

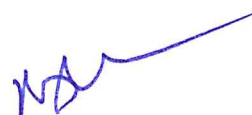
## MEMORANDUM

**DATE:** February 22, 2019

**TO:** Lisa Mead, Esquire  
Mead, Talerman & Costa, LLC  
30 Green Street  
Newburyport, Massachusetts, 01950

**FROM:** Robert J. Michaud, P.E. – Managing Principal  
Daniel A. Dumais, P.E. – Senior Project Manager

**RE:** **Proposed Newburyport Brewery Relocation & Expansion**  
79 Parker Street – Newburyport, MA



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MDM Transportation Consultants, Inc. (MDM) has prepared this traffic updated impact assessment (TIA) for the proposed Newburyport Brewery development to be located at 79 Parker Street in Newburyport, Massachusetts. The project location and surrounding roadway network is shown in **Figure 1**. This memorandum describes existing (baseline) traffic conditions for adjacent roadways, outlines trip generation characteristics of the existing use/proposed development, and quantifies incremental traffic impacts of the Site development on area roadways.

Key findings of the traffic assessment are as follows:

- *Traffic Generation.* The proposed Newburyport Brewery development with simultaneous use of the on-site facilities is estimated to generate approximately 14 vehicle trips during the weekday morning peak hour (11 entering and 3 exiting), 130 vehicle trips during the weekday evening peak hour (69 entering and 61 exiting), and 159 vehicle trips during the Saturday midday peak hour (84 entering and 75 exiting). Trip generation estimates assume a maximum seating capacity of 275 (175 seats in the restaurant and 100 seats in the function space); actual facility use is likely to fall below these levels.
- *Adequate Roadway Capacity & Operations.* Under Design Year conditions, the signalized intersection of Parker Street at Graf Road will continue to operate below capacity at an overall LOS C or better during the peak hours. Likewise, the proposed site driveway approaches to Parker Street will operate below capacity at LOS B or better during the peak hours with the development in place. The incremental traffic increases at the study intersections due to the proposed development do not result in any significant change in overall intersection operations at the study intersections compared to Baseline conditions.

