

PROJECT: US Route 9 Alltown Fresh
Town of Moreau, Saratoga County, New York

OWNER: Global Partners LP
800 South Street
Waltham, MA, 02545



WARNING: The alteration of this material in any way, unless under the direction of a comparable professional, i.e. a Professional Engineer, is a violation of the New York State Education Law and/or Regulations and is a Class 'A' misdemeanor.

Table of Contents

1.0 Introduction	1
2.0 Project Site and Study Area.....	1
3.0 Existing Conditions.....	3
3.1 Roadway Description	3
3.2 Existing Traffic Volumes	3
4.0 Projected Traffic Conditions	6
4.1 Background Traffic Growth	6
4.2 Site Generated Traffic	9
4.3 Trip Distribution	11
4.4 Build Condition Traffic Volumes.....	11
5.0 Operating Conditions.....	18
5.1 Capacity Analysis Description	18
5.3 Results of Analysis.....	19
5.3.1 US Route 9 at the Reynolds Rd	19
5.3.2 US Route 9 at the Xtramart / Alltown Fresh Driveways.....	19
6.0 Findings & Recommendations.....	20

Appendices:

- A. Site Plan
- B. Traffic Counts / Data Collection
- C. Capacity Analysis Output Sheets

List of Tables

Table 1 – Trip Generation Summary	10
Table 2 – Level of Service Criteria	18
Table 3 – Level of Service Summary.....	19

List of Figures

Figure 1 – Site Location Map.....	2
Figure 2 – Existing Condition AM Peak Hour Traffic Volume.....	4
Figure 3 – Existing Condition PM Peak Hour Traffic Volume	5
Figure 4 – No-Build Condition AM Peak Hour Volume Traffic Volume.....	7
Figure 5 – No-Build Condition PM Peak Hour Volume Traffic Volume.....	8
Figure 6 – Directional Distribution of Primary Trips	12
Figure 7 – Directional Distribution of Pass-by Trips.....	13
Figure 8 – Trip Assignment of Site Generated Traffic AM Peak Hour.....	14
Figure 9 – Trip Assignment of Site Generated Traffic PM Peak Hour	15
Figure 10 – Build Condition AM Peak Hour Traffic Volume.....	16
Figure 11 – Build Condition PM Peak Hour Traffic Volume	17

1.0 Introduction

Greenman-Pedersen Inc. (GPI) has been retained to assess the traffic impacts of the development of an Alltown Fresh, a retail motor fuel outlet, being proposed on US Route 9 about two miles northeast of I-87 in the Town of Moreau, Saratoga County, New York.

The following report details the analysis performed to assess the traffic impacts of the proposed development on the adjacent roadway network within the study area. This report includes a summary of the assumptions and procedures used in the analysis, as well as the findings of the analysis and any recommended improvements to mitigate identified site impacts.

2.0 Project Site and Study Area

The Alltown Fresh is proposed to replace the existing Xtramart, A gas station with a small convenient market, that is currently operating at the site's location. The proposed site will include a 4,800-sf convenience store with freshly made food service and a gas station consisting of twelve fueling positions. A site plan showing the proposed site layout is included in Appendix A.

The project site will be located at the existing Xtramart at 1401 Saratoga Road (US Route 9), a couple of miles northeast of the Interstate 87 (I-87) Exit 17 interchange with the US Route 9.

The study area for the traffic analysis was determined by GPI, based on anticipated traffic volumes and directionality, and includes the following intersections.

- US Route 9 and Reynolds Rd (NYS-197) (3-leg signalized intersection)
- US Route 9 and Site Entrance.

Figure 1 – "Site Location Map" depicts the location of the proposed development and the studied intersections in relation to the area's roadways.



KEY:



STUDIED INTERSECTION

GPI

Engineering
Design
Planning
Construction Management

**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

SITE LOCATION MAP

Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	1

3.0 Existing Conditions

3.1 Roadway Description

The study area's intersections are located along US Route 9 in the Town of Moreau, New York. US Route 9 adjacent to the proposed site is classified as an Urban Principal Arterial and meets with the Interstate 87 (I-87) at Exit 17 interchange. US Route 9 is a two-lane roadway east of the project site that expands to four lanes (two northbound lanes and two southbound lanes) at the intersection of Reynolds Rd, south of the proposed site location. It generally has 11-foot-wide lanes with shoulders of between 6-foot and 11-foot wide. The posted speed limit along US Route 9 throughout the study area is 45 mph.

US Route 9 at Reynolds Rd is a three-legged signalized intersection. US Route 9 travels north and south, while the Reynolds Rd approaches from the east. Northbound US Route 9 is a two-lane approach with a right-turn lane at the Reynolds Rd, while the southbound US Route 9 is a two-lane approach, with one through lane and one left turn lane. Westbound Reynolds Rd operates as a single lane at the intersection.

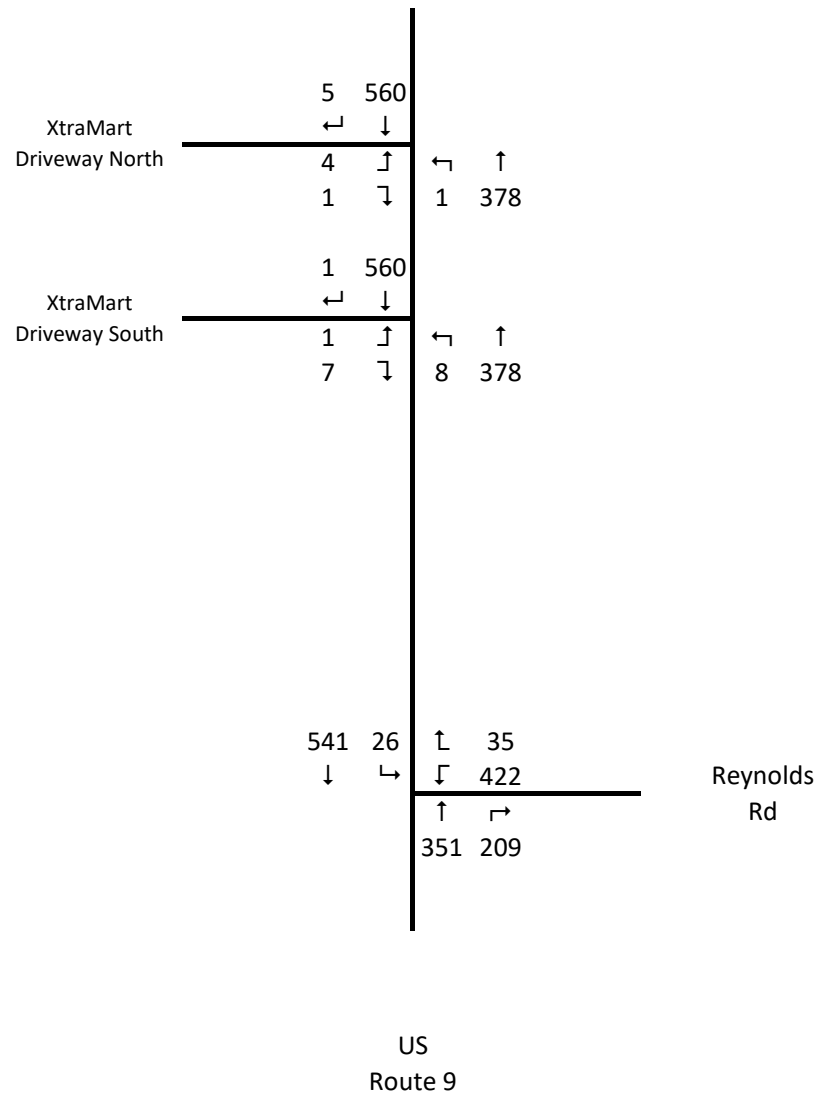
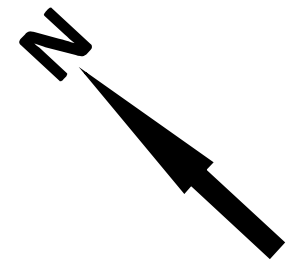
There are two existing Xtramart Site Entrances along US Route 9, both are three-legged intersections. US Route 9 travels north and south while the existing Xtramart Driveways approach from the west. The northbound and southbound approaches of US Route 9 and the eastbound approach of the Xtramart's driveways are all single-lane approaches. Both the Xtramart's driveways are stop-sign controlled, and the US Route 9 approaches are uncontrolled.

3.2 Existing Traffic Volumes

Existing traffic operating conditions were determined through field reconnaissance and traffic counts performed by GPI at the existing location described in Section 3.1.

Vehicular traffic data was recorded by GPI during the 13-hour period of 6:00 AM – 7:00 PM on Tuesday July 27, 2021, for the intersections of US Route 9 at Reynolds Rd and the entrance driveways of the existing Xtramart at US Route 9. Based on the count data, it was determined that the weekday AM peak hour for roadway traffic is approximately 7:15 AM – 8:15 AM and the weekday PM peak hour is approximately 4:15 PM – 5:15 PM. Traffic count data sheets for the location is included in Appendix B of this report. Additionally, GPI reviewed NYSDOT seasonal adjustment factors to determine how the count data compared to average annual conditions. The weekday adjustment factor for July, the month the traffic counts were performed, is 1.101, which indicates that July traffic is typically about 10% higher than average annual conditions. However, to be conservative, the counted traffic volumes were not adjusted by this seasonal adjustment factor.

The volumes are depicted on Figure 2 and 3 – “2021 Existing Peak Hour Traffic Volumes.”

