

10-7-97 DRB

CONCEPTUAL LANDSCAPE PLAN

1"=30'-0"

JULY 16, 1997 (REV.)

SEP 15, 1997 (REV.)

Existing trees that have a trunk diameter of eight (8) or more inches at 4.5 feet above the ground shall be preserved or preserved and shall be co-ordinated with the Planning & Zoning Director.



SEP 18 1997

2007 Site Plan Circulation Analysis



Memorandum

To: Lee Hodges
Flamingo South Beach

From: Adrian K. Dabkowski, P.E., PTOE 
Omar Kanaan, P.E. 

Date: June 20, 2017

Subject: Flamingo
2007 Site Plan Circulation Analysis

The purpose of this memorandum is to summarize the site circulation challenges of the approved September 2007 site plan for the Flamingo redevelopment. Site circulation to the north tower porte-cochere and south tower porte-cochere were reviewed. The approved 2007 site plan is contained in Attachment A.

Please note that this site plan was developed 10 years ago and does not consider the impacts of rideshare activity such as Uber and Lyft as these services did not exist in 2007. The following sections summarize the circulation challenges of the 2007 site plan.

NORTH TOWER PORTE-COCHERE

Access to the north tower porte-cochere is provided from Bay Road via the north and south driveways. Graphics of vehicle circulation and conflict points are contained in Attachment B. The following summarizes the challenges of this site plan specific to the north tower porte-cochere.

- The porte-cochere, which provides stacking distance for eight (8) vehicles with four (4) spaces along the curb lane and four (4) spaces within the inner lane and a by-pass lane in the center, was designed to accommodate valet drop-off/pick-up vehicles only and does not account for rideshare. Please note that based on the *Flamingo Miami Beach Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis*, April 6, 2017, the north tower porte-cochere is required to accommodate a stacking distance of nine (9) rideshare/taxi vehicles. Additionally, a minimum of three (3) stacking spaces are needed for valet operations. The total stacking distance requirement for the north tower porte-cochere is 12 vehicles. As the 2007 site plan provides less than the required 12 vehicles of stacking it is expected that the queue will extend to the parking garage entrance periodically, resulting in gridlock and traffic potentially extending onto Bay Road. A graphic depicting the stacking distance is contained in Attachment C.
- The designated valet drop-off/pick-up and/or rideshare area is located along the left-most lane of the porte-cochere forcing drivers and passengers to cross two lanes of traffic to access the redevelopment conflicting with north tower valet pick-up trips and south tower porte-cochere traffic. Valet activities should occur along the right-most lane adjacent to buildings where pedestrians await valet and rideshare vehicles with the by-pass lane located in the left-most lane. Furthermore, valet activities should occur along the right-most lane to minimize vehicle/pedestrian conflicts which this plan does not provide.
- The porte-cochere appears to function with a center by-pass lane with drop-off/pick-up stacking on both sides of the by-pass lane. Typically, by-pass lanes are the left-most lanes to minimize

vehicle/pedestrian and valet conflicts.

- The site is not pedestrian friendly due to the large amount of paved areas and multiple conflict points with passenger vehicles. Pedestrians exiting the north tower must cross vehicular traffic to get to Bay Road.
- The congestion at the north tower porte-cochere resulting from the valet drop-off/pick-up and rideshare activities will interfere with the ability for a vehicle to access the south tower porte-cochere as south tower trips must travel through the north porte-cochere.
- Vehicles entering the site via the north driveway encounter multiple conflict points within 50 feet of entering the site including other vehicles exiting the parking garage, vehicles approaching from the north tower return driveway, and vehicle accessing the surface parking space adjacent to the parking garage which could lead to congestion extending on to Bay Road. A graphic of the conflict points is included in Attachment B.
- Access to the site and site circulation is confusing to drivers due to multiple driver decision points and the circuitous nature of the valet and self-parking routes which create unnecessary internal trips. The site's single access point to the parking garage requires valet vehicles to U-turn within the porte-cochere to access the parking garage resulting in multiple vehicle trips within the porte-cochere.
- Valet drop-off/pick-up vehicles traveling to and from the parking garage encounter multiple conflict points with ingress vehicles entering the site via the north and south driveways as the site plan provides one (1) access point to the parking garage serving both valet and self-park vehicles. A graphic of the conflict points is included in Attachment B.
- Vehicles exiting the site via the south driveway encounter conflict points including other vehicles accessing the north tower return driveway. A graphic of the conflict points is included in Attachment B.
- The intersection of the north driveway, north tower return driveway, and north garage is a skewed intersection with a non-standard intersection configuration which results in odd conflict points, drivers will not be sure of which approach has right-of-way which will lead to driver confusion and add congestion. Skewed intersections provide inadequate sight distance and negatively impact intersection safety resulting in more crashes.

