Appendix B
Transportation

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Memorandum

To: New York City Department of City Planning

Cc: Steven Lewent – Graf & Lewent Architects
John Lyons – The Parking Spot
Nancy Doon – VHB

From: Amir Rizavi and Marty Taub

Date: April 21, 2016

Project: 102-05 Ditmars Blvd. Garage
No.: 29229.00

Re: Travel Demand Assumptions Memorandum

This memorandum summarizes the travel demand assumptions for a proposed parking garage that would serve long-term air travelers from LaGuardia Airport (LGA) in Queens. The proposed parking garage would be located at 102-05 Ditmars Avenue, just south of the Grand Central Parkway. The analysis presented in this memorandum determined that the volume of vehicle trips generated by the proposed parking garage (approximately 100 to 125 vehicle trips per hour during weekday peak hours) would exceed CEQR Level 1 screening thresholds cited in the *2014 City Environmental Quality Review (CEQR) Technical Manual* for vehicular traffic. A Level 2 (trip assignment) screening was then prepared and used to identify traffic study locations. The proposed parking garage is not expected to generate any significant level of transit or pedestrian trips, which would be below their respective CEQR Level 1 screening thresholds; no further transit or pedestrian analyses would be needed.

ANALYTICAL FRAMEWORK

The Parking Spot (the developer) proposes to develop a public parking garage adjacent to the LaGuardia Marriott Hotel at 102-05 Ditmars Boulevard in East Elmhurst, Queens. The proposed garage would include a total of approximately 2,200 parking spaces; approximately 400 spaces would be accessory to the hotel replacing existing spaces that would be temporarily lost during construction and about 1,800 would be public spaces to be used by air travelers from LGA. A 600 square feet (sf) retail space would also be developed.

CEQR TRANSPORTATION ANALYSIS SCREENING

According to *2014 CEQR Technical Manual* procedures for transportation analysis, a two-tiered screening process is to be undertaken to determine whether a quantified analysis is necessary. The first step, the Level 1 (Trip Generation) screening, determines whether the volume of peak hour person and vehicle trips generated by the proposed project would remain below the minimum thresholds for further study.

These thresholds are:

- 50 peak hour vehicle trip ends;
- 200 peak hour subway/rail or bus transit riders; and
- 200 peak hour pedestrian trips.

If project-generated trips would exceed any of these thresholds, a Level 2 (Trip Assignment) screening assessment is usually performed. Under this assessment, project-generated trips that exceed Level 1 thresholds are assigned to and from the site through their respective modal networks (streets, bus and subway lines, sidewalks, etc.) based on expected origin-destination patterns and travel routes.

Level 1 Screening Assessment (Trip Generation)

Public Parking Garage

Trip generation projections for the proposed parking garage have been determined based on existing volume data ("ins" and "outs") provided by The Parking Spot for a similar 701-space parking lot which is located at 90-01 23rd Avenue, East Elmhurst, NY 11369, less than one-half mile away from the proposed project site, which also serves LGA travelers. Volume data ("ins" and "outs") were also provided for parking garages near Newark Liberty International Airport (EWR) in Newark, NJ, and John F. Kennedy International Airport (JFK) in Queens. The volumes for the lot located near LGA were higher than the volumes at the lots/garages near EWR and JFK because the duration of parking stays at LGA are lower and, so, parking turnover is higher. Therefore, utilizing the volumes from the 701-space parking lot near the project site is appropriate. Also, the developer operates airport parking garages all around the country (33 locations) and the provided information demonstrates their first-hand knowledge of this airport/long-term travel market.

The volume information for the existing 701-space parking lot includes data for typical weeks in May and October 2013. The volumes consist of a 24-hour count of entering vehicles ("ins") and exiting vehicles ("outs") for all seven days of both weeks. This information is provided in Table A-1 at the end of this technical memorandum. The AM, midday and PM peak periods for background commuting traffic have been highlighted in the table.

