

**TRAFFIC IMPACT STUDY**

**for the proposed**

**KENYON'S CONVENIENCE STORE  
AND TIM HORTON'S KIOSK**

**Main Street and Westwood Road  
Town of Clarence  
Erie County, New York**

*Prepared for:*

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*Prepared by:*



*Locally-owned and Operated since 1933*



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**TRAFFIC IMPACT STUDY**  
**Kenyon's Convenience Store and Tim Horton's Kiosk**  
**Town of Clarence, New York**



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## 1.0 INTRODUCTION AND SUMMARY

This study is an update to the January 2014 Traffic Impact Study (TIS) for Kenyon's plans to redevelop a commercial parcel of land in the Town of Clarence at 8250 Main Street (northeast corner of the intersection of Main Street and Westwood Road) that is currently occupied by Stop & Go Gas that has 4 gasoline pumps. The proposed project analyzed in that study included a new convenience store (3,022 square feet) with 6 gasoline pumps that would also have a Tim Horton's Kiosk (700 square feet) within the convenience store with a drive-thru.

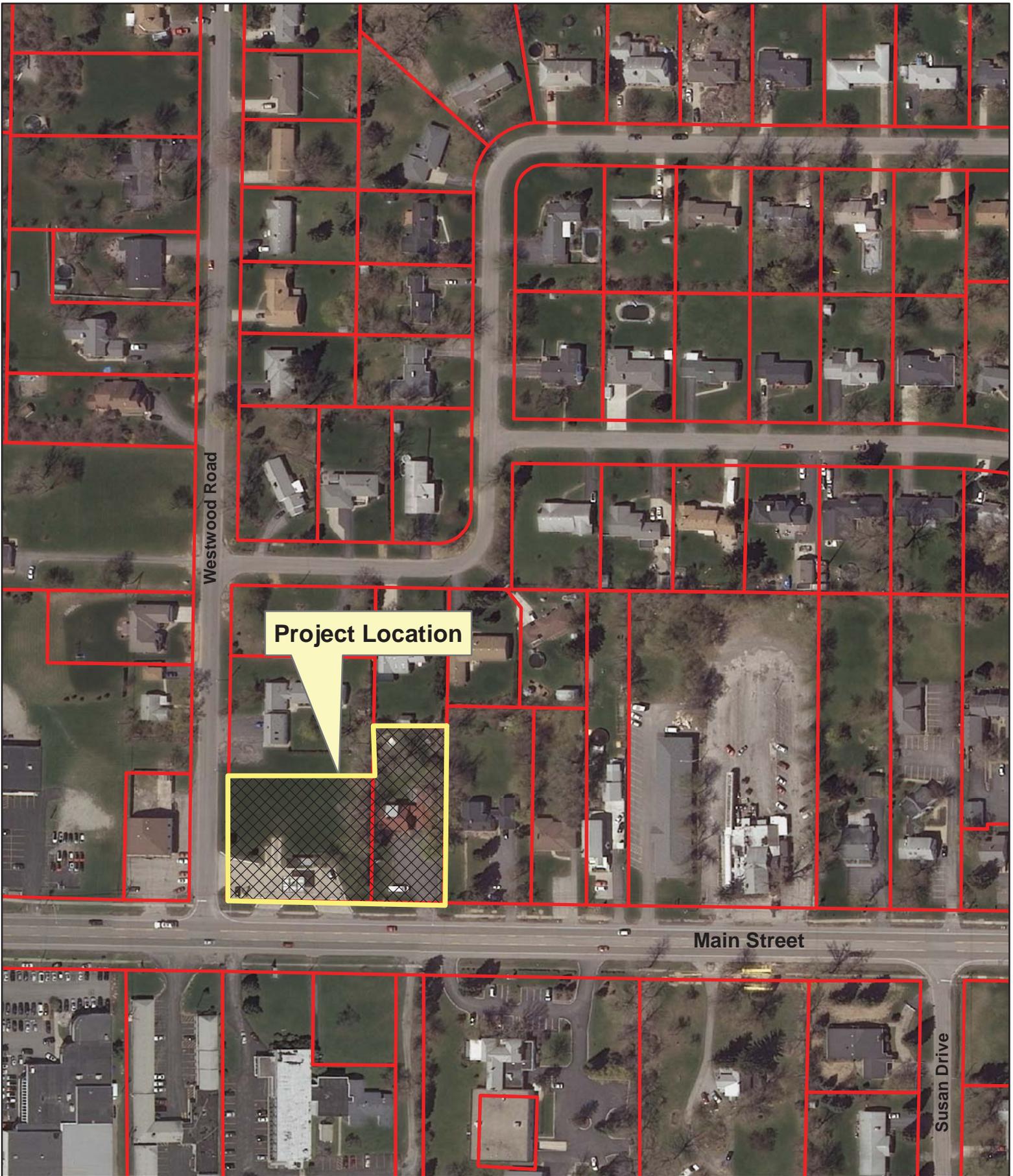
Since then a revised plan has been submitted for the proposed development that includes a new 4,656 square foot building that would encompass a 3,256 square foot convenience store with 8 gasoline pumps, a 800 square foot Tim Horton's Kiosk with a drive-thru and 600 square foot space for the relocation of the video production business located adjacent to the original project site at 8274 Main Street. The property located at 8274 Main Street would be incorporated into the over site development for the proposed project. The general area location map and conceptual site plan are shown in **Figures 1 and 2** respectively.

The proposed Project would utilize driveway connections to Main Street and Westwood Road. This TIS will review the existing and future traffic patterns and levels of services associated with the intersections within the study area.

The TIS conducted for the Project recognizes that much of the development activity within the study area consists of commercial redevelopments along Main Street and limited residential development to the north and south of Main Street. The traffic study includes an analysis of the un-signalized intersection of Main Street and Westwood Road, as well as the driveway connections to these roads from the Project Site.

### 1.1 Purpose and Objectives

The purpose of this TIS is to evaluate the potential impacts that traffic generated by the proposed project (at full occupancy) may have on the adjacent local roadway network, summarize our firm's analysis, evaluate various entrance and exit alternatives, and to provide our firm's professional opinion and recommendations for the Planning Board's consideration in connection with environmental review of the project pursuant to SEQRA.



**General Location Area**  
**Main Street and Westwood Road**  
**Town of Clarence, New York**

Source: NYS GIS Clearinghouse - 2011

**Figure - 1**





## 2.0 PROJECT DESCRIPTION

Construction of the proposed project would start in the year 2016 and is anticipated to be finished later that year. As currently configured, the project's parcel located on the northeast corner of this intersection (8250 Main Street) would utilize reconfigured driveway access points to Main Street and Westwood Road (enter only) while the parcel at 8274 Main Street would be used for the project's eastern driveway connection to Main Street. The existing driveways used by the Stop & Go Gas Station and the photography and video production business are shown in the general area location map in **Figure 1**. Proposed driveways are shown in the project site plan in **Figure 2**.

As currently envisioned, the revised Kenyon's project will include a new 4,656 square foot single story building that will incorporate a 3,256 square foot convenience store with 8 gasoline pumps, a 800 square foot Tim Horton's Kiosk with a drive-thru and 600 square foot space for the relocation of the video production business Chuck Eckert – Mary Money Photography & Video.

In order to evaluate the potential traffic impacts for purposes of this TIS, it is assumed that the project will be fully developed and operational in 2016. Therefore, the full build-out is assumed by Year 2016.

### 2.1 Description of On-site Existing Development

The existing parcel at 8250 Main Street consists of The Stop & Go Gas station which currently has 4 gasoline pumps and the parcel at 8274 Main Street consists of a single building that is used for the Chuck Eckert – Mary Money Photography & Video business.

### 2.2 Description of Off-site Existing Development

The area surrounding the site parcel is developed, with single family residential uses located to the north of the project off of Westwood Road and surrounding streets, and commercial uses located along Main Street. Towne Mini Cooper recently opened at the northwest corner of Main Street and Westwood Road across from the project site at 8250 Main Street. The McGuire Project (19,000 square foot office) near the intersection of Main Street and Susan Drive (8321 Main Street) which was in the development stages during the original study has since been completed and operational. Vehicular traffic generated by these businesses was collected during the traffic counts performed at the intersection of Main Street and Westwood Road on September 29, 2015.

### 2.3 Description of Other Planned Off-site Developments

Other planned off-site developments in the area include the 19 lot Gentwood Extension project which is north of the proposed project off of Gentwood Drive. Trips generated by this 19 lot single family development were estimated and used in the analysis of the intersections. A growth rate was also used to project the 2016 future traffic volumes for the intersections analyzed to account for the trips generated by any other proposed developments in the nearby vicinity.

### 3.0 EXISTING AREA CONDITIONS

The transportation network serving vehicular and pedestrian traffic generated by the Kenyon’s Convenience Store and Tim Horton’s Kiosk project consists of roads and intersections immediately adjacent to the site parcel along Main Street and Westwood Road. Main Street bounds the property to the south and Westwood Road bounds the property to the west, with both roads providing direct access to the site. Sidewalks are located on both sides of Main Street but are not located along Westwood Road. NFTA bus service is not available near the project site. Photographs of the intersections and general area are included in **Appendix C**.

A brief description of each roadway and intersection follows under Section 3.1 Transportation Systems. The existing conditions of the roadways within the study area are summarized in **Table 1**.

Roadway	Class <sup>1</sup>	Route <sup>2</sup>	Number Lanes <sup>3</sup>	Feature <sup>4</sup>	Width <sup>5</sup>		Speed <sup>6</sup>		Profile <sup>7</sup>	Drainage <sup>8</sup>
					Lane	Shoulder	Limit	Operating		
Main Street	Principal Arterial	NY 5	2	Undivided	12	Paved (5)	40	40-45	Flat	Closed
Westwood Road	Local	CR 104	2	Undivided	12	None	25	25-30	Flat	Closed

1. Federal Aid Functional Class of the Roadway.
2. US – Federal Route Number; NY – State Route Number; CR – County Route Number; None – No Route Number.
3. Number of travel lanes in the “highway proper” i.e., the highway segment between intersections and/or interchanges, excluding turning lanes developed at the intersections and/or interchanges.
4. Divided – opposing travel lanes separated by either a curbed (raised), grass or yellow striped median; Undivided – opposing travel lanes separated by either a yellow full barrier, yellow partial barrier, yellow broken line or a two-way, left-turn lane.
5. Lane and paved shoulder widths are in feet; R – Right; L – Left; Curb – no paved shoulders, offset in feet in parenthesis; gutter – no paved shoulders, offset in feet in parenthesis.
6. Miles per hour (MPH); Limit – posted or statewide speed limit; Operating – average operating speeds in the “highway proper.”
7. Flat – 0 to 3 percent grades; Rolling – 3 to 10 percent grades; Mountainous – 10 plus percent grades.
8. Open – ditches convey surface water away from the roadway; Closed – catch basins and underground pipes collect and convey surface water away from the roadway.

### 3.1 Transportation Systems

#### 3.1.1 Highway Proper

Main Street (NY 5). Main Street accommodates two-lane, two-way traffic within the project area in an east-west direction, with a center median for two-way left turning vehicles. It is classified on the federal-aid highway system as a Principal Arterial. It is a NYS Highway and the posted speed limit is 40 MPH. The pavement condition is good. Parking may or may not be permitted as no signs indicate parking restrictions.

Westwood Road. Westwood Road accommodates two-lane, two-way traffic in a north-south direction. The facility is classified as a local road with a posted speed limit of 25 MPH. It is owned/maintained by the Town of Clarence. The pavement condition is good. Parking may or may not be permitted as no signs indicate parking restrictions.

### 3.1.2 Intersections

The following existing intersections were analyzed within the study area (see **Figures 1 & 2** for driveway locations).

Main Street at Westwood Road. This three-way ("T") intersection is un-signalized. Main Street consists of one lane in each direction (east and west) with a two way left turn median. Westwood Road consists of one lane in each direction (north and south) with a combined southbound left/right turn lane.

Main Street at Driveway #1 (East). This three-way intersection is un-signalized. Main Street consists of one lane for the east and west approaches with a two-way left turn median, and the project driveway consists of a southbound left/right turn approach. This driveway will be moved to the east where the existing Photography/Video Business Driveway is located as part of the site redevelopment.

Main Street at Driveway #2 (West). This three-way intersection is un-signalized. Main Street consists of one lane for the east and west approaches with a two-way left turn median, and the project driveway consists of a southbound left/right turn approach.

Westwood Road at Existing Driveway. This three-way intersection is un-signalized. Westwood Road consists of one lane in each direction (north and south) and the project driveway consists of a westbound left/right turn approach. This driveway will be designated and redesigned as enter-only as part of the site redevelopment plans.

Main Street at Photography/Video Business Driveway. This three-way intersection is un-signalized. Main Street consists of one lane for the east and west approaches with a two-way left turn median, and the project driveway consists of a southbound left/right turn approach. This driveway will be reconfigured into the new eastern driveway for the proposed project.

The aforementioned intersections require a detailed capacity and level of service for the existing and future traffic generated by the Kenyon's Convenience Store and Tim Horton's Kiosk project once assigned and distributed over the existing transportation system. Refer to the Appendices for details relative to geometric layout and lane configurations.

### 3.2 Study Area Land Use

The lands immediately surrounding the proposed site consist of uses that are commercial, light industrial and residential along Main Street and Westwood Road.

### 3.3 Site Accessibility

Currently the site has existing access to Main Street and Westwood Road via road frontage. Based on the revised site plan the proposed project would have two entrances/exits on Main Street and one entrance from Westwood Road. See **Figure 1** for existing driveway locations.

## 4.0 PROJECTED TRAFFIC

### 4.1 Existing Traffic Volumes and Transportation Network

Traffic counts were performed by Nussbaumer & Clarke, Inc. (Nussbaumer) on September 29, 2015 for the AM and Noon Peak Hours. This count was used for development of existing and future year background traffic needed for this traffic impact study analysis. The manual turning count provides data on individual approach turning volumes and turning patterns.

The listing in **Table 2** is a summary of the traffic count data collected in the vicinity of the project site. Appendix A includes the summary and details of all the individual intersection manual turning counts gathered for the traffic study.

<b>TABLE 2 SUMMARY OF TRAFFIC DATA COLLECTED</b>			
<b>Location</b>		<b>Year Count Taken</b>	<b>By Whom</b>
<b><u>Intersection Manual Turning Movement Counts</u></b>			
Main Street and Westwood Road	(Weekday)	2015	Nussbaumer

#### 4.1.1 Growth and Seasonal Adjustment Factor

The seasonal adjustment factor of 1.06 was added to the traffic counts conducted in September, 2015 in order to accurately reflect normal conditions at this intersection. This factor was obtained from the New York State Department of Transportation (NYSDOT). See **Appendix A** for a copy of the seasonal factor used.

The growth rate developed to project the future build-out year of 2016 was based on data obtained from the NYSDOT. A growth rate of 0.5% was used to project future volumes. **Table 3** shows the calculated growth rates for each approach.

#### 4.1.2 Existing Peak Period Traffic Volumes

As noted earlier, and in **Table 2** for this traffic study, a manual intersection turning movement count was performed at the intersection of Main Street and Westwood Road. **Table 3** shows the 2015 and projected 2016 at build-out peak hour traffic volumes for the intersection in the study area.

<b>TABLE 3 PROJECTED GROWTH</b>			
<b>Kenyon's Convenience Store &amp; Tim Horton's Kiosk 8250-8274 Main Street Clarence, New York Intersection: Main Street &amp; Westwod Road</b>			
<b>Movement</b>	<b>AM PEAK EXISTING 2015</b>	<b>Annual Growth Rate</b>	<b>AM PEAK BACKGROUND 2016</b>
<b>Main Street Eastbound</b>			
Left Turn Movement	17	0.005	17
Through Movement	375	0.005	377
<b>Main Street Westbound</b>			
Through Movement	881	0.005	885
Right Turn Movement	3	0.005	3
<b>Westwod Road Southbound</b>			
Left Turn Movement	6	0.005	6
Right Movement	70	0.005	70
<b>Movement</b>	<b>NOON PEAK EXISTING 2015</b>	<b>Annual Growth Rate</b>	<b>NOON PEAK BACKGROUND 2016</b>
<b>Main Street Eastbound</b>			
Left Turn Movement	32	0.005	32
Through Movement	688	0.005	691
<b>Main Street Westbound</b>			
Through Movement	754	0.005	758
Right Turn Movement	5	0.005	5
<b>Westwod Road Southbound</b>			
Left Turn Movement	3	0.005	3
Right Movement	34	0.005	34

#### 4.2 2015 Existing Traffic Volumes

Traffic impact studies (TIS) are required to be prepared in accordance with policies and procedures of the traffic engineering profession (i.e., the Institute of Transportation Engineers (ITE)). The analysis of these intersections will focus on the future impacts the proposed development will have on the intersections' level of service within the study area.

For level of service and site traffic impact analysis, the background and year of completion/occupancy of the Kenyon's Convenience Store and Tim Horton's Kiosk project is 2016. The TIS utilized traffic counts (manual intersection turning counts) taken in 2015 under existing operating conditions.

#### 4.3 2016 Background and 2016 with Development Traffic Volumes

Level of service was evaluated for 2016 background traffic volume conditions for the intersections within the study area. These traffic-operating conditions can be expected to be realized without the Kenyon's Convenience Store and Tim Horton's Kiosk project. Un-signalized level of service analyses were also conducted for the peak hours of the 2016 build-out year with the project generated traffic to determine the impacts on the intersections.

**Figures 3A-B** summarizes the 2016 Background Traffic Volumes (weekday AM and Noon Peak Hours) and **Figures 4A-B** summarizes the 2016 Background with Development Traffic Volumes (weekday AM and Noon Peak Hours) at the intersections within the study area. The methodology used to estimate project generated trips are further explained in **Section 4.4** of this report. The level of service analyses for all studied years and conditions are summarized in **Tables 6A-D** of **Section 5.1** of this report. Copies of the Synchro reports for the intersection analysts are included in **Appendix B**.

#### **4.4 Trip Generation – Site – Generated Traffic**

##### Trip Generation

Traffic impact studies generally apply the Institute of Transportation Engineers (ITE) Trip Generation Manual procedures in the calculation of trips generated for a development proposal. Trip generation rates are derived from numerous studies and surveys at particular land uses and are used to estimate the number of trips originating from or to a particular land use. The ITE guidelines for estimating trip generation have been followed in determining traffic generated for the proposed land use through application of the procedures of the 9<sup>th</sup> Edition of the ITE Trip Generation Manual. Additional guidelines and documents were also reviewed in regards to the trip generation rates associated with coffee shops with drive-thru lanes.

For purposes of estimating trip generation for the project site ITE Code 853 – Convenience Store with Gas Pumps (independent variable square footage), ITE Code 937 – Coffee/Donut Shop with Drive-Thru (independent variable square footage) and ITE Code 944 – Gasoline/Service Station (independent variable fueling positions) were used to estimate project generated trips. Trips generated by the existing Stop and Go gas station (using ITE Code 944) were subtracted from the traffic counts for the 2016 Background with Development analysts. ITE Code 210 – Single Family Homes (independent variable dwelling unit) was used for the proposed 19 lot Gentwood Extension residential development and ITE Code 826 (formerly 814) - Specialty Retail Center was used to estimate trip for the existing video production business.