SOUTH TOWER PORTE-COCHERE

Access to the south tower porte-cochere is provided from Bay Road via the proposed north and south driveways. Graphics of valet vehicle circulation and anticipated conflict points are contained in Attachment B. The following summarizes the challenges of this site plan specific to the south tower porte-cochere.

- The porte-cochere which provides stacking distance for a total of three (3) vehicles along the curb lane was designed to accommodate valet drop-off/pick-up vehicles only and does not account for rideshare. Please note that based on the *Flamingo Miami Beach Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis*, April 6, 2017, the south tower porte-cochere is required to accommodate a stacking distance of required to accommodate a stacking distance of two (2) rideshare/taxi vehicles. Additionally, a minimum of three (3) stacking spaces are needed for valet operations. The total stacking distance requirement for the south tower porte-cochere is five (5) vehicles. As the 2007 site plan provides less than the required five (5) vehicles of stacking it is expected that the queue will extend beyond the service area and result

- in on-site congestion. Furthermore, as no by-pass lane is provided congestion will be exacerbated. A graphic depicting the stacking distance is contained in Attachment C.
- Please note that drive aisle is too narrow to provide both a drop-off/pick-up area and a by-pass lane. Therefore, additional congestion is expected as a by-pass lane is not provided and vehicles behind the first vehicle in queue must wait for the first vehicle to depart before exiting the porte-cochere.
 - The circulation to the south tower porte-cochere is fatally flawed as all vehicles entering the site must first drive through the north tower porte-cochere to access the south tower porte-cochere adding congestion to the site. This circuitous route is confusing to drivers, adds unnecessary trip length, unnecessarily adds congestion to the north tower porte-cochere, and exposes drivers to numerous conflict points as shown in Attachment B.
 - Vehicles entering the site via the north driveway encounter multiple conflict points including other vehicles exiting the parking garage and vehicles approaching from the north tower return driveway. A graphic of the conflict points is included in Attachment B.
 - Valet drop-off/pick-up vehicles traveling to and from the parking garage encounter multiple conflict points with ingress vehicles entering the site via the north and south driveways. A graphic of the conflict points is included in Attachment B.
 - Vehicles exiting the site via the south driveway encounter multiple conflict points including other vehicles accessing the north tower return driveway and exiting the site. A graphic of the conflict points is included in Attachment B.
 - Access to the site and site circulation is confusing to drivers due to multiple driver decision points and as south tower trips must travel through the north porte-cochere.

CONCLUSION

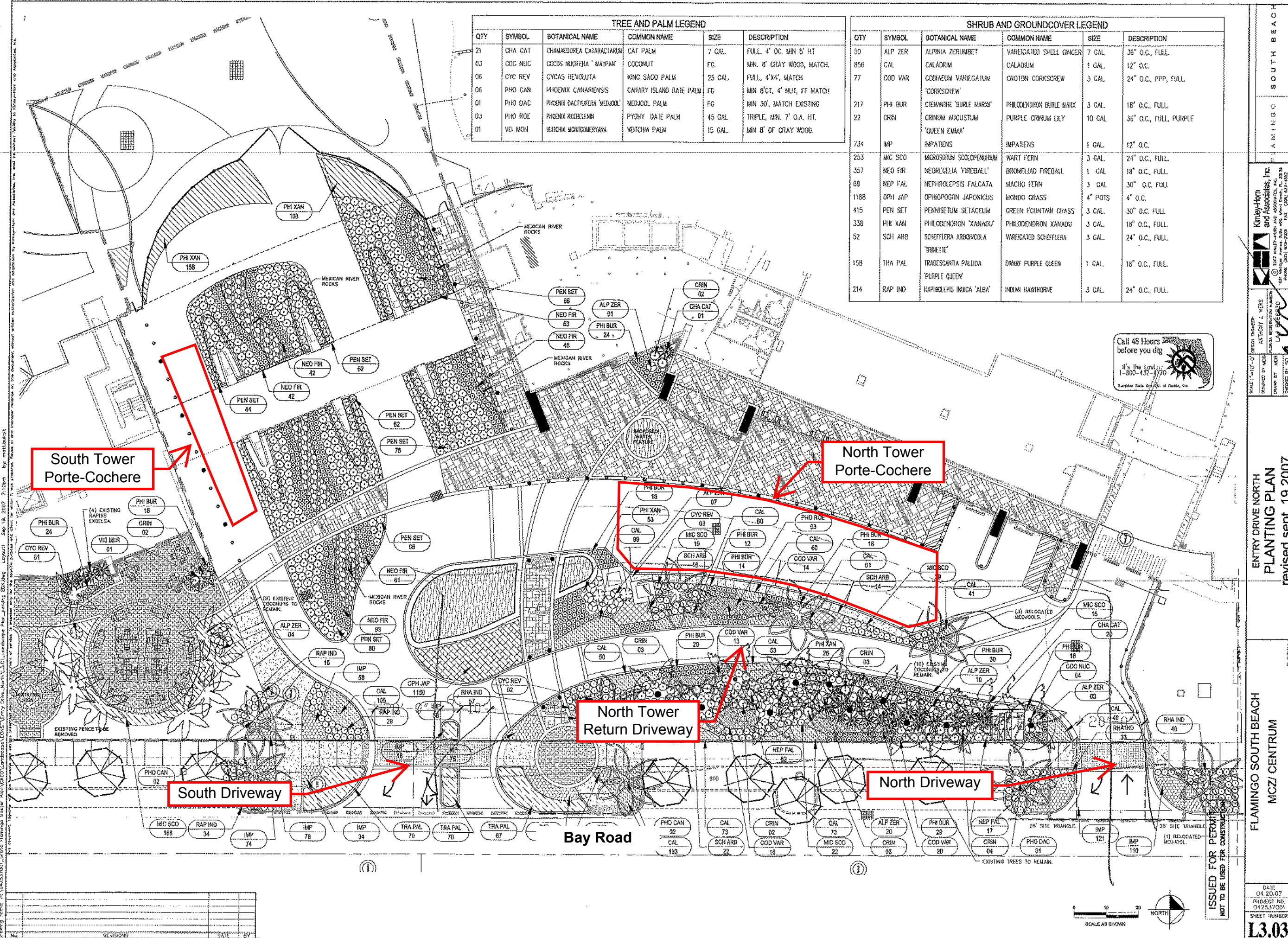
As a result of the documented deficiencies of the 2007 site plan, it is not recommended to implement the circulation plan presented in the 2007 site plan.

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Attachment A

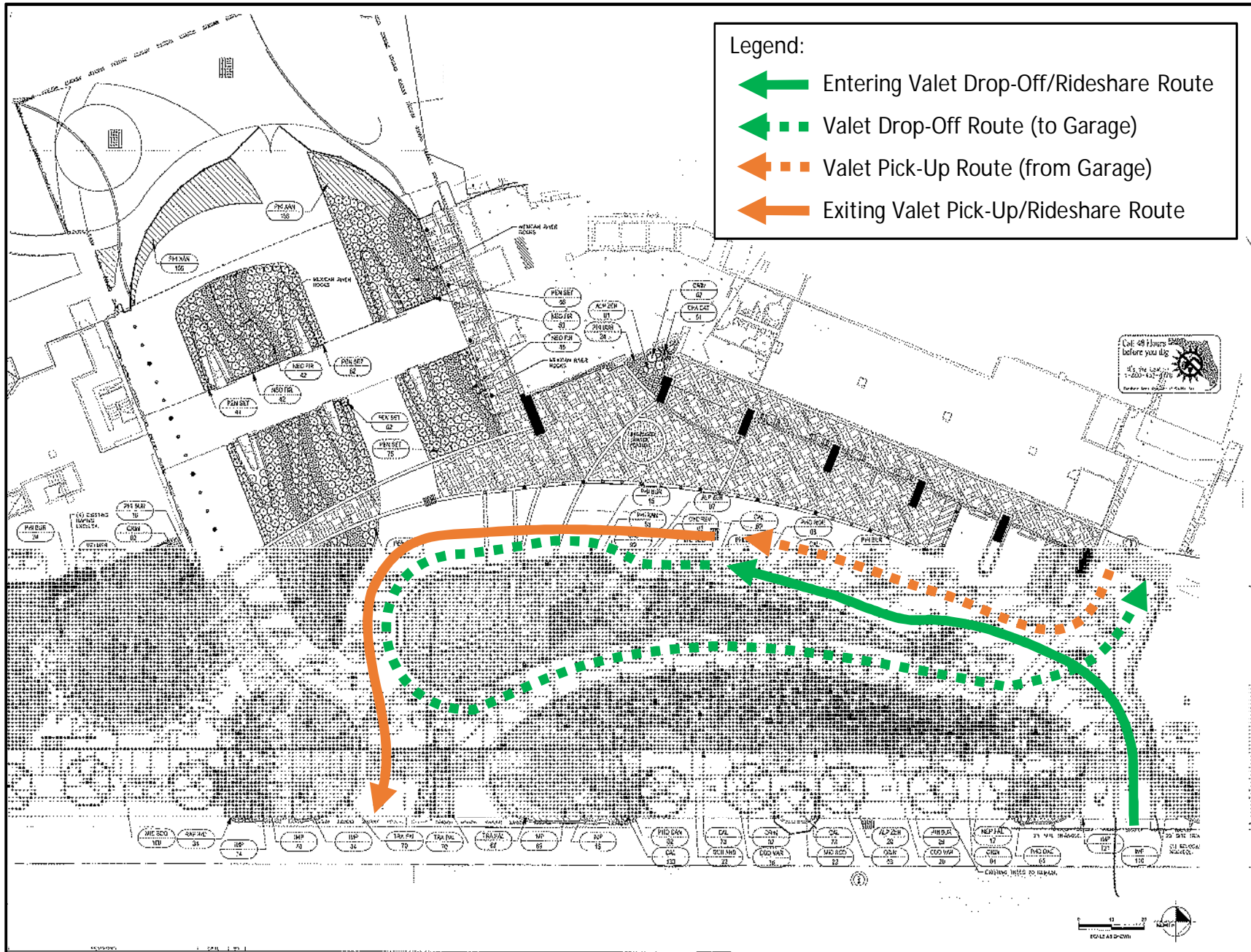
TREE AND PALM LEGEND					
QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	DESCRIPTION
21	CHA CAT	CHAMADOREA CATAPACTARIA	CAT PALM	7 CAL.	FULL, 4' OC. MIN 5' HT
03	COC NUC	COCOS NUCIFERA 'MAYPAM'	COCONUT	FG.	MIN. 8' GRAY WOOD, MATCH.
06	CYC REV	CYCAS REVOLUTA	WING SAGO PALM	25 CAL.	FULL, 4'X4', MATCH
06	PHO CAN	PHOENIX CANARIENSIS	CANARY ISLAND DATE PALM	FG.	MIN 6'CT, 4' ALUF, FT MATCH
01	