The proposed parking garage is expected to have approximately 1,800 public spaces so "in" and "out" volumes for the proposed parking garage were developed by pro-rating the existing volumes for the 701-space lot to reflect 1,800 spaces (multiplying the volumes for the 701-space lot by 2.57). In addition, in order to ensure a conservative analysis as per Department of City Planning protocols, the projected trips were grown by 16 percent to analyze the parking facility operating at 100 percent capacity since the average occupancy during the weekday peak parking hour was 84 percent. Table A-2 provides the results for the 7-10 AM, 11 AM to 2 PM midday, and 3-7 PM peak periods (highlighted).

Table A-2 again shows that the total volumes ("ins" plus "outs") during the three weekday peak periods are higher in October than in May. Table A-2 also shows that the highest volumes do not necessarily occur on a Tuesday, Wednesday or Thursday which are the typical peak commuting days for background traffic. In fact, the highest volumes during the month of October occur on either a Monday or a Friday depending on the peak period. It can also be seen that weekend peak hour volumes are generally lower than weekday peak hour volumes for the month of October.

Retail

The travel demand factors used to calculate the projected number of trips expected to be generated for the retail component were obtained from the *2014 CEQR Technical Manual* and the *Willets Point Development Final Supplemental Environmental Impact Statement (FSEIS) (2013)*. A trip generation rate of 205 daily weekday person trips per 1,000 sf and temporal distributions of 3 percent in the weekday AM peak hour, 19 percent in the weekday midday peak hour, and 10 percent in the weekday PM peak

hour were assumed and obtained from the *2014 CEQR Technical Manual*. Directional distributions of 50 percent "in" for the weekday peak hours and vehicle occupancies of 2 person per auto or taxi were obtained from the *Willets Point Development FSEIS*. The modal splits of 20 percent by auto, 10 percent by bus, and 70 percent by walk or bike were also obtained from the *Willets Point Development FSEIS* and were modified to reflect local travel characteristics.

For retail delivery trips, a trip generation rate of 0.35 daily weekday trucks per 1,000 sf and temporal distributions of 8 percent in the weekday AM peak hour, 11 percent in the weekday midday peak hour, and 2 percent in the weekday PM peak hour were assumed and were obtained from the *2014 CEQR Technical Manual*. Travel demand assumptions used for the retail space is detailed in Table 1.

Table 1: Retail Use Travel Demand Characteristics

Rates	Retail
Weekday Person Trip Gen Rate	205 [1]
	per 1,000 SF
Temporal Distribution	
Weekday AM/Midday/PM Peak	3% / 19% / 10% [1]
Modal Split	
Auto	20% [2, 3]
Bus	10% [2, 3]
Walk/Bike	70% [2, 3]
Vehicle Occupancy	
Auto/Taxi	2.00 [2]
Directional Split (In/Out)	
Weekday AM/Midday/PM Peak	(50% / 50%) / (50% / 50%) /(50% / 50%) [2]
Weekday Truck Trip Gen	0.35 [1]
	per 1,000 SF
Weekday AM/Midday/PM Peak	8% / 11% / 2% [1]
Truck Trip Directional Split (In/Out) – 50% / 50%	

Source:
1) *2014 CEQR Technical Manual*
2) *Willets Point Development FSEIS* (2013)
3) Modal split modified to reflect local travel characteristics

Level 1 Screening Results

Traffic and Parking

Table 2 below summarizes total peak hour volumes ("ins" plus "outs") for the highest individual weekday during typical weeks in May and October.

Table 2 - Highest Individual Weekday Peak Hour Volumes (vph)*

	May			October		
	Ins	Outs	Total	Ins	Outs	Total
AM Peak	90	15	105	107	15	122
Midday Peak	64	34	98	28	75	103
PM Peak	55	45	100	34	87	121

**Includes a net increase of 6 shuttle buses per hour during each peak period, and two retail auto trips per hour during the weekday midday and PM periods.*

As shown in Table 2, the net increase in vehicle trips ("ins" plus "outs") would exceed the 50 peak hour trip threshold during the weekday peak hours. The volume of hourly vehicle trips generated by the proposed project would be 122 vehicles per hour (vph) during the weekday AM peak hour, 103 vph in the weekday midday peak hour and 121 vph in weekday PM peak hour (as described previously, volumes from October are being used since they are higher). Since the volume of vehicle trips that would be generated by the proposed project would exceed the 50 vehicle trip threshold during at least one weekday peak hour, additional analysis is warranted.