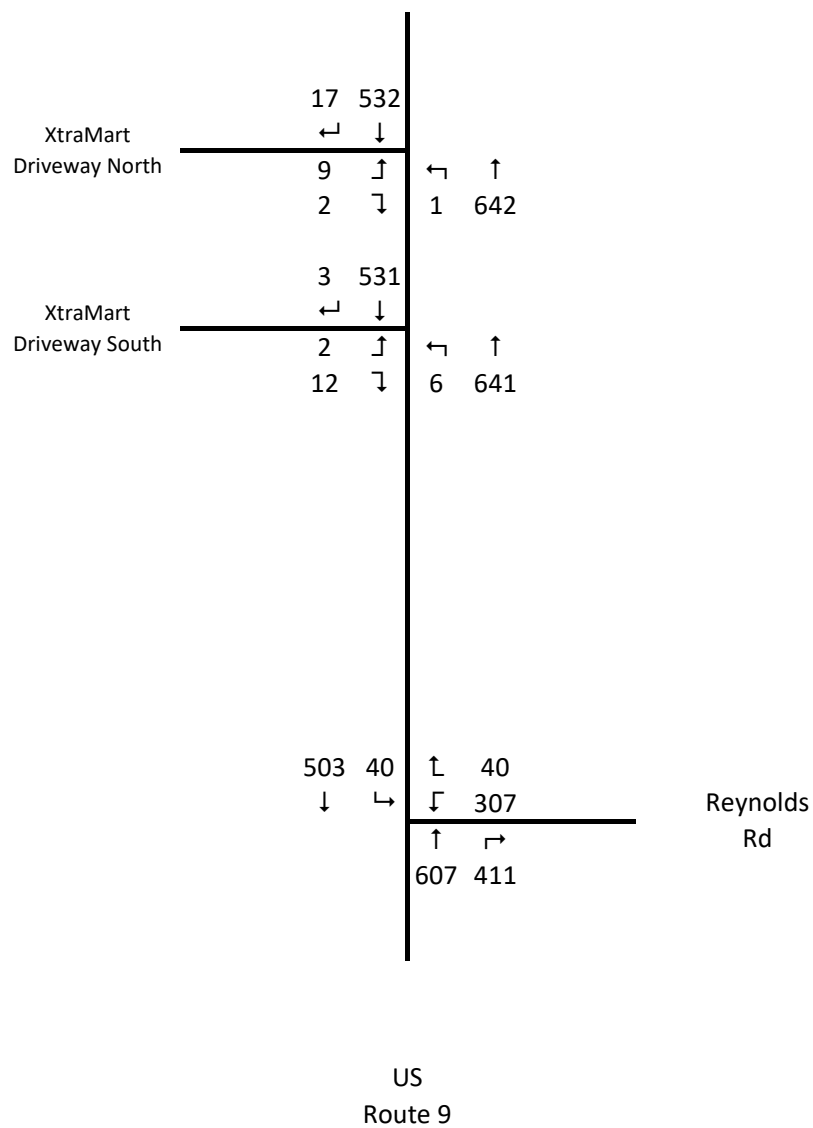
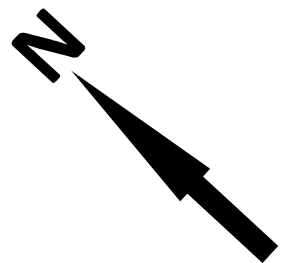


Engineering
Design
Planning
Construction Management

**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

**EXISTING CONDITION
AM PEAK HOUR TRAFFIC VOLUMES**

Project No.	Scale:	Date:	Figure No.
2021057	No Scale	August 2021	2



GPI

Engineering
Design
Planning
Construction Management

**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

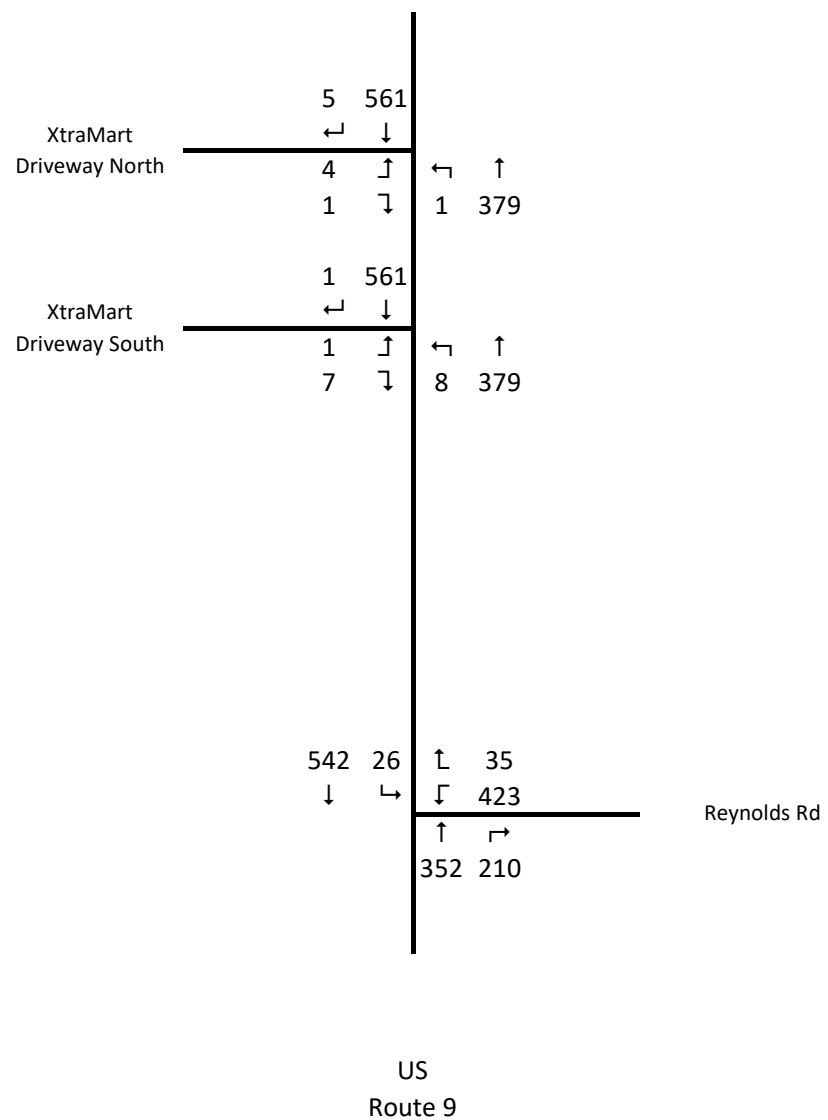
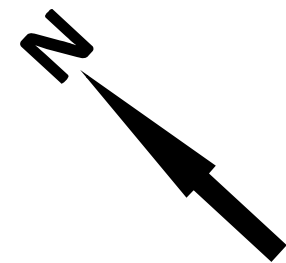
**EXISTING CONDITION
PM PEAK HOUR TRAFFIC VOLUMES**

Project No.	Scale:	Date:	Figure No.
2021057	No Scale	August 2021	3

4.0 Projected Traffic Conditions

4.1 Background Traffic Growth

To address the impacts of the proposed development on the surrounding roadway system, it was first necessary to determine the background traffic operations as a baseline. Since the proposed development is anticipated to be fully constructed within one year, an analysis year of 2022 was selected for evaluation. "No-Build" traffic volumes were developed for the year 2022 using NYSDOT historic traffic data to determine an annual growth rate that reflects the expected growth of traffic along the roadways because of regional development. Based on the NYSDOT data, a negative annual growth rate was identified, but to be conservative, it is assumed that the traffic will increase with a rate of 0.25% per year for one year, as such the existing traffic volumes were each multiplied by an overall growth factor of 1.0025 to approximate this growth. Figures 4 and 5 depict the 2022 No-Build Condition Peak Hour Traffic Volumes.

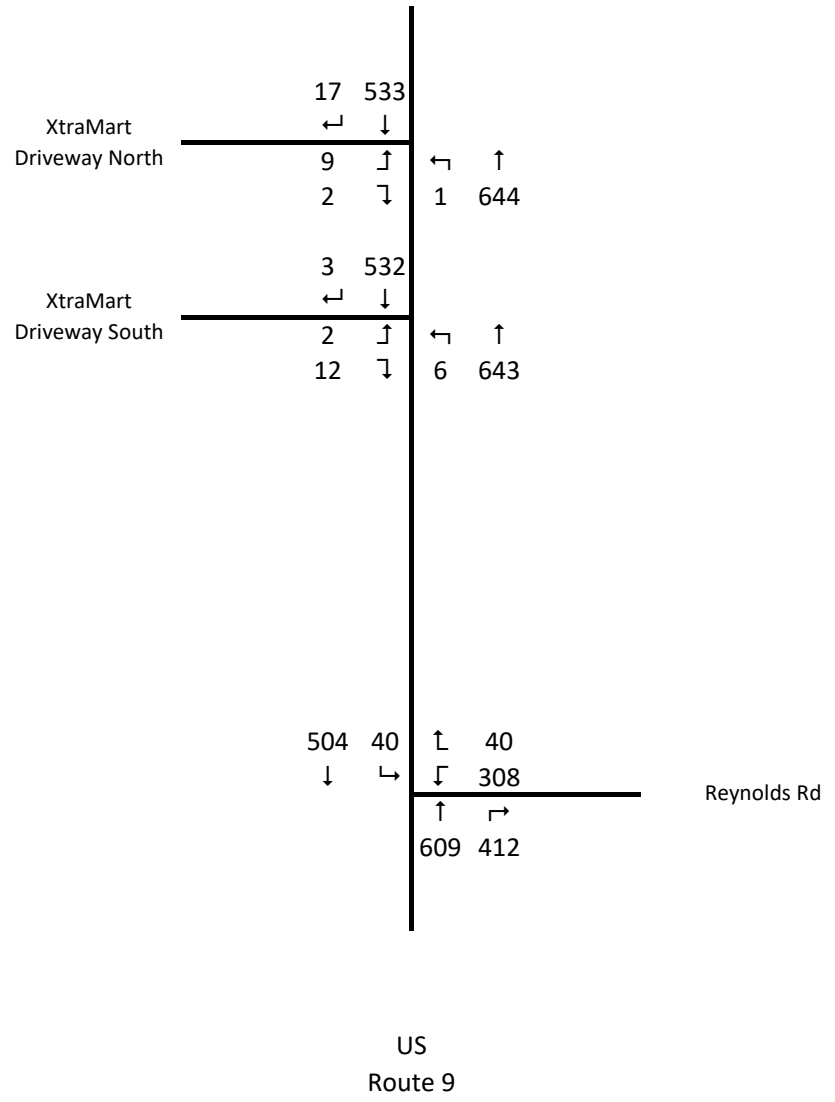
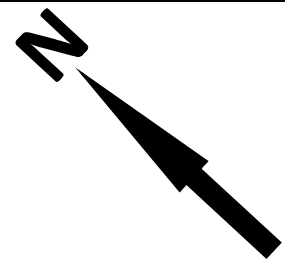


Engineering
Design
Planning
Construction Management

**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

**NO-BUILD CONDITION
AM PEAK HOUR TRAFFIC VOLUME**

Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	4



GPI

Engineering
Design
Planning
Construction Management

**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

**NO-BUILD CONDITION
PM PEAK HOUR TRAFFIC VOLUME**

Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	5

4.2 Site Generated Traffic

The number of trips generated by the proposed development was estimated for peak hour conditions using the data contained in the *Trip Generation Manual*, 10th Edition, published by the Institute of Transportation Engineers (ITE). This ITE publication contains data from various case studies on many different types of land uses. In addition to the *Trip Generation Manual*, count data from a comparable Alltown Fresh site built by the same client in Ayer, Massachusetts was also reviewed.