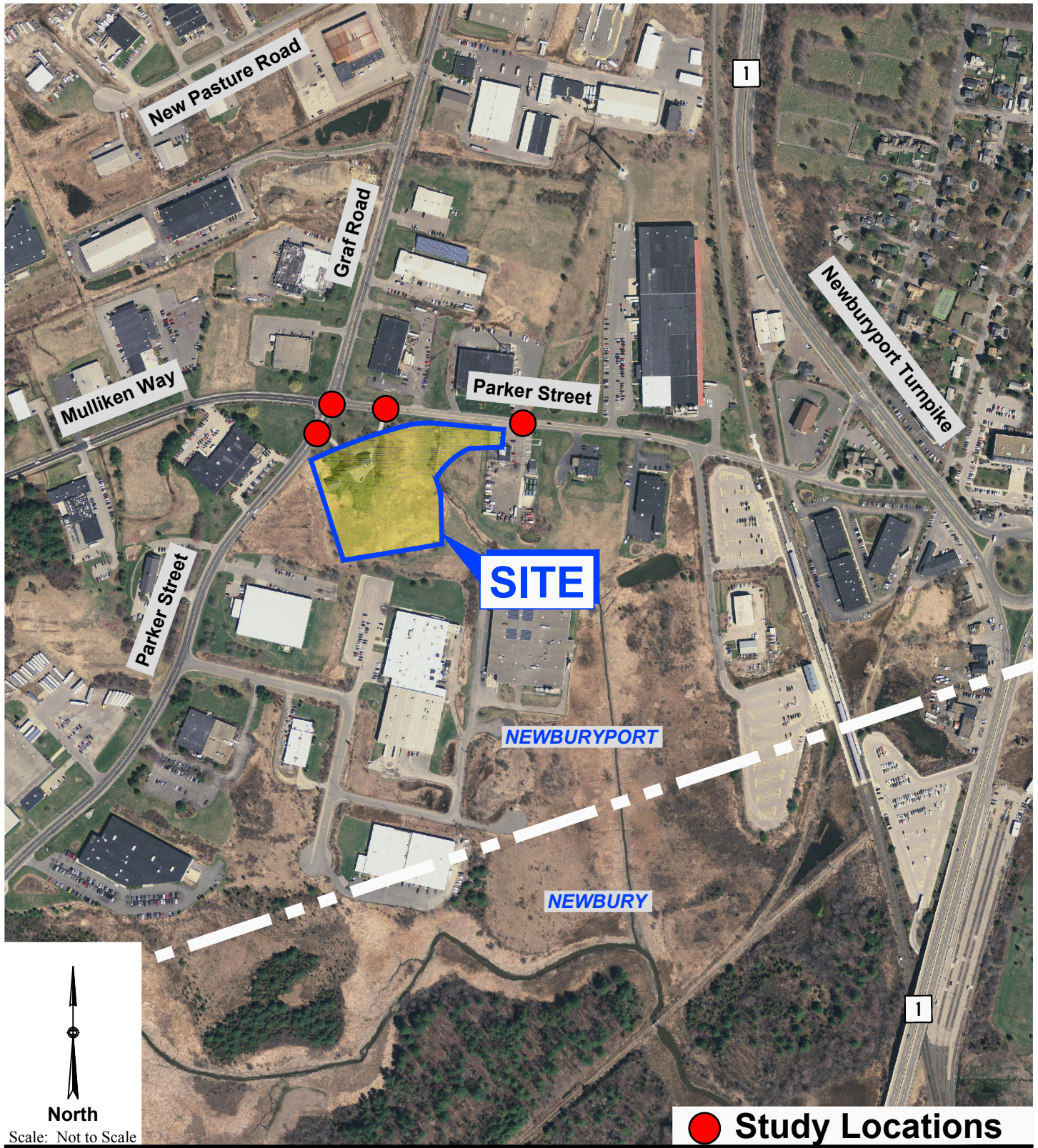


Figure 1

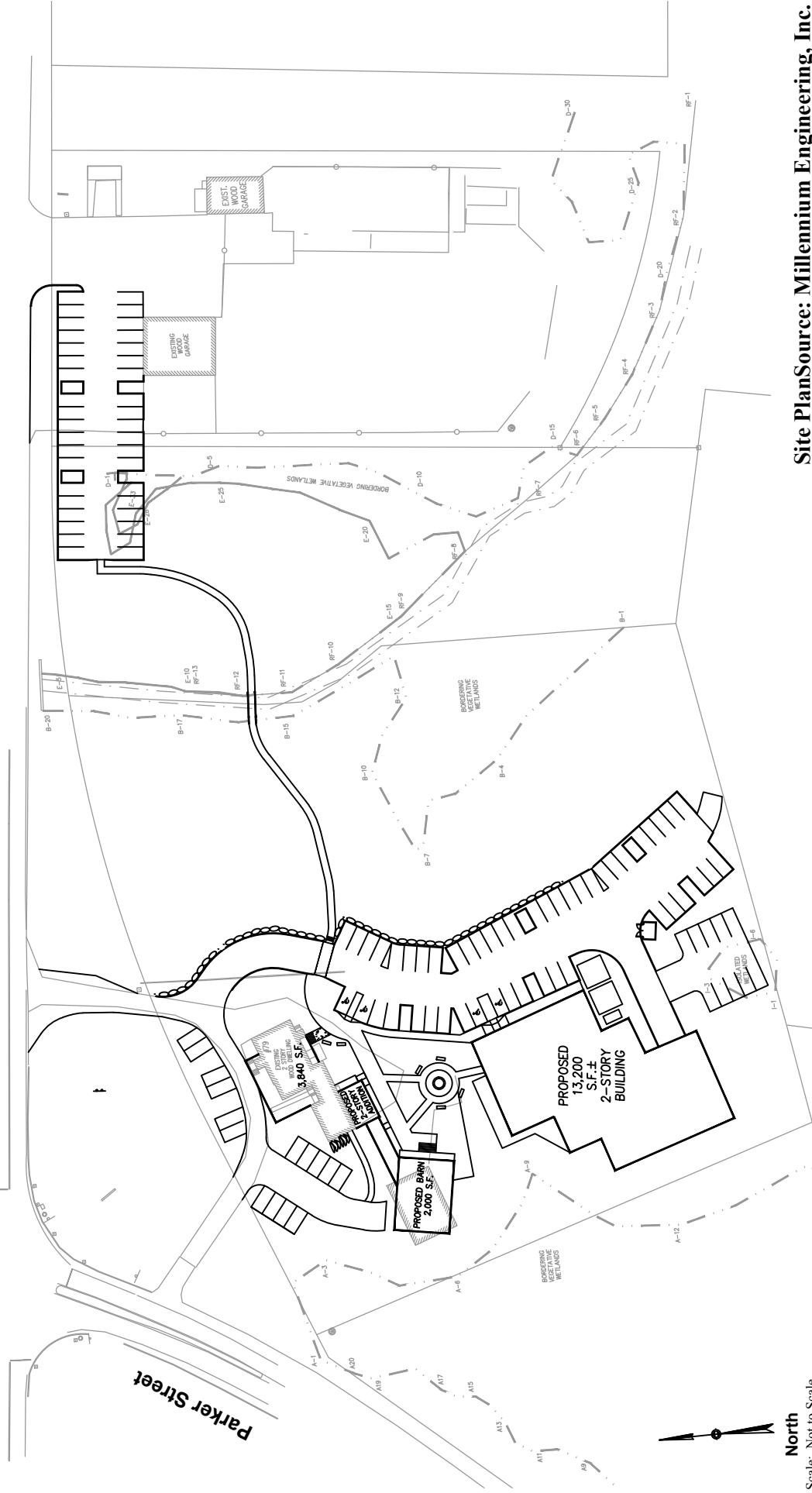
Site Location

In summary, MDM finds that incremental traffic associated with the proposed development is not expected to materially impact operating conditions at the study intersections and ample roadway capacity will be available to support the project. Proposed access/egress improvements will minimize disruption of traffic along Parker Street by restricting the western driveway to right-in/right-out movements. The project will not be influenced by average queues from the adjacent signal.

## PROJECT DESCRIPTION

The property at 79 Parker Street consists of approximately 4± acres of land that currently includes a single family farm house and a barn structure. The site uses at 77 Parker Street include NRC/ENPRO which use the property for a satellite equipment storage yard with no employee's onsite; Publishers Circulation Fulfillment, Inc. (a newspaper delivery company) with on-site employment from midnight to 6 am; and Schulte Grounds Management, Inc. (a seasonal landscaping company) who's lease expires in April 2019.

Under the proposed site programming approximately 23,400± sf of building area will be provided including 6,450± sf of office space (farmhouse renovation/addition), 2,500± sf of function space (new barn with 100 seats) and a 14,450 sf brewery consisting of 3,500± sf tasting room/restaurant (175 seats) and 10,950± sf of manufacturing, package, storage and mechanical space. The proposed access/egress will be via three driveways; a driveway along the north-south section of Parker Street which will be restricted to right-in/right-out movements; a driveway along the east-west section of Parker Street; and a driveway located at 77 Parker Street for overflow parking. The proposed parking supply for the project includes approximately 112± combined surface spaces with 74± spaces located at 79 Parker Street and 38± overflow parking spaces located at 77 Parker Street. A preliminary site plan prepared by Millennium Engineering is presented in **Figure 2**.



North  
Scale: Not to Scale

Site Plan Source: Millennium Engineering, Inc.

Figure 2

## **BASELINE TRAFFIC & SAFETY CHARACTERISTICS**

An overview of baseline roadway conditions, traffic volumes, safety characteristics of area roadways is provided below.

### **Roadways**

#### *Parker Street*

Parker Street is generally an east-west roadway to the east of Graf Road and a north-south roadway to the south of Graf Road classified by the Massachusetts Department of Transportation (MassDOT) as an urban minor arterial roadway under (Town) jurisdiction and provides a connection between Route 1 and High Street to the east and becomes Scotland Road and provides access to Route 95 to the west at Exit 56. Within the study area, Parker Street provides a single travel lane in each direction. The posted (regulatory) speed limit on Parker Street in the study area is 35 mph. Land use along Parker Street in the study area consists of commercial and office space including Berkshire Manufactured Products, N&N Manufacturing and A-W Airflo Industries. The uses at 77 Parker Street include NRC/ENPRO, Publishers Circulation Fulfillment, Inc., and Schulte Grounds Management, Inc.

#### *Graf Road*

Graf Road is classified by the MassDOT as an Urban Collector under the City of Newburyport jurisdiction. Graf Road is a north-south roadway in the project area which connects Parker Street to the south with Low Street to the north. The roadway generally provides one lane of travel in each direction with paved shoulders along both sides for a total pavement width of approximately 40 feet and additional turn lanes are provided at its major intersections. Land use along Graf Road includes a mix of industrial and commercial establishments.

### **Intersections**

#### *Parker Street at Graf Road*

Parker Street meets Graf Road and Mulliken Way to form a signalized, four-legged intersection. The Parker Street northbound and westbound approaches and the Mulliken Way eastbound approaches provide a single shared-use lane. The Graf Road southbound approach provides an exclusive left-turn lane and a shared through/right-turn lane. Land use at the intersection consists of commercial and office space including Berkshire Manufactured Products, N&N Manufacturing and A-W Airflo Industries.

## Baseline Traffic Data

This traffic memorandum includes the following intersections:

- Parker Street at Graf Road/Mulliken Way (Signalized)
- Parker Street at 50/77 Parker Street Driveways (Unsignalized)

Traffic volume data was collected in February 2019 during the weekday morning (7:00 – 9:00 AM), weekday evening (4:00 – 6:00 PM), and Saturday midday (11:00 AM – 1:00 PM) peak periods. Review of MassDOT permanent count station data indicates that February is a below average traffic month (approximately 17 percent below average month conditions). Thus, the traffic counts were adjusted (increased by 17%) to represent average conditions. The resulting Baseline weekday morning and weekday evening peak-hour traffic volumes for the study intersections are depicted in **Figure 3** and **Figure 4**. Turning movement counts and permanent count station data are provided in the **Attachments**.

## Daily Traffic

Daily traffic volumes along Parker Street to the south of Graf Road in February 2019 using an automatic traffic recorder (ATR) device with results summarized in **Table 1**.

**TABLE 1**  
**ROADWAY TRAFFIC-VOLUME SUMMARY – PARKER STREET**

Time Period	Daily Volume (vpd) <sup>1</sup>	Percent Daily Traffic <sup>2</sup>	Peak Hour Volume (vph) <sup>3</sup>	Peak Flow Direction <sup>4</sup>	Peak Hour Directional Volume (vph)
Weekday Morning Peak Hour	9,320	8%	764	51% NB	388
Weekday Evening Peak Hour	9,320	9%	807	54% NB	435
Saturday Midday Peak Hour	5,970	9%	546	57% NB	310