Transit and Pedestrians

It is assumed that the vast majority of those using the proposed parking garage will be flying out of LaGuardia Airport and will be shuttled back and forth to the airport. Project-generated transit and pedestrian trips would thus be expected to be well below their respective CEQR Level 1 screening thresholds; accordingly, no further transit or pedestrian analyses are needed.

TRIP ASSIGNMENTS AND ANALYSIS LOCATIONS

Vehicle trip increments shown in Table 1 for October were assigned through the surrounding street network based on expected routes to and from the project site. Trip assignment maps are located at the end of this technical memorandum (see Figures A-1, A-2 and A-3). Based on these traffic assignments, traffic analysis study locations were identified along routes approaching the project site and through which most project-generated traffic would pass, plus the proposed project site driveways. The study intersections are as follows:

- Ditmars Boulevard and 94th Street
- Ditmars Boulevard and 97th Street/Ramp to Eastbound Grand Central Parkway
- Ditmars Boulevard and 23rd Road/Marriott Entrance/Exit
- Ditmars Boulevard and 27th Avenue
- Ditmars Boulevard and Astoria Boulevard/111th Street
- Northern Boulevard and 114th Street
- 94th Street and GCP Westbound Exit Ramp

Traffic counts and level of service impact analyses were performed at these locations for weekday AM, midday, and PM peak hours. A parking accumulation was also performed to provide the hour-by-hour parking occupancies for the proposed garge. This information will also be based on the existing parking occupancies at the nearby 701-space parking lot.

Table A-1 - Existing Volumes (2013)
New York LaGuardia - 90-01, 23rd Avenue, East Elmhurst, NY 11369

Number of spaces = 701

Entries
5/12/2013 through 5/18/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	0	1	0	0	0	0	0
1 - 2 am	0	0	0	0	0	0	0
2 - 3 am	0	0	1	0	1	0	0
3 - 4 am	0	1	0	4	2	0	0
4 - 5 am	2	20	10	8	16	19	7
5 - 6 am	6	15	11	13	24	22	26
6 - 7 am	5	21	14	20	23	35	14
7 - 8 am	10	28	12	14	10	21	32
8 - 9 am	5	13	8	17	19	23	14
9 - 10 am	9	10	9	19	23	28	13
10 - 11 am	0	11	8	11	8	21	14
11 am - 12 pm	1	11	9	16	12	8	5
12 - 1 pm	3	8	4	9	13	19	6
1 - 2 pm	7	9	7	10	13	12	4
2 - 3 pm	2	6	5	10	15	17	0
3 - 4 pm	2	6	9	16	14	10	1
4 - 5 pm	8	5	9	12	12	13	1
5 - 6 pm	2	4	4	11	12	13	2
6 - 7 pm	1	2	4	5	5	9	0
7 - 8 pm	2	1	1	2	4	5	0
8 - 9 pm	0	0	0	0	1	1	0
9 - 10 pm	1	0	0	0	1	0	0
10 - 11 pm	1	0	0	1	0	0	0
11 pm - 12 am	0	0	1	0	0	0	0