For trip generation purposes at the Ayers MA site, Land Use Code (LUC) 960 – “Super Convenience Store/Gas Station” was used to project new site traffic, because of the combination of convenience store and fresh-made food service. However, traffic counts performed at that site 9 months after the site was in operation indicated that the actual trip generation was much lower than predicted. In fact, the Super Convenience Store trip generation data from the *Trip Generation Manual* over-projected the actual trip generation by 2 times in the PM peak hour and an unrealistic 4 times in the AM peak hour. Because of this, it was concluded that the data for that Land Use Code was inappropriate to represent Alltown Fresh site operations, and it was decided to instead use a combination of two separate land use codes for a better representation.

For the 4,800 Square Foot (SF) site proposed in this study, it was assumed that 4,500 SF would generate traffic as a Convenience Market with Gasoline Pumps (LUC 853) and 300 SF as a Fast-Food Restaurant without Drive-Through Window (LUC 933). When trip generation using this methodology was compared to the actual trips counted at the Ayers MA site, it was found that the Trip Generation projection would have been just 4% high in the PM peak hour and about 40% high in the AM peak hour. Much more realistic, yet conservative, numbers. As such, this is the methodology used for this study.

Based on the LUC data, as discussed above, it is projected that the proposed Alltown site will generate 191 AM peak hour trips (96 entering and 95 exiting) and 231 PM peak hour trips (115 entering and 116 exiting).

As part of the trip generation for this site, it should be noted that the development of proposed Alltown Fresh site requires the demolition and removal of the existing Xtramart gas station and convenience market. As such, it is necessary to account for the trips currently generated by the site. These trips, which are included in the 2021 existing peak hour traffic volumes described in Section 3.2 and were subtracted from the site generated trip totals described above to determine the number of “new” trips entering and exiting the proposed site, beyond what the existing site already generates. These new trips are estimated to be 163 in the AM peak hour (81 entering/82 exiting) and 179 in the PM peak hour (88 entering/91 exiting).

The *Trip Generation Handbook*, 3rd Edition, published by ITE defines two major categories for trips: pass-by trips and non-pass by trips. Non-pass by trips are further broken down into primary trips and diverted link trips. Pass-by trips are those made by a driver enroute to a

separate primary destination. They are trips that are attracted from existing traffic passing the site on an adjacent roadway and are not diverted from another roadway. Primary trips, as discussed above, are made for the specific purpose of visiting the generating site, and diverted link trips are trips attracted from existing traffic on roadways within the vicinity of generator but require diversion from that roadway to the roadway adjacent to the generator. These trips add traffic to the street adjacent to the site but may not add traffic to other travel routes.

Data from the *Trip Generation Handbook* indicates that between 63% to 66% of a convenience store/gas station site traffic would be from pass-by trips. Based on this data, it was assumed that 65% of the site generated trips would be from pass-by traffic along US Route 9.

A summary of the trip generation numbers discussed above is included in table 1.

Table 1 – Trip Generation Summary

Land Use Code	Land Use	Size ksf	Trip Generation Rate per 1,000 gsf		AM Peak Hour			PM Peak Hour		
			AM	PM	In	Out	Total	In	Out	Total
853	Convenience Market with Gasoline Pump	4.5	40.59	49.29	91	92	183	111	111	222
933	Fast-Food Restaurant without Drive-Through Window	0.3	25.10	28.34	5	3	8	4	5	9
-	Existing Xtramart Gas Station with Convenience Market	-	-	-	(15)	(13)	(28)	(27)	(25)	(52)
Total Additional Trips					81	82	163	88	91	179
Passby Trips		65%			53	53	106	57	59	116
Primary Trips					28	29	57	31	32	63

4.3 Trip Distribution

The trip distribution for this project is based on the peak hour traffic patterns at the existing Xtramart in & out volumes and along US Route 9. Based on this information, the following directional distribution is assumed for the site traffic:

- Primary Trips:
 - 50% to/from the north along US Route 9
 - 50% to/from the south along US Route 9

- Pass-By Trips:
 - 60% southbound along US Route 9
 - 40% northbound along US Route 9

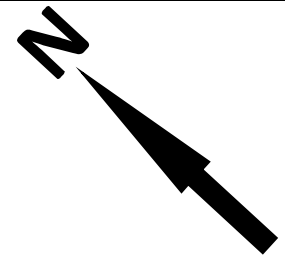
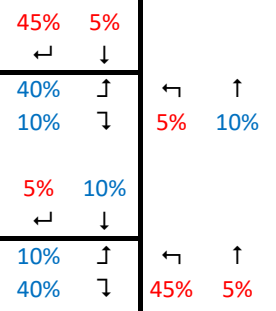
These trip distribution percentages, along with the AM and PM peak hour trip assignment for new site trips based on this distribution are graphically depicted in Figures 6 & 7 - Directional Distribution, and Figures 8 & 9 – Trip Assignment of Site Generated Traffic.

4.4 Build Condition Traffic Volumes

The Build Condition peak hour traffic volumes were developed by combining the No-Build condition traffic volumes with the new trips generated by the overall proposed Alltown Fresh site. These volumes are graphically depicted on Figures 10 & 11 – “Build Condition Peak Hour Traffic Volumes”.



PROPOSED
SITE

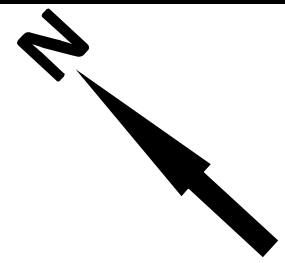


Reynolds Rd

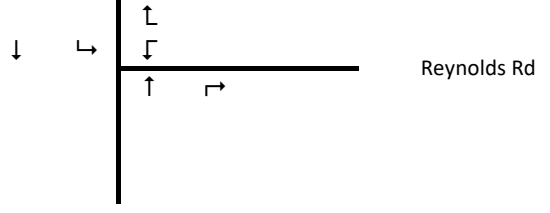
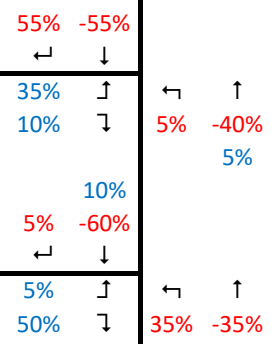
US Route 9

KEY:
→ INBOUND TRAFFIC
→ OUTBOUND TRAFFIC

DIRECTIONAL DISTRIBUTION PRIMARY TRIPS			
Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	6



PROPOSED
SITE



Reynolds Rd

US Route 9

KEY:
→ INBOUND TRAFFIC
→ OUTBOUND TRAFFIC

DIRECTIONAL DISTRIBUTION PASS-BY TRIPS			
Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	7