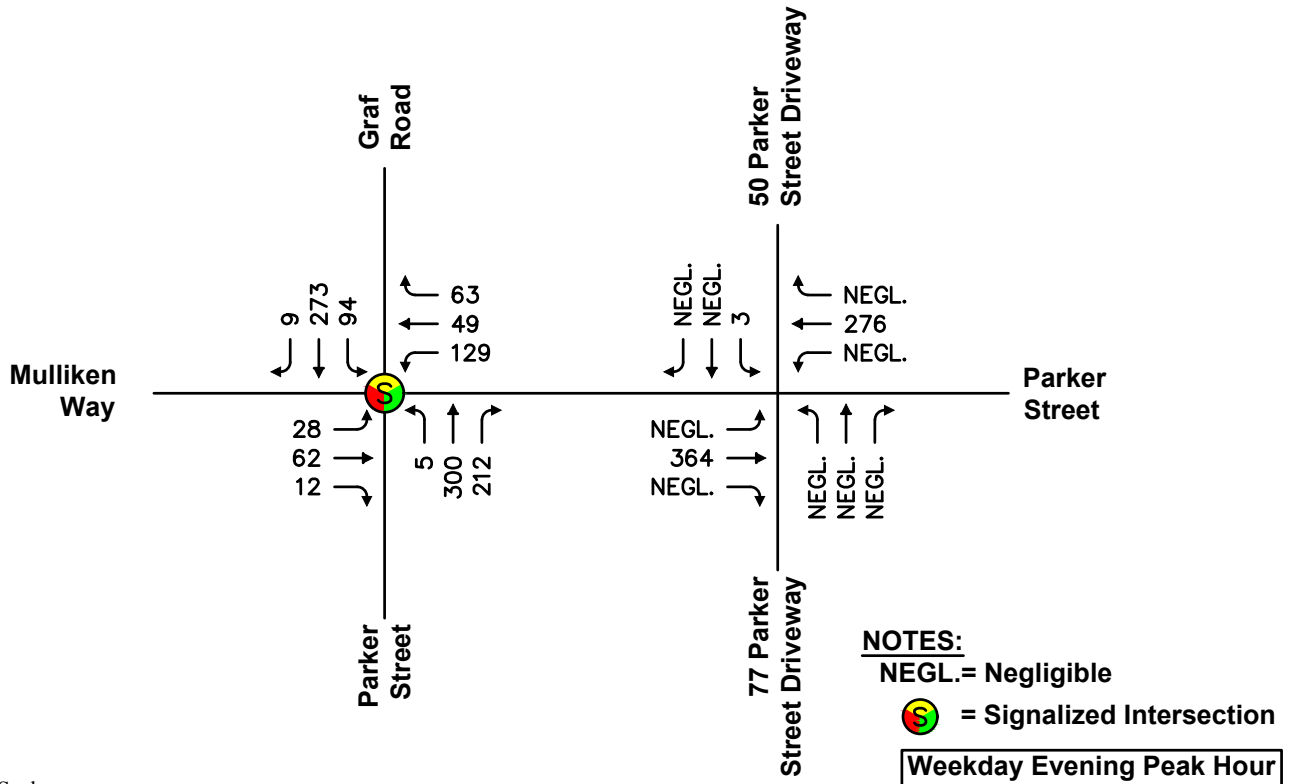
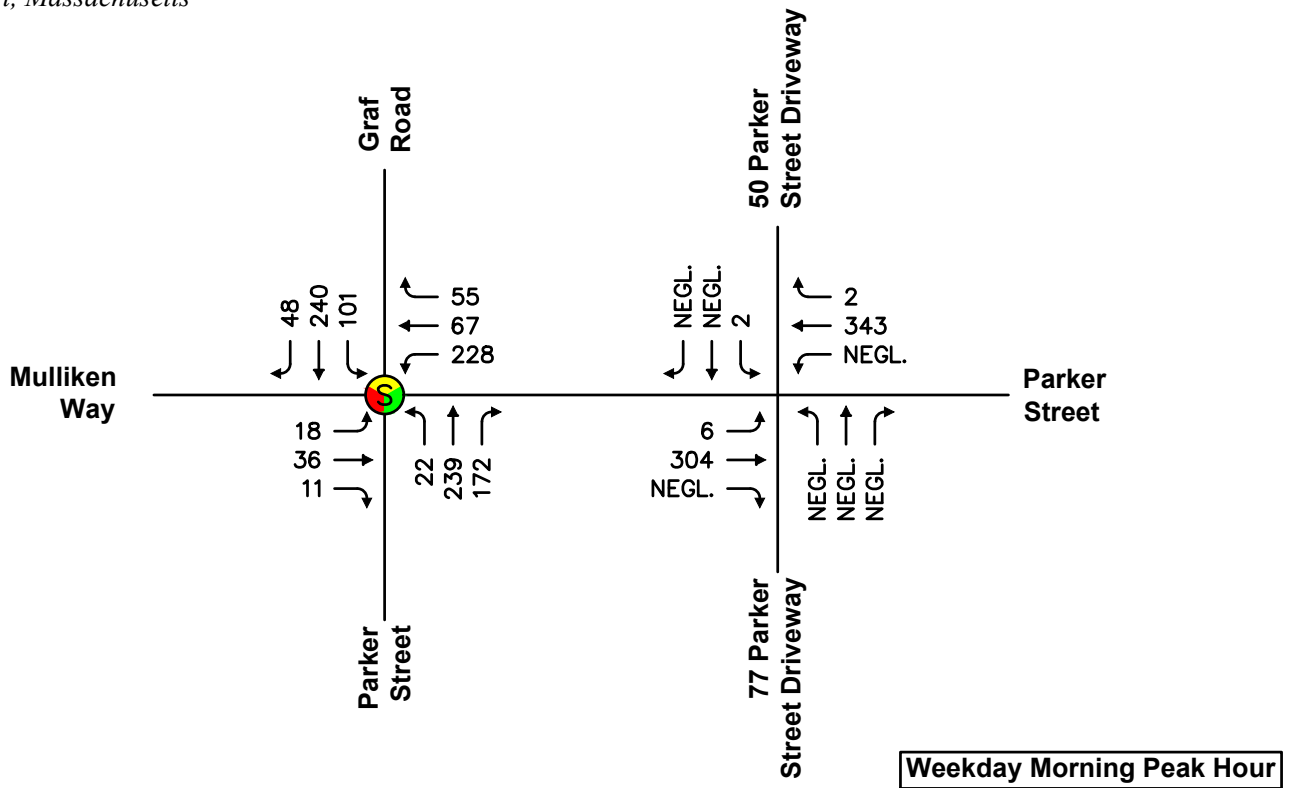
<sup>1</sup>Two-way daily traffic expressed in vehicles per day without seasonal adjustment.

<sup>2</sup>Two-way peak-hour volume expressed in vehicles per hour.

<sup>3</sup>The percent of daily traffic that occurs during the peak hour.

<sup>4</sup>NB = Northbound, SB = Southbound

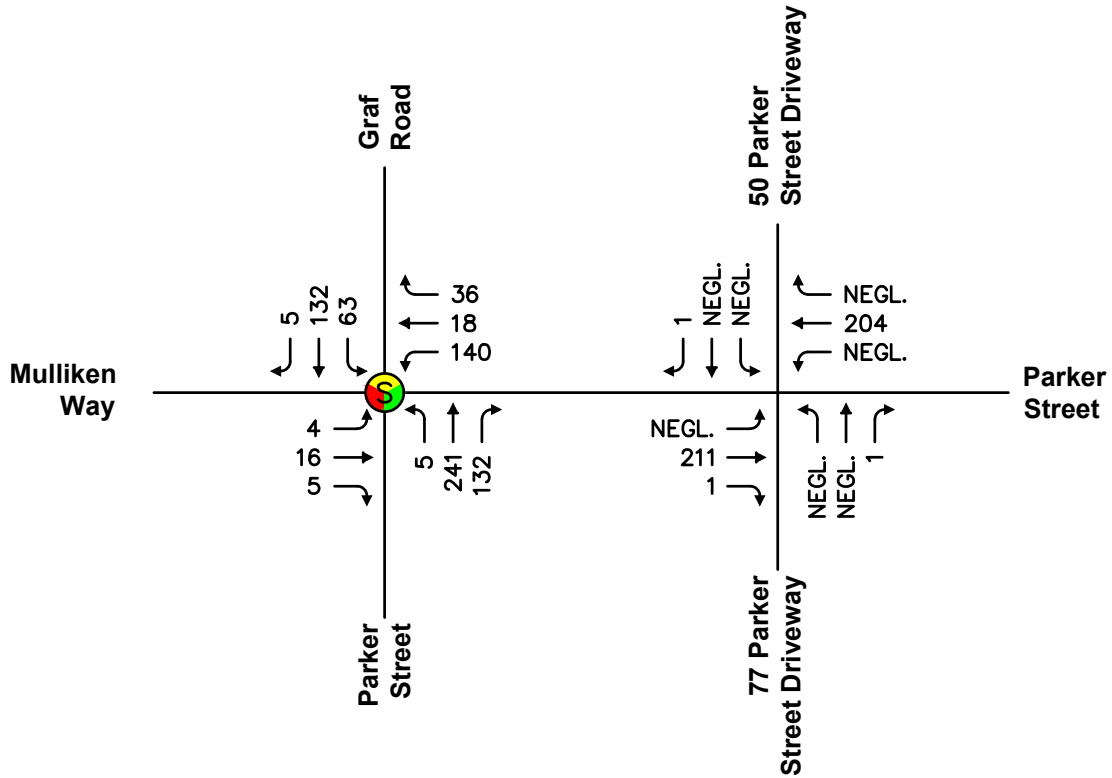
As summarized in **Table 1**, Parker Street to the south of Graf Road and Mulliken Way carries approximately 9,320 vehicles per day (vpd) on weekdays and approximately 5,920 vpd on Saturdays. The Saturday traffic volumes are approximately 35% less than during a weekday. Peak hour traffic flow on Parker Street is approximately 8 to 9 percent of the daily flow with directional flow slightly skewed northbound during the peak traffic hours.