Exits
5/12/2013 through 5/18/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	3	4	1	3	7	7	3
1 - 2 am	1	0	1	0	0	0	1
2 - 3 am	0	0	0	0	0	0	1
3 - 4 am	0	0	0	0	0	0	0
4 - 5 am	0	0	0	0	0	0	0
5 - 6 am	0	0	0	0	0	0	0
6 - 7 am	0	0	0	0	0	0	1
7 - 8 am	0	3	0	0	1	5	0
8 - 9 am	1	6	1	4	1	0	0
9 - 10 am	2	9	2	1	1	3	0
10 - 11 am	5	9	3	3	0	5	2
11 am - 12 pm	12	8	5	3	6	10	6
12 - 1 pm	20	9	3	4	4	9	7
1 - 2 pm	9	10	9	3	3	8	5
2 - 3 pm	31	14	7	4	4	8	5
3 - 4 pm	19	15	14	13	9	4	11
4 - 5 pm	19	15	9	3	7	5	4
5 - 6 pm	25	20	7	8	14	8	15
6 - 7 pm	18	12	5	13	8	8	4
7 - 8 pm	16	17	11	12	12	13	14
8 - 9 pm	17	10	10	16	13	7	7
9 - 10 pm	15	20	8	14	11	12	9
10 - 11 pm	21	16	9	7	16	14	14
11 pm - 12 am	19	13	4	15	12	13	13

Totals (Entries + Exits)
5/12/2013 through 5/18/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	3	5	1	3	7	7	3
1 - 2 am	1	0	1	0	0	0	1
2 - 3 am	0	0	1	0	1	0	1
3 - 4 am	0	1	0	4	2	0	0
4 - 5 am	2	20	10	8	16	19	7
5 - 6 am	6	15	11	13	24	22	26
6 - 7 am	5	21	14	20	23	35	15
7 - 8 am	10	31	12	14	11	26	32
8 - 9 am	6	19	9	21	20	23	14
9 - 10 am	11	19	11	20	24	31	13
10 - 11 am	5	20	11	14	8	26	16
11 am - 12 pm	13	19	14	19	18	18	11
12 - 1 pm	23	17	7	13	17	28	13
1 - 2 pm	16	19	16	13	16	20	9
2 - 3 pm	33	20	12	14	19	25	5
3 - 4 pm	21	21	23	29	23	14	12
4 - 5 pm	27	20	18	15	19	18	5
5 - 6 pm	27	24	11	19	26	21	17
6 - 7 pm	19	14	9	18	13	17	4
7 - 8 pm	18	18	12	14	16	18	14
8 - 9 pm	17	10	10	16	14	8	7
9 - 10 pm	16	20	8	14	12	12	9
10 - 11 pm	22	16	9	8	16	14	14
11 pm - 12 am	19	13	5	15	12	13	13

Entries
10/13/2013 through 10/19/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	1	0	0	0	0	1	0
1 - 2 am	0	0	0	0	0	0	0
2 - 3 am	0	0	0	0	0	0	0
3 - 4 am	0	2	1	0	1	2	6
4 - 5 am	4	12	4	8	7	17	15
5 - 6 am	7	14	14	18	18	27	11
6 - 7 am	4	31	16	19	33	26	24
7 - 8 am	7	18	12	13	23	34	28
8 - 9 am	4	5	17	16	22	25	14
9 - 10 am	9	9	12	14	22	25	9
10 - 11 am	5	12	7	12	22	15	9
11 am - 12 pm	4	12	14	9	21	21	3
12 - 1 pm	2	8	5	8	25	10	6
1 - 2 pm	7	7	12	11	12	12	3
2 - 3 pm	4	4	1	8	8	6	5
3 - 4 pm	11	9	6	12	14	23	6
4 - 5 pm	3	2	2	11	17	21	1
5 - 6 pm	2	2	3	9	9	14	2
6 - 7 pm	3	2	1	5	5	4	0
7 - 8 pm	2	0	0	1	2	5	0
8 - 9 pm	0	0	0	0	0	0	0
9 - 10 pm	0	0	0	0	0	0	0
10 - 11 pm	1	0	0	0	2	0	0
11 pm - 12 am	3	1	2	2	1	2	1