In addition to site specific generated trips some land uses also draw pass-by trips that are not specifically generated by the land use. Pass-by trips are made by traffic already using the adjacent roadway (existing traffic volumes) and enter the site as an in-between stop on the way to/from another destination. With the exception of the trips generated by the proposed 19 lot single family development to the north of the proposed project, pass-by percentages were applied to the other land uses in the analyses.

For reference purposes, **Table 4** (page 14) shows the trips generated by the proposed project for the AM and Noon Peak hour volumes using the ITE Codes. As Noon Peak Hour trip generation rates for the land uses at the project site were not available from the ITE Handbook or other sources, the PM Peak Hour rate was substituted for these study periods.

Figure 3A - AM 2016 Background Volumes

10/7/2015



Baseline

I:\2015\15J1-0147 Clarence TIS Update\2016 AM Background.syn

Figure 3B - Noon 2016 Background Volumes

10/7/2015

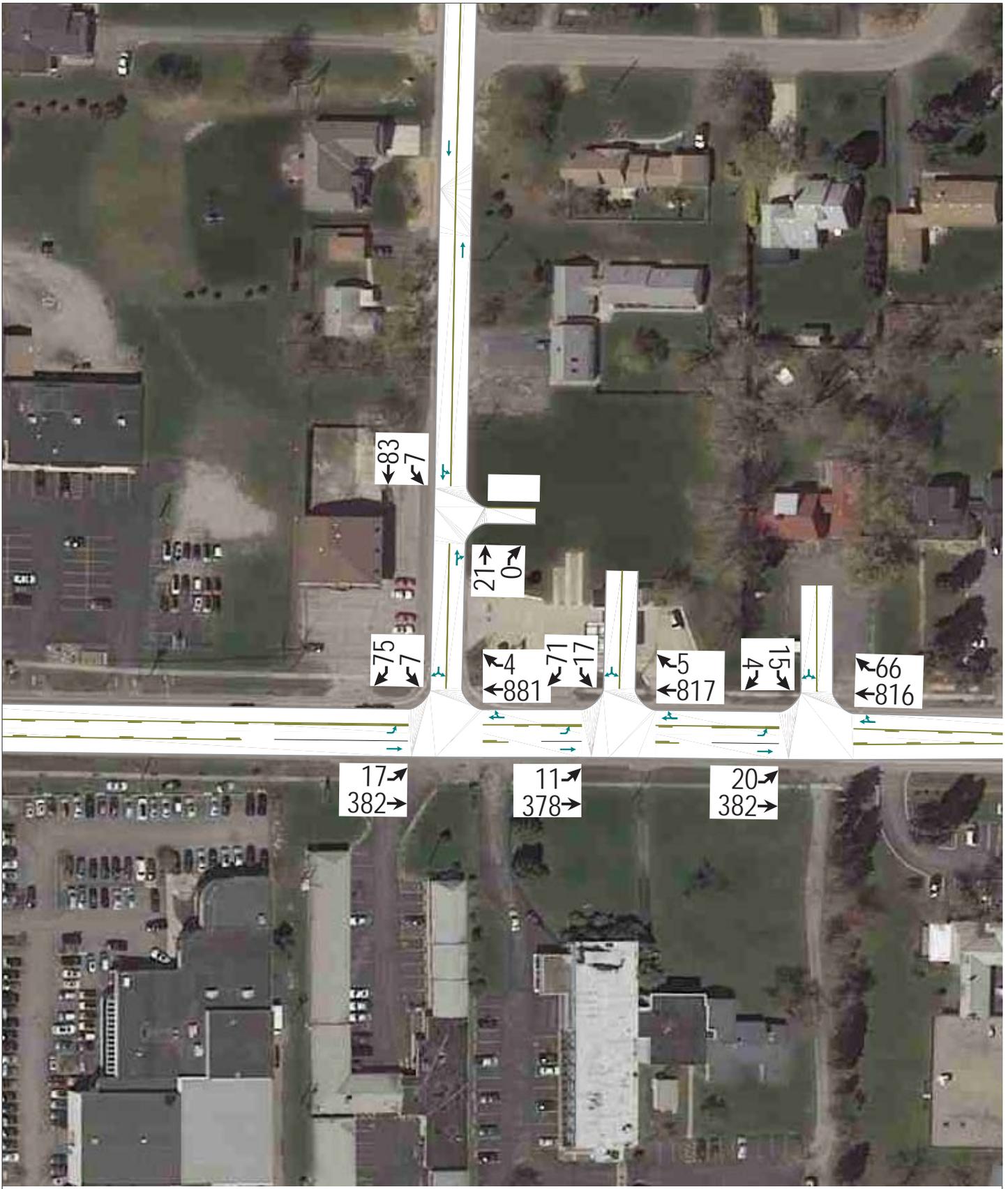


Baseline

I:\2015\15J1-0147 Clarence TIS Update\2016 Noon Background.syn

Figure 4A - AM 2016 With Project Volumes

10/7/2015

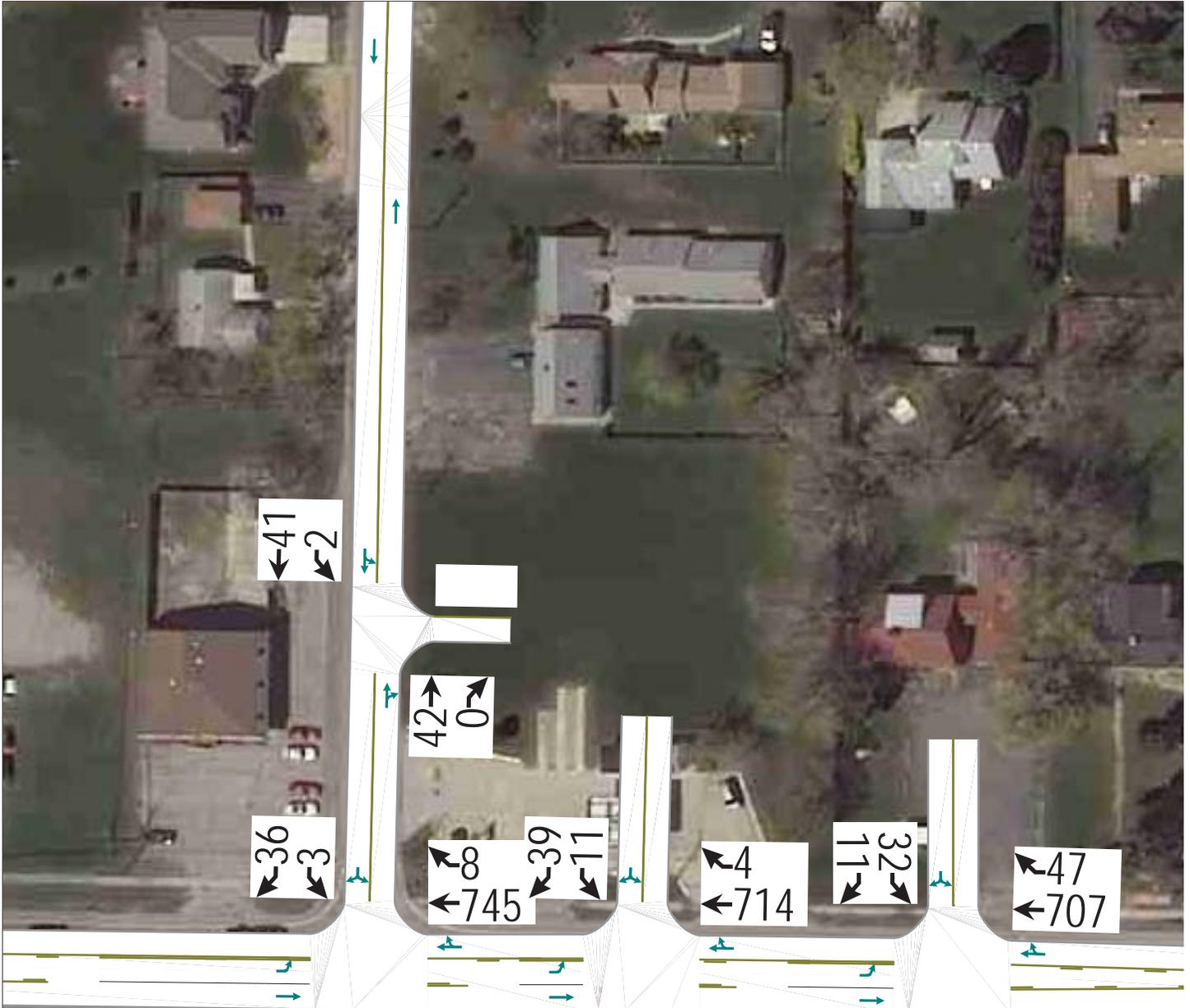


Baseline

I:\2015\15J1-0147 Clarence TIS Update\2016 AM Build-out.syn

Figure 4B - Noon 2016 With Project Volumes

10/7/2015



Baseline

**Table 4**

Description/ITE Code	Units	ITE Vehicle Trip Generation Rates							Expected Units/Sq. Ft.	Total Generated Trips		Total Distribution of Generated Trips					
		AM	PM	Pass-By	AM In	AM Out	PM In	PM Out		AM Hour	PM Hour	AM In	AM Out	Pass-By	PM In	PM Out	Pass-By
		Single Family Homes 210	DU	0.75	1.00		25%	75%		63%	37%	19.0	14	19	4	11	0
Specialty Retail Center 826 (formerly)	KSF <sup>2</sup>	6.84	2.71		48%	52%	44%	56%	0.6	4	2	2	2	0	1	1	0
Convenience. Mkt w/ Gas Pumps 853	KSF <sup>2</sup>	40.92	50.92	66%	50%	50%	50%	50%	3.256	133	166	23	23	88	28	28	109
Coffee/Donut Shop w/ Drive Thru 937	KSF <sup>2</sup>	100.58	42.80	70%	51%	49%	50%	50%	0.8	80	34	12	12	56	5	5	24
Gasoline/Service Station 944	Pumps	12.16	13.87	42%	51%	49%	50%	50%	4.0	49	55	14	14	20	16	16	23

#### 4.5 Trip Distribution

Trip distribution is the process of assigning the trips generated by a land use to and from its origin and/or destination. The directional distribution of trips to and from the Kenyon's Convenience Store and Tim Horton's Kiosk project was determined through existing traffic counts performed at the intersection of Main Street and Westwood Road. Percentages were derived from directional traffic volumes at this intersection and used to assign project generated trips. Based on the traffic volumes most trips were assigned to Main Street, with a majority assigned westbound during the AM Peak period (70% westbound and 30% eastbound) and slightly over half assigned westbound during the Noon Peak Hour period (53% westbound and 47% eastbound).

For the purposes of this traffic analysis the traffic distribution patterns identified through the traffic counts and observations available for this study period were reviewed and applied to derive trip distribution patterns specifically for 2016 when the full build-out and occupancy would occur. These traffic trip distribution patterns are shown in **Appendix A**. 2016 Background and 2016 Build-out volumes are shown in **Table 5** for the intersection of Main Street and Westwood Road.

<b>TABLE 5</b> <b>2016 Background &amp; 2016 Build-out Volumes</b>		
<b>Kenyon's Convenience Store &amp; Tim Horton's Kiosk</b> <b>8250 Main Street</b> <b>Clarence, New York</b> <b>Intersection: Main Street &amp; Westwod Road</b>		
<b>Movement</b>	<b>AM PEAK BACKGROUND 2016</b>	<b>AM PEAK BUILD-OUT 2016</b>
<b>Main Street Eastbound</b>		
Left Turn Movement	17	17
Through Movement	377	382
<b>Main Street Westbound</b>		
Through Movement	885	881
Right Turn Movement	3	4
<b>Westwod Road Southbound</b>		
Left Turn Movement	6	7
Right Movement	70	75
<b>Movement</b>	<b>NOON PEAK BACKGROUND 2016</b>	<b>NOON PEAK BUILD-OUT 2016</b>
<b>Main Street Eastbound</b>		
Left Turn Movement	32	35
Through Movement	691	699
<b>Main Street Westbound</b>		
Through Movement	758	745
Right Turn Movement	5	8
<b>Westwod Road Southbound</b>		
Left Turn Movement	3	3
Right Movement	34	36

## 5.0 TRAFFIC ANALYSIS

The capacity analyses and levels of service (LOS) center on the analyses of the intersections as opposed to the arterial or highway proper. Capacity and levels of service analyses were undertaken for the identified intersections in the study during the morning and noon weekday peak periods.

The intersections identified under **Section 3.1.2** of this report were analyzed during the weekday morning and noon peak periods for the 2015 existing traffic.

The results of the 2015 existing traffic analyses concluded that both peak periods had acceptable levels of service. All intersections analyzed for the 2016 background plus project generated traffic during the weekday AM and Noon peak periods also concluded acceptable levels of service.

These analyses utilized the existing 2015 lane configurations and pavement markings when projecting 2016 traffic conditions.

The Highway Capacity Manual (HCM) which was developed by the *National Cooperative Highway Research Program (NCHRP)* defines LOS as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

For un-signalized intersections, the LOS is evaluated on the basis of "control delay per vehicle" where control delay is the portion of the delay attributed to vehicles on the stop sign approach and/or turn lane approaches. LOS criteria can be further reduced into two intersection types: all-way stop-controlled and two-way stop-controlled. All-way, stop-controlled intersection LOS is expressed in terms of the average vehicle delay of all of the movements, much like that of a signalized intersection. Two-way, stop-controlled intersection LOS is defined in terms of the average vehicle delay of an individual movement(s). Mitigation is considered at the intersection when the LOS is lower than the minimal acceptable "LOS D", i.e., when the control delay per vehicle is greater than fifty-five (55) seconds per vehicle and observations show this to be true.

### Level of Service Criteria for Un-signalized Intersections

LOS	Average Delay per Vehicle
A	Very low control delay 10 or less seconds per vehicle. All drivers find freedom of operation. Very rarely more than one vehicle in queue.
B	Control delay greater than 10 and up to 15 seconds per vehicle. Some drivers begin to consider the delay troublesome. Seldom there is more than one vehicle in queue.
C	Control delay greater than 15 and up to 25 seconds per vehicle. Most drivers feel restricted, but tolerably so. Often there is more than one vehicle in queue.
D	Control delay greater than 25 and up to 35 seconds per vehicle. Drivers feel restricted. Most often, there is more than one vehicle in queue.
E	Control delay greater than 35 and up to 50 seconds per vehicle. Drivers find delays approaching intolerable levels. There is frequently more than one vehicle in queue. This level denotes a state in which the demand is close or equal to the probable maximum number of vehicles that can be accommodated by the movement.
F	Control delay in excess of 50 seconds per vehicle. Very constrained flow. Represents an intersection failure situation that is caused by geometric and/or operational constraints external to the intersection.

### Unsignalized Intersections

LOS	Unsignalized Intersections	Signalized Intersections
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Certain approaches at un-signalized intersections when analyzed may indicate poor levels of service; however, this condition may not require mitigation due to a proposed project. A poor level of service is an indicator that visual on-site observations are necessary to determine if a problem is really occurring. Field conditions such as gaps from nearby signalized intersections may indicate that no mitigation is needed. Many un-signalized intersections have at least one approach that operates at a poor level of service; however, on-site observations may show that no major problems exist.

#### 5.1 Intersection Capacity Analysis

*-Main Street at Westwood Road-*

Existing 2015: The intersection operates at a LOS A during the morning peak period. The southbound approach experiences the highest delay of all movements with 22 seconds per vehicle (LOS C). The intersection operates at a LOS A during the noon peak period, while the southbound approach experiences the highest delay of all movements with 18.4 seconds per vehicle (LOS C). Overall the morning peak period experiences the highest vehicular delay.

Projected 2016 Background: The intersection operates at a LOS A during the morning peak period. The southbound approach experiences the highest delay of all movements with 22.2 seconds per vehicle (LOS C). The intersection operates at a LOS A during the noon peak period, while the southbound approach experiences the highest delay of all movements with 18.5 seconds per vehicle (LOS C). Overall the morning peak period experiences the highest vehicular delay.

Projected 2016 Background plus Development: The intersection operates at a LOS A during the morning peak period. The southbound approach experiences the highest delay of all movements with 22.7 seconds per vehicle (LOS C). The intersection operates at a LOS A during the noon peak period, while the southbound approach experiences the highest delay of all movements with 18.4 seconds per vehicle (LOS C). Overall the morning peak period experiences the highest vehicular delay.

Conclusion: There is little to no impact at this intersection as a result of the overall project. The intersection operates at an acceptable level of service. No mitigation is necessary.

*-Main Street at Driveway #1 (East)-*

*Projected 2016 Background plus Development:* The intersection operates at a LOS A during the morning peak period. The southbound approach experiences the highest delay of all movements with 16.2 seconds per vehicle (LOS C). The intersection operates at a LOS A during the noon peak period, while the southbound approach experiences the highest delay of all movements with 17 seconds per vehicle (LOS C). Overall the noon peak period experiences the highest vehicular delay.

*Conclusion:* The intersection operates at an acceptable level of service. No mitigation is necessary.

*-Main Street at Driveway #2 (West)-*

*Projected 2016 Background plus Development:* The intersection operates at a LOS A during the morning peak period. The southbound approach experiences the highest delay of all movements with 19.4 seconds per vehicle (LOS C). The intersection operates at a LOS A during the noon peak period, while the southbound approach experiences the highest delay of all movements with 16.1 seconds per vehicle (LOS C). Overall the morning peak period experiences the highest vehicular delay.

*Conclusion:* The intersection operates at an acceptable level of service. No mitigation is necessary.

*-Westwood Road at Entrance Driveway-*

*Projected 2016 Background plus Development:* The intersection operates at a LOS A during the morning and noon peak periods. There are no vehicular delays.

*Conclusion:* The intersection operates at an acceptable level of service. No mitigation is necessary.

**Tables 6A through 6D** summarize the results of the *Synchro 7* capacity/level of service analysis of the various intersection locations analyzed for the study. **Appendix B** provides copies of full Synchro reports of the LOS analyses.