Scale: Not to Scale

Figure 3

2019 Baseline Conditions  
Weekday Peak Hour Volumes



North

Scale: Not to Scale

**NOTES:**

NEGL. = Negligible



= Signalized Intersection

Saturday Midday Peak Hour

Figure 4

**2019 Baseline Conditions  
 Saturday Midday Peak Hour Volumes**



## TRIP GENERATION

The trip generation estimates for the proposed Site are provided for the weekday morning, weekday evening, and Saturday midday periods, which correspond to the critical analysis periods for the proposed uses and the area roadway network. The methodology utilized to estimate the future trip-generation characteristics of the proposed development are summarized below. In accordance with EEA/MassDOT guidelines, the traffic generated by the proposed development was estimated using trip rates published in ITE's *Trip Generation* for the Land Use Codes (LUC's) based on Manufacturing (LUC 140), General Office (LUC 710), and High-Turnover (Sit-Down) Restaurant (LUC 932) uses. Other LUCs for the Brewery component were also examined including Fast Casual Restaurant (LUC 930), Winery (LUC 970), and Drinking Place (LUC 925). However, these LUCs were determined to not be the best fit uses for this project. Projected site trip generation for the proposed development is summarized in **Table 2** for simultaneous use of the on-site facilities under a maximum occupancy condition. Trip generation calculations are provided in the **Attachments**.

**TABLE 2**  
**TRIP-GENERATION SUMMARY – ITE BASIS**

Peak Hour/Direction	Brewery		Farmhouse (Office <sup>3</sup> )	Barn (Function Space <sup>4</sup> )	Total
	Restaurant <sup>1</sup>	Manufacturing <sup>2</sup>			
<i>Weekday Morning Peak Hour:</i>					
Entering	NEGL.	5	6	NEGL.	<b>11</b>
<u>Exiting</u>	<u>NEGL.</u>	<u>2</u>	<u>1</u>	<u>NEGL.</u>	<u><b>3</b></u>
Total	NEGL.	7	7	NEGL.	<b>14</b>
<i>Weekday Evening Peak Hour:</i>					
Entering	42	2	1	24	<b>69</b>
<u>Exiting</u>	<u>32</u>	<u>5</u>	<u>6</u>	<u>18</u>	<u><b>61</b></u>
Total	74	7	7	42	<b>130</b>
<i>Saturday Midday Peak Hour:</i>					
Entering	49	5	2	28	<b>84</b>
<u>Exiting</u>	<u>44</u>	<u>5</u>	<u>1</u>	<u>25</u>	<u><b>75</b></u>
Total	93	10	3	53	<b>159</b>

Source: ITE *Trip Generation*, 10<sup>th</sup> Edition; 2017.

<sup>1</sup>ITE LUC 932 High-Turnover (Sit-Down) Restaurant trip rates applied to 175 Seats (maximum use) and assumed to be closed during the weekday morning peak hour.

<sup>2</sup>ITE LUC 140 Manufacturing trip rates applied to 10,950± gsf

<sup>3</sup>ITE LUC 710 Office rates applied to 6,450± gsf.

<sup>4</sup>ITE LUC 932 High-Turnover (Sit-Down) Restaurant trip rates applied to 100 Seats (maximum use).

Based on industry-standard trip rates, the proposed development is estimated to generate approximately 14 vehicle trips during the weekday morning peak hour (11 entering and 3 exiting), 130 vehicle trips during the weekday evening peak hour (69 entering and 61 exiting), and 159 vehicle trips during the Saturday midday peak hour (84 entering and 75 exiting). Trip generation estimates assume a maximum seating capacity of 275 (175 seats in the restaurant and 100 seats in the function space); actual facility use is likely to fall below these levels.

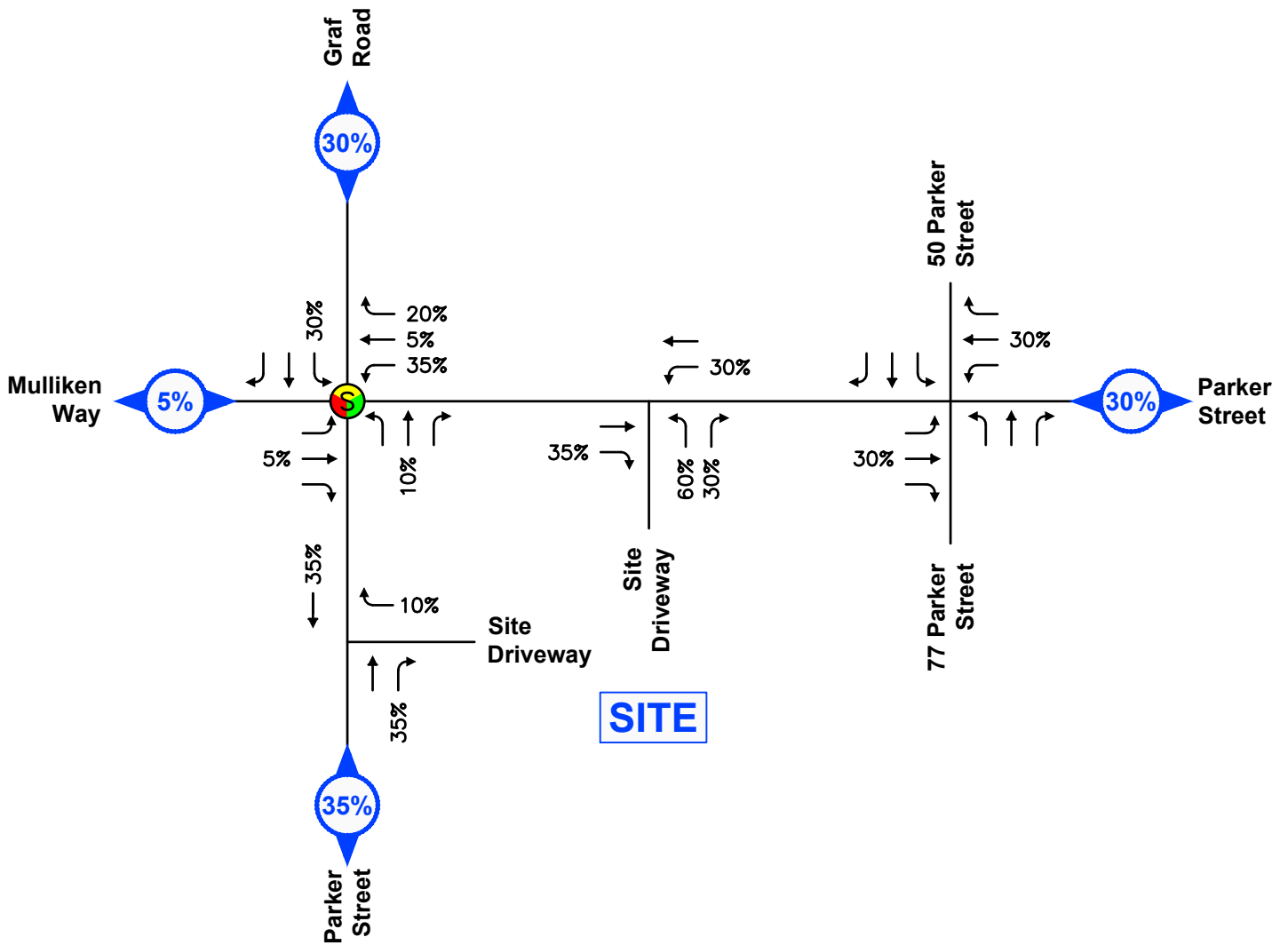
### **Trip Distribution**

The distribution for projected traffic for the proposed development re based existing travel patterns in the area. The resulting trip distribution pattern is presented in **Figure 5**. Trip distribution calculations are provided in the **Attachments**.

