Moreland Avenue. The Site Plan proposes an extensive system of internal sidewalks, generally allowing multiple path choices between each of the various land uses and site facilities. The internal sidewalk system will be connected to the external sidewalks at two locations. Therefore, the Site qualifies for a 4% reduction for bike/ped networks in developments that have an extensive internal sidewalk system that connects to adjoining uses.

12.3 Conclusion

Based on the data and information presented in this study, it is concluded that the specialized primary land use of the site does not easily fit in to the ARC VMT Criteria, and thus it can not reach the ARC goal of 15% using that criteria. None-the-less, it provides a necessary service to travelers, and is strategically located just off the Interstate System. It may provide a more convenient and efficient interim destination for many travelers, and thus may actually reduce VMT more than can be documented here. Further, the internal and external sidewalks proposed as part of the Site are expected to contribute to a 4%

reduction in the overall VMT for the Site and accelerate air quality improvements.

Appendix A – Transit Information

Appendix B – Trip Generation Worksheets

Appendix C – Peak Hour Turning Movement Counts

Appendix D – Capacity Analyses: Existing Conditions

Appendix E – Capacity Analyses: Existing Conditions with Improvements

Appendix F – Capacity Analyses: Future Background Conditions

Appendix G – Capacity Analyses: Future Background Conditions with Improvements

Appendix H – Capacity Analyses: Future Year Total Conditions

Appendix I – Capacity Analyses: Future Year Total Conditions with Improvements

[Appendices are bound as a Separate Document]