Main Street and Westwood Road	2015 Volumes		2016 Background		2016 Background With Project	
	AM	NOON	AM	NOON	AM	NOON
<b>Main Street (East Approach)</b>	LOS	LOS	LOS	LOS	LOS	LOS
Eastbound Left Turn	B	B	B	B	B	B
	Delay	Delay	Delay	Delay	Delay	Delay
	10.9	10.1	10.9	10.2	10.9	10.2
Eastbound Through	LOS	LOS	LOS	LOS	LOS	LOS
	A	A	A	A	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
	0	0	0	0	0	0
<b>Main Street (West Approach)</b>	AM	NOON	AM	NOON	AM	NOON
Westbound Through/Right Turn	LOS	LOS	LOS	LOS	LOS	LOS
	A	A	A	A	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
	0	0	0	0	0	0
<b>Westwood Road (South Approach)</b>	AM	NOON	AM	NOON	AM	NOON
Southbound Left/Right Turn	LOS	LOS	LOS	LOS	LOS	LOS
	C	C	C	C	C	C
	Delay	Delay	Delay	Delay	Delay	Delay
	22	18.4	22.2	18.5	22.7	18.4
<b>Overall Intersection</b>	AM	NOON	AM	NOON	AM	NOON
	LOS	LOS	LOS	LOS	LOS	LOS
	A	A	A	A	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
	2	0.8	2	0.8	2.1	0.9

Main Street and Driveway #1 (East)	2015 Volumes		2016 Background		2016 Background With Project	
	AM	NOON	AM	NOON	AM	NOON
<b>Main Street (East Approach)</b>	LOS	LOS	LOS	LOS	LOS	LOS
Eastbound Left Turn	-	-	-	-	B	A
	Delay	Delay	Delay	Delay	Delay	Delay
	-	-	-	-	10.2	9.5
Eastbound Through	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
	-	-	-	-	0	0
<b>Main Street (West Approach)</b>	AM	NOON	AM	NOON	AM	NOON
Westbound Through/Right Turn	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
	-	-	-	-	0	0
<b>Driveway #1 (South Approach)</b>	AM	NOON	AM	NOON	AM	NOON
Southbound Left/Right Turn	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	C	C
	Delay	Delay	Delay	Delay	Delay	Delay
	-	-	-	-	16.2	17
<b>Overall Intersection</b>	AM	NOON	AM	NOON	AM	NOON
	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
	-	-	-	-	0.4	0.6

Main Street and Driveway #2 (West)	2015 Volumes		2016 Background		2016 Background With Project	
	AM	NOON	AM	NOON	AM	NOON
<b>Main Street (East Approach)</b>	LOS	LOS	LOS	LOS	LOS	LOS
Eastbound Left Turn	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
	-	-	-	-	9.8	9.5
Eastbound Through	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
-	-	-	-	0	0	
<b>Main Street (West Approach)</b>	AM	NOON	AM	NOON	AM	NOON
Westbound Through/Right Turn	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
-	-	-	-	0	0	
<b>Driveway #2 (South Approach)</b>	AM	NOON	AM	NOON	AM	NOON
Southbound Left/Right Turn	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	C	C
	Delay	Delay	Delay	Delay	Delay	Delay
-	-	-	-	19.4	16.1	
<b>Overall Intersection</b>	AM	NOON	AM	NOON	AM	NOON
	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
-	-	-	-	1.4	0.8	

Westwood Road and Entrance	2015 Volumes		2016 Background		2016 Background With Project	
	AM	NOON	AM	NOON	AM	NOON
<b>Entrance</b>	LOS	LOS	LOS	LOS	LOS	LOS
Westbound Left/Right Turn	-	-	-	-	-	-
	Delay	Delay	Delay	Delay	Delay	Delay
	-	-	-	-	-	-
<b>Westwood Road (North Approach)</b>	AM	NOON	AM	NOON	AM	NOON
Northbound Through/Right Turn	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
-	-	-	-	0	0	
<b>Westwood Road (South Approach)</b>	AM	NOON	AM	NOON	AM	NOON
Southbound Left Turn/Through	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	B
	Delay	Delay	Delay	Delay	Delay	Delay
-	-	-	-	0	0	
<b>Overall Intersection</b>	AM	NOON	AM	NOON	AM	NOON
	LOS	LOS	LOS	LOS	LOS	LOS
	-	-	-	-	A	A
	Delay	Delay	Delay	Delay	Delay	Delay
-	-	-	-	0	0	

## 5.2 Signal Warrant Analysis

As all approaches and the overall intersection operate at an acceptable level of service based on the analyses no signal warrant analysis was performed at the intersection of Main Street and Westwood Road.

## 5.3 Drive-Thru Queuing

The proposed project includes a drive-thru for the Tim Horton's Kiosk that will be located within the northwest corner of the Kenyon's Convenience Store building. The drive-thru lane as currently proposed is shown in **Figure 2** of this report, with vehicles entering the lane on the eastern side of the property.

The Town of Clarence currently requires a minimum of 12 stacking spaces for drive-thru lanes. As proposed by the site plan the drive-thru lane would contain enough space to accommodate 12 queuing vehicles. Additional space for vehicle stacking is available in the project parking lot on the eastern side of the property.

## 6.0 FINDINGS, RECOMMENDATIONS & CONCLUSION

The trip generation and distribution from and to the proposed project projected onto the 2016 Build-out traffic volumes during the AM and Noon Peak Hours analyzed show no significant increase in traffic volumes at the studied intersections.

As discussed in **Section 4.4** (page 9), most of the trips associated with the proposed project are "pass-by trips" which are existing vehicles on the adjacent road network. Pass-by trips are made by traffic already using the adjacent roadway (existing traffic volumes) and enter the site as an in-between stop on the way to/from another destination. Trips associated with the existing Stop and Go Gas Station we subtracted from the 2016 Build-out intersection volumes and analyses.

For the un-signalized intersections analyzed in this study, there are minimal or virtually no change in levels of service as a result of the proposed Kenyon's Convenience Store and Tim Horton's Kiosk project. The overall LOS of all intersections analyzed operate at a LOS A, with only the southbound approaches of Westwood Road and the driveway connections to Main Street operating at an acceptable LOS C during the 2016 project year build-out. The Westwood Road southbound approach currently operates at an acceptable LOS C for existing 2015 volumes during the AM and Noon Peak hours of traffic, with the only minor change being the small increase/decrease in vehicular delay when comparing existing LOS to the build-out year LOS. When comparing 2015 Existing LOS to the 2016 Build-out LOS, the vehicular delay for this approach increased from 22 seconds to 22.7 seconds during the AM Peak Hour and decreased slightly from 18.5 seconds to 18.4 seconds during the Noon Peak Hour.

Based on the results of our firm's comprehensive analysis of potential traffic impacts within the TIS it is our firm's professional opinion that the project will not have any potentially significant traffic impacts on the existing transportation network including the local roadways in the study area. In fact, the project will only result in minimal traffic impacts on the local roadway network.

This TIS demonstrates that given the lack of potentially significant traffic impacts resulting from the project that potential traffic impacts on the local roadway system do not warrant the issuance of a positive declaration and preparation of an Environmental Impact Statement in connection with the environmental review of the project pursuant to SEQRA.

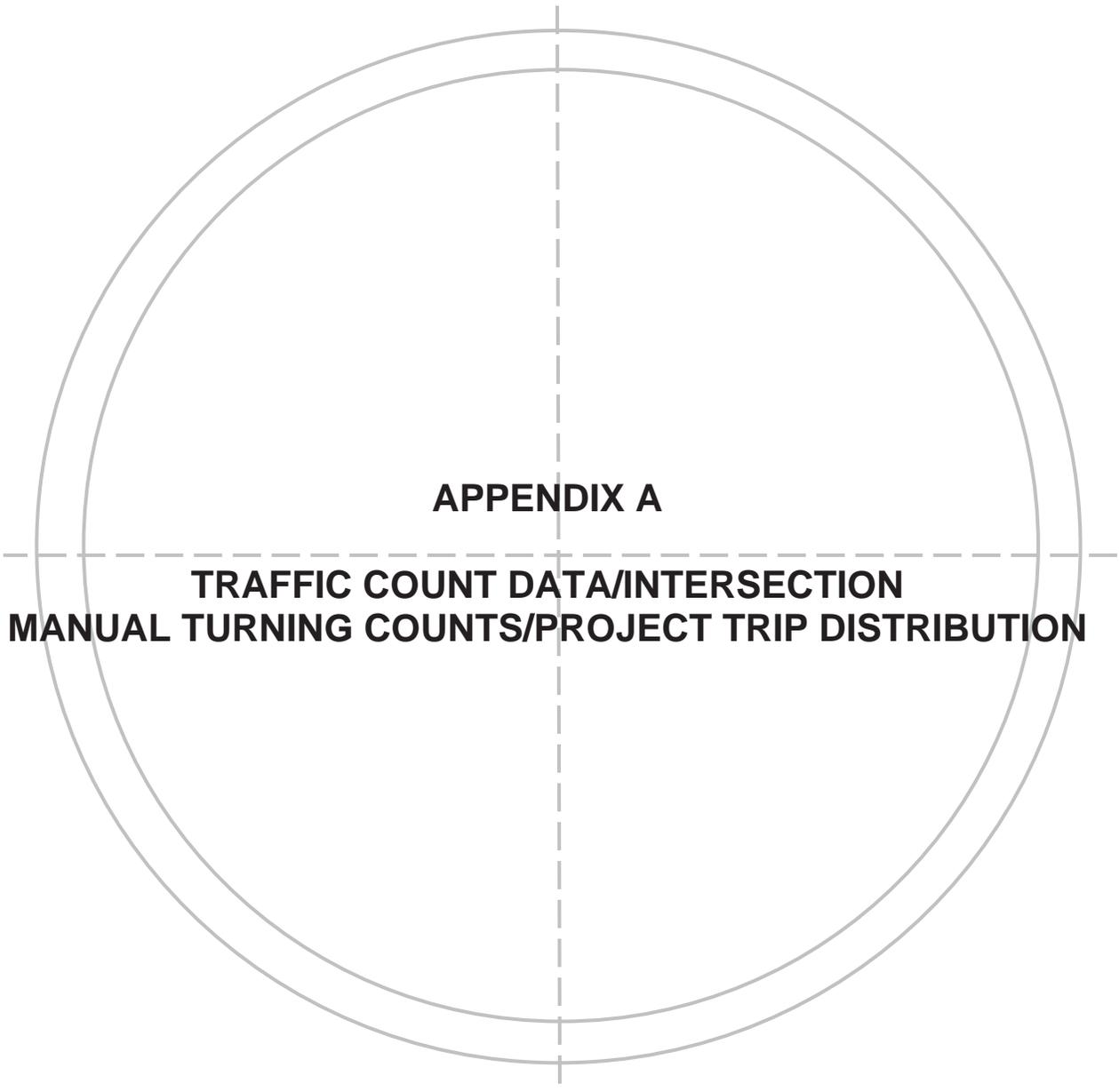
## 7.0 STUDY CONTACT

For questions or comments regarding this traffic impact study, contact:

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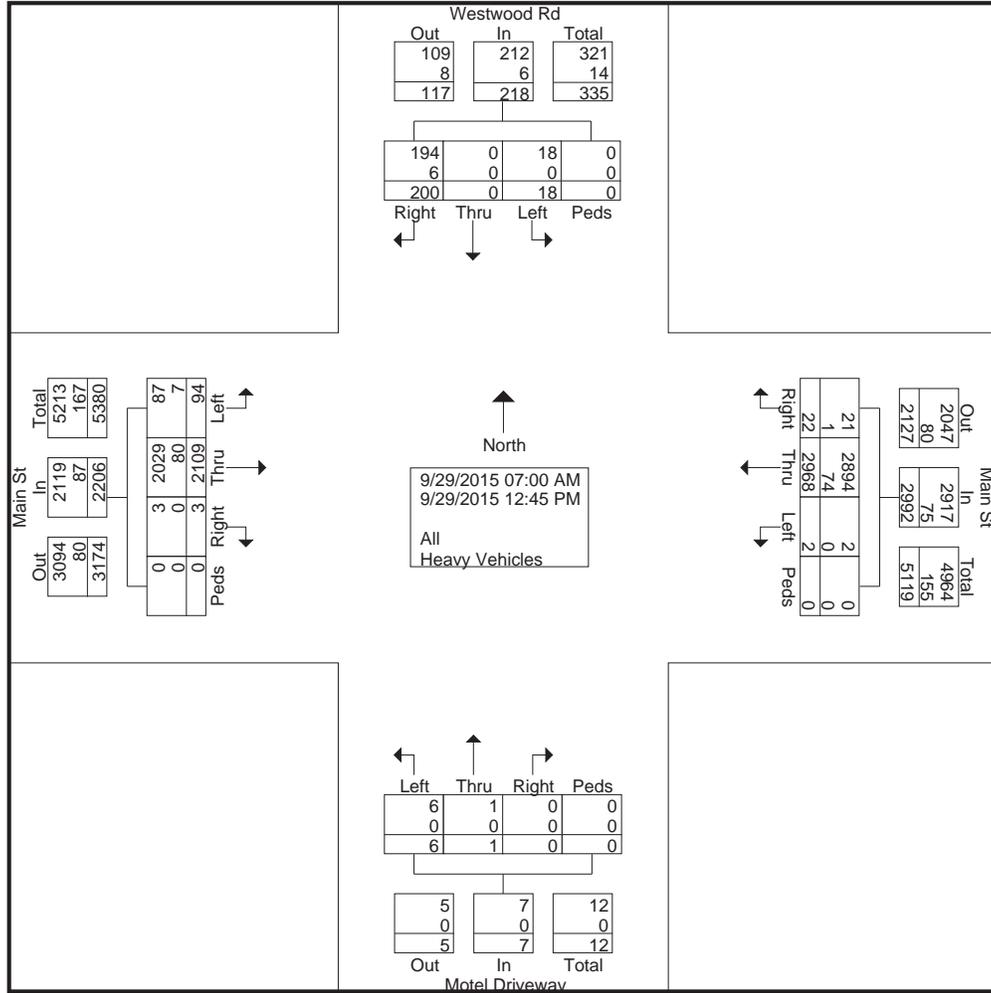
File Name : Main & Westwood 9-29-15  
 Site Code : 00000776  
 Start Date : 9/29/2015  
 Page No : 1

Groups Printed- All - Heavy Vehicles

Start Time	Westwood Rd Southbound					Main St Westbound					Motel Driveway Northbound					Main St Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.06	1.06	1.06	1.06		1.06	1.06	1.06	1.06		1.06	1.06	1.06	1.06		1.06	1.06	1.06	1.06		
07:00 AM	2	0	12	0	14	0	125	1	0	126	0	0	0	0	0	4	57	0	0	61	201
07:15 AM	0	0	18	0	18	0	181	2	0	183	0	0	0	0	0	4	91	0	0	95	296
07:30 AM	1	0	18	0	19	0	202	1	0	203	1	0	0	0	1	5	88	0	0	93	316
07:45 AM	1	0	14	0	15	0	229	0	0	229	0	0	0	0	0	1	78	0	0	79	323
Total	4	0	62	0	66	0	737	4	0	741	1	0	0	0	1	14	314	0	0	328	1136
08:00 AM	1	0	17	0	18	0	224	1	0	225	0	0	0	0	0	11	80	0	0	91	334
08:15 AM	2	0	12	0	14	0	222	1	0	223	1	0	0	0	1	1	113	0	0	114	352
08:30 AM	2	0	27	0	29	0	206	1	0	207	0	0	0	0	0	4	104	0	0	108	344
08:45 AM	3	0	8	0	11	0	183	1	0	184	0	0	0	0	0	7	109	0	0	116	311
Total	8	0	64	0	72	0	835	4	0	839	1	0	0	0	1	23	406	0	0	429	1341
*** BREAK ***																					
11:00 AM	0	0	9	0	9	0	153	2	0	155	1	0	0	0	1	4	169	0	0	173	338
11:15 AM	1	0	11	0	12	0	148	2	0	150	0	1	0	0	1	10	171	0	0	181	344
11:30 AM	0	0	10	0	10	0	167	3	0	170	0	0	0	0	0	4	158	0	0	162	342
11:45 AM	1	0	8	0	9	0	225	2	0	227	1	0	0	0	1	9	160	1	0	170	407
Total	2	0	38	0	40	0	693	9	0	702	2	1	0	0	3	27	658	1	0	686	1431
12:00 PM	0	0	14	0	14	0	186	2	0	188	0	0	0	0	0	10	153	0	0	163	365
12:15 PM	1	0	6	0	7	2	179	0	0	181	0	0	0	0	0	5	180	1	0	186	374
12:30 PM	1	0	6	0	7	0	164	1	0	165	2	0	0	0	2	8	195	1	0	204	378
12:45 PM	2	0	10	0	12	0	174	2	0	176	0	0	0	0	0	7	203	0	0	210	398
Total	4	0	36	0	40	2	703	5	0	710	2	0	0	0	2	30	731	2	0	763	1515
Grand Total	18	0	200	0	218	2	2968	22	0	2992	6	1	0	0	7	94	2109	3	0	2206	5423
Apprch %	8.3	0	91.7	0		0.1	99.2	0.7	0		85.7	14.3	0	0		4.3	95.6	0.1	0		
Total %	0.3	0	3.7	0	4	0	54.7	0.4	0	55.2	0.1	0	0	0	0.1	1.7	38.9	0.1	0	40.7	
All	18	0	194	0	212	2	2894	21	0	2917	6	1	0	0	7	87	2029	3	0	2119	5255
% All	100	0	97	0	97.2	100	97.5	95.5	0	97.5	100	100	0	0	100	92.6	96.2	100	0	96.1	96.9
Heavy Vehicles	0	0	6	0	6	0	74	1	0	75	0	0	0	0	0	7	80	0	0	87	168
% Heavy Vehicles	0	0	3	0	2.8	0	2.5	4.5	0	2.5	0	0	0	0	0	7.4	3.8	0	0	3.9	3.1

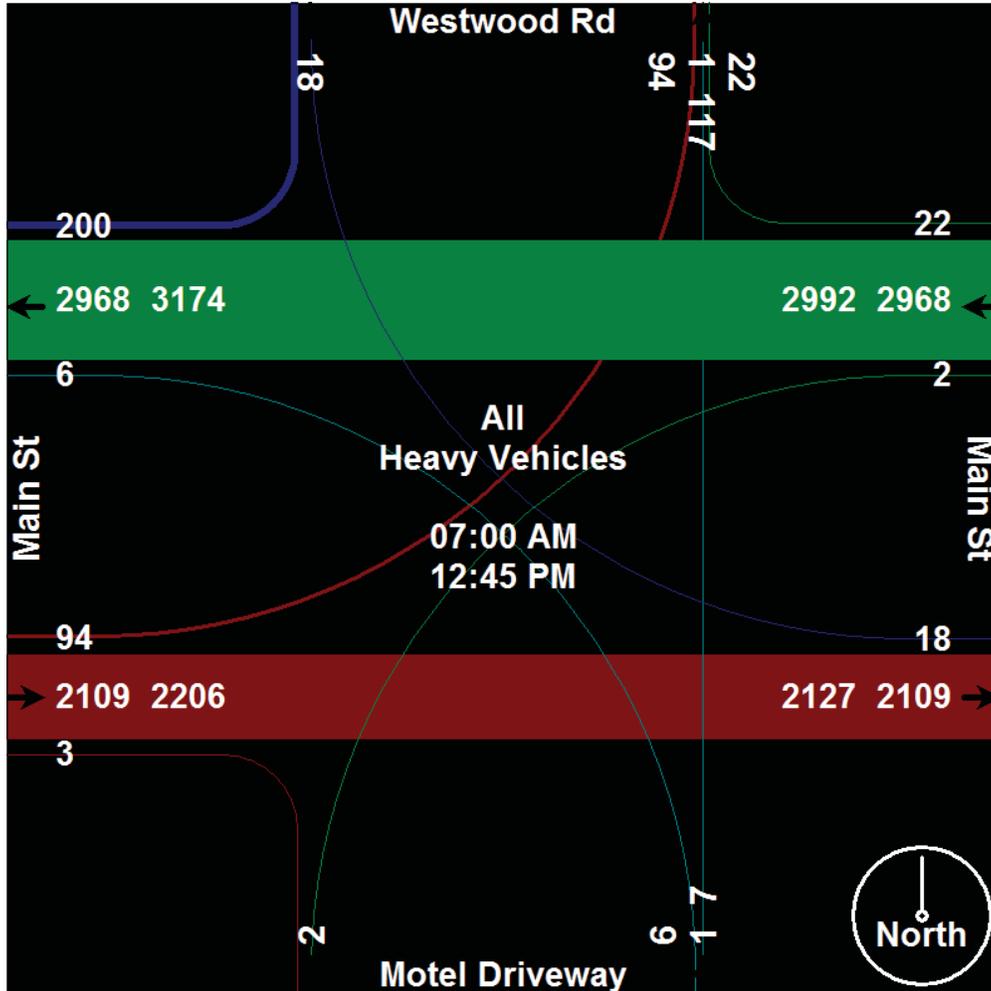
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 Weather: Cloudy, Rain, 60 degrees  
 Municipality: Clarence