Exits
10/13/2013 through 10/19/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	4	8	4	8	3	5	0
1 - 2 am	0	0	0	0	0	0	0
2 - 3 am	0	4	0	0	1	0	0
3 - 4 am	0	0	0	0	0	1	0
4 - 5 am	0	0	0	1	0	0	1
5 - 6 am	0	1	0	2	1	0	0
6 - 7 am	0	0	0	0	0	0	0
7 - 8 am	1	2	3	0	2	3	0
8 - 9 am	2	6	3	0	3	1	1
9 - 10 am	8	13	7	3	2	2	1
10 - 11 am	4	9	5	3	3	4	1
11 am - 12 pm	10	17	11	2	3	4	6
12 - 1 pm	13	15	8	6	4	11	5
1 - 2 pm	21	23	11	9	5	5	10
2 - 3 pm	16	30	5	9	4	5	2
3 - 4 pm	10	27	11	4	5	5	7
4 - 5 pm	20	26	12	13	7	5	10
5 - 6 pm	19	25	13	6	14	10	9
6 - 7 pm	20	20	18	10	15	8	9
7 - 8 pm	22	26	7	11	13	11	6
8 - 9 pm	15	24	24	7	12	20	12
9 - 10 pm	34	31	16	12	19	10	7
10 - 11 pm	15	26	15	12	17	12	9
11 pm - 12 am	17	14	5	8	12	4	9

Totals (Entries + Exits)
10/13/2013 through 10/19/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	5	8	4	8	3	6	0
1 - 2 am	0	0	0	0	0	0	0
2 - 3 am	0	4	0	0	1	0	0
3 - 4 am	0	2	1	0	1	3	6
4 - 5 am	4	12	4	9	7	17	16
5 - 6 am	7	15	14	20	19	27	11
6 - 7 am	4	31	16	19	33	26	24
7 - 8 am	8	20	15	13	25	37	28
8 - 9 am	6	11	20	16	25	26	15
9 - 10 am	17	22	19	17	24	27	10
10 - 11 am	9	21	12	15	25	19	10
11 am - 12 pm	14	29	25	11	24	25	9
12 - 1 pm	15	23	13	14	29	21	11
1 - 2 pm	28	30	23	20	17	17	13
2 - 3 pm	20	34	6	17	12	11	7
3 - 4 pm	21	36	17	16	19	28	13
4 - 5 pm	23	28	14	24	24	26	11
5 - 6 pm	21	27	16	15	23	24	11
6 - 7 pm	23	22	19	15	20	12	9
7 - 8 pm	24	26	7	12	15	16	6
8 - 9 pm	15	24	24	7	12	20	12
9 - 10 pm	34	31	16	12	19	10	7
10 - 11 pm	16	26	15	12	19	12	9
11 pm - 12 am	20	15	7	10	13	6	10

Note: Volumes have been provided by The Parking Spot based on the data collected for this facility.

Table A-2 - Projected Volumes
New York LaGuardia - 102-05 Ditmars Boulevard, East Elmhurst, NY 11370

Number of Spaces = 1800

Entries
5/12/2013 through 5/18/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	0	3	0	0	0	0	0
1 - 2 am	0	0	0	0	0	0	0
2 - 3 am	0	0	3	0	3	0	0
3 - 4 am	0	3	0	10	5	0	0
4 - 5 am	5	51	26	21	41	49	18
5 - 6 am	15	39	28	33	62	56	67
6 - 7 am	13	54	36	51	59	90	36
7 - 8 am	26	72	31	36	26	54	82
8 - 9 am	13	33	21	44	49	59	36
9 - 10 am	23	26	23	49	59	72	33
10 - 11 am	0	28	21	28	21	54	36
11 am - 12 pm	3	28	23	41	31	21	13
12 - 1 pm	8	21	10	23	33	49	15
1 - 2 pm	18	23	18	26	33	31	10
2 - 3 pm	5	15	13	26	39	44	0
3 - 4 pm	5	15	23	41	36	26	3
4 - 5 pm	21	13	23	31	31	33	3
5 - 6 pm	5	10	10	28	31	33	5
6 - 7 pm	3	5	10	13	13	23	0
7 - 8 pm	5	3	3	5	10	13	0
8 - 9 pm	0	0	0	0	3	3	0
9 - 10 pm	3	0	0	0	3	0	0
10 - 11 pm	3	0	0	3	0	0	0
11 pm - 12 am	0	0	3	0	0	0	0