Development-related trips for the proposed development are assigned to the roadway network using the ITE trip-generation estimates shown in **Table 2** and the distribution patterns presented in **Figure 5**. Development-related trips at each intersection approach for the weekday morning, weekday evening and Saturday midday peak hours are quantified in **Figure 6** and **Figure 7**.

### **2019 Design Traffic Conditions**

2019 Design Year condition traffic volumes are derived by adding the incremental traffic increases for the development project at the Site to 2019 Baseline conditions. **Figure 8** and **Figure 9** present the 2019 Design Year condition traffic-volume networks for the weekday morning, weekday evening, and Saturday midday peak hours.



North

Scale: Not to Scale

**Figure 5**

**Trip Distribution**

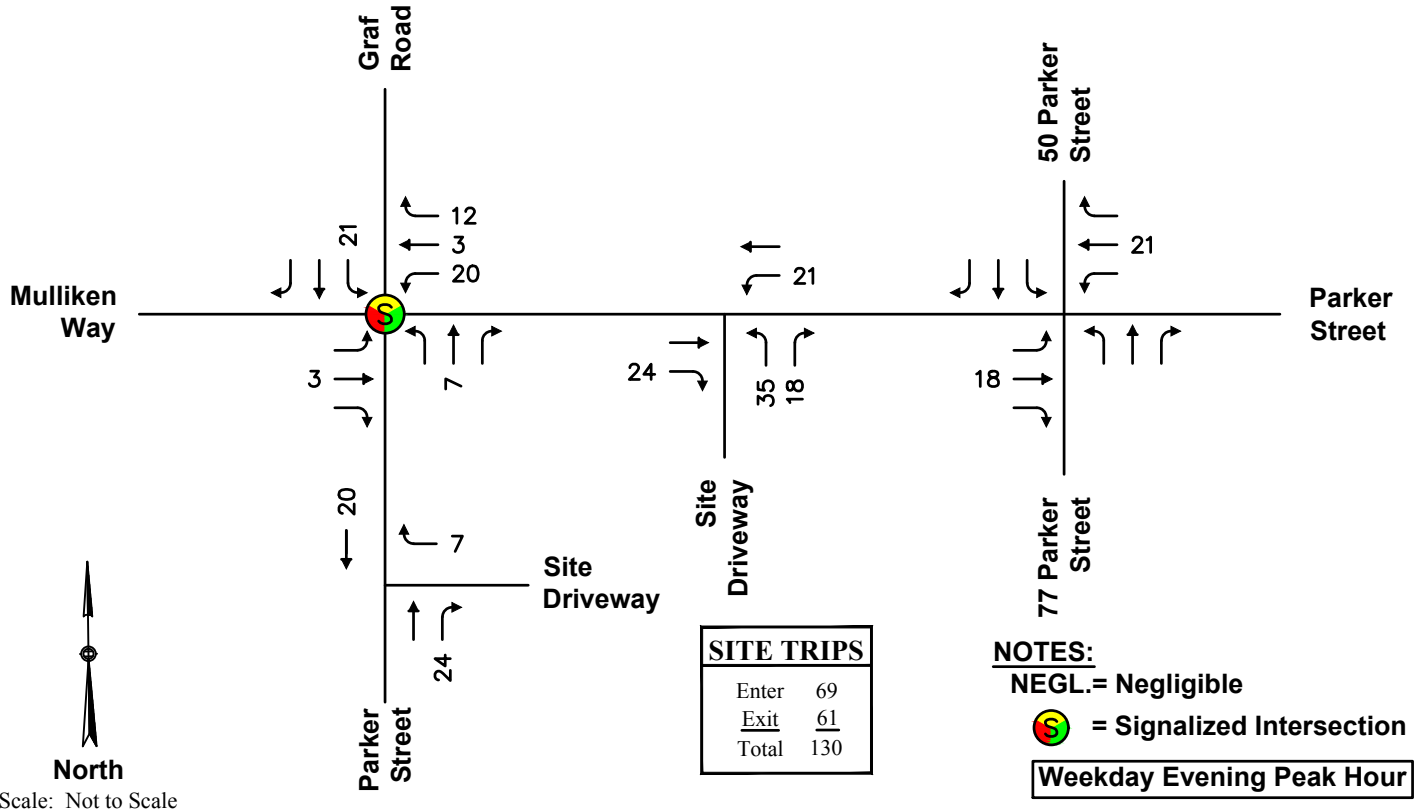
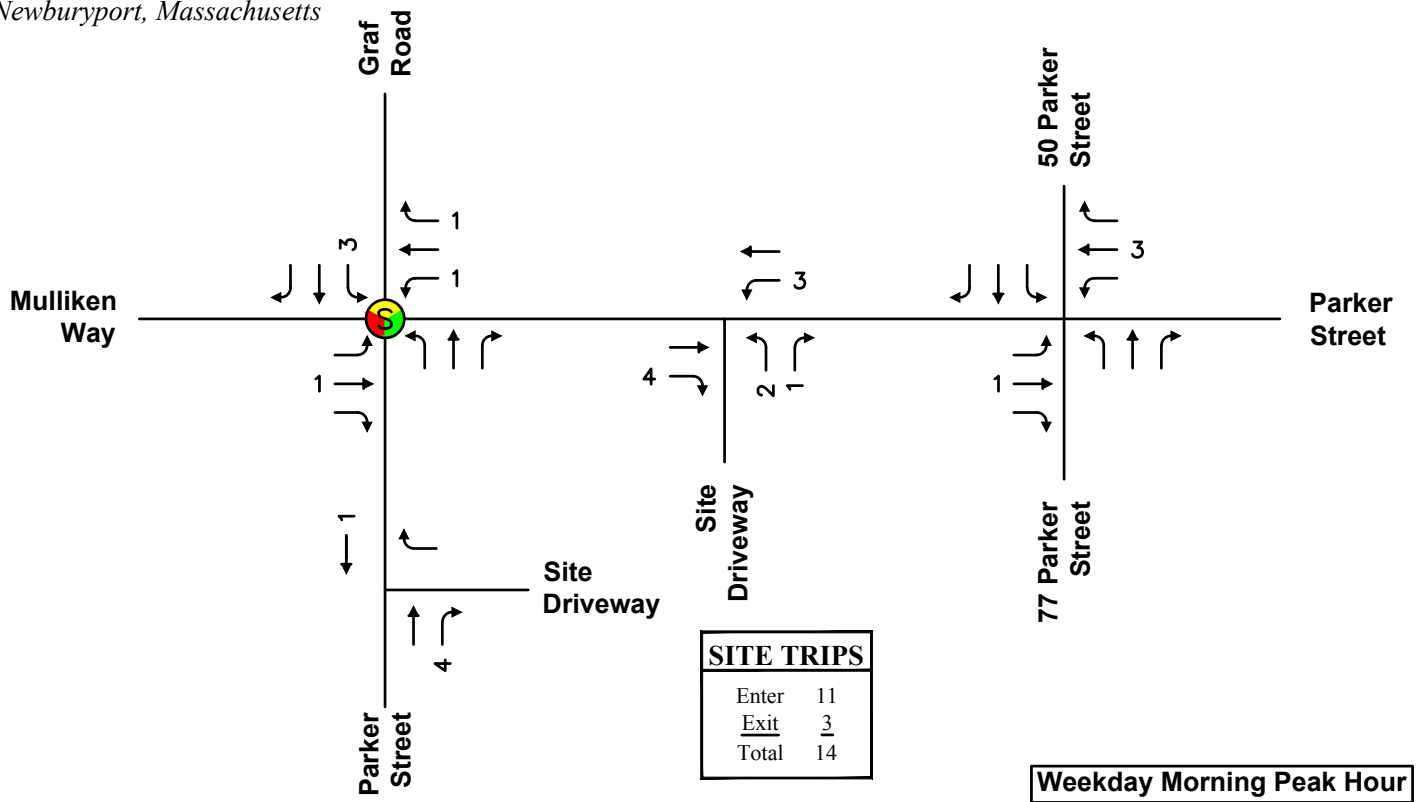
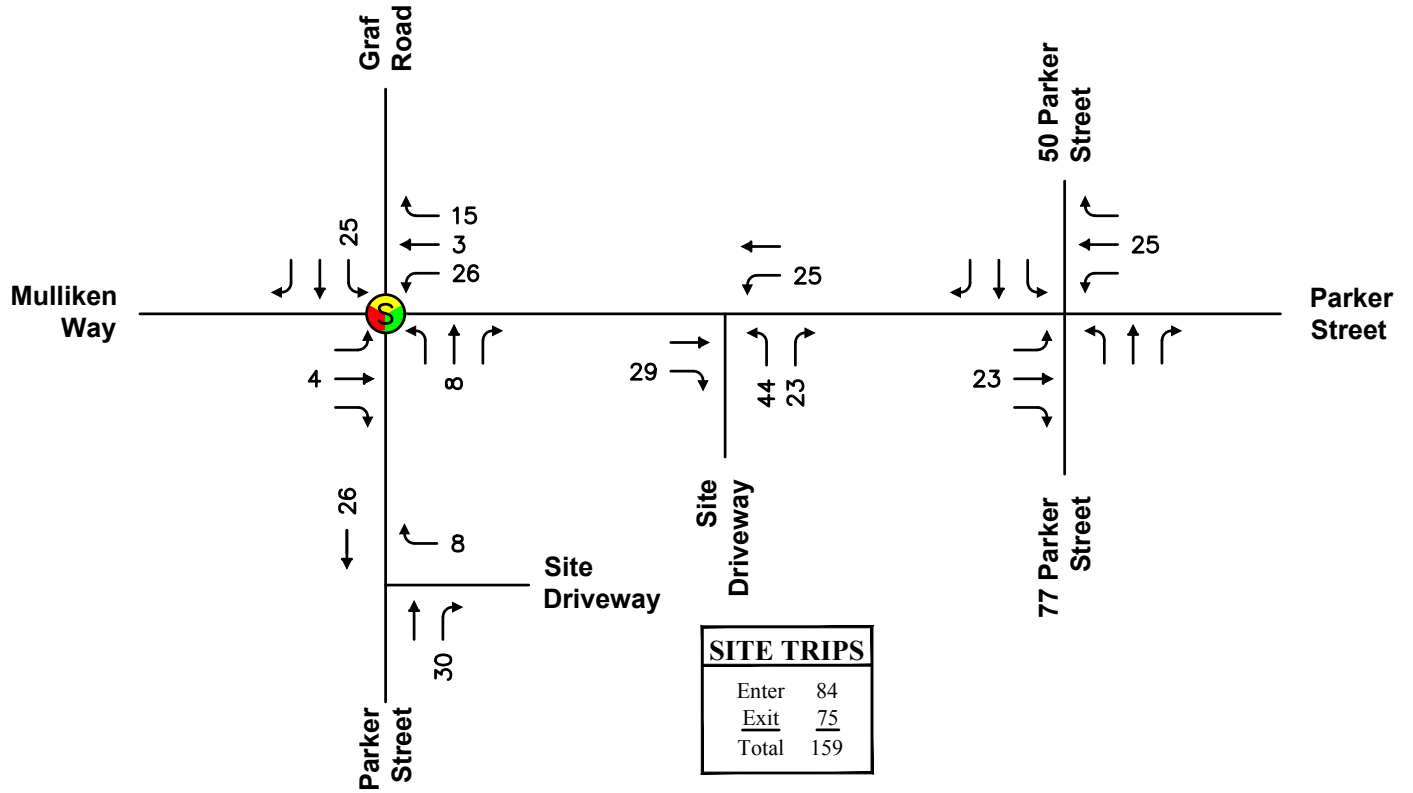