File Name : Main & Westwood 9-29-15  
 Site Code : 00000776  
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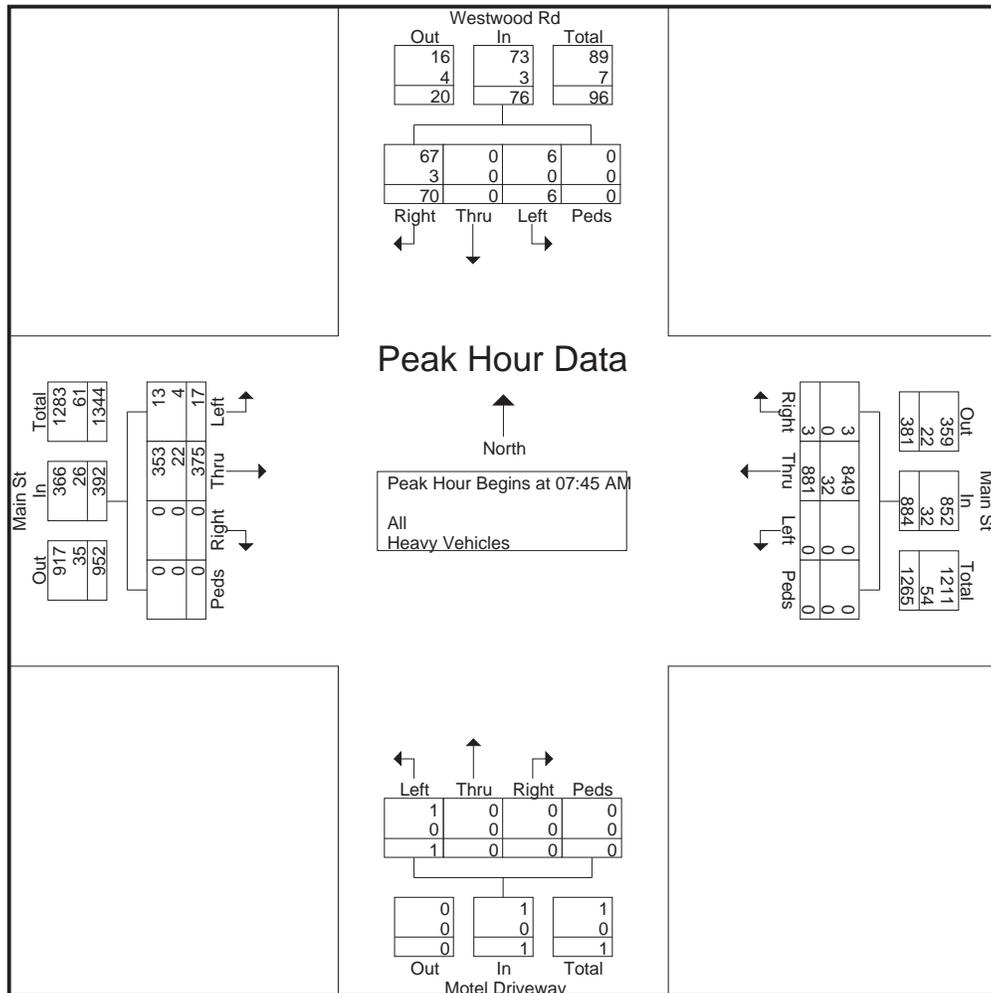
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Site Code : 00000776  
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Counter: D1-0330  
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 Municipality: Clarence

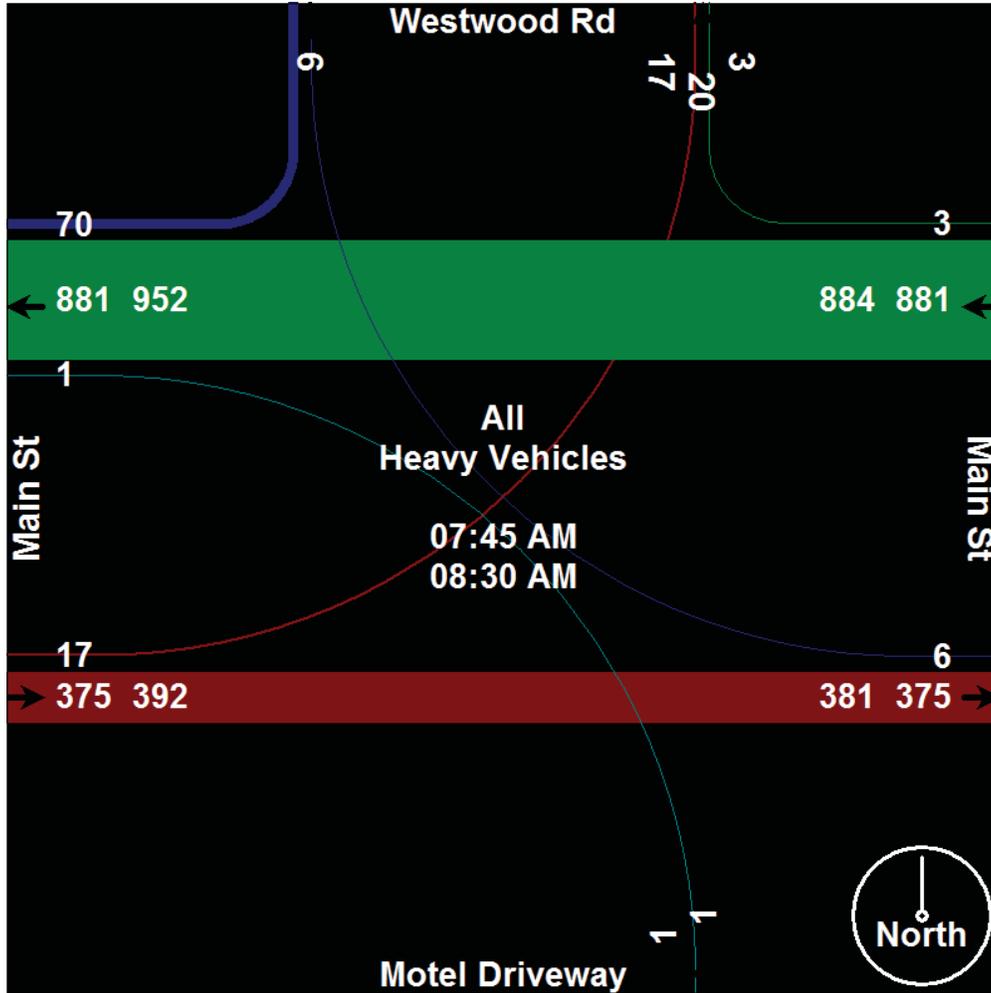
File Name : Main & Westwood 9-29-15  
 Site Code : 00000776  
 Start Date : 9/29/2015  
 Page No : 4

Start Time	Westwood Rd Southbound					Main St Westbound					Motel Driveway Northbound					Main St Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	1	0	14	0	15	0	229	0	0	229	0	0	0	0	0	1	78	0	0	79	323
08:00 AM	1	0	17	0	18	0	224	1	0	225	0	0	0	0	0	11	80	0	0	91	334
08:15 AM	2	0	12	0	14	0	222	1	0	223	1	0	0	0	1	1	113	0	0	114	352
08:30 AM	2	0	27	0	29	0	206	1	0	207	0	0	0	0	0	4	104	0	0	108	344
Total Volume	6	0	70	0	76	0	881	3	0	884	1	0	0	0	1	17	375	0	0	392	1353
% App. Total	7.9	0	92.1	0		0	99.7	0.3	0		100	0	0	0		4.3	95.7	0	0		
PHF	.750	.000	.648	.000	.655	.000	.962	.750	.000	.965	.250	.000	.000	.000	.250	.386	.830	.000	.000	.860	.961
All	6	0	67	0	73	0	849	3	0	852	1	0	0	0	1	13	353	0	0	366	1292
% All	100	0	95.7	0	96.1	0	96.4	100	0	96.4	100	0	0	0	100	76.5	94.1	0	0	93.4	95.5
Heavy Vehicles																					
% Heavy Vehicles	0	0	4.3	0	3.9	0	3.6	0	0	3.6	0	0	0	0	0	23.5	5.9	0	0	6.6	4.5



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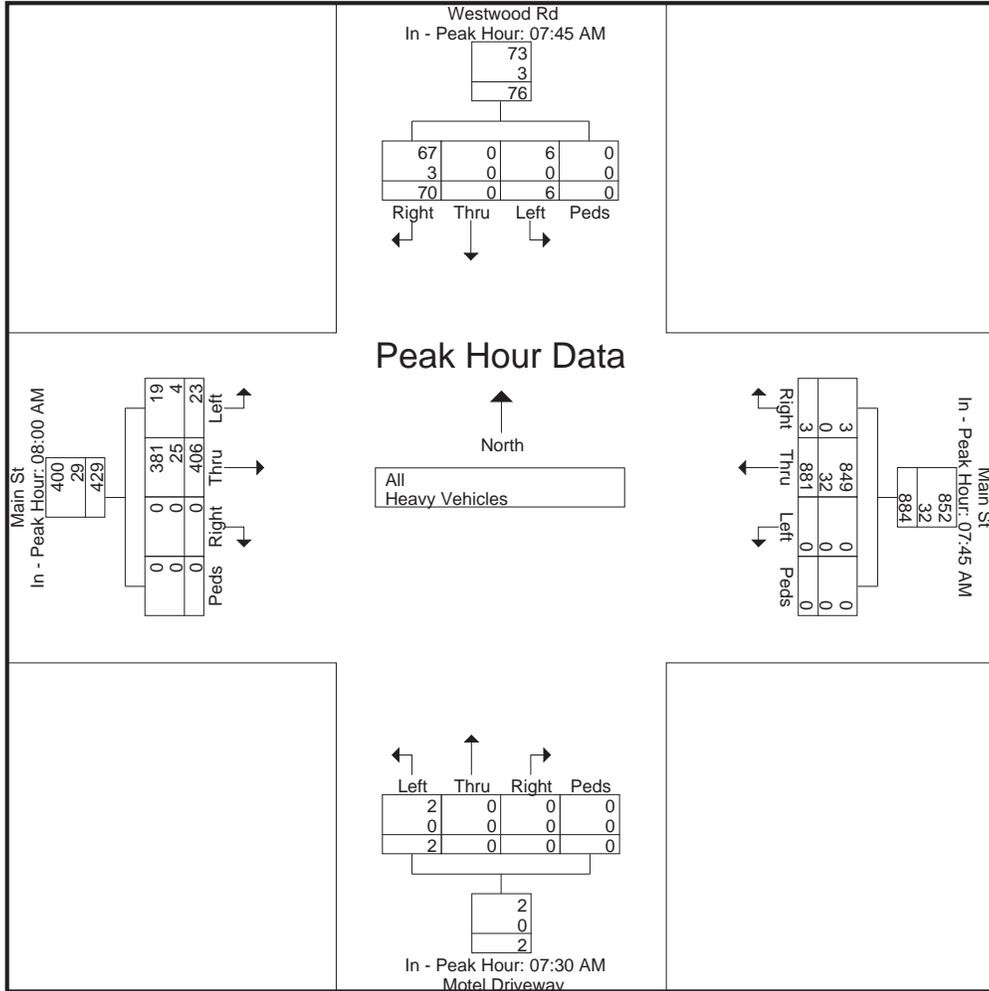
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM					07:45 AM					07:30 AM					08:00 AM				
+0 mins.	1	0	14	0	15	0	229	0	0	229	1	0	0	0	1	11	80	0	0	91
+15 mins.	1	0	17	0	18	0	224	1	0	225	0	0	0	0	0	1	113	0	0	114
+30 mins.	2	0	12	0	14	0	222	1	0	223	0	0	0	0	0	4	104	0	0	108
+45 mins.	2	0	27	0	29	0	206	1	0	207	1	0	0	0	1	7	109	0	0	116
Total Volume	6	0	70	0	76	0	881	3	0	884	2	0	0	0	2	23	406	0	0	429
% App. Total	7.9	0	92.1	0		0	99.7	0.3	0		100	0	0	0		5.4	94.6	0	0	
PHF	.750	.000	.648	.000	.655	.000	.962	.750	.000	.965	.500	.000	.000	.000	.500	.523	.898	.000	.000	.925
All	6	0	67	0	73	0	849	3	0	852	2	0	0	0	2	19	381	0	0	400
% All	100	0	95.7	0	96.1	0	96.4	100	0	96.4	100	0	0	0	100	82.6	93.8	0	0	93.2
Heavy Vehicles																				
% Heavy Vehicles	0	0	4.3	0	3.9	0	3.6	0	0	3.6	0	0	0	0	0	17.4	6.2	0	0	6.8

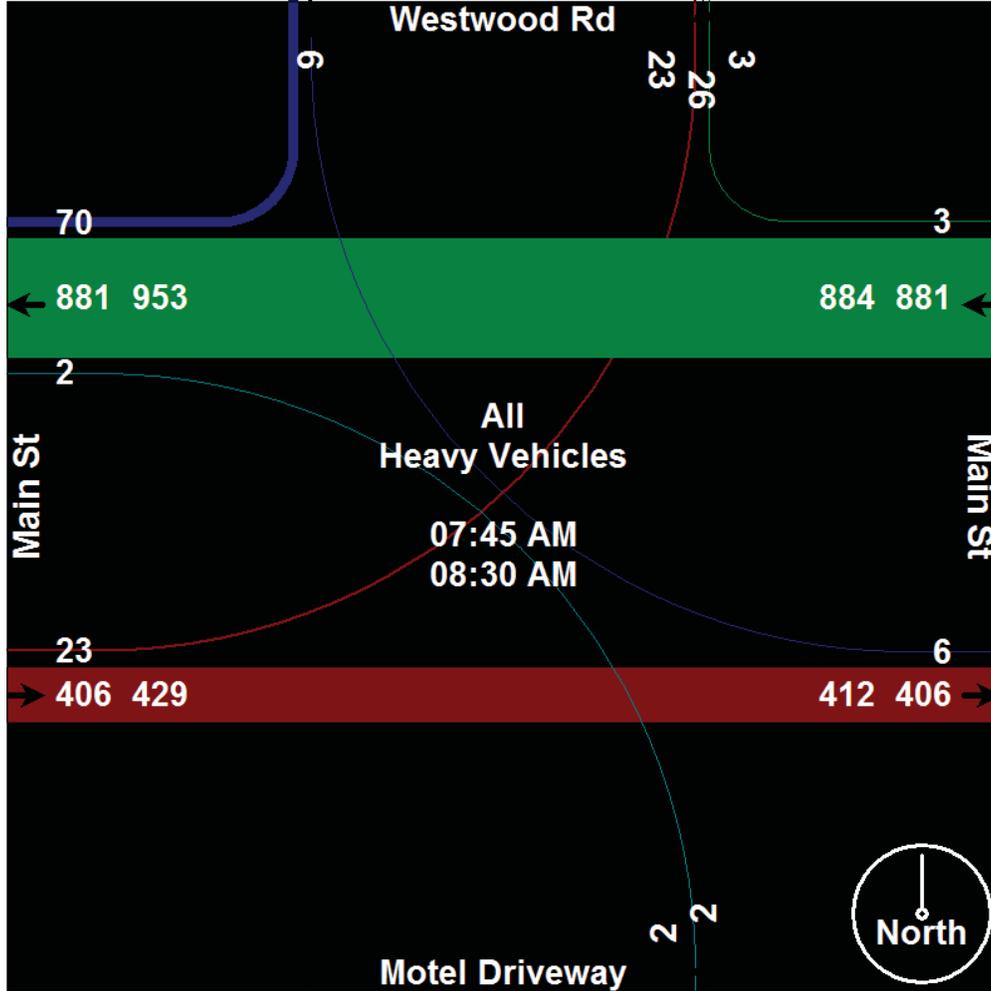
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Weather: Cloudy, Rain, 60 degrees  
Municipality: Clarence

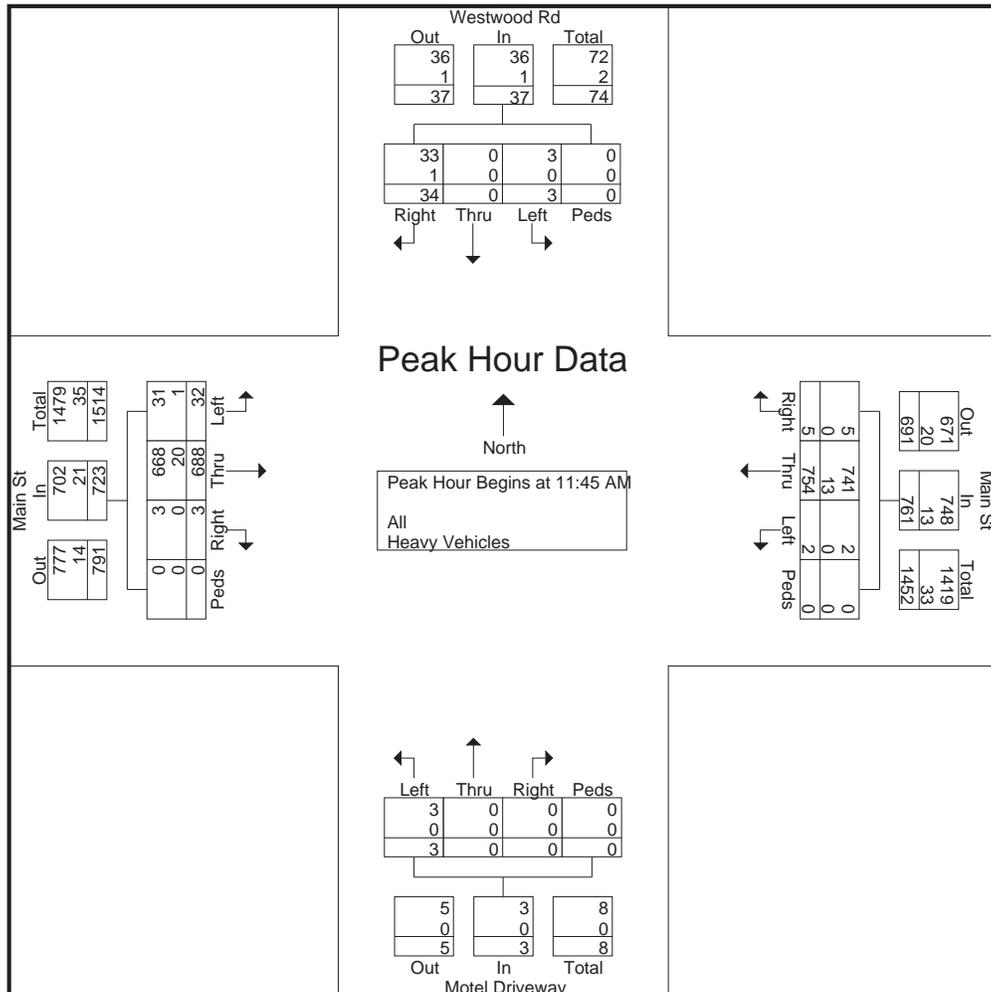
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Page No : 7