Exits
5/12/2013 through 5/18/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	8	10	3	8	18	18	8
1 - 2 am	3	0	3	0	0	0	3
2 - 3 am	0	0	0	0	0	0	3
3 - 4 am	0	0	0	0	0	0	0
4 - 5 am	0	0	0	0	0	0	0
5 - 6 am	0	0	0	0	0	0	0
6 - 7 am	0	0	0	0	0	0	3
7 - 8 am	0	8	0	0	3	13	0
8 - 9 am	3	15	3	10	3	0	0
9 - 10 am	5	23	5	3	3	8	0
10 - 11 am	13	23	8	8	0	13	5
11 am - 12 pm	31	21	13	8	15	26	15
12 - 1 pm	51	23	8	10	10	23	18
1 - 2 pm	23	26	23	8	8	21	13
2 - 3 pm	80	36	18	10	10	21	13
3 - 4 pm	49	39	36	33	23	10	28
4 - 5 pm	49	39	23	8	18	13	10
5 - 6 pm	64	51	18	21	36	21	39
6 - 7 pm	46	31	13	33	21	21	10
7 - 8 pm	41	44	28	31	31	33	36
8 - 9 pm	44	26	26	41	33	18	18
9 - 10 pm	39	51	21	36	28	31	23
10 - 11 pm	54	41	23	18	41	36	36
11 pm - 12 am	49	33	10	39	31	33	33

Totals (Entries + Exits)
5/12/2013 through 5/18/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	8	13	3	8	18	18	8
1 - 2 am	3	0	3	0	0	0	3
2 - 3 am	0	0	3	0	3	0	3
3 - 4 am	0	3	0	10	5	0	0
4 - 5 am	5	51	26	21	41	49	18
5 - 6 am	15	39	28	33	62	56	67
6 - 7 am	13	54	36	51	59	90	39
7 - 8 am	26	80	31	36	28	67	82
8 - 9 am	15	49	23	54	51	59	36
9 - 10 am	28	49	28	51	62	80	33
10 - 11 am	13	51	28	36	21	67	41
11 am - 12 pm	33	49	36	49	46	46	28
12 - 1 pm	59	44	18	33	44	72	33
1 - 2 pm	41	49	41	33	41	51	23
2 - 3 pm	85	51	31	36	49	64	13
3 - 4 pm	54	54	59	74	59	36	31
4 - 5 pm	69	51	46	39	49	46	13
5 - 6 pm	69	62	28	49	67	54	44
6 - 7 pm	49	36	23	46	33	44	10
7 - 8 pm	46	46	31	36	41	46	36
8 - 9 pm	44	26	26	41	36	21	18
9 - 10 pm	41	51	21	36	31	31	23
10 - 11 pm	56	41	23	21	41	36	36
11 pm - 12 am	49	33	13	39	31	33	33

Entries
10/13/2013 through 10/19/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	3	0	0	0	0	3	0
1 - 2 am	0	0	0	0	0	0	0
2 - 3 am	0	0	0	0	0	0	0
3 - 4 am	0	5	3	0	3	5	15
4 - 5 am	10	31	10	21	18	44	39
5 - 6 am	18	36	36	46	46	69	28
6 - 7 am	10	80	41	49	85	67	62
7 - 8 am	18	46	31	33	59	**87**	72
8 - 9 am	10	13	44	41	56	64	36
9 - 10 am	23	23	31	36	56	64	23
10 - 11 am	13	31	18	31	56	39	23
11 am - 12 pm	10	31	36	23	54	54	8
12 - 1 pm	5	21	13	21	64	26	15
1 - 2 pm	18	**18**	31	28	31	31	8
2 - 3 pm	10	10	3	21	21	15	13
3 - 4 pm	28	**23**	15	31	36	59	15
4 - 5 pm	8	5	5	28	44	54	3
5 - 6 pm	5	5	8	23	23	36	5
6 - 7 pm	8	5	3	13	13	10	0
7 - 8 pm	5	0	0	3	5	13	0
8 - 9 pm	0	0	0	0	0	0	0
9 - 10 pm	0	0	0	0	0	0	0
10 - 11 pm	3	0	0	0	5	0	0
11 pm - 12 am	8	3	5	5	3	5	3