Figure 6

Site Generated Trips  
 Weekday Peak Hour Volumes



North

Scale: Not to Scale

**NOTES:**

NEGL.= Negligible



= Signalized Intersection

Saturday Midday Peak Hour

Figure 7

Site Generated Trips  
 Saturday Midday Peak Hour Volumes

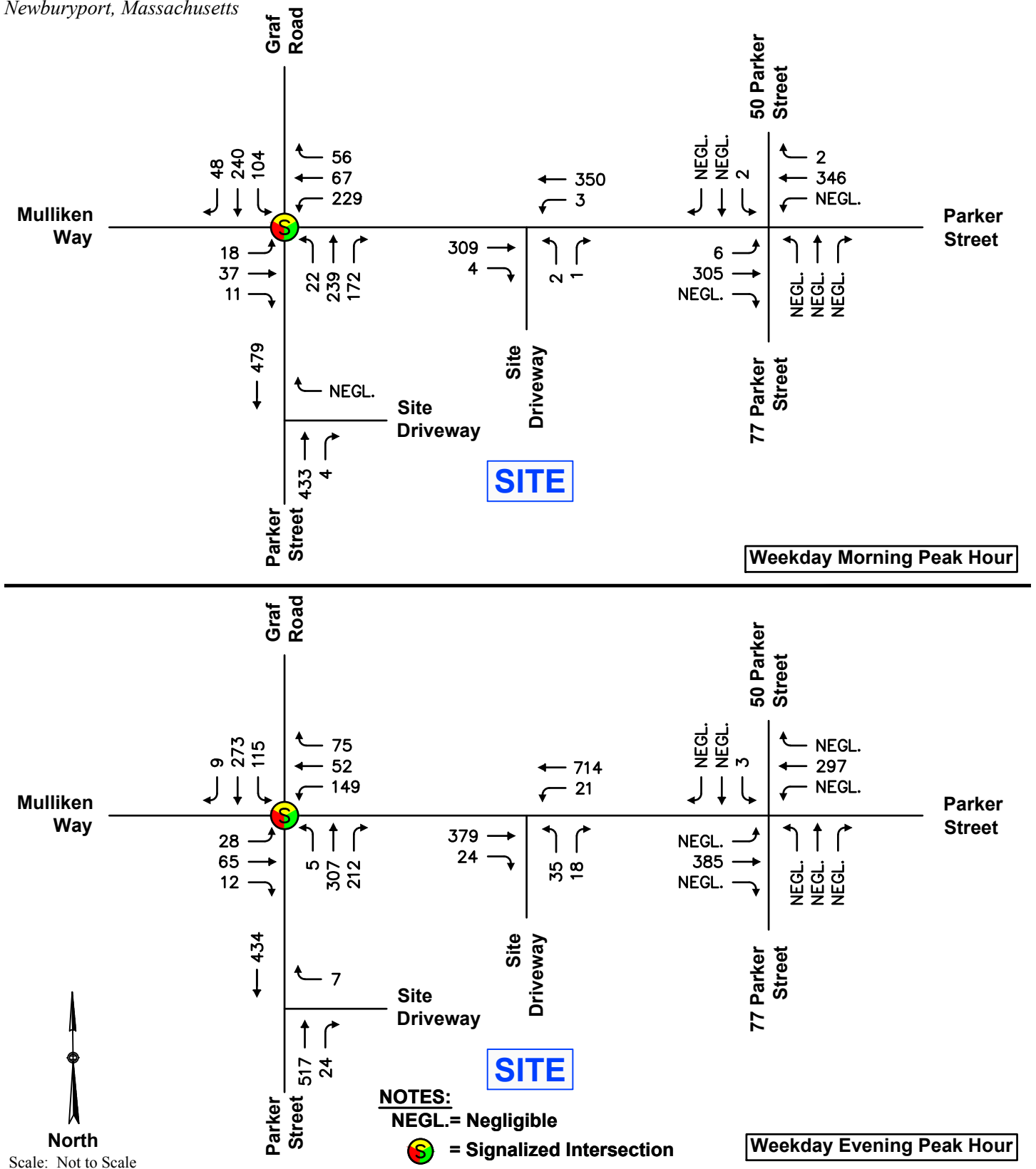
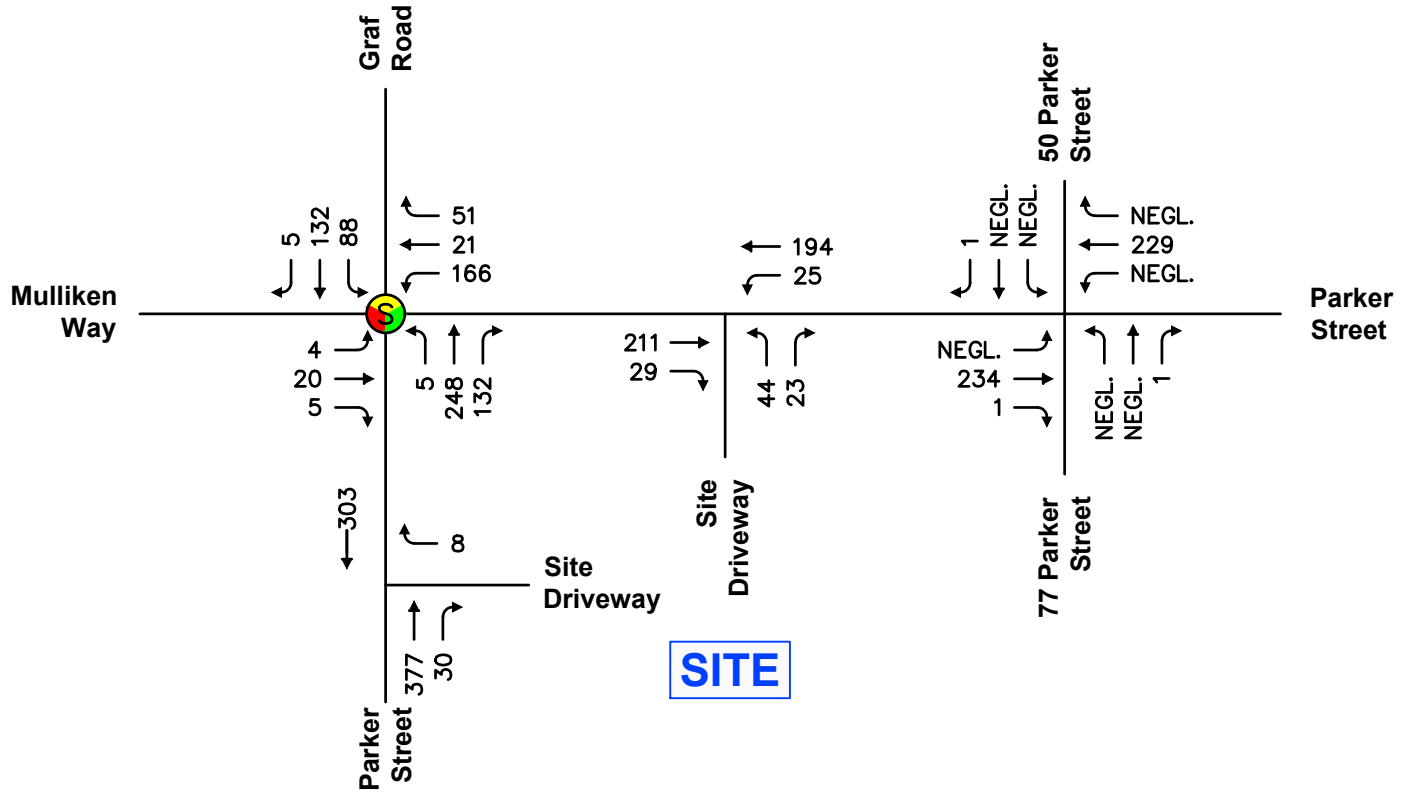