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 Weather: Cloudy, Rain, 60 degrees  
 Municipality: Clarence

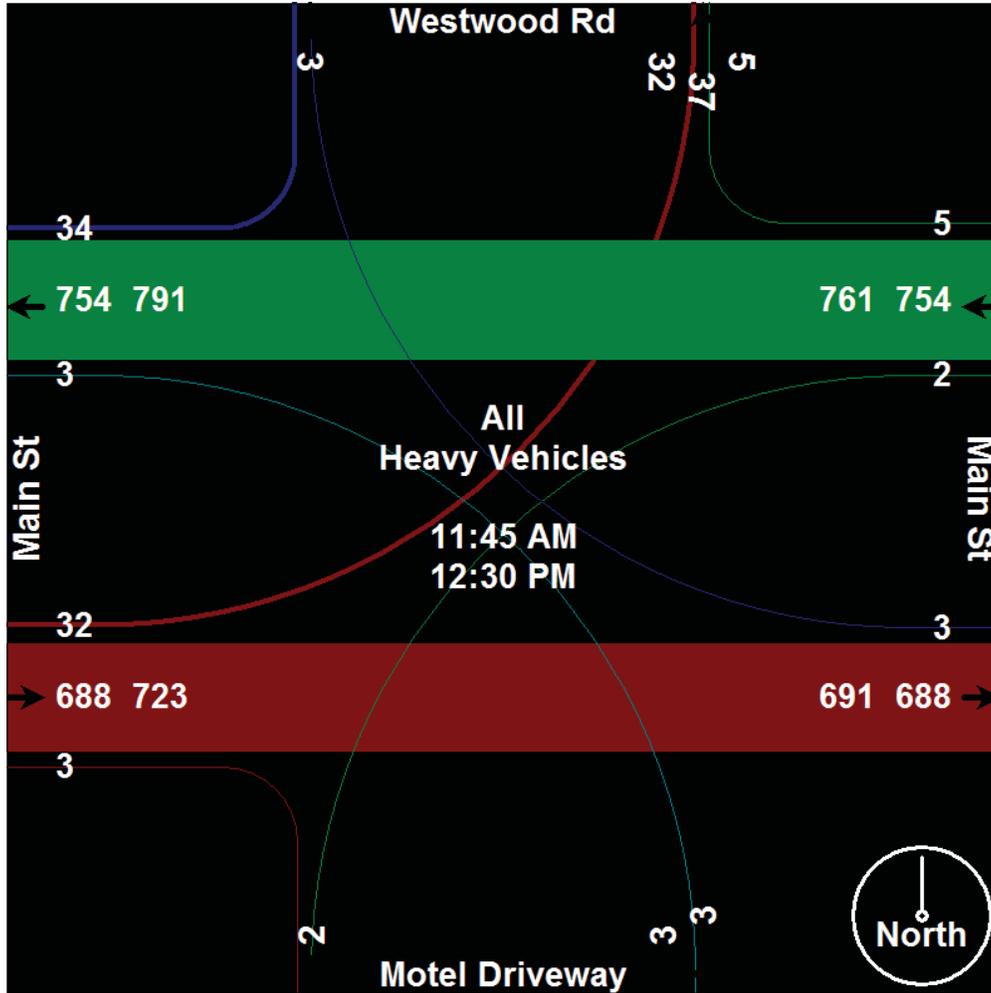
File Name : Main & Westwood 9-29-15  
 Site Code : 00000776  
 Start Date : 9/29/2015  
 Page No : 8

Start Time	Westwood Rd Southbound					Main St Westbound					Motel Driveway Northbound					Main St Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	1	0	8	0	9	0	225	2	0	227	1	0	0	0	1	9	160	1	0	170	407
12:00 PM	0	0	14	0	14	0	186	2	0	188	0	0	0	0	0	10	153	0	0	163	365
12:15 PM	1	0	6	0	7	2	179	0	0	181	0	0	0	0	0	5	180	1	0	186	374
12:30 PM	1	0	6	0	7	0	164	1	0	165	2	0	0	0	2	8	195	1	0	204	378
Total Volume	3	0	34	0	37	2	754	5	0	761	3	0	0	0	3	32	688	3	0	723	1524
% App. Total	8.1	0	91.9	0		0.3	99.1	0.7	0		100	0	0	0		4.4	95.2	0.4	0		
PHF	.750	.000	.607	.000	.661	.250	.838	.625	.000	.838	.375	.000	.000	.000	.375	.800	.882	.750	.000	.886	.936
All	3	0	33	0	36	2	741	5	0	748	3	0	0	0	3	31	668	3	0	702	1489
% All	100	0	97.1	0	97.3	100	98.3	100	0	98.3	100	0	0	0	100	96.9	97.1	100	0	97.1	97.7
Heavy Vehicles																					
% Heavy Vehicles	0	0	2.9	0	2.7	0	1.7	0	0	1.7	0	0	0	0	0	3.1	2.9	0	0	2.9	2.3



Counter: D1-0330  
 Counted By: JP  
 Weather: Cloudy, Rain, 60 degrees  
 Municipality: Clarence

File Name : Main & Westwood 9-29-15  
 Site Code : 00000776  
 Start Date : 9/29/2015  
 Page No : 9



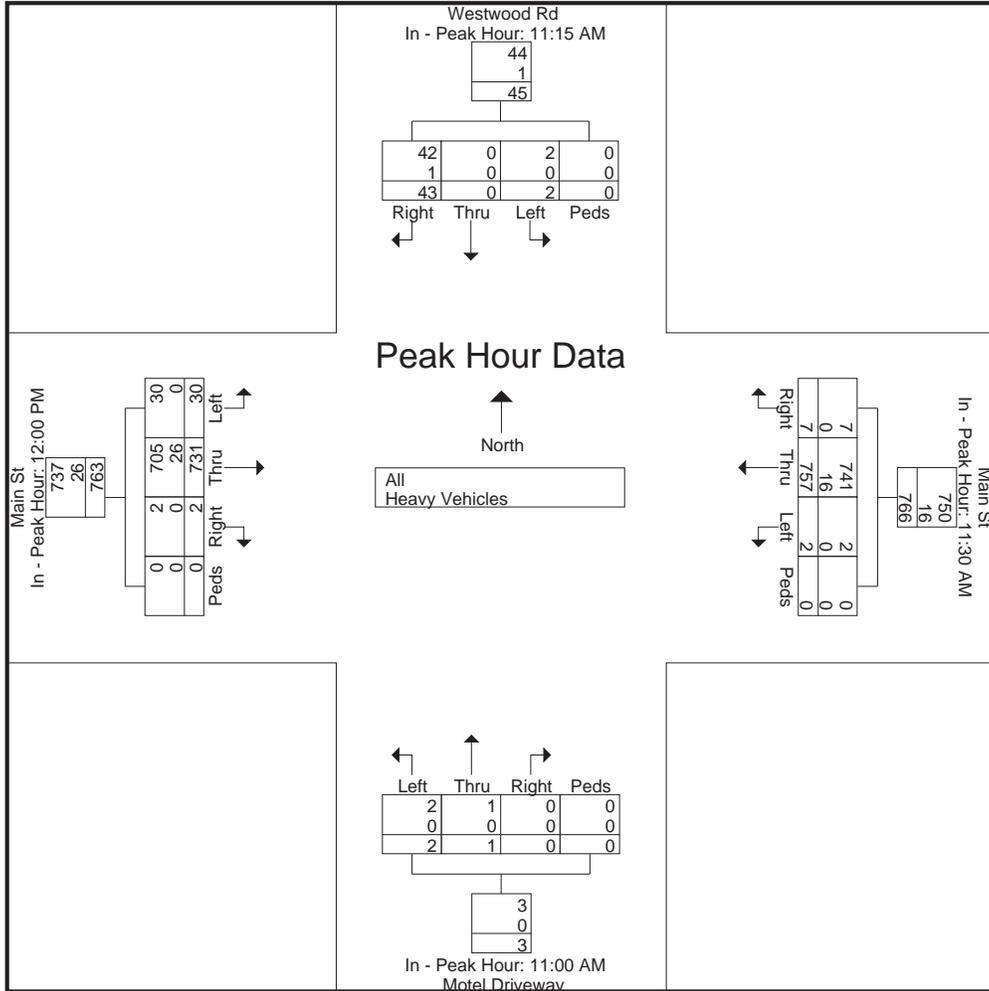
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:15 AM					11:30 AM					11:00 AM					12:00 PM				
+0 mins.	1	0	11	0	12	0	167	3	0	170	1	0	0	0	1	10	153	0	0	163
+15 mins.	0	0	10	0	10	0	225	2	0	227	0	1	0	0	1	5	180	1	0	186
+30 mins.	1	0	8	0	9	0	186	2	0	188	0	0	0	0	0	8	195	1	0	204
+45 mins.	0	0	14	0	14	2	179	0	0	181	1	0	0	0	1	7	203	0	0	210
Total Volume	2	0	43	0	45	2	757	7	0	766	2	1	0	0	3	30	731	2	0	763
% App. Total	4.4	0	95.6	0		0.3	98.8	0.9	0		66.7	33.3	0	0		3.9	95.8	0.3	0	
PHF	.500	.000	.768	.000	.804	.250	.841	.583	.000	.844	.500	.250	.000	.000	.750	.750	.900	.500	.000	.908
All	2	0	42	0	44	2	741	7	0	750	2	1	0	0	3	30	705	2	0	737
% All	100	0	97.7	0	97.8	100	97.9	100	0	97.9	100	100	0	0	100	100	96.4	100	0	96.6
Heavy Vehicles																				
% Heavy Vehicles	0	0	2.3	0	2.2	0	2.1	0	0	2.1	0	0	0	0	0	0	3.6	0	0	3.4

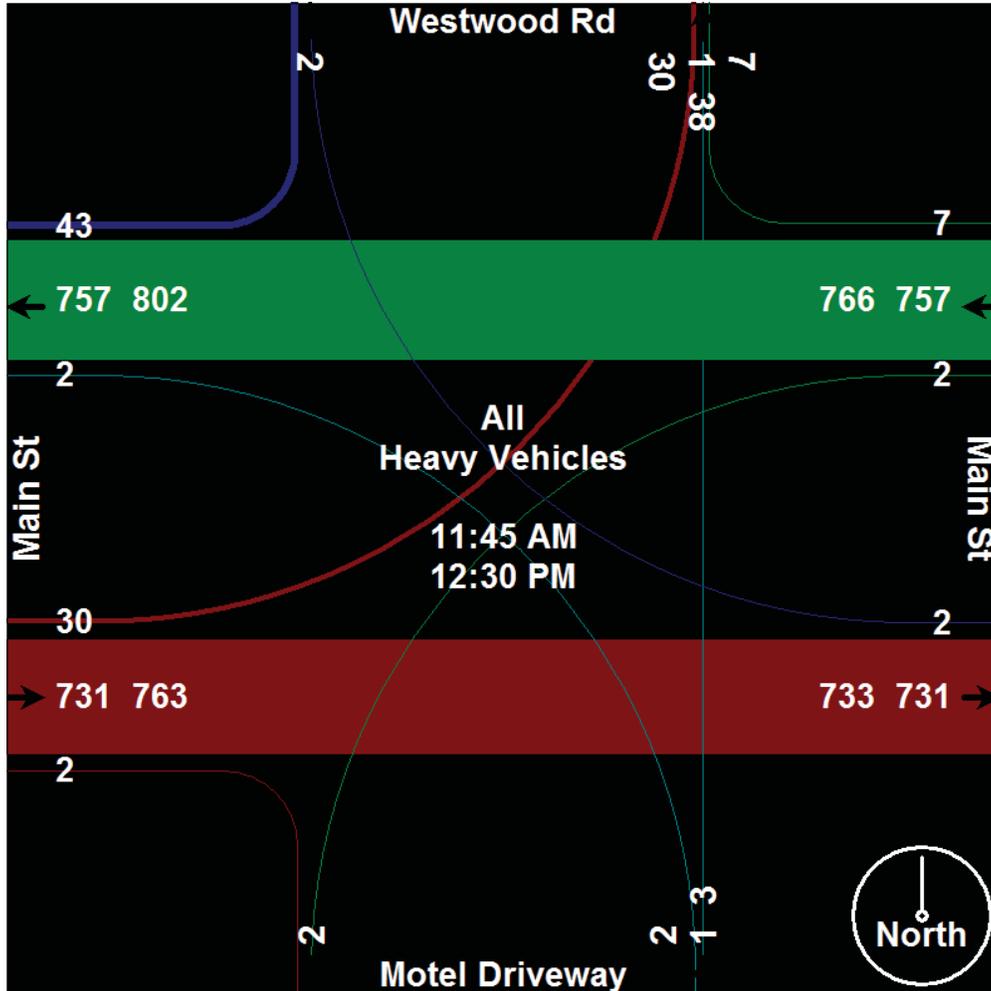
Counter: D1-0330  
 Counted By: JP  
 Weather: Cloudy, Rain, 60 degrees  
 Municipality: Clarence

File Name : Main & Westwood 9-29-15  
 Site Code : 00000776  
 Start Date : 9/29/2015  
 Page No : 10



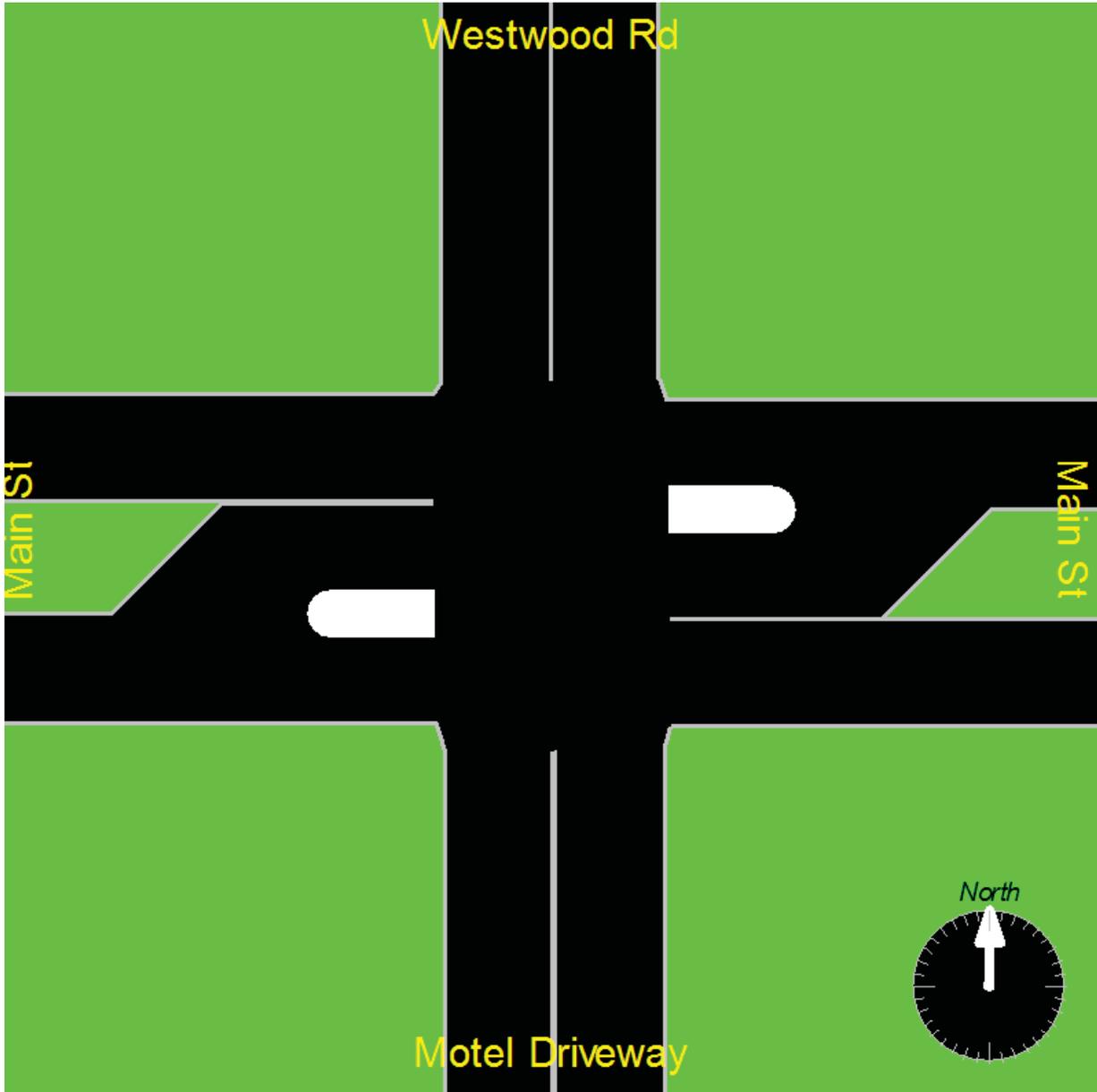
Counter: D1-0330  
Counted By: JP  
Weather: Cloudy, Rain, 60 degrees  
Municipality: Clarence

File Name : Main & Westwood 9-29-15  
Site Code : 00000776  
Start Date : 9/29/2015  
Page No : 11



Counter: D1-0330  
Counted By: JP  
Weather: Cloudy, Rain, 60 degrees  
Municipality: Clarence

File Name : Main & Westwood 9-29-15  
Site Code : 00000776  
Start Date : 9/29/2015  
Page No : 12



# SEASONAL ADJUSTMENT FACTORS FOR TRAFFIC COUNT PROCESSING 2015

Based on Continuous Count Site Data 2012 - 2014

## FULL WEEK

FACTOR GROUP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
urban - 30	0.898	0.926	0.973	1.012	1.046	1.063	1.040	1.050	1.032	1.026	0.971	0.944
suburban - 40	0.800	0.834	0.885	0.956	1.071	1.117	1.208	1.215	1.069	1.026	0.921	0.861
recreational - 60	0.657	0.699	0.729	0.801	1.061	1.242	1.605	1.560	1.106	0.955	0.713	0.691

Factor Group

% Precision with 95% Confidence

- urban - 30 1.7%
- suburban - 40 2.5%
- recreational - 60 39.7%

The FHWA Traffic Monitoring Guide 2013 states (page 3-14):

*The reliability levels recommended are 10 percent precision with 95 percent confidence for each individual seasonal group, excluding recreational groups where no precision requirement is specified.*

For each factor group, the percent precision value is the maximum value out of all months.