PROPOSED
SITE

+42 -28



+31 ↑

+8 ↓

↖ ↑

+3 -17

+4 -24



+4 ↑

+39 ↓

↖ ↑

+32 -18

+12 +3



↑ +3

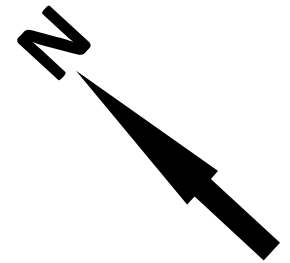
↓ 0

↑ ↗

+11 0

Reynolds Rd

US
Route 9



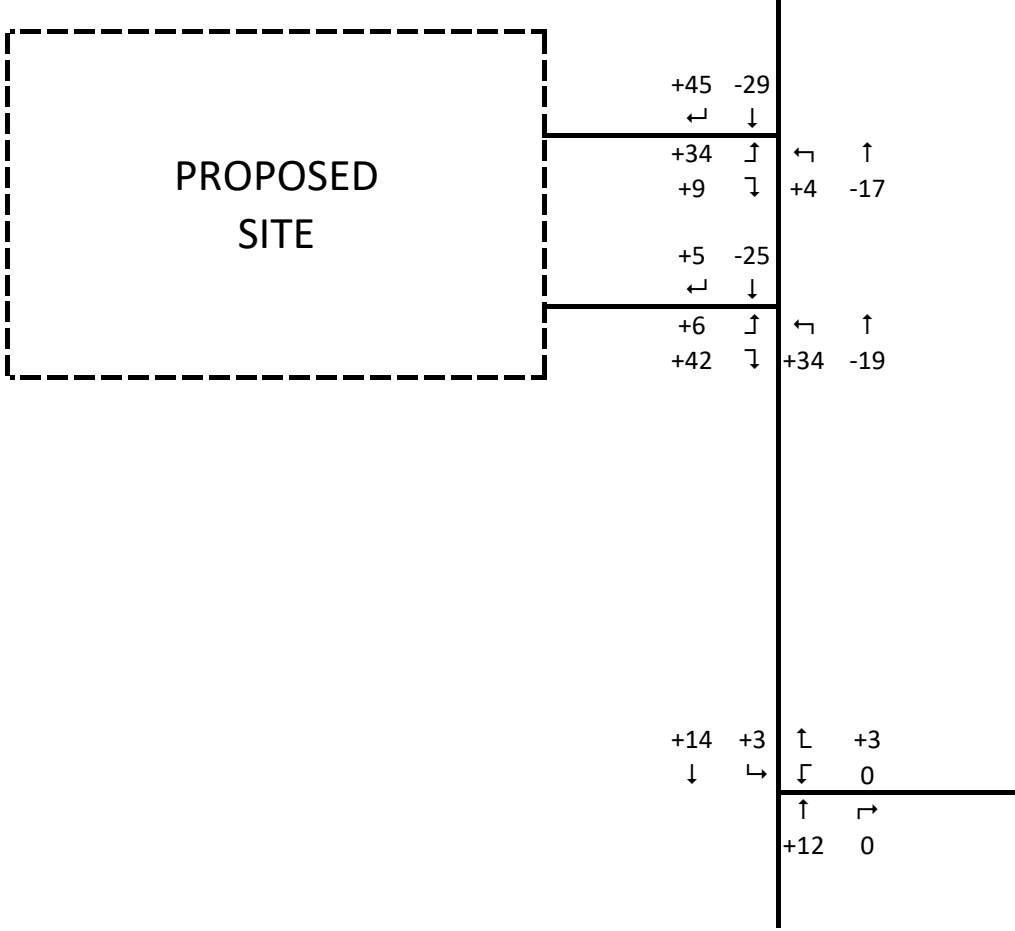
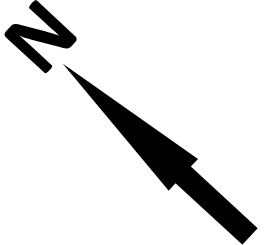
GPI

Engineering
Design
Planning
Construction Management

**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

**TRIP ASSIGNMENT OF SITE GENERATED TRAFFIC
AM PEAK HOUR**

Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	8

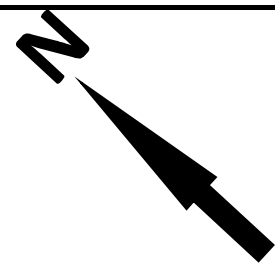


Engineering
Design
Planning
Construction Management

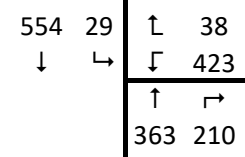
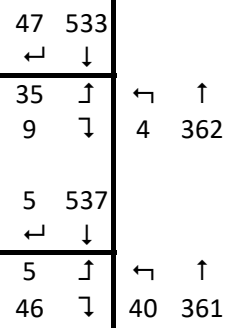
**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

**TRIP ASSIGNMENT OF SITE GENERATED TRAFFIC
PM PEAK HOUR**

Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	9



PROPOSED
SITE



Reynolds Rd

US
Route 9

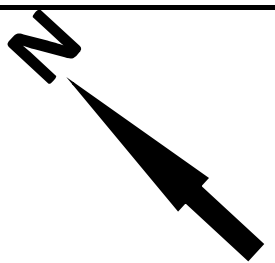


Engineering
Design
Planning
Construction Management

**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

**BUILD CONDITION
AM PEAK HOUR TRAFFIC VOLUMES**

Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	10



PROPOSED
SITE

62 504
← ↓

43 ↑ ← ↑
11 ↘ 5 627

8 507
← ↓

8 ↑ ← ↑
54 ↘ 40 624

518 43 ↑ 43
↓ ↘ ↘ 308

↑ ↘
621 412

Reynolds Rd

US
Route 9

GPI

Engineering
Design
Planning
Construction Management

**US ROUTE 9 ALLTOWN FRESH
TRAFFIC IMPACT STUDY
TOWN OF MOREAU, NEW YORK**

**BUILD CONDITION
PM PEAK HOUR TRAFFIC VOLUMES**

Project No.	Scale:	Date:	Figure No.
2021057.00	No Scale	August 2021	11

5.0 Operating Conditions

5.1 Capacity Analysis Description

The operating conditions of transportation facilities are evaluated based on the relationship of existing or projected traffic volumes to the theoretical capacity of the highway facility, which can be equated to a level of service (LOS) based on the delay experienced by each vehicle. Level of service ranges from LOS A to LOS F and the delay thresholds that define various levels of service can be found in the *Highway Capacity Manual*, 6th Edition (HCM6), published by the Transportation Research Board. In general, "A" represents the best operating condition with unrestricted flow and little or no delay per vehicle, and "F" represents the worst, with congested conditions, long delays and poor traffic operations. LOS C or better is generally desirable, but LOS D for signalized locations and LOS E for unsignalized are generally acceptable during peak periods as long as the volume to capacity ratio (v/c) is below 1.0.

Table 2 below presents the LOS criteria for both signalized and unsignalized intersections.

Table 2 – Level of Service Criteria

LOS	Signalized Intersection Delay Per Vehicle (sec.)	Unsignalized Intersection Delay Per Vehicle (sec.)
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 20.0	> 10.0 and ≤ 15.0
C	> 20.0 and ≤ 35.0	> 15.0 and ≤ 25.0
D	> 35.0 and ≤ 55.0	> 25.0 and ≤ 35.0
E	> 55.0 and ≤ 80.0	> 35.0 and ≤ 50.0
F	> 80.0	> 50.0

It should be noted that the LOS criteria for an unsignalized intersection is reported for the side street approaches and mainline left turn movement only, as the uncontrolled through and right turn movements along the mainline are assumed to have a theoretical delay of zero in the HCM methodology.

As can be seen in Table 2, unsignalized and signalized intersection have different delay thresholds for many of the LOS levels. This is because driver expectation is different when waiting at a stop sign versus waiting at a signal. At a signal, a driver does not have to remain ever vigilant looking for gaps in traffic, as with a stop sign. They know they will eventually be given the right of way, so there is less stress during the delay. Because of this, drivers tend to be more accepting of longer delays when stopped at a traffic signal.

5.3 Results of Analysis

To determine the impact of the proposed Alltown Fresh on the operations of the adjacent transportation system and to evaluate the potential effectiveness of various improvement alternatives, traffic operations were analyzed for both the weekday AM and PM peak hour under existing, no-build and future build conditions. The traffic operations within the study area for each of these conditions are summarized in Table 3 and computation worksheets for each of the analyses are provided in Appendix C.

Table 3 - Level of Service Summary

INTERSECTION & APPROACH		2021 Existing Condition		No-Build Condition		Build Condition	
		AM	PM	AM	PM	AM	PM
Signalized							
U.S. 9 and Reynolds Rd Reynolds Rd U.S. 9	Westbound	C (23.3)	B (19.6)	C (23.3)	B (19.7)	C (23.5)	C (20.8)
	Northbound	B (18.9)	C (22.9)	B (18.9)	C (22.9)	B (19.0)	C (22.6)
	Southbound	C (23.8)	C (22.7)	C (23.8)	C (22.7)	C (24.2)	C (22.6)
	Overall Intersection	C (21.9)	C (22.3)	C (21.9)	C (22.3)	C (22.2)	C (22.3)
Unsignalized							
U.S. 9 and Xtramart/Alltown Fresh Driveways North Driveway South Driveway U.S. 9	Eastbound	C (17.0)	C (22.1)	C (17.0)	C (22.2)	C (18.4)	C (25.9)
	Eastbound	B (13.0)	B (13.7)	B (13.0)	B (13.8)	B (13.5)	B (14.8)
	Northbound	A (0.2)	A (0.1)	A (0.2)	A (0.1)	A (1.0)	A (0.6)
	Southbound	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
	Overall Intersection	A (0.3)	A (0.4)	A (0.3)	A (0.4)	A (2.0)	A (2.2)

5.3.1 US Route 9 at the Reynolds Rd

The analysis shows that this signalized intersection operates at an overall LOS C with no approach operating worse than LOS C for all analyzed periods. The analysis shows that the development of the Alltown Fresh site will have minimal impact on the operations at this intersection and no improvements are necessary.

5.3.2 US Route 9 at the Xtramart / Alltown Fresh Driveways

The analysis shows that this unsignalized intersection operates at an overall LOS A with no approach operating worse than LOS C for all analyzed periods. The analysis shows that the development of the Alltown Fresh site will have minimal impact on the operations at this intersection and no improvements are necessary.

6.0 Findings & Recommendations

The preceding analysis evaluated the potential traffic impacts resulting from replacing an existing Xtramart gas station/convenience store with a proposed Alltown Fresh Site located on US Route 9, northwest of I-87 in the Town of Moreau, Saratoga County, New York. The site is proposed to include a convenience store with fresh made food service. It is anticipated that the site will be constructed within a year. Findings and recommendations derived from the analysis include the following:

- Existing traffic volumes were counted at each of the studied intersections. It is estimated that the proposed Alltown Fresh site will generate 191 AM peak hour trips (96 in and 95 out) and 231 PM peak hour trips (115 in and 116 out) in addition to the traffic currently generated by the existing Xtramart site.
- Capacity analysis was performed and it was found that the intersections within the study area will operate acceptably in the build condition, with all intersections and approaches at LOS C or better. No capacity improvements are required to mitigate the additional site traffic.

The traffic study shows that the intersections within the project area will not be significantly impacted by the reconstruction of the existing Xtramart into an Alltown fresh convenience store with gas pumps, and the corridor should operate acceptably with the new development.

APPENDIX A
Site Plan

APPENDIX B
Traffic Counts/Data Collection

Greenman-Pedersen, Inc.

80 Wolf Rd, Suite 300

Albany, NY 12205

(518) 453-9431

Intersection: US 9 and N/A

Project No.: 2021057.00

Location: Town of Copake, NY

Count Date: 7/27/2021

Total Traffic - Cars & Heavy Vehicles

Start Time	US 9 Southbound					Reynolds Rd Westbound					US 9 Northbound					N/A Eastbound				
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes
6:00 AM	0	2	81	0	0	0	78	0	2	0	0	0	32	45	0	0	0	0	0	0
6:15 AM	0	4	132	0	0	0	80	0	3	0	0	0	72	52	0	0	0	0	0	0
6:30 AM	0	5	117	0	0	0	111	0	3	0	0	0	57	70	0	0	0	0	0	0
6:45 AM	0	0	97	0	0	0	87	0	6	0	0	0	66	55	0	0	0	0	0	0
7:00 AM	0	2	131	0	0	0	89	0	2	0	0	0	54	36	0	0	0	0	0	0
7:15 AM	0	8	142	0	0	0	113	0	12	0	0	0	77	42	0	0	0	0	0	0
7:30 AM	0	4	149	0	0	0	127	0	8	0	0	0	84	59	0	0	0	0	0	0
7:45 AM	0	7	138	0	0	0	104	0	7	0	0	0	90	62	0	0	0	0	0	0
8:00 AM	0	7	112	0	0	0	78	0	6	0	0	0	85	46	0	0	0	0	0	0
8:15 AM	0	2	120	0	0	0	98	0	6	0	0	0	87	54	0	0	0	0	0	0
8:30 AM	0	5	138	0	0	0	83	0	11	0	0	0	64	41	0	0	0	0	0	0
8:45 AM	0	3	102	0	0	0	84	0	8	0	0	0	88	59	0	0	0	0	0	0
9:00 AM	0	3	97	0	0	0	63	0	4	0	0	0	64	57	0	0	0	0	0	0
9:15 AM	0	2	93	0	0	0	72	0	4	0	0	0	82	50	0	0	0	0	0	0
9:30 AM	0	6	101	0	0	0	57	0	9	0	0	0	80	52	0	0	0	0	0	0
9:45 AM	0	9	84	0	0	0	63	0	7	0	0	0	86	51	0	0	0	0	0	0
10:00 AM	0	9	77	0	0	0	56	0	8	0	0	0	84	37	0	0	0	0	0	0
10:15 AM	0	11	84	0	0	0	94	0	9	0	0	0	79	53	0	0	0	0	0	0
10:30 AM	0	6	92	0	0	0	59	0	16	0	0	0	72	46	0	0	0	0	0	0
10:45 AM	0	8	107	0	0	0	52	0	11	0	0	0	90	64	0	0	0	0	0	0
11:00 AM	0	10	104	0	0	0	70	0	9	0	0	0	75	61	0	0	0	0	0	0
11:15 AM	0	4	106	0	0	0	58	0	8	0	0	0	109	67	0	0	0	0	0	0
11:30 AM	0	6	125	0	0	0	71	0	6	0	0	0	96	49	0	0	0	0	0	0
11:45 AM	0	8	97	0	0	0	60	0	14	0	0	0	94	65	0	0	0	0	0	0
12:00 PM	0	9	110	0	0	0	53	0	9	0	0	0	101	59	0	0	0	0	0	0
12:15 PM	0	7	112	0	0	0	58	0	8	0	0	0	113	63	0	0	0	0	0	0
12:30 PM	0	4	110	0	0	0	91	0	13	0	0	0	93	67	0	0	0	0	0	0
12:45 PM	0	5	118	0	0	0	66	0	13	0	0	0	116	68	0	0	0	0	0	0
1:00 PM	0	6	94	0	0	0	52	0	7	0	0	0	91	70	1	0	0	0	0	0
1:15 PM	0	8	129	0	0	0	64	0	11	0	0	0	95	68	0	0	0	0	0	0
1:30 PM	0	12	101	0	0	0	50	0	15	0	0	0	98	59	0	0	0	0	0	0
1:45 PM	0	8	105	0	0	0	62	0	5	0	0	0	104	79	0	0	0	0	0	0
2:00 PM	0	6	102	0	0	0	71	0	8	0	0	0	107	69	0	0	0	0	0	0
2:15 PM	0	5	107	0	0	0	62	0	8	0	0	0	131	68	0	0	0	0	0	0
2:30 PM	0	9	108	0	0	0	88	0	17	0	0	0	106	57	0	0	0	0	0	0
2:45 PM	0	9	80	0	0	0	71	0	2	0	0	0	136	63	0	0	0	0	0	0
3:00 PM	0	8	127	0	0	0	77	0	9	0	0	0	114	74	0	0	0	0	0	0
3:15 PM	0	2	137	0	0	0	97	0	10	0	0	0	135	105	0	0	0	0	0	0
3:30 PM	0	9	128	0	0	0	111	0	14	0	0	0	141	100	0	0	0	0	0	0
3:45 PM	0	10	106	0	1	0	74	0	12	0	0	0	171	88	0	0	0	0	0	0
4:00 PM	0	6	127	0	0	0	73	0	9	0	0	0	153	106	0	0	0	0	0	0
4:15 PM	0	13	137	0	0	0	99	0	9	0	0	0	145	96	0	0	0	0	0	0
4:30 PM	0	7	112	0	0	0	70	0	9	0	0	0	145	97	0	0	0	0	0	0
4:45 PM	0	8	127	0	0	0	76	0	12	0	0	0	152	121	0	0	0	0	0	0
5:00 PM	0	12	127	0	0	0	62	0	9	0	0	0	156	97	0	0	0	0	0	0
5:15 PM	0	6	116	0	0	0	69	0	7	0	0	0	155	100	0	0	0	0	0	0
5:30 PM	0	11	103	0	0	0	46	0	10	0	0	0	151	100	0	0	0	0	0	0
5:45 PM	0	5	98	0	0	0	50	0	9	0	0	0	124	97	0	0	0	0	0	0
6:00 PM	0	9	77	0	0	0	51	0	6	0	0	0	94	70	0	0	0	0	0	0
6:15 PM	0	17	77	0	0	0	45	0	11	0	0	0	91	60	0	0	0	0	0	0
6:30 PM	0	8	48	0	0	0	40	0	3	0	0	0	77	54	0	0	0	0	0	0
6:45 PM	0	9	42	0	0	0	48	0	11	0	0	0	82	57	0	0	0	0	0	0

Greenman-Pedersen, Inc.

80 Wolf Rd, Suite 300

Albany, NY 12205

(518) 453-9431

Intersection: US 9 and N/A
 Location: Town of Copake, NY

Project No.: 2021057.00
 Count Date: 7/27/2021

Peak Hour Traffic Volumes

	US 9 Southbound					Reynolds Rd Westbound					US 9 Northbound					N/A Eastbound				
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes
AM Peak Hour:	7:15 AM to 8:15 AM																			
7:15 AM	0	8	142	0	0	0	113	0	12	0	0	0	77	42	0	0	0	0	0	0
7:30 AM	0	4	149	0	0	0	127	0	8	0	0	0	84	59	0	0	0	0	0	0
7:45 AM	0	7	138	0	0	0	104	0	7	0	0	0	90	62	0	0	0	0	0	0
8:00 AM	0	7	112	0	0	0	78	0	6	0	0	0	85	46	0	0	0	0	0	0
Total Car Volume	0	26	541	0	0	0	422	0	33	0	0	0	336	209	0	0	0	0	0	0
1,567			567					455					545					0		
No. of Trucks	0	3	40	0	0	0	25	0	3	0	0	0	30	34	0	0	0	0	0	0
Truck %	0.0%	11.5%	7.4%	0.0%	0.0%	0.0%	5.9%	0.0%	9.1%	0.0%	0.0%	0.0%	8.9%	16.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
8.6%			7.6%					6.2%					11.7%					0.0%		
PHF	0.00	0.81	0.91	0.00	0.00	0.00	0.83	0.00	0.69	0.00	0.00	0.00	0.93	0.84	0.00	0.00	0.00	0.00	0.00	0.00
0.91			0.93					0.84					0.90					0.00		

	US 9 Southbound					Reynolds Rd Westbound					US 9 Northbound					N/A Eastbound				
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes
PM Peak Hour:	4:15 PM to 5:15 PM																			
4:15 PM	0	13	137	0	0	0	99	0	9	0	0	0	145	96	0	0	0	0	0	0
4:30 PM	0	7	112	0	0	0	70	0	9	0	0	0	145	97	0	0	0	0	0	0
4:45 PM	0	8	127	0	0	0	76	0	12	0	0	0	152	121	0	0	0	0	0	0
5:00 PM	0	12	127	0	0	0	62	0	9	0	0	0	156	97	0	0	0	0	0	0
Total Car Volume	0	40	503	0	0	0	307	0	39	0	0	0	598	411	0	0	0	0	0	0
1,898			543					346					1009					0		
No. of Trucks	0	1	20	0	0	0	27	0	3	0	0	0	17	17	0	0	0	0	0	0
Truck %	0.0%	2.5%	4.0%	0.0%	0.0%	0.0%	8.8%	0.0%	7.7%	0.0%	0.0%	0.0%	2.8%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.5%			3.9%					8.7%					3.4%					0.0%		
PHF	0.00	0.77	0.92	0.00	0.00	0.00	0.78	0.00	0.81	0.00	0.00	0.00	0.96	0.85	0.00	0.00	0.00	0.00	0.00	0.00
0.95			0.91					0.80					0.92					0.00		

Greenman-Pedersen, Inc.

80 Wolf Rd, Suite 300

Albany, NY 12205

(518) 453-9431

Intersection: US 9 and XtraMart Driveways

Project No.: 2021057.00

Location: Town of Copake, NY

Count Date: 7/27/2021

Total Traffic - Cars & Heavy Vehicles

Start Time	US 9 Southbound					0 Westbound					US 9 Northbound					XtraMart Driveways Eastbound					
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	4	0	4	0	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0	0	4	0	2	0	0
8:00 AM	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	4	0	0
8:15 AM	0	0	0	2	0	0	0	0	0	0	0	5	0	0	0	0	5	0	4	0	0
8:30 AM	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	2	0	2	0	0
8:45 AM	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	0	3	0	3	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	2	0	4	0	0
4:15 PM	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	0	1	0	4	0	0
4:30 PM	0	0	0	5	0	0	0	0	0	0	0	3	0	0	0	0	1	0	6	0	0
4:45 PM	0	0	0	7	0	0	0	0	0	0	0	2	0	0	0	0	4	0	4	0	0
5:00 PM	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	5	0	0	0	0
5:15 PM	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	3	0	1	0	0
5:30 PM	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3	0	0
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	1	0	5	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Greenman-Pedersen, Inc.

80 Wolf Rd, Suite 300

Albany, NY 12205

(518) 453-9431

Intersection: US 9 and XtraMart Driveways
 Location: Town of Copake, NY

Project No.: 2021057.00
 Count Date: 7/27/2021

Peak Hour Traffic Volumes

	US 9 Southbound					0 Westbound					US 9 Northbound					XtraMart Driveways Eastbound					
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	
AM Peak Hour:	7:15 AM to 8:15 AM																				
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0	0	4	0	0	2	0
8:00 AM	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0
Total Car Volume	0	0	0	6	0	0	0	0	0	0	0	9	0	0	0	0	5	0	0	8	0
28	6					0					9					13					
No. of Trucks	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	2	0
Truck %	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	40.0%	0.0%	25.0%	0.0%	0.0%
28.6%	16.7%					0.0%					33.3%					30.8%					
PHF	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.31	0.00	0.50	0.00	0.00
0.58	0.75					#DIV/0!					0.45					0.54					

	US 9 Southbound					0 Westbound					US 9 Northbound					XtraMart Driveways Eastbound					
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	
PM Peak Hour:	4:15 PM to 5:15 PM																				
4:15 PM	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	4	0
4:30 PM	0	0	0	5	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	6	0
4:45 PM	0	0	0	7	0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	4	0
5:00 PM	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	5	0	0	0	0
Total Car Volume	0	0	0	20	0	0	0	0	0	0	0	7	0	0	0	0	11	0	0	14	0
52	20					0					7					25					
No. of Trucks	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4	0
Truck %	0.0%	0.0%	0.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	28.6%	0.0%	0.0%
19.2%	15.0%					0.0%					28.6%					20.0%					
PHF	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.55	0.00	0.58	0.00	0.00
0.76	0.71					#DIV/0!					0.58					0.78					

Greenman-Pedersen, Inc.

80 Wolf Rd, Suite 300

Albany, NY 12205

(518) 453-9431

Intersection: US 9 and Lamplighter Blvd
 Location: Town of Copake, NY

Project No.: 2021057.00
 Count Date: 7/27/2021

Total Traffic - Cars & Heavy Vehicles

Start Time	US 9 Southbound					0 Westbound					US 9 Northbound					Lamplighter Blvd Eastbound				
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes
6:00 AM	0	0	79	0	0	0	0	0	0	0	0	1	35	0	0	2	4	0	9	0
6:15 AM	0	0	121	8	0	0	0	0	0	0	0	5	70	0	0	0	2	0	6	0
6:30 AM	0	0	111	4	0	0	0	0	0	0	0	7	55	0	0	3	8	0	9	0
6:45 AM	0	0	88	9	0	0	0	0	0	0	0	0	66	0	0	2	10	0	5	0
7:00 AM	0	0	119	5	0	0	0	0	0	0	0	6	53	0	0	1	4	0	11	0
7:15 AM	0	0	141	2	0	0	0	0	0	0	0	3	93	0	0	0	6	0	11	0
7:30 AM	0	0	138	3	0	0	0	0	0	0	0	0	91	0	0	0	6	0	11	0
7:45 AM	0	0	136	3	0	0	0	0	0	0	0	5	89	0	0	0	11	0	10	0
8:00 AM	0	0	104	7	0	0	0	0	0	0	0	7	94	0	0	2	10	0	9	0
8:15 AM	0	0	115	6	0	0	0	0	0	0	0	7	81	0	0	2	9	0	9	0
8:30 AM	0	0	133	6	0	0	0	0	0	0	0	6	70	0	0	3	10	0	8	0
8:45 AM	0	0	102	5	0	0	0	0	0	0	0	3	96	0	0	3	7	0	3	0
9:00 AM	0	0	95	8	0	0	0	0	0	0	0	3	61	0	0	1	8	0	7	0
9:15 AM	0	0	84	5	0	0	0	0	0	0	0	2	78	0	0	1	5	0	4	0
9:30 AM	0	0	98	9	0	0	0	0	0	0	0	3	94	0	0	0	3	0	9	0
9:45 AM	0	0	81	11	0	0	0	0	0	0	0	5	87	0	0	0	10	0	5	1
10:00 AM	0	0	91	6	0	0	0	0	0	0	0	4	91	0	0	0	8	0	3	0
10:15 AM	0	0	86	3	0	0	0	0	0	0	0	1	90	0	0	0	8	0	2	0
10:30 AM	0	0	91	9	0	0	0	0	0	0	0	4	83	0	0	0	5	0	8	0
10:45 AM	0	0	105	15	0	0	0	0	0	0	0	2	95	0	0	0	7	0	7	0
11:00 AM	0	0	102	6	0	0	0	0	0	0	0	7	80	0	0	2	6	0	9	0
11:15 AM	0	0	109	11	0	0	0	0	0	0	0	6	109	0	0	1	7	0	4	0
11:30 AM	0	0	123	11	0	0	0	0	0	0	0	7	97	0	0	0	7	0	6	0
11:45 AM	0	0	98	7	0	0	0	0	0	0	0	4	109	0	0	1	2	0	5	0
12:00 PM	0	0	114	4	0	0	0	0	0	0	0	7	112	0	0	1	5	0	8	1
12:15 PM	0	0	112	7	0	0	0	0	0	0	0	9	112	0	0	0	4	0	5	0
12:30 PM	0	0	112	12	0	0	0	0	0	0	0	7	105	0	0	0	11	0	2	0
12:45 PM	0	0	115	13	0	0	0	0	0	0	0	7	120	0	0	0	10	0	8	0
1:00 PM	0	0	106	6	0	0	0	0	0	0	0	7	97	0	0	2	10	0	2	0
1:15 PM	0	0	126	7	0	0	0	0	0	0	0	9	103	0	0	1	6	0	7	2
1:30 PM	0	0	98	12	0	0	0	0	0	0	0	13	103	0	0	1	6	0	7	1
1:45 PM	0	0	107	13	0	0	0	0	0	0	0	4	106	0	0	1	11	0	5	0
2:00 PM	0	0	106	13	0	0	0	0	0	0	0	6	112	0	0	0	8	0	7	0
2:15 PM	1	0	101	13	0	0	0	0	0	0	0	3	133	0	0	0	5	0	6	0
2:30 PM	0	0	112	7	0	0	0	0	0	0	0	8	119	0	0	0	5	0	7	0
2:45 PM	0	0	95	13	0	0	0	0	0	0	0	3	146	0	0	0	3	0	3	0
3:00 PM	0	0	133	11	0	0	0	0	0	0	0	11	107	0	0	2	8	0	4	0
3:15 PM	0	0	127	12	0	0	0	0	0	0	0	5	141	0	0	0	6	0	8	0
3:30 PM	0	0	133	9	0	0	0	0	0	0	0	14	145	0	0	3	6	0	6	1
3:45 PM	0	0	113	13	0	0	0	0	0	0	0	14	174	0	0	1	2	0	6	0
4:00 PM	0	0	125	11	0	0	0	0	0	0	0	17	145	0	0	1	3	0	5	0
4:15 PM	0	0	133	16	0	0	0	0	0	0	0	11	148	0	0	2	9	0	11	1
4:30 PM	0	0	119	14	0	0	0	0	0	0	0	13	133	0	0	0	5	0	5	0
4:45 PM	0	0	130	17	0	0	0	0	0	0	0	11	160	0	0	2	10	0	5	0
5:00 PM	0	0	133	13	0	0	0	0	0	0	0	11	164	0	0	1	8	0	7	0
5:15 PM	0	0	115	11	0	0	0	0	0	0	0	10	156	0	0	1	9	0	7	0
5:30 PM	0	0	106	13	0	0	0	0	0	0	0	15	140	0	0	1	10	0	4	1
5:45 PM	0	0	99	13	0	0	0	0	0	0	0	13	129	0	0	0	9	0	8	0
6:00 PM	0	0	83	9	0	0	0	0	0	0	0	7	94	0	0	0	6	0	5	0
6:15 PM	0	0	84	9	0	0	0	0	0	0	0	6	93	0	0	0	1	0	6	0
6:30 PM	0	0	49	7	0	0	0	0	0	0	0	6	75	0	0	0	9	0	0	0
6:45 PM	0	0	48	7	0	0	0	0	0	0	0	9	79	0	0	0	7	0	7	0

Greenman-Pedersen, Inc.

80 Wolf Rd, Suite 300

Albany, NY 12205

(518) 453-9431

Intersection: US 9 and Lamplighter Blvd
 Location: Town of Copake, NY

Project No.: 2021057.00
 Count Date: 7/27/2021

Peak Hour Traffic Volumes

	US 9 Southbound					0 Westbound					US 9 Northbound					Lamplighter Blvd Eastbound				
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes
AM Peak Hour:	7:15 AM to 8:15 AM																			
7:15 AM	0	0	141	2	0	0	0	0	0	0	0	3	93	0	0	0	6	0	11	0
7:30 AM	0	0	138	3	0	0	0	0	0	0	0	0	91	0	0	0	6	0	11	0
7:45 AM	0	0	136	3	0	0	0	0	0	0	0	5	89	0	0	0	11	0	10	0
8:00 AM	0	0	104	7	0	0	0	0	0	0	0	7	94	0	0	2	10	0	9	0
Total Car Volume	0	0	519	15	0	0	0	0	0	0	0	15	367	0	0	2	33	0	41	0
			534					0					382					76		
No. of Trucks	0	0	42	1	0	0	0	0	0	0	0	5	33	0	0	0	1	0	2	0
Truck %	0.0%	0.0%	8.1%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	9.0%	0.0%	0.0%	0.0%	3.0%	0.0%	4.9%	0.0%
	8.5%		8.1%					0.0%					9.9%					3.9%		
PHF	0.00	0.00	0.92	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.98	0.00	0.00	0.25	0.75	0.00	0.93	0.00
	0.97		0.93					#DIV/0!					0.95					0.90		












	US 9 Southbound					0 Westbound					US 9 Northbound					Lamplighter Blvd Eastbound				
	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes	U Turns	Left Turns	Straight Through	Right Turns	Peds/Bikes
PM Peak Hour:	4:15 PM to 5:15 PM																			
4:15 PM	0	0	133	16	0	0	0	0	0	0	0	11	148	0	0	2	9	0	11	1
4:30 PM	0	0	119	14	0	0	0	0	0	0	0	13	133	0	0	0	5	0	5	0
4:45 PM	0	0	130	17	0	0	0	0	0	0	0	11	160	0	0	2	10	0	5	0
5:00 PM	0	0	133	13	0	0	0	0	0	0	0	11	164	0	0	1	8	0	7	0
Total Car Volume	0	0	515	60	0	0	0	0	0	0	0	46	605	0	0	5	32	0	28	1
			575					0					651					66		
No. of Trucks	0	0	21	0	0	0	0	0	0	0	0	3	14	0	0	0	0	0	0	0
Truck %	0.0%	0.0%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	2.9%		3.7%					0.0%					2.6%					0.0%		
PHF	0.00	0.00	0.97	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.92	0.00	0.00	0.63	0.80	0.00	0.64	0.25
	0.96		0.96					#DIV/0!					0.93					0.72		

APPENDIX C
Capacity Analysis Output Sheets

HCM 6th Signalized Intersection Summary

1: U.S. 9 & Reynolds Rd

Existing AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	422	35	351	209	26	541
Future Volume (veh/h)	422	35	351	209	26	541
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1811	1811	1722	1722	1781	1781
Adj Flow Rate, veh/h	464	38	386	230	29	595
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	6	12	12	8	8
Cap, veh/h	685	56	749	635	287	775
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1577	129	1722	1459	768	1781
Grp Volume(v), veh/h	503	0	386	230	29	595
Grp Sat Flow(s),veh/h/ln	1709	0	1722	1459	768	1781
Q Serve(g_s), s	21.7	0.0	15.0	9.7	2.6	26.1
Cycle Q Clear(g_c), s	21.7	0.0	15.0	9.7	17.7	26.1
Prop In Lane	0.92	0.08		1.00	1.00	
Lane Grp Cap(c), veh/h	743	0	749	635	287	775
V/C Ratio(X)	0.68	0.00	0.52	0.36	0.10	0.77
Avail Cap(c_a), veh/h	743	0	1460	1237	604	1510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	18.9	17.4	25.4	22.1
Incr Delay (d2), s/veh	2.5	0.0	0.6	0.3	0.2	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	5.5	3.0	0.5	10.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.3	0.0	19.5	17.8	25.5	23.7
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h	503		616			624
Approach Delay, s/veh	23.3		18.9			23.8
Approach LOS	C		B			C
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		46.0			46.0	46.0
Change Period (Y+Rc), s		6.0			6.0	6.0
Max Green Setting (Gmax), s		78.0			78.0	40.0
Max Q Clear Time (g_c+I1), s		17.0			28.1	23.7
Green Ext Time (p_c), s		3.1			4.3	1.4
Intersection Summary						
HCM 6th Ctrl Delay			21.9			
HCM 6th LOS			C			

HCM 6th TWSC
 3: U.S. 9 & Xtramart North

Existing AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	1	378	560	5
Future Vol, veh/h	4	1	1	378	560	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	4	1	1	390	577	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	972	580	582	0	-	0
Stage 1	580	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	278	510	954	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	278	510	954	-	-	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	555	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	954	-	306	-	-
HCM Lane V/C Ratio	0.001	-	0.017	-	-
HCM Control Delay (s)	8.8	0	17	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th TWSC
4: U.S. 9 & Xtramart South

Existing AM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	1	7	8	378	560	1
Future Vol, veh/h	1	7	8	378	560	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	1	7	8	390	577	1












Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	984	578	578	0	-	0
Stage 1	578	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	273	512	957	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	270	512	957	-	-	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	551	-	-	-	-	-
Stage 2	668	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	957	-	460	-	-
HCM Lane V/C Ratio	0.009	-	0.018	-	-
HCM Control Delay (s)	8.8	0	13	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary
 1: U.S. 9 & Reynolds Rd

Existing PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	307	40	607	411	40	503
Future Volume (veh/h)	307	40	607	411	40	503
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1767	1767	1856	1856	1841	1841
Adj Flow Rate, veh/h	323	42	639	433	42	529
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	3	3	4	4
Cap, veh/h	634	83	810	687	151	804
Arrive On Green	0.43	0.43	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1464	190	1856	1572	518	1841
Grp Volume(v), veh/h	366	0	639	433	42	529
Grp Sat Flow(s),veh/h/ln	1659	0	1856	1572	518	1841
Q Serve(g_s), s	14.8	0.0	27.3	19.8	7.0	21.0
Cycle Q Clear(g_c), s	14.8	0.0	27.3	19.8	34.3	21.0
Prop In Lane	0.88	0.11		1.00	1.00	
Lane Grp Cap(c), veh/h	719	0	810	687	151	804
V/C Ratio(X)	0.51	0.00	0.79	0.63	0.28	0.66
Avail Cap(c_a), veh/h	719	0	1568	1329	362	1556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	22.3	20.2	37.1	20.6
Incr Delay (d2), s/veh	0.6	0.0	1.8	1.0	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	11.0	6.7	0.9	8.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.6	0.0	24.1	21.2	38.1	21.5
LnGrp LOS	B	A	C	C	D	C
Approach Vol, veh/h	366		1072			571
Approach Delay, s/veh	19.6		22.9			22.7
Approach LOS	B		C			C
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		46.3			46.3	46.0
Change Period (Y+Rc), s		6.0			6.0	6.0
Max Green Setting (Gmax), s		78.0			78.0	40.0
Max Q Clear Time (g_c+I1), s		29.3			36.3	16.8
Green Ext Time (p_c), s		6.4			4.0	1.0
Intersection Summary						
HCM 6th Ctrl Delay			22.3			
HCM 6th LOS			C			

HCM 6th TWSC
3: U.S. 9 & Xtramart North

Existing PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	2	1	642	532	17
Future Vol, veh/h	9	2	1	642	532	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	9	2	1	662	548	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1221	557	566	0	-	0
Stage 1	557	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	197	526	967	-	-	-
Stage 1	570	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	197	526	967	-	-	-
Mov Cap-2 Maneuver	197	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	508	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	967	-	222	-	-
HCM Lane V/C Ratio	0.001	-	0.051	-	-
HCM Control Delay (s)	8.7	0	22.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 6th TWSC
4: U.S. 9 & Xtramart South

Existing PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	2	12	6	641	531	3
Future Vol, veh/h	2	12	6	641	531	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	2	12	6	661	547	3












Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1222	549	550	0	-	0
Stage 1	549	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	196	532	981	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	194	532	981	-	-	-
Mov Cap-2 Maneuver	194	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	503	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	981	-	426	-	-
HCM Lane V/C Ratio	0.006	-	0.034	-	-
HCM Control Delay (s)	8.7	0	13.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary
 1: U.S. 9 & Reynolds Rd

No-Build AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	423	35	352	210	26	542
Future Volume (veh/h)	423	35	352	210	26	542
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1811	1811	1722	1722	1781	1781
Adj Flow Rate, veh/h	465	38	387	231	29	596
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	6	12	12	8	8
Cap, veh/h	686	56	749	635	286	775
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1577	129	1722	1459	767	1781
Grp Volume(v), veh/h	504	0	387	231	29	596
Grp Sat Flow(s),veh/h/ln	1709	0	1722	1459	767	1781
Q Serve(g_s), s	21.7	0.0	15.1	9.8	2.6	26.1
Cycle Q Clear(g_c), s	21.7	0.0	15.1	9.8	17.7	26.1
Prop In Lane	0.92	0.08		1.00	1.00	
Lane Grp Cap(c), veh/h	743	0	749	635	286	775
V/C Ratio(X)	0.68	0.00	0.52	0.36	0.10	0.77
Avail Cap(c_a), veh/h	743	0	1460	1237	603	1510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	19.0	17.5	25.4	22.1
Incr Delay (d2), s/veh	2.5	0.0	0.6	0.4	0.2	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	5.5	3.0	0.5	10.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.3	0.0	19.5	17.8	25.6	23.7
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h	504		618			625
Approach Delay, s/veh	23.3		18.9			23.8
Approach LOS	C		B			C
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		46.0			46.0	46.0
Change Period (Y+Rc), s		6.0			6.0	6.0
Max Green Setting (Gmax), s		78.0			78.0	40.0
Max Q Clear Time (g_c+I1), s		17.1			28.1	23.7
Green Ext Time (p_c), s		3.2			4.3	1.4
Intersection Summary						
HCM 6th Ctrl Delay			21.9			
HCM 6th LOS			C			

HCM 6th TWSC
3: U.S. 9 & Xtramart North

No-Build AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	4	1	1	379	561	5
Future Vol, veh/h	4	1	1	379	561	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	4	1	1	391	578	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	974	581	583	0	-	0
Stage 1	581	-	-	-	-	-
Stage 2	393	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	277	510	953	-	-	-
Stage 1	555	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	277	510	953	-	-	-
Mov Cap-2 Maneuver	277	-	-	-	-	-
Stage 1	554	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	953	-	305	-	-
HCM Lane V/C Ratio	0.001	-	0.017	-	-
HCM Control Delay (s)	8.8	0	17	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th TWSC
4: U.S. 9 & Xtramart South

No-Build AM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			L		T
Traffic Vol, veh/h	1	7	8	379	562	1
Future Vol, veh/h	1	7	8	379	562	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	1	7	8	391	579	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	987	580	580	0	-	0
Stage 1	580	-	-	-	-	-
Stage 2	407	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	272	510	956	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	269	510	956	-	-	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	668	-	-	-	-	-












Approach	EB	NB	SB
HCM Control Delay, s	13	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	956	-	459	-	-
HCM Lane V/C Ratio	0.009	-	0.018	-	-
HCM Control Delay (s)	8.8	0	13	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary

1: U.S. 9 & Reynolds Rd

No-Build PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	308	40	609	412	40	504
Future Volume (veh/h)	308	40	609	412	40	504
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1767	1767	1856	1856	1841	1841
Adj Flow Rate, veh/h	324	42	641	434	42	531
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	3	3	4	4
Cap, veh/h	633	82	812	688	151	806
Arrive On Green	0.43	0.43	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1465	190	1856	1572	517	1841
Grp Volume(v), veh/h	367	0	641	434	42	531
Grp Sat Flow(s),veh/h/ln	1659	0	1856	1572	517	1841
Q Serve(g_s), s	14.9	0.0	27.4	19.8	7.0	21.1
Cycle Q Clear(g_c), s	14.9	0.0	27.4	19.8	34.5	21.1
Prop In Lane	0.88	0.11		1.00	1.00	
Lane Grp Cap(c), veh/h	718	0	812	688	151	806
V/C Ratio(X)	0.51	0.00	0.79	0.63	0.28	0.66
Avail Cap(c_a), veh/h	718	0	1565	1326	360	1552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	22.3	20.2	37.1	20.5
Incr Delay (d2), s/veh	0.6	0.0	1.8	1.0	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	11.0	6.7	0.9	8.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.7	0.0	24.1	21.1	38.1	21.5
LnGrp LOS	B	A	C	C	D	C
Approach Vol, veh/h	367		1075			573
Approach Delay, s/veh	19.7		22.9			22.7
Approach LOS	B		C			C
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		46.5			46.5	46.0
Change Period (Y+Rc), s		6.0			6.0	6.0
Max Green Setting (Gmax), s		78.0			78.0	40.0
Max Q Clear Time (g_c+I1), s		29.4			36.5	16.9
Green Ext Time (p_c), s		6.4			4.0	1.0
Intersection Summary						
HCM 6th Ctrl Delay			22.3			
HCM 6th LOS			C			

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	2	1	643	533	17
Future Vol, veh/h	9	2	1	643	533	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	9	2	1	663	549	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1223	558	567	0	-	0
Stage 1	558	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	196	525	966	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	196	525	966	-	-	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	508	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	966	-	221	-	-
HCM Lane V/C Ratio	0.001	-	0.051	-	-
HCM Control Delay (s)	8.7	0	22.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 6th TWSC
4: U.S. 9 & Xtramart South

No-Build PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	2	12	6	643	532	3
Future Vol, veh/h	2	12	6	643	532	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	2	12	6	663	548	3

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1225	550	551	0	-	0
Stage 1	550	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	196	531	980	-	-	-
Stage 1	574	-	-	-	-	-
Stage 2	502	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	194	531	980	-	-	-
Mov Cap-2 Maneuver	194	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	502	-	-	-	-	-












Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	980	-	425	-	-
HCM Lane V/C Ratio	0.006	-	0.034	-	-
HCM Control Delay (s)	8.7	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary

1: U.S. 9 & Reynolds Rd

Build AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	423	38	363	210	29	554
Future Volume (veh/h)	423	38	363	210	29	554
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1811	1811	1722	1722	1781	1781
Adj Flow Rate, veh/h	465	42	399	231	32	609
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	6	12	12	8	8
Cap, veh/h	680	61	749	635	279	775
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1563	141	1722	1459	758	1781
Grp Volume(v), veh/h	508	0	399	231	32	609
Grp Sat Flow(s),veh/h/ln	1708	0	1722	1459	758	1781
Q Serve(g_s), s	22.0	0.0	15.7	9.8	3.0	27.0
Cycle Q Clear(g_c), s	22.0	0.0	15.7	9.8	18.7	27.0
Prop In Lane	0.92	0.08		1.00	1.00	
Lane Grp Cap(c), veh/h	742	0	749	635	279	775
V/C Ratio(X)	0.68	0.00	0.53	0.36	0.11	0.79
Avail Cap(c_a), veh/h	742	0	1460	1237	592	1510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	19.1	17.5	26.0	22.3
Incr Delay (d2), s/veh	2.6	0.0	0.6	0.4	0.2	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	5.8	3.0	0.5	10.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.5	0.0	19.7	17.8	26.2	24.1
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h	508		630			641
Approach Delay, s/veh	23.5		19.0			24.2
Approach LOS	C		B			C
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		46.0			46.0	46.0
Change Period (Y+Rc), s		6.0			6.0	6.0
Max Green Setting (Gmax), s		78.0			78.0	40.0
Max Q Clear Time (g_c+I1), s		17.7			29.0	24.0
Green Ext Time (p_c), s		3.2			4.4	1.4
Intersection Summary						
HCM 6th Ctrl Delay			22.2			
HCM 6th LOS			C			

HCM 6th TWSC
3: U.S. 9 & Xtramart North

Build AM Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	35	9	4	362	533	47
Future Vol, veh/h	35	9	4	362	533	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	36	9	4	373	549	48

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	954	573	597	0	-	0
Stage 1	573	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	285	515	942	-	-	-
Stage 1	560	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	284	515	942	-	-	-
Mov Cap-2 Maneuver	284	-	-	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	686	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	942	-	313	-	-
HCM Lane V/C Ratio	0.004	-	0.145	-	-
HCM Control Delay (s)	8.8	0	18.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

HCM 6th TWSC
4: U.S. 9 & Xtramart South

Build AM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	5	46	40	361	537	5
Future Vol, veh/h	5	46	40	361	537	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	5	47	41	372	554	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1011	557	559	0	-	0
Stage 1	557	-	-	-	-	-
Stage 2	454	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	263	526	973	-	-	-
Stage 1	570	-	-	-	-	-
Stage 2	635	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	249	526	973	-	-	-
Mov Cap-2 Maneuver	249	-	-	-	-	-
Stage 1	540	-	-	-	-	-
Stage 2	635	-	-	-	-	-












Approach	EB	NB	SB
HCM Control Delay, s	13.5	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	973	-	474	-	-
HCM Lane V/C Ratio	0.042	-	0.111	-	-
HCM Control Delay (s)	8.9	0	13.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

HCM 6th Signalized Intersection Summary

1: U.S. 9 & Reynolds Rd

Build PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	308	43	621	412	43	518
Future Volume (veh/h)	308	43	621	412	43	518
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1767	1767	1856	1856	1841	1841
Adj Flow Rate, veh/h	324	45	654	434	45	545
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	3	3	4	4
Cap, veh/h	616	86	832	705	152	825
Arrive On Green	0.42	0.42	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1452	202	1856	1572	510	1841
Grp Volume(v), veh/h	370	0	654	434	45	545
Grp Sat Flow(s),veh/h/ln	1658	0	1856	1572	510	1841
Q Serve(g_s), s	15.6	0.0	28.3	19.8	7.8	21.9
Cycle Q Clear(g_c), s	15.6	0.0	28.3	19.8	36.1	21.9
Prop In Lane	0.88	0.12		1.00	1.00	
Lane Grp Cap(c), veh/h	704	0	832	705	152	825
V/C Ratio(X)	0.53	0.00	0.79	0.62	0.30	0.66
Avail Cap(c_a), veh/h	704	0	1536	1301	345	1523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	22.2	19.8	37.5	20.4
Incr Delay (d2), s/veh	0.7	0.0	1.7	0.9	1.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	11.4	6.7	1.0	8.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.8	0.0	23.8	20.7	38.6	21.3
LnGrp LOS	C	A	C	C	D	C
Approach Vol, veh/h	370		1088			590
Approach Delay, s/veh	20.8		22.6			22.6
Approach LOS	C		C			C
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		48.2			48.2	46.0
Change Period (Y+Rc), s		6.0			6.0	6.0
Max Green Setting (Gmax), s		78.0			78.0	40.0
Max Q Clear Time (g_c+I1), s		30.3			38.1	17.6
Green Ext Time (p_c), s		6.6			4.2	1.0
Intersection Summary						
HCM 6th Ctrl Delay			22.3			
HCM 6th LOS			C			

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	43	11	5	627	504	62
Future Vol, veh/h	43	11	5	627	504	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	44	11	5	646	520	64

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1208	552	584	0	-	0
Stage 1	552	-	-	-	-	-
Stage 2	656	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	200	530	952	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	513	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	198	530	952	-	-	-
Mov Cap-2 Maneuver	198	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	513	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.9	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	952	-	227	-	-
HCM Lane V/C Ratio	0.005	-	0.245	-	-
HCM Control Delay (s)	8.8	0	25.9	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	8	54	40	624	507	8
Future Vol, veh/h	8	54	40	624	507	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	10	10	8	8
Mvmt Flow	8	56	41	643	523	8

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1252	527	531	0	-	0
Stage 1	527	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	188	547	997	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	176	547	997	-	-	-
Mov Cap-2 Maneuver	176	-	-	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	476	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	997	-	430	-	-
HCM Lane V/C Ratio	0.041	-	0.149	-	-
HCM Control Delay (s)	8.8	0	14.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

GPI

Many Talents One Firm



gpinet.com