Figure 8



North

Scale: Not to Scale

**NOTES:**

NEGL.= Negligible



= Signalized Intersection

Saturday Midday Peak Hour

Figure 9

**2019 Design Year Conditions  
 Saturday Midday Peak Hour Volumes**

## OPERATIONS ANALYSIS

This section provides an overview of operational analysis methodology, and an assessment of intersection operations under Baseline and projected future No-Build and Build conditions.

### Analysis Methodology

Intersection capacity analyses are presented in this section for the Baseline and Design Year traffic-volume conditions. Capacity analyses, conducted in accordance with EEA/MassDOT guidelines, provide an index of how well the roadway facilities serve the traffic demands placed upon them. The operational results provide the basis for recommended access and roadway improvements in the following section.

Capacity analysis of intersections is developed using the Synchro® computer software, which implements the methods of the 2010 Highway Capacity Manual (HCM). The resulting analysis presents a level-of-service (LOS) designation for individual intersection movements. The LOS is a letter designation that provides a qualitative measure of operating conditions based on several factors including roadway geometry, speeds, ambient traffic volumes, traffic controls, and driver characteristics. Since the LOS of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of LOS, depending on the time of day, day of week, or period of year. A range of six levels of service are defined on the basis of average delay, ranging from LOS A (the least delay) to LOS F (delays greater than 50 seconds for unsignalized movements and delays greater than 80 seconds for signalized movements). The specific control delays and associated LOS designations are presented in the **Attachments**.

### Intersection Capacity Analysis Results

Level-of-Service (LOS) analyses were conducted for the Baseline and Design Year conditions for the study intersections. The results of the intersection capacity are summarized below in **Table 3**, **Table 4** and **Table 5**. Detailed analysis results are presented in the **Attachments**.



**TABLE 3  
INTERSECTION CAPACITY ANALYSIS RESULTS  
WEEKDAY MORNING PEAK HOUR**

Period	Approach	2019 Baseline			Design Year		
		v/c <sup>1</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>	v/c	Delay	LOS
<i>Parker Street at Mulliken Way and Graf Road</i>	Eastbound	0.12	17	B	0.12	17	B
	Westbound	0.76	35	C	0.76	35	C
	Northbound	0.77	28	C	0.77	28	C
	<u>Southbound</u>	<u>0.36</u>	<u>10</u>	<u>B</u>	<u>0.36</u>	<u>10</u>	<u>B</u>
	<b>Overall</b>	<b>0.77</b>	<b>24</b>	<b>C</b>	<b>0.77</b>	<b>24</b>	<b>C</b>
<i>Parker Street at 77 Parker Street &amp; 50 Parker Street</i>	Eastbound	0.01	<5	A	0.01	<5	A
	Westbound	0.00	<5	A	0.00	<5	A
	NB R/L Exit	0.00	<5	A	0.00	<5	A
	SB R/L Exit	0.01	20	C	0.01	20	C
<i>Parker Street at 79 Parker Street (Eastern Site Driveway)</i>	Eastbound	n/a	n/a	n/a	0.00	<5	A
	Westbound	n/a	n/a	n/a	0.00	<5	A
	NB R/L Exit	n/a	n/a	n/a	0.01	13	B
<i>Parker Street at 79 Parker Street (Western Site Driveway)</i>	WB R Exit	n/a	n/a	n/a	0.00	<5	A
	Northbound	n/a	n/a	n/a	0.00	<5	A
	Southbound	n/a	n/a	n/a	0.00	<5	A

<sup>1</sup>Volume-to-capacity ratio

<sup>2</sup>Average control delay per vehicle (in seconds)

<sup>3</sup>Level of service

<sup>4</sup>n/a = not applicable

**TABLE 4  
INTERSECTION CAPACITY ANALYSIS RESULTS  
WEEKDAY EVENING PEAK HOUR**

Period	Approach	2019 Baseline			Design Year		
		v/c <sup>1</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>	v/c	Delay	LOS
<i>Parker Street at Mulliken Way and Graf Road</i>	Eastbound	0.27	23	C	0.27	23	C
	Westbound	0.69	33	C	0.75	37	D
	Northbound	0.81	28	C	0.82	30	C
	<u>Southbound</u>	<u>0.33</u>	<u>9</u>	<u>A</u>	<u>0.34</u>	<u>10</u>	<u>A</u>
	<b>Overall</b>	<b>0.81</b>	<b>23</b>	<b>C</b>	<b>0.82</b>	<b>25</b>	<b>C</b>
<i>Parker Street at 77 Parker Street &amp; 50 Parker Street</i>	Eastbound	0.00	<5	A	0.00	<5	A
	Westbound	0.00	<5	A	0.00	<5	A
	NB R/L Exit	0.00	<5	A	0.00	<5	A
	SB R/L Exit	0.01	18	C	0.02	19	C
<i>Parker Street at 79 Parker Street (Eastern Site Driveway)</i>	Eastbound	n/a	n/a	n/a	0.00	<5	A
	Westbound	n/a	n/a	n/a	0.02	<5	A
	NB R/L Exit	n/a	n/a	n/a	0.12	14	B
<i>Parker Street at 79 Parker Street (Western Site Driveway)</i>	WB R Exit	n/a	n/a	n/a	0.01	12	B
	Northbound	n/a	n/a	n/a	0.00	<5	A
	Southbound	n/a	n/a	n/a	0.00	<5	A

<sup>1</sup>Volume-to-capacity ratio

<sup>2</sup>Average control delay per vehicle (in seconds)

<sup>3</sup>Level of service

<sup>4</sup>n/a = not applicable

**TABLE 5  
INTERSECTION CAPACITY ANALYSIS RESULTS  
SATURDAY MIDDAY PEAK HOUR**

Period	Approach	2019 Baseline			Design Year		
		v/c <sup>1</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>	v/c	Delay	LOS
<i>Parker Street at Mulliken Way and Graf Road</i>	Eastbound	0.06	16	B	0.06	16	B
	Westbound	0.53	23	C	0.62	26	C
	Northbound	0.57	17	B	0.65	22	C
	<u>Southbound</u>	<u>0.15</u>	<u>7</u>	<u>A</u>	<u>0.20</u>	<u>8</u>	<u>A</u>
	<b>Overall</b>	<b>0.57</b>	<b>16</b>	<b>B</b>	<b>0.65</b>	<b>19</b>	<b>B</b>
<i>Parker Street at 77 Parker Street &amp; 50 Parker Street</i>	Eastbound	0.00	<5	A	0.00	<5	A
	Westbound	0.00	<5	A	0.00	<5	A
	NB R/L Exit	0.00	10	A	0.00	10	A
	SB R/L Exit	0.00	9	A	0.00	10	A
<i>Parker Street at 79 Parker Street (Eastern Site Driveway)</i>	Eastbound	n/a	n/a	n/a	0.00	<5	A
	Westbound	n/a	n/a	n/a	0.02	<5	A
	NB R/L Exit	n/a	n/a	n/a	0.11	12	B
<i>Parker Street at 79 Parker Street (Western Site Driveway)</i>	WB R Exit	n/a	n/a	n/a	0.01	11	B
	Northbound	n/a	n/a	n/a	0.00	<5	A
	Southbound	n/a	n/a	n/a	0.00	<5	A

<sup>1</sup>Volume-to-capacity ratio

<sup>2</sup>Average control delay per vehicle (in seconds)

<sup>3</sup>Level of service

<sup>4</sup>n/a = not applicable

As summarized in **Table 3**, **Table 4** and **Table 5**:

- *Parker Street at Graf Road/Mulliken Way*: Under Design year conditions, the signalized intersection of Parker Street at Graf Road/Mulliken Way will continue to operate below capacity at an overall level of service LOS C or better during the peak hours with no material increases in delay.
- *Parker Street at 50/77 Parker Street Driveways*: The unsignalized 50/77 Parker Street driveway approaches to Parker Street will continue operate well below capacity at LOS C or better during the peak hours. .
- *Parker Street at Proposed 79 Parker Street Driveways*: The unsignalized 79 Parker Street driveway approaches to Parker Street will operate below capacity at LOS B or better operations during the peak hours.

In summary, under Design Year conditions, the site driveway intersections with Parker Street and the nearby signalized intersection will continue to operate under capacity during the peak hours with no material change in delay. The incremental traffic increases at the study intersections due to the proposed development do not result in any significant change in overall intersection operations at the study intersections compared to Baseline conditions.

### **Intersection Queue Results**

Vehicle queue results are presented for the signalized study intersection of Parker Street at Graf Road. These vehicle queues are compared to available storage lengths, which are defined as lengths of exclusive turn lanes or the distance to the nearest major intersection for through lanes. Vehicle queue results from the capacity analysis are summarized in **Table 6** for the signalized study intersection. Detailed worksheets of the queuing analysis are provided in the **Attachments**.

**TABLE 6  
VEHICLE QUEUE ANALYSIS SUMMARY  
PARKER STREET AT MULLIKEN WAY AND GRAF ROAD**

Approach	Available Queue Storage Length (feet)	Baseline		Design Year	
		Average Queue Length <sup>1</sup>	Maximum Queue Length <sup>1</sup>	Average Queue Length <sup>1</sup>	Maximum Queue Length <sup>1</sup>
<i>Weekday Morning Peak Hour</i>					
Eastbound L/T/R	>1000	<25	53	<25	53
Westbound L/T/R	>1000	137	352	138	356
Northbound L/T/R	>1000	168	281	168	282
Southbound L	150±	<25	45	<25	46
Southbound T/R	>1000	69	113	69	113
<i>Weekday Evening Peak Hour</i>					
Eastbound L/T/R	>1000	42	83	46	86
Westbound L/T/R	>1000	113	192	145	248
Northbound L/T/R	>1000	224	362	261	381
Southbound L	150±	<25	43	30	51
Southbound T/R	>1000	70	118	82	118
<i>Saturday Midday Peak Hour</i>					
Eastbound L/T/R	>1000	<25	<25	<25	27
Westbound L/T/R	>1000	51	135	68	172
Northbound L/T/R	>1000	94	215	105	236
Southbound L	150±	<25	29	<25	41
Southbound T/R	>1000	<25	53	<25	57

<sup>1</sup>Average and 95<sup>th</sup> percentile queue lengths are reported in feet per lane.

As presented in **Table 6**, average and 95<sup>th</sup> percentile vehicle queues at the signalized study intersections are generally contained within available storage areas during the peak hours. Incremental impacts due to the proposed project are minor, generally representing an increase of one to two additional vehicle queue length for impacted movements and in many cases no increase at all. The western 79 Parker Street driveway will be restricted to right-in/right out movements and the eastern 79 Parker Street driveway will not be blocked under average conditions.

## CONCLUSIONS

In summary, based on industry-standard trip rates, the proposed development with simultaneous use of the on-site facilities is estimated to generate approximately 14 vehicle trips during the weekday morning peak hour (11 entering and 3 exiting), 130 vehicle trips during the weekday evening peak hour (69 entering and 61 exiting), and 159 vehicle trips during the Saturday midday peak hour (84 entering and 75 exiting). Trip generation estimates assume a maximum seating capacity of 275 (175 seats in the restaurant and 100 seats in the function space); actual facility use is likely to fall below these levels. Traffic increases for the proposed project likely represent a modest change in area roadway volumes along Parker Street and Graf Street. Furthermore, MDM notes that the Brewery use is expected to generate trips outside the core hours of the Industrial area with the majority of its trips occurring on evenings and weekend periods. The capacity analysis indicates that the incremental traffic increases at the study intersections due to the proposed development do not result in any significant change in overall intersection operations at the study intersections compared to Baseline conditions.

MDM recommends the following access/egress elements to enhance safety and capacity:

- *Signage and Markings.* A STOP sign (R1-1) and STOP line pavement markings are recommended on the site driveway approaches to Parker Street. The sign and pavement markings shall be compliant with the Manual on Uniform Traffic Control Devices (MUTCD).
- *Driveway Restriction.* The western driveway will be restricted to right-in/right-out movements; therefore, turn restriction signs should be installed in accordance with MUTCD criteria. Specifically, “No Left Turn” signs (R3-2) should be installed on the driveway approach to Parker Street and on the Parker Street approach to the site driveway from the north. To further enhance the restriction a right turn only pavement marking should be installed on the site driveway approach to Parker Street.
- *Sight Line Maintenance.* The sight lines should be maintained at the site driveway approaches to Parker Street. Any new plantings (shrubs, bushes) or physical landscape features to be located within the project driveway sight lines should also be maintained at a height of 2 feet or less above the adjacent roadway grade to ensure unobstructed lines of sight.