New York State Department of Transportation  
 Highway Data Services Bureau  
 MO-TrafficDataViewer@dot.state.ny.us  
 (518) 457-1965

4/30/2015

# SEASONAL ADJUSTMENT FACTORS FOR TRAFFIC COUNT PROCESSING 2015

Based on Continuous Count Site Data 2012 - 2014

## WEEKEND

FACTOR GROUP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
urban - 30	0.796	0.814	0.885	0.913	0.965	0.969	0.940	0.954	0.946	0.940	0.876	0.845
suburban - 40	0.731	0.753	0.841	0.898	1.050	1.107	1.218	1.226	1.048	0.993	0.865	0.794
recreational - 60	0.612	0.652	0.692	0.768	1.097	1.337	1.772	1.713	1.159	0.968	0.672	0.632

Factor Group

- urban - 30
- suburban - 40
- recreational - 60

% Precision with 95% Confidence

- urban - 30 3.5%
- suburban - 40 4.2%
- recreational - 60 43.1%

The FHWA Traffic Monitoring Guide 2013 states (page 3-14):

*The reliability levels recommended are 10 percent precision with 95 percent confidence for each individual seasonal group, excluding recreational groups where no precision requirement is specified.*

For each factor group, the percent precision value is the maximum value out of all months.

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4/30/2015

# SEASONAL ADJUSTMENT FACTORS FOR TRAFFIC COUNT PROCESSING 2015

Based on Continuous Count Site Data 2012 - 2014

## WORKWEEK

FACTOR GROUP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
urban - 30	0.941	0.973	1.006	1.052	1.077	1.100	1.083	1.089	1.064	1.056	1.010	0.986
suburban - 40	0.826	0.865	0.896	0.972	1.065	1.103	1.181	1.186	1.062	1.023	0.938	0.886
recreational - 60	0.666	0.707	0.732	0.800	1.008	1.150	1.477	1.439	1.041	0.918	0.722	0.709

Factor Group

% Precision with 95% Confidence

- urban - 30 2.2%
- suburban - 40 2.9%
- recreational - 60 37.5%

The FHWA Traffic Monitoring Guide 2013 states (page 3-14):

*The reliability levels recommended are 10 percent precision with 95 percent confidence for each individual seasonal group, excluding recreational groups where no precision requirement is specified.*

For each factor group, the percent precision value is the maximum value out of all months.

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4/30/2015

6, 0, (0), 0, (0), (0), 0 →  
 0, 0, (0), 0, (0), (0), 0 →  
 0, 0, (0), 0, (0), (0), 0 →  
 Noon Peak ↑ 0, (0), 0, (0), 0, (0)  
 ↓ 0, (0), 0, (0), 0, (0)

1, 0, (0), 0, (0), (0), 0 →  
 0, 0, (0), 0, (0), (0), 0 →  
 0, 0, (0), 0, (0), (0), 0 →  
 A.M. Peak ↑ 0, (0), 0, (0), 0, (0)  
 ↓ 2, (1), 0, (0), 0, (0)

**Legend**  
 10 (25) = Existing Gas Station Trips (Passby Trips)  
 10 (25) = Convenience Store Trips (Passby Trips)  
 10 (25) = Coffee Shop Trips (Passby Trips)  
 10 = 19 Single Family Home Trips  
 10 = Video Production Store Trips

2, (6), 13, (25), 7, (6) ↑  
 0, (0), 0, (0), 0, (0) →  
 Noon Peak ↑ 9, (6), 10, (19), 0, (0), 1  
 ↓ 7, (5), 7, (16), 1, (2), 0  
 9, (6), 14, (28), 3, (6), 1  
 0, (0), 0, (0), 0, (0) ←

1, 3, (8), 7, (13), 5, (3) ↑  
 1, 0, (0), 0, (0), 0, (0) →  
 A.M. Peak ↑ 7, (6), 16, (32), 8, (19), 1  
 ↓ 4, (3), 7, (13), 4, (8), 1  
 10, (6), 15, (29), 8, (19), 1  
 0, (0), 0, (0), 0, (0) ←

0, 0, (0), 0, (0), 0, (0) ↑  
 1, 3, (8), 7, (13), 5, (3) →  
 A.M. Peak ↑ 2, (1), 0, (0), 0, (0), 1  
 ↓ 7, (6), 16, (32), 8, (19), 1

3, 0, (0), 0, (0), 0, (0) ↑  
 2, (6), 13, (25), 7, (6) →  
 Noon Peak ↑ 0, (0), 0, (0), 0, (0), 3, 1  
 ↓ 9, (6), 15, (29), 3, (3)

Project Location

Main Street

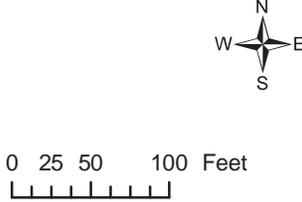
Westwood Road

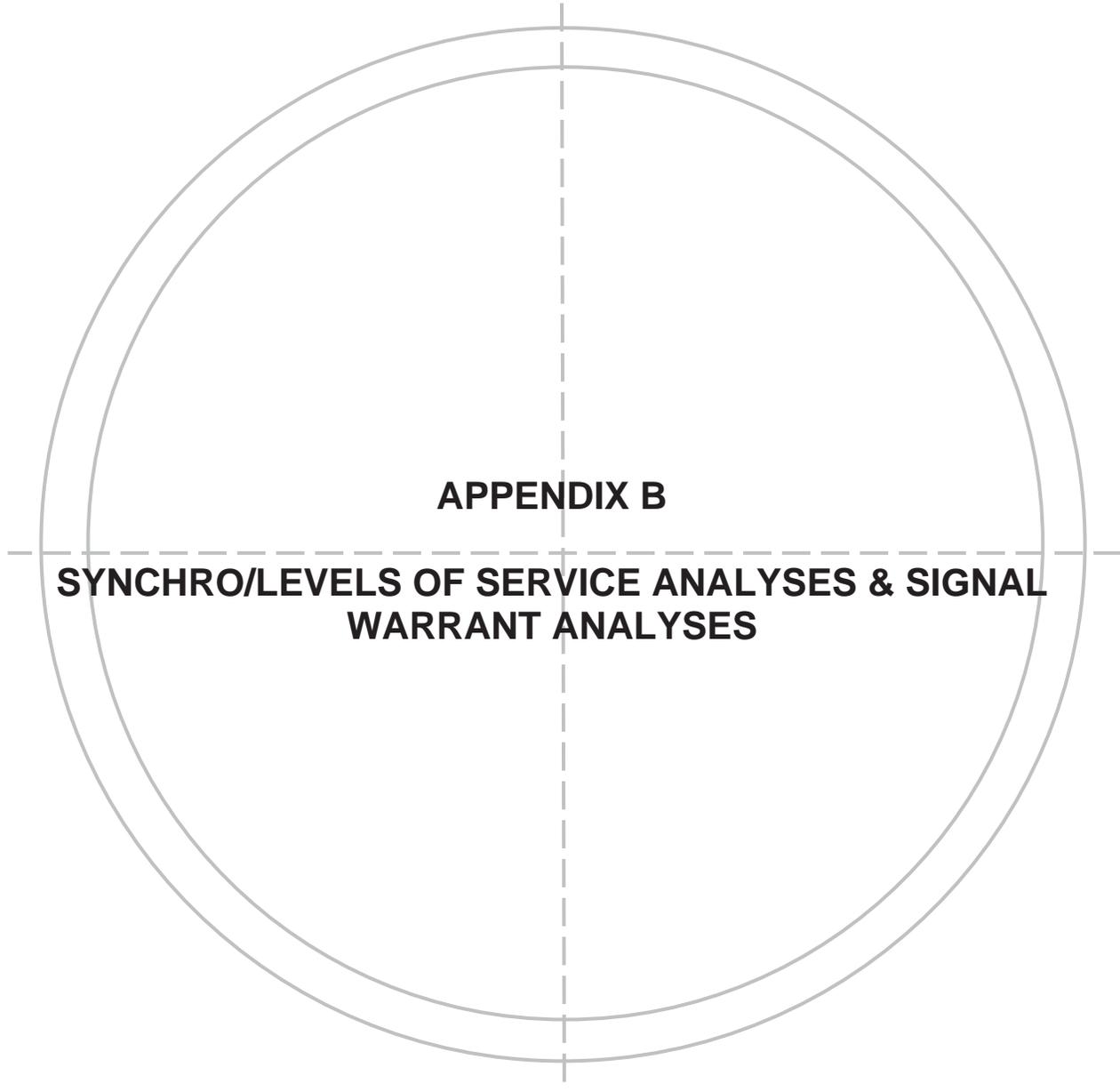
**Kenyon's Trip Generation/Distribution**

**Main Street and Westwood Road  
 Town of Clarence, New York**



Source: NYS GIS Clearinghouse - 2011





AM 2015 Existing Volumes  
Lanes, Volumes, Timings

4: Main St & Westwood Rd

10/6/2015

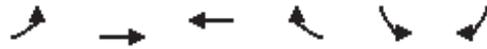


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	375	881	3	6	70
Future Volume (vph)	17	375	881	3	6	70
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.874	
Flt Protected	0.950				0.997	
Satd. Flow (prot)	1456	1792	1825	0	1596	0
Flt Permitted	0.950				0.997	
Satd. Flow (perm)	1456	1792	1825	0	1596	0
Link Speed (mph)		30	40		25	
Link Distance (ft)		398	614		401	
Travel Time (s)		9.0	10.5		10.9	
Peak Hour Factor	0.39	0.83	0.96	0.75	0.75	0.65
Heavy Vehicles (%)	24%	6%	4%	0%	0%	4%
Adj. Flow (vph)	44	452	918	4	8	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	452	922	0	116	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	57.9%
Analysis Period (min)	15
	ICU Level of Service B

AM 2015 Existing Volumes  
 HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗		↙	↘
Traffic Volume (veh/h)	17	375	881	3	6	70
Future Volume (Veh/h)	17	375	881	3	6	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.39	0.83	0.96	0.75	0.75	0.65
Hourly flow rate (vph)	44	452	918	4	8	108
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	922				1460	920
vC1, stage 1 conf vol					920	
vC2, stage 2 conf vol					540	
vCu, unblocked vol	922				1460	920
tC, single (s)	4.3				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.4				3.5	3.3
p0 queue free %	93				98	67
cM capacity (veh/h)	658				334	326
Direction, Lane #	EB 1	EB 2	WB 1	SB 1		
Volume Total	44	452	922	116		
Volume Left	44	0	0	8		
Volume Right	0	0	4	108		
cSH	658	1700	1700	326		
Volume to Capacity	0.07	0.27	0.54	0.36		
Queue Length 95th (ft)	5	0	0	39		
Control Delay (s)	10.9	0.0	0.0	22.0		
Lane LOS	B			C		
Approach Delay (s)	1.0		0.0	22.0		
Approach LOS				C		
Intersection Summary						
Average Delay			2.0			
Intersection Capacity Utilization			57.9%		ICU Level of Service	B
Analysis Period (min)			15			

Noon 2015 Existing Volumes  
Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	688	754	5	3	34
Future Volume (vph)	32	688	754	5	3	34
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.874	
Flt Protected	0.950				0.997	
Satd. Flow (prot)	1752	1845	1858	0	1611	0
Flt Permitted	0.950				0.997	
Satd. Flow (perm)	1752	1845	1858	0	1611	0
Link Speed (mph)		30	40		25	
Link Distance (ft)		398	614		401	
Travel Time (s)		9.0	10.5		10.9	
Peak Hour Factor	0.80	0.88	0.84	0.25	0.75	0.61
Heavy Vehicles (%)	3%	3%	2%	0%	0%	3%
Adj. Flow (vph)	40	782	898	20	4	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	782	918	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.0%
Analysis Period (min)	15
	ICU Level of Service A

Noon 2015 Existing Volumes  
 HCM Unsignalized Intersection Capacity Analysis

4: Main St & Westwood Rd  
 10/6/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗		↙	↘
Traffic Volume (veh/h)	32	688	754	5	3	34
Future Volume (Veh/h)	32	688	754	5	3	34
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.80	0.88	0.84	0.25	0.75	0.61
Hourly flow rate (vph)	40	782	898	20	4	56
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	918				1770	908
vC1, stage 1 conf vol					908	
vC2, stage 2 conf vol					862	
vCu, unblocked vol	918				1770	908
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	95				99	83
cM capacity (veh/h)	739				286	332

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	40	782	918	60
Volume Left	40	0	0	4
Volume Right	0	0	20	56
cSH	739	1700	1700	329
Volume to Capacity	0.05	0.46	0.54	0.18
Queue Length 95th (ft)	4	0	0	16
Control Delay (s)	10.1	0.0	0.0	18.4
Lane LOS	B			C
Approach Delay (s)	0.5		0.0	18.4
Approach LOS				C

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization		50.0%	ICU Level of Service
Analysis Period (min)		15	A

AM 2016 Background Volumes  
Lanes, Volumes, Timings

4: Main St & Westwood Rd

10/6/2015

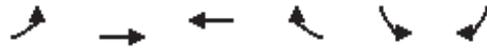


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	377	885	3	6	70
Future Volume (vph)	17	377	885	3	6	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.874	
Flt Protected	0.950				0.997	
Satd. Flow (prot)	1456	1792	1825	0	1596	0
Flt Permitted	0.950				0.997	
Satd. Flow (perm)	1456	1792	1825	0	1596	0
Link Speed (mph)		30	40		25	
Link Distance (ft)		398	614		401	
Travel Time (s)		9.0	10.5		10.9	
Peak Hour Factor	0.39	0.83	0.96	0.75	0.75	0.65
Heavy Vehicles (%)	24%	6%	4%	0%	0%	4%
Adj. Flow (vph)	44	454	922	4	8	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	454	926	0	116	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	58.1%
ICU Level of Service	B
Analysis Period (min)	15

AM 2016 Background Volumes  
 HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↘	↘
Traffic Volume (veh/h)	17	377	885	3	6	70
Future Volume (Veh/h)	17	377	885	3	6	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.39	0.83	0.96	0.75	0.75	0.65
Hourly flow rate (vph)	44	454	922	4	8	108
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	926				1466	924
vC1, stage 1 conf vol					924	
vC2, stage 2 conf vol					542	
vCu, unblocked vol	926				1466	924
tC, single (s)	4.3				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.4				3.5	3.3
p0 queue free %	93				98	67
cM capacity (veh/h)	655				332	324

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	44	454	926	116
Volume Left	44	0	0	8
Volume Right	0	0	4	108
cSH	655	1700	1700	324
Volume to Capacity	0.07	0.27	0.54	0.36
Queue Length 95th (ft)	5	0	0	39
Control Delay (s)	10.9	0.0	0.0	22.2
Lane LOS	B			C
Approach Delay (s)	1.0		0.0	22.2
Approach LOS				C

Intersection Summary			
Average Delay		2.0	
Intersection Capacity Utilization		58.1%	ICU Level of Service B
Analysis Period (min)		15	

Noon 2016 Background Volumes  
Lanes, Volumes, Timings

4: Main St & Westwood Rd

10/6/2015

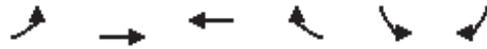


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	691	758	5	3	34
Future Volume (vph)	32	691	758	5	3	34
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.874	
Flt Protected	0.950				0.997	
Satd. Flow (prot)	1752	1845	1858	0	1611	0
Flt Permitted	0.950				0.997	
Satd. Flow (perm)	1752	1845	1858	0	1611	0
Link Speed (mph)		30	40		25	
Link Distance (ft)		398	614		401	
Travel Time (s)		9.0	10.5		10.9	
Peak Hour Factor	0.80	0.88	0.84	0.25	0.75	0.61
Heavy Vehicles (%)	3%	3%	2%	0%	0%	3%
Adj. Flow (vph)	40	785	902	20	4	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	785	922	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.2%
Analysis Period (min)	15
	ICU Level of Service A

Noon 2016 Background Volumes  
 HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗		↙	↘
Traffic Volume (veh/h)	32	691	758	5	3	34
Future Volume (Veh/h)	32	691	758	5	3	34
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.80	0.88	0.84	0.25	0.75	0.61
Hourly flow rate (vph)	40	785	902	20	4	56
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	922				1777	912
vC1, stage 1 conf vol					912	
vC2, stage 2 conf vol					865	
vCu, unblocked vol	922				1777	912
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	95				99	83
cM capacity (veh/h)	737				285	330

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	40	785	922	60
Volume Left	40	0	0	4
Volume Right	0	0	20	56
cSH	737	1700	1700	327
Volume to Capacity	0.05	0.46	0.54	0.18
Queue Length 95th (ft)	4	0	0	17
Control Delay (s)	10.2	0.0	0.0	18.5
Lane LOS	B			C
Approach Delay (s)	0.5		0.0	18.5
Approach LOS				C

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization		50.2%	ICU Level of Service
Analysis Period (min)		15	A



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	382	881	4	7	75
Future Volume (vph)	17	382	881	4	7	75
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.875	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1456	1792	1825	0	1597	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1456	1792	1825	0	1597	0
Link Speed (mph)		30	40		25	
Link Distance (ft)		398	130		170	
Travel Time (s)		9.0	2.2		4.6	
Peak Hour Factor	0.39	0.83	0.96	0.75	0.75	0.65
Heavy Vehicles (%)	24%	6%	4%	0%	0%	4%
Adj. Flow (vph)	44	460	918	5	9	115
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	460	923	0	124	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	58.3%
ICU Level of Service	B
Analysis Period (min)	15

AM 2016 Build-out Volumes  
 HCM Unsignalized Intersection Capacity Analysis



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	382	881	4	7	75
Future Volume (Veh/h)	17	382	881	4	7	75
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.39	0.83	0.96	0.75	0.75	0.65
Hourly flow rate (vph)	44	460	918	5	9	115
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	923				1468	920
vC1, stage 1 conf vol					920	
vC2, stage 2 conf vol					548	
vCu, unblocked vol	923				1468	920
tC, single (s)	4.3				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.4				3.5	3.3
p0 queue free %	93				97	65
cM capacity (veh/h)	657				333	325
Direction, Lane #	EB 1	EB 2	WB 1	SB 1		
Volume Total	44	460	923	124		
Volume Left	44	0	0	9		
Volume Right	0	0	5	115		
cSH	657	1700	1700	326		
Volume to Capacity	0.07	0.27	0.54	0.38		
Queue Length 95th (ft)	5	0	0	43		
Control Delay (s)	10.9	0.0	0.0	22.7		
Lane LOS	B			C		
Approach Delay (s)	0.9		0.0	22.7		
Approach LOS				C		
Intersection Summary						
Average Delay			2.1			
Intersection Capacity Utilization			58.3%		ICU Level of Service	B
Analysis Period (min)			15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	378	817	5	17	71
Future Volume (vph)	11	378	817	5	17	71
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	30			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.891	
Flt Protected	0.950				0.991	
Satd. Flow (prot)	1770	1863	1861	0	1645	0
Flt Permitted	0.950				0.991	
Satd. Flow (perm)	1770	1863	1861	0	1645	0
Link Speed (mph)		40	40		30	
Link Distance (ft)		130	149		122	
Travel Time (s)		2.2	2.5		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	411	888	5	18	77
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	411	893	0	95	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	55.3%
ICU Level of Service	B
Analysis Period (min)	15

AM 2016 Build-out Volumes  
 HCM Unsignalized Intersection Capacity Analysis

8: Main St & Driveway #2 West  
 10/6/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	378	817	5	17	71
Future Volume (Veh/h)	11	378	817	5	17	71
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	411	888	5	18	77
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	893				1326	890
vC1, stage 1 conf vol					890	
vC2, stage 2 conf vol					435	
vCu, unblocked vol	893				1326	890
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	98				95	77
cM capacity (veh/h)	759				360	341

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	12	411	893	95
Volume Left	12	0	0	18
Volume Right	0	0	5	77
cSH	759	1700	1700	345
Volume to Capacity	0.02	0.24	0.53	0.28
Queue Length 95th (ft)	1	0	0	28
Control Delay (s)	9.8	0.0	0.0	19.4
Lane LOS	A			C
Approach Delay (s)	0.3		0.0	19.4
Approach LOS				C

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization		55.3%	ICU Level of Service
Analysis Period (min)		15	B



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	382	816	66	15	4
Future Volume (vph)	20	382	816	66	15	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990		0.973	
Flt Protected	0.950				0.962	
Satd. Flow (prot)	1770	1863	1844	0	1744	0
Flt Permitted	0.950				0.962	
Satd. Flow (perm)	1770	1863	1844	0	1744	0
Link Speed (mph)		40	40		30	
Link Distance (ft)		149	335		113	
Travel Time (s)		2.5	5.7		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	415	887	72	16	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	415	959	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	56.9%
ICU Level of Service	B
Analysis Period (min)	15

AM 2016 Build-out Volumes  
 HCM Unsignalized Intersection Capacity Analysis

10: Main St & Driveway #1 East  
 10/6/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↘	↘
Traffic Volume (veh/h)	20	382	816	66	15	4
Future Volume (Veh/h)	20	382	816	66	15	4
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	415	887	72	16	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	959				1382	923
vC1, stage 1 conf vol					923	
vC2, stage 2 conf vol					459	
vCu, unblocked vol	959				1382	923
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	97				95	99
cM capacity (veh/h)	717				345	327

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	22	415	959	20
Volume Left	22	0	0	16
Volume Right	0	0	72	4
cSH	717	1700	1700	341
Volume to Capacity	0.03	0.24	0.56	0.06
Queue Length 95th (ft)	2	0	0	5
Control Delay (s)	10.2	0.0	0.0	16.2
Lane LOS	B			C
Approach Delay (s)	0.5		0.0	16.2
Approach LOS				C

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		56.9%	ICU Level of Service B
Analysis Period (min)		15	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↔			↔
Traffic Volume (vph)	0	0	21	0	7	83
Future Volume (vph)	0	0	21	0	7	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr						
Flt Protected						0.996
Satd. Flow (prot)	0	0	1863	0	0	1855
Flt Permitted						0.996
Satd. Flow (perm)	0	0	1863	0	0	1855
Link Speed (mph)	30		25			25
Link Distance (ft)	64		170			231
Travel Time (s)	1.5		4.6			6.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	23	0	8	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	23	0	0	98
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Free		Free			Free

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	13.5%
Analysis Period (min)	15
	ICU Level of Service A

Intersection Sign configuration not allowed in HCM analysis.

Noon 2016 Build-out Volumes  
Lanes, Volumes, Timings

4: Main St & Westwood Rd

10/7/2015



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	699	745	8	3	36
Future Volume (vph)	35	699	745	8	3	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.874	
Flt Protected	0.950				0.997	
Satd. Flow (prot)	1752	1845	1855	0	1610	0
Flt Permitted	0.950				0.997	
Satd. Flow (perm)	1752	1845	1855	0	1610	0
Link Speed (mph)		30	40		25	
Link Distance (ft)		398	130		170	
Travel Time (s)		9.0	2.2		4.6	
Peak Hour Factor	0.80	0.88	0.84	0.25	0.75	0.61
Heavy Vehicles (%)	3%	3%	2%	0%	0%	3%
Adj. Flow (vph)	44	794	887	32	4	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	794	919	0	63	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	49.7%
Analysis Period (min)	15
	ICU Level of Service A

Noon 2016 Build-out Volumes  
 HCM Unsignalized Intersection Capacity Analysis

4: Main St & Westwood Rd  
 10/7/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↷		↶	↷
Traffic Volume (veh/h)	35	699	745	8	3	36
Future Volume (Veh/h)	35	699	745	8	3	36
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.80	0.88	0.84	0.25	0.75	0.61
Hourly flow rate (vph)	44	794	887	32	4	59
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	919				1785	903
vC1, stage 1 conf vol					903	
vC2, stage 2 conf vol					882	
vCu, unblocked vol	919				1785	903
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	94				99	82
cM capacity (veh/h)	738				282	334

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	44	794	919	63
Volume Left	44	0	0	4
Volume Right	0	0	32	59
cSH	738	1700	1700	331
Volume to Capacity	0.06	0.47	0.54	0.19
Queue Length 95th (ft)	5	0	0	17
Control Delay (s)	10.2	0.0	0.0	18.4
Lane LOS	B			C
Approach Delay (s)	0.5		0.0	18.4
Approach LOS				C

Intersection Summary			
Average Delay		0.9	
Intersection Capacity Utilization		49.7%	ICU Level of Service
Analysis Period (min)		15	A



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	667	714	4	11	39
Future Volume (vph)	35	667	714	4	11	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	30			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.895	
Flt Protected	0.950				0.989	
Satd. Flow (prot)	1770	1863	1861	0	1649	0
Flt Permitted	0.950				0.989	
Satd. Flow (perm)	1770	1863	1861	0	1649	0
Link Speed (mph)		40	40		30	
Link Distance (ft)		130	149		122	
Travel Time (s)		2.2	2.5		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	725	776	4	12	42
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	725	780	0	54	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	47.8%
ICU Level of Service	A
Analysis Period (min)	15

Noon 2016 Build-out Volumes  
 HCM Unsignalized Intersection Capacity Analysis

8: Main St & Driveway #2 West  
 10/7/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↑	↷		↶	↷
Traffic Volume (veh/h)	35	667	714	4	11	39
Future Volume (Veh/h)	35	667	714	4	11	39
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	725	776	4	12	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	780				1579	778
vC1, stage 1 conf vol					778	
vC2, stage 2 conf vol					801	
vCu, unblocked vol	780				1579	778
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	95				96	89
cM capacity (veh/h)	837				321	396

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	38	725	780	54
Volume Left	38	0	0	12
Volume Right	0	0	4	42
cSH	837	1700	1700	377
Volume to Capacity	0.05	0.43	0.46	0.14
Queue Length 95th (ft)	4	0	0	12
Control Delay (s)	9.5	0.0	0.0	16.1
Lane LOS	A			C
Approach Delay (s)	0.5		0.0	16.1
Approach LOS				C

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization		47.8%	ICU Level of Service A
Analysis Period (min)		15	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	667	707	47	32	11
Future Volume (vph)	11	667	707	47	32	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.992		0.966	
Flt Protected	0.950				0.964	
Satd. Flow (prot)	1770	1863	1848	0	1735	0
Flt Permitted	0.950				0.964	
Satd. Flow (perm)	1770	1863	1848	0	1735	0
Link Speed (mph)		40	40		30	
Link Distance (ft)		149	335		113	
Travel Time (s)		2.5	5.7		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	725	768	51	35	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	725	819	0	47	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.1%
ICU Level of Service	A
Analysis Period (min)	15

Noon 2016 Build-out Volumes  
 HCM Unsignalized Intersection Capacity Analysis

10: Main St & Driveway #1 East  
 10/7/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	667	707	47	32	11
Future Volume (Veh/h)	11	667	707	47	32	11
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	725	768	51	35	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	819				1542	794
vC1, stage 1 conf vol					794	
vC2, stage 2 conf vol					749	
vCu, unblocked vol	819				1542	794
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	99				90	97
cM capacity (veh/h)	810				335	388

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	12	725	819	47
Volume Left	12	0	0	35
Volume Right	0	0	51	12
cSH	810	1700	1700	347
Volume to Capacity	0.01	0.43	0.48	0.14
Queue Length 95th (ft)	1	0	0	12
Control Delay (s)	9.5	0.0	0.0	17.0
Lane LOS	A			C
Approach Delay (s)	0.2		0.0	17.0
Approach LOS				C

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		50.1%	ICU Level of Service A
Analysis Period (min)		15	

Noon 2016 Build-out Volumes  
Lanes, Volumes, Timings

12: Westwood Rd & Entrance Only  
10/7/2015



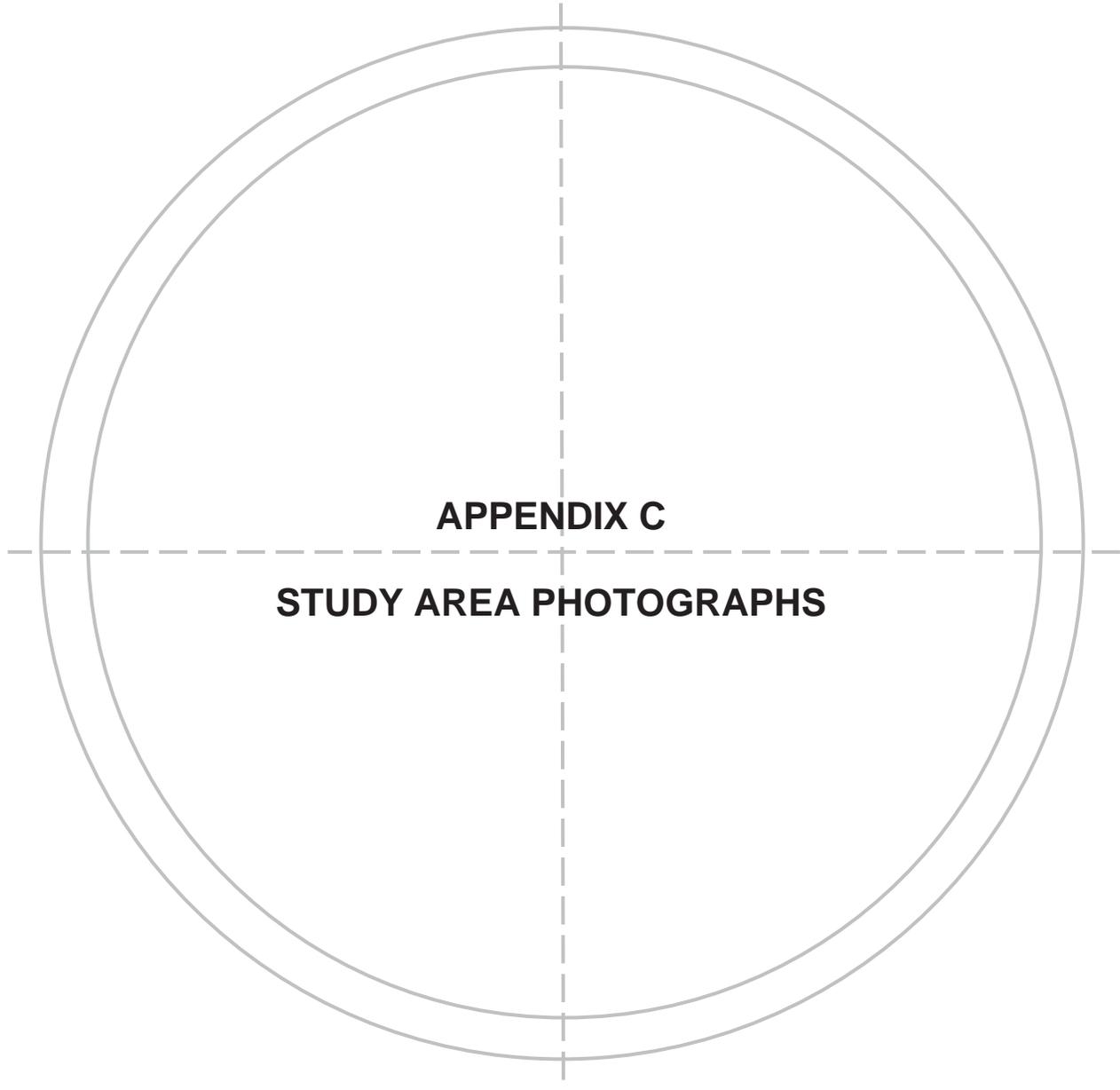
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↔			↔
Traffic Volume (vph)	0	0	42	0	2	41
Future Volume (vph)	0	0	42	0	2	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						0.998
Satd. Flow (prot)	0	0	1863	0	0	1859
Flt Permitted						0.998
Satd. Flow (perm)	0	0	1863	0	0	1859
Link Speed (mph)	30		25			25
Link Distance (ft)	64		170			231
Travel Time (s)	1.5		4.6			6.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	46	0	2	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	46	0	0	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Free		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	7.1% ICU Level of Service A
Analysis Period (min)	15

Intersection Sign configuration not allowed in HCM analysis.

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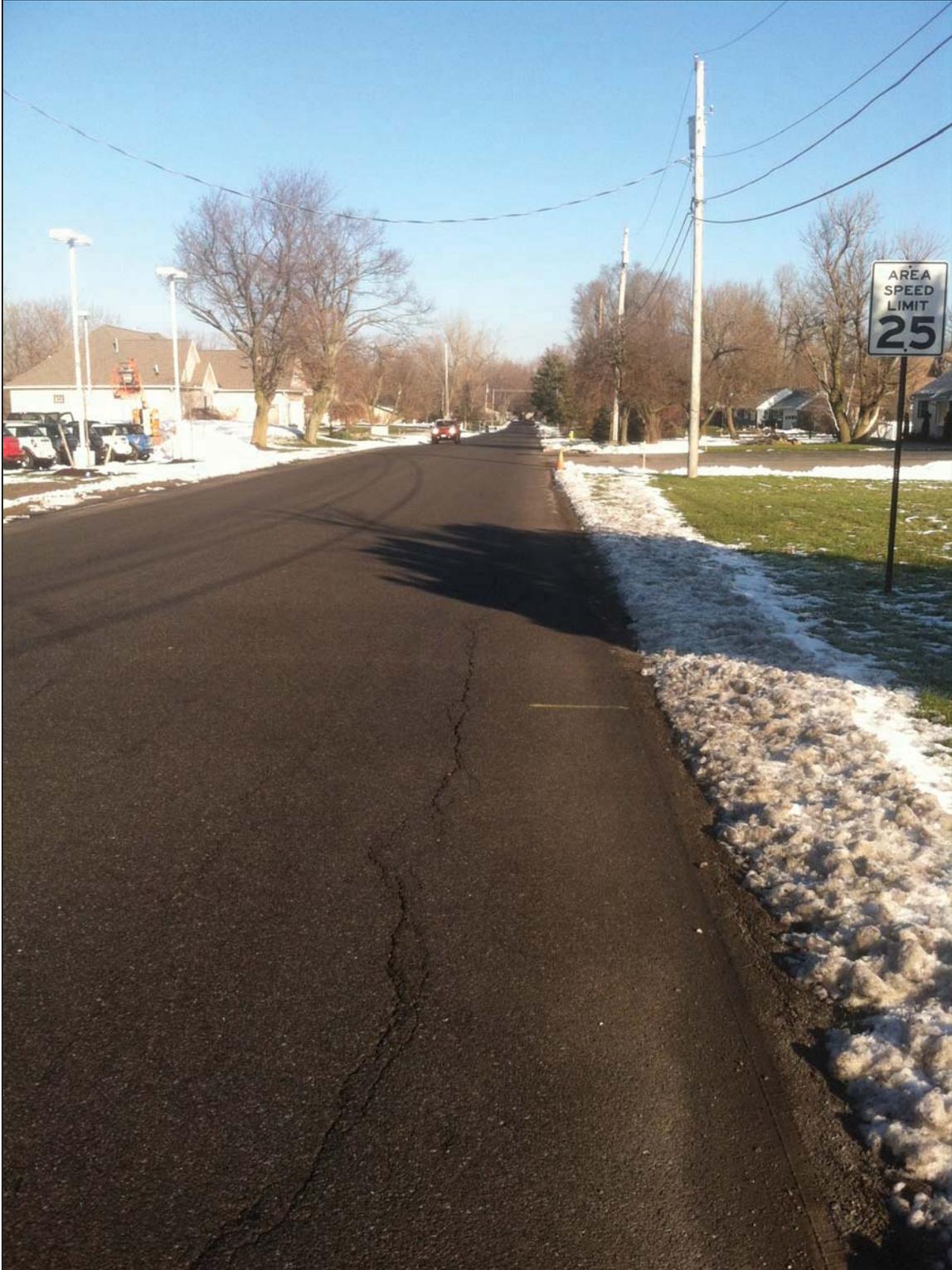
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Looking west from project site driveway across Westwood Road at Towne Mini.



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Looking north on Westwood Road from project site.



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Looking east from Westwood Road at existing gas station.



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Looking north on south side of Main Street at intersection with Westwood Road.



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Looking south on Westwood Road towards intersection with Main Street.



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Looking east on Main Street across the street from project site.



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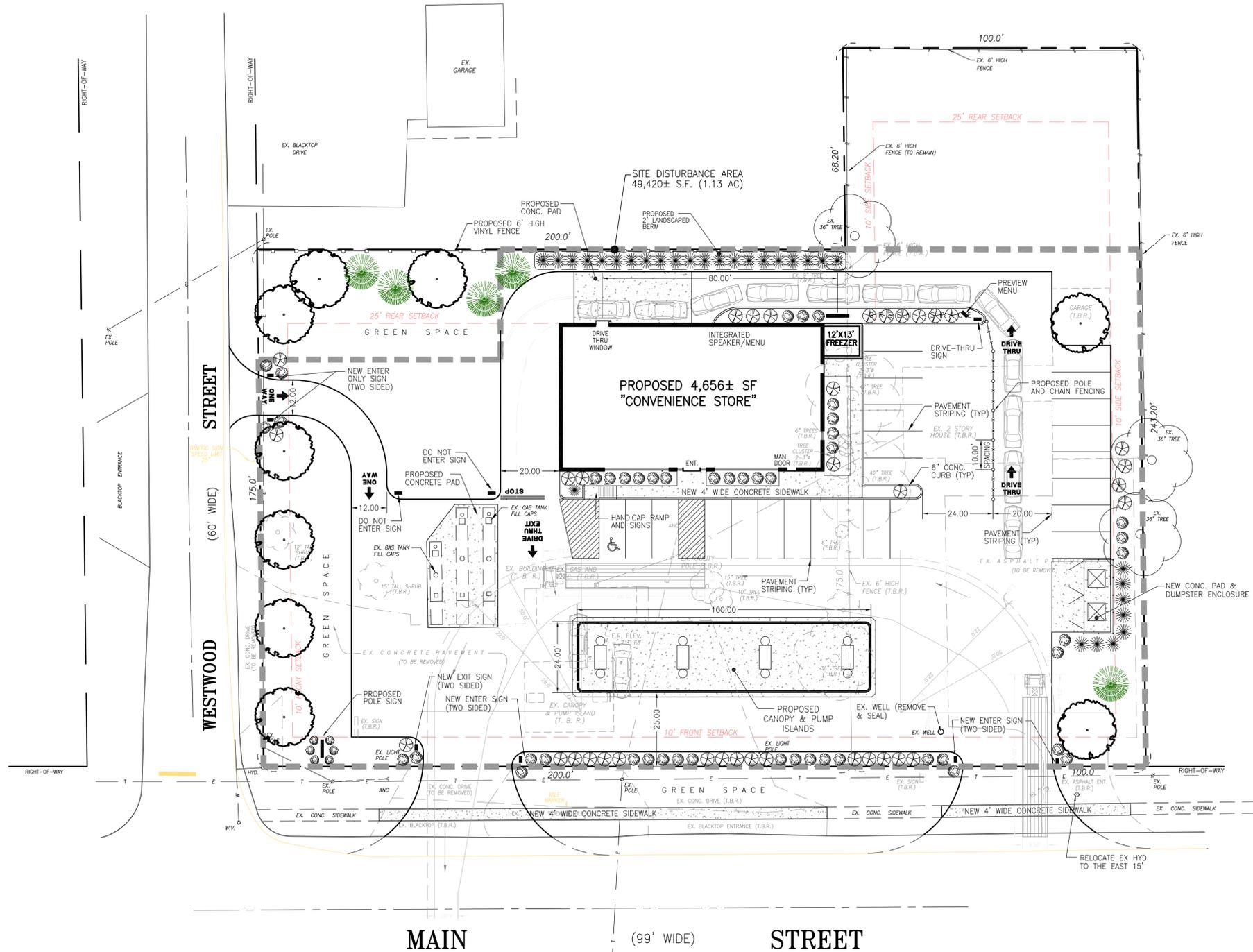
Looking east on the north side of Main Street towards Westwood Road.



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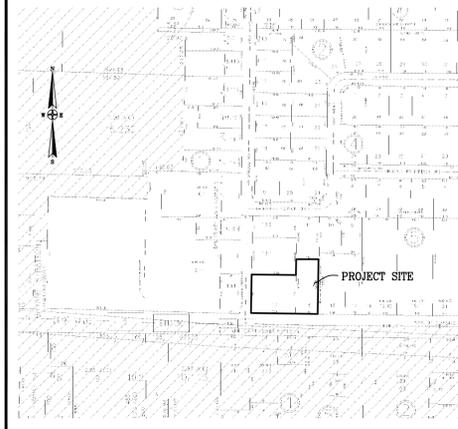
Looking west on Main Street across from Westwood Road.





**PLAN**  
SCALE: 1" = 20'

SAN. M.H.  
RM: 708.18  
E. NY-701.35  
S. NY-701.04  
W. NY-700.36



**SITE DATA:**

**PARCEL:**  
OWNER: KENYON PARTNERSHIP  
TAX MAP ID #: 70.18-5-14 & 70.18-5-15  
PARCEL SIZE: 1.36 AC.  
PROJECT AREA: 1.13± AC.

**ZONING:**  
CURRENT ZONING: TRADITIONAL NEIGHBORHOOD (TND)  
EXISTING USE: FORMER GAS STATION  
PROPOSED USE: CONVENIENCE STORE WITH GAS

**PARKING:**  
REQUIRED: 23 PARKING SPACES PLUS 12 STACKING SPACES  
PROPOSED: 24 PARKING SPACES PLUS 12 STACKING SPACES

**GREEN SPACE:**  
BUILDING, PLUS ASPHALT & CONC. (4,656 S.F. BLDG. + 31,052± S.F.) = 35,708 S.F.  
REQUIRED GREEN SPACE: 40.0%  
PROPOSED GREEN SPACE: 40.0%

**LAYOUT NOTES:**

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO COMMENCING.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF WORKERS AND OTHER PERSONS BY ANY MEASURES DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL KEEP THE JOB SITE CLEAN, ORDERLY, AND FREE OF DEBRIS ON A DAILY BASIS. FINAL CLEANUP SHALL BE TO THE OWNER'S SATISFACTION.
4. REFER TO DWG. NO. D11 FOR SITE CONSTRUCTION DETAILS.

**GENERAL NOTES:**

1. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATION (HORIZONTAL & VERTICAL) PRIOR TO CONSTRUCTION.
2. VERIFY ALL EXISTING CONDITIONS (I.E. AS-BUILT LOCATIONS, ELEVATIONS & DIMENSIONS) PRIOR TO BID PREPARATION AND CONSTRUCTION.
3. CONTRACTOR IS TO OBTAIN PERMISSION TO ACCESS UTILITIES WITHIN RIGHT-OF-WAY AND/OR UNDER THE AUTHORITY OF OTHERS.
4. CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO PROTECT EXISTING TREES WHICH ARE TO BE PRESERVED FROM ALL TYPES OF ROOT, TRUNK AND LIMB DAMAGE; INCLUDING BUT NOT LIMITED TO, RETAINING WALLS AND CONSTRUCTION FENCE WHICH PREVENT FILLING ON TOP, OR SOIL COMPACTION OVER ROOTS.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL CONSTRUCTION SPECIFICATIONS WHERE APPLICABLE AND/OR SUBJECT TO THE LATEST REVISION BY THE TOWN ENGINEER.
6. CONTRACTOR SHALL REPAIR ALL SIDEWALKS, PAVEMENTS AND LAWN AREAS DISTURBED BY SITE WORK.



NOTE:  
THESE PLANS DO NOT ASSURE THE PRESENCE OR LOCATION OF UTILITIES. THE CONTRACTOR SHALL NOTIFY "DIG SAFELY-NEW YORK" TOLL FREE AT 1-800-962-7962 TWO (2) FULL WORKING DAYS BEFORE THE START OF CONSTRUCTION, NOT COUNTING THE DAY OF YOUR CALL.

**LEGEND:**

- ⊙ HYD. — HYDRANT
- ⊙ P.P. — UTILITY POLE
- RECVR/CATCH BASIN/D.I.
- M.H. — MANHOLE
- W.V. — WATER VALVE
- ST — STORM SEWER LINE
- SA — SANITARY SEWER LINE
- W — WATER LINE
- G — GAS LINE
- OE — OVERHEAD ELECTRIC WIRES
- UE — UNDERGROUND ELECTRIC
- — — — — EXISTING CONTOUR
- — — — — PROPOSED CONTOUR
- — — — — EXIST. SPOT ELEVATION
- — — — — PROP. SPOT ELEVATION
- — — — — SELECT FILL (NO.2 R.O.C.)
- — — — — PROP. WALL-PAK LIGHT
- — — — — TO BE REMOVED

REVISIONS	DATE	DESCRIPTION	BY	DAS
	9/21/15	ADDED CHAIN FENCE	DAS	DAS
	8/29/15	REVISED DRIVE-THRU AS PER CLIENT	DAS	DAS

**PROJECT TITLE:** PROPOSED KENYON'S VARIETY STORE  
8250 MAIN ST. - TOWN OF CLARENCE, NY

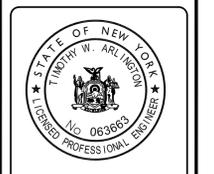
**CLIENT:** KENYON PARTNERSHIP  
859 DAVISON ROAD  
LOCKPORT, NEW YORK 14094

**DRAWING TITLE:** CONCEPT PLAN

**APEX CONSULTING**  
**SURVEY & ENGINEERING SERVICES, P.C.**

SURVEYING • ENGINEERING • LANDSCAPE ARCHITECTURE

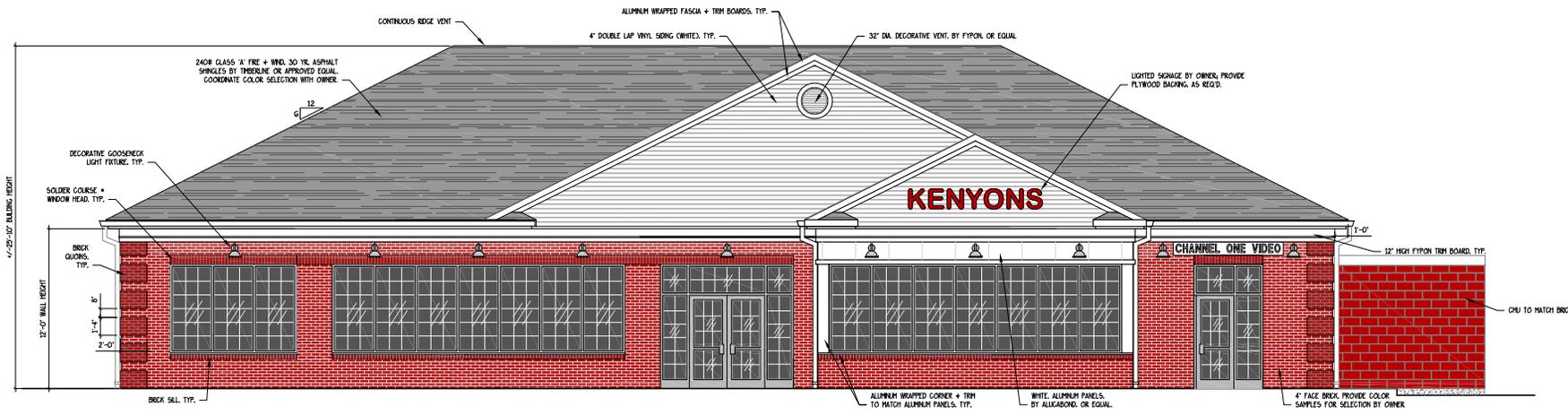
102 EAST AVENUE, LOCKPORT, NEW YORK 14094  
Phone: (716) 439-0188 FAX: (716) 439-0189



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DATE: 8/20/15  
SCALE: 1" = 20'  
PROJECT NO.: 13-106  
DRAWN BY: DAS  
CHECKED BY: TWA

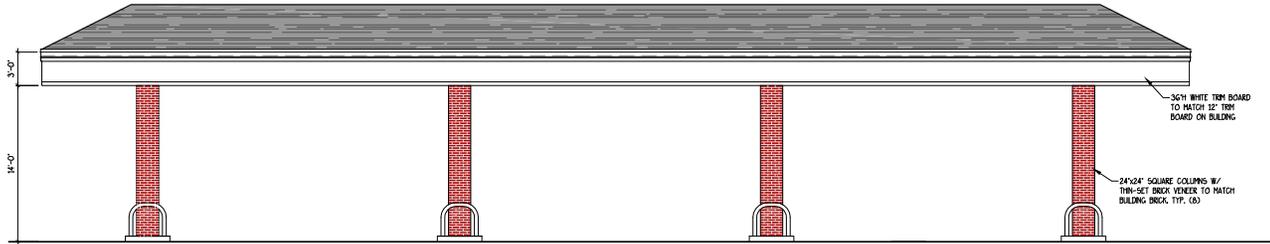
DWG. NO.:  
**L1**  
SHEET OF



**SOUTH ELEVATION**

SCALE: 1/4" = 1'-0"

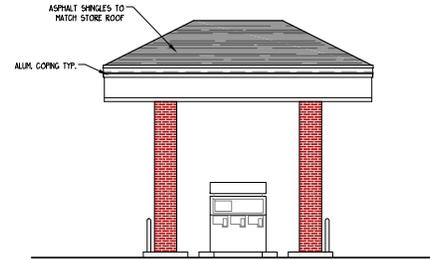
1



**SOUTH ELEVATION: CANOPY**

SCALE: 3/16" = 1'-0"

2



**WEST ELEVATION: CANOPY**

SCALE: 3/16" = 1'-0"

3

REVISIONS	DESCRIPTION	DATE

PROJECT TITLE: ENGINEERING DESIGN PLANS FOR 3220 s.f. CONVENIENCE STORE  
 8250 MAIN STREET (T) CLARENCE, NEW YORK  
 CLIENT: KENYON PARTNERSHIP  
 859 DAVISON ROAD  
 LOCKPORT, NEW YORK 14094  
 DRAWING TITLE: ELEVATIONS

**APEX CONSULTING**  
 SURVEY & ENGINEERING SERVICES, P.C.  
 SURVEYING • ENGINEERING • LANDSCAPE ARCHITECTURE  
 102 EAST AVENUE, LOCKPORT, NEW YORK 14094  
 Phone: (716) 439-0188 FAX: (716) 439-0189

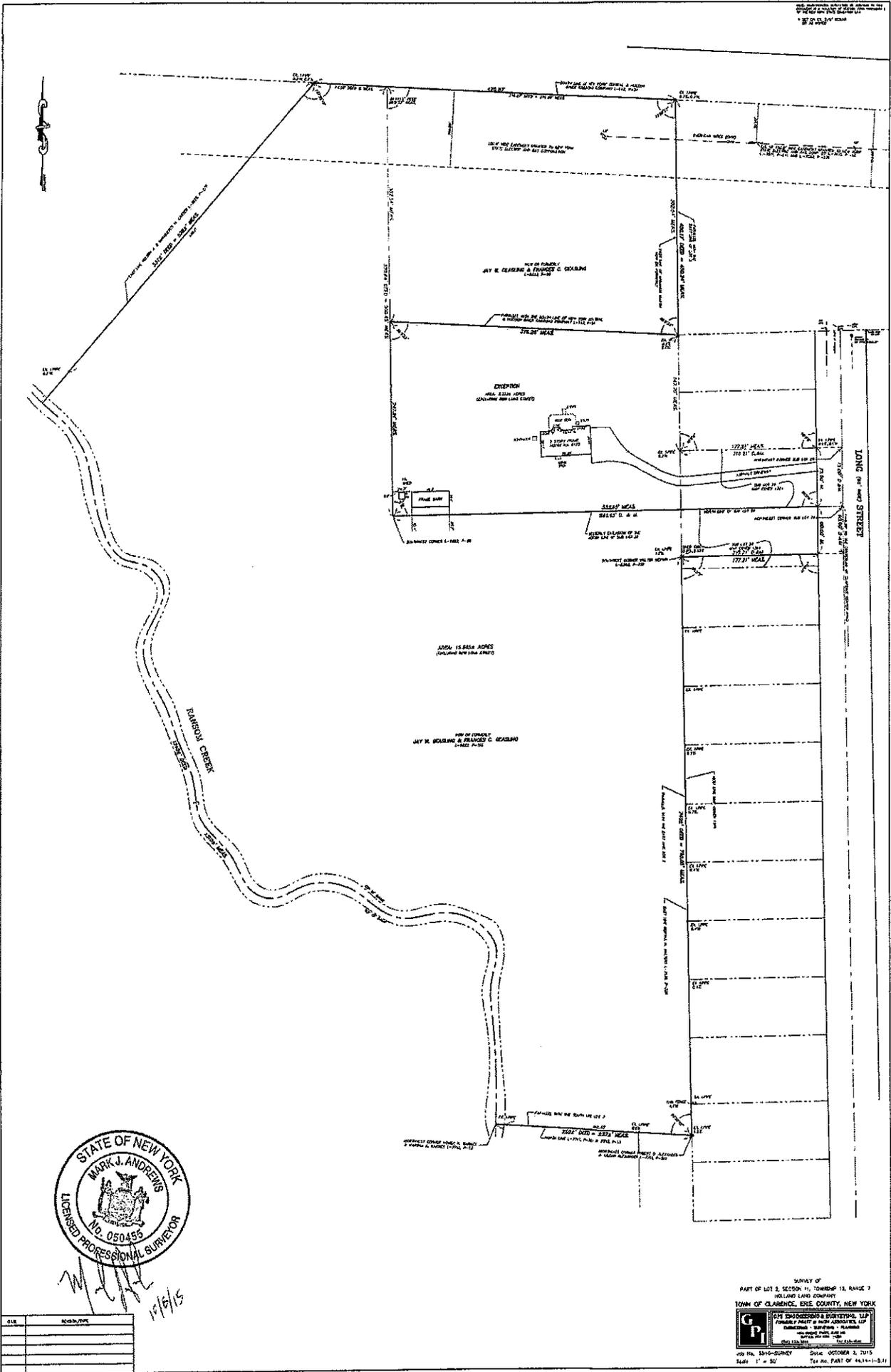
ANY UNAUTHORIZED ALTERATION OR ADDITION OF THIS DRAWING / DOCUMENT IS A VIOLATION OF THE PROFESSIONAL SEAL AND EXERCISE OF THE NEW YORK STATE EDUCATION LAW  
 DATE: 03/14/14  
 SCALE: AS NOTED  
 PROJECT NO.: 13-105  
 DRAWN BY: SWE  
 CHECKED BY: TWA  
**A2**  
 SHEET OF



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**EXHIBIT A – SURVEY PREPARED  
BY GPI ENGINEERING &  
SURVEYING, LLP DATED  
OCTOBER 2, 2015**

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DATE	REVISION/NOTE

SURVEY OF  
 PART OF LOT 5, SECTION 11, TOWNSHIP 11, RANGE 7  
 HOLLAND LAND COMPANY  
 TOWN OF CLARENCE, ERIE COUNTY, NEW YORK

**GPI** ENGINEERS & SURVEYORS, LLP  
 1000 WEST 10TH STREET, SUITE 100  
 CLARENCE, NEW YORK 14939  
 (607) 754-1100

DATE: OCTOBER 3, 2015  
 SCALE: 1" = 50'

## *Short Environmental Assessment Form*

### *Part 1 - Project Information*

#### **Instructions for Completing**

**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 - Project and Sponsor Information</b>			
Name of Action or Project: Proposed 2 Lot Minor Subdivision			
Project Location (describe, and attach a location map): 6120 Long Street - Town of Clarence, Erie County			
Brief Description of Proposed Action: The proposed project ("action") consists of a Two Lot Minor Subdivision of the existing parcel at 6120 Long Street, which consists of a single family home and vacant land [SBL No. 44.14-1-5.11]. The lots will be have sizes of 15.985 acres and 2.333 acres and the configuration of the two proposed lots is depicted on the Survey of the Project Site prepared by GPI Engineering & Surveying LLP dated October 2, 2015 attached to the Minor Subdivision Application. The smaller parcel will include the single family home and will have 75 ft. of frontage. The larger parcel consists of vacant land will have 60 ft. of frontage. The Project Sponsor acknowledges that any future development of the larger parcel consisting of vacant land will require a separate future environmental review pursuant to SEQRA including appropriate consideration of the potential adverse environmental impacts of any future proposed use.			
Name of Applicant or Sponsor: Cutaia Acquisitions LLC c/o Sean Hopkins, Esq.		Telephone: 716.510-4338 E-Mail: shopkins@hsr-legal.com	
Address: 5500 Main Street, Suite 343			
City/PO: Williamsville		State: New York	Zip Code: 14221
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.		NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Town of Clarence Planning Board - Minor Subdivision Approval		NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
3.a. Total acreage of the site of the proposed action?		18.32 acres	
b. Total acreage to be physically disturbed?		0 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		18.32 acres	
4. Check all land uses that occur on, adjoining and near the proposed action. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Parkland			

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the proposed action located in an archeological sensitive area?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? [no mapped wetlands]	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input checked="" type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16. Is the project site located in the 100 year flood plain? [A portion of the Project Site adjacent to Ransom Creek is in the 100 yr. floodplain]	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <input type="checkbox"/> NO <input type="checkbox"/> YES	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: _____	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	

<p>18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)?          If Yes, explain purpose and size: _____          _____          _____</p>	<p>NO</p> <p><input checked="" type="checkbox"/></p>	<p>YES</p> <p><input type="checkbox"/></p>
<p>19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?          If Yes, describe: _____          _____          _____</p>	<p>NO</p> <p><input checked="" type="checkbox"/></p>	<p>YES</p> <p><input type="checkbox"/></p>
<p>20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?          If Yes, describe: _____          _____          _____</p>	<p>NO</p> <p><input checked="" type="checkbox"/></p>	<p>YES</p> <p><input type="checkbox"/></p>

**I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**

Applicant/sponsor name: Cutaia Acquisition LLC Date: October 8, 2015  
 Signature: *Shirley Lin, Attorney for Project Sponsor*