Exits
10/13/2013 through 10/19/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	10	21	10	21	8	13	0
1 - 2 am	0	0	0	0	0	0	0
2 - 3 am	0	10	0	0	3	0	0
3 - 4 am	0	0	0	0	0	3	0
4 - 5 am	0	0	0	3	0	0	3
5 - 6 am	0	3	0	5	3	0	0
6 - 7 am	0	0	0	0	0	0	0
7 - 8 am	3	5	8	0	5	**8**	0
8 - 9 am	5	15	8	0	8	3	3
9 - 10 am	21	33	18	8	5	5	3
10 - 11 am	10	23	13	8	8	10	3
11 am - 12 pm	26	44	28	5	8	10	15
12 - 1 pm	33	39	21	15	10	28	13
1 - 2 pm	54	**59**	28	23	13	13	26
2 - 3 pm	41	77	13	23	10	13	5
3 - 4 pm	26	**69**	28	10	13	13	18
4 - 5 pm	51	67	31	33	18	13	26
5 - 6 pm	49	64	33	15	36	26	23
6 - 7 pm	51	51	46	26	39	21	23
7 - 8 pm	56	67	18	28	33	28	15
8 - 9 pm	39	62	62	18	31	51	31
9 - 10 pm	87	80	41	31	49	26	18
10 - 11 pm	39	67	39	31	44	31	23
11 pm - 12 am	44	36	13	21	31	10	23

Totals (Entries + Exits)
10/13/2013 through 10/19/2013

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12 - 1 am	13	21	10	21	8	15	0
1 - 2 am	0	0	0	0	0	0	0
2 - 3 am	0	10	0	0	3	0	0
3 - 4 am	0	5	3	0	3	8	15
4 - 5 am	10	31	10	23	18	44	41
5 - 6 am	18	39	36	51	49	69	28
6 - 7 am	10	80	41	49	85	67	62
7 - 8 am	21	51	39	33	64	**95**	72
8 - 9 am	15	28	51	41	64	67	39
9 - 10 am	44	56	49	44	62	69	26
10 - 11 am	23	54	31	39	64	49	26
11 am - 12 pm	36	74	64	28	62	64	23
12 - 1 pm	39	59	33	36	74	54	28
1 - 2 pm	72	**77**	59	51	44	44	33
2 - 3 pm	51	87	15	44	31	28	18
3 - 4 pm	54	**92**	44	41	49	72	33
4 - 5 pm	59	72	36	62	62	67	28
5 - 6 pm	54	69	41	39	59	62	28
6 - 7 pm	59	56	49	39	51	31	23
7 - 8 pm	62	67	18	31	39	41	15
8 - 9 pm	39	62	62	18	31	51	31
9 - 10 pm	87	80	41	31	49	26	18
10 - 11 pm	41	67	39	31	49	31	23
11 pm - 12 am	51	39	18	26	33	15	26

Note: Volumes have been pro-rated based on information provided by The Parking Spot (does not include shuttle buses).

Date: 4.21.16

102-05 Ditmars Blvd. Garage
Queens, New York 11369

Weekday AM Trip Increments

Figure A-1

● Traffic Analysis Locations

Sources: 1. New York (City). Dept. of City Planning 2014. LION (Edition 14A). New York City: NYC Department of City Planning.

Date: 4.21.16

102-05 Ditmars Blvd. Garage
Queens, New York 11369

Weekday Midday Trip Increments

Figure A-2

● Traffic Analysis Locations

Sources: 1. New York (City). Dept. of City Planning 2014. LION (Edition 14A). New York City: NYC Department of City Planning.

102-05 Ditmars Blvd. Garage
Queens, New York 11369

Weekday PM Trip Increments

Figure A-3

● Traffic Analysis Locations

Sources: 1. New York (City). Dept. of City Planning 2014. LION (Edition 14A). New York City: NYC Department of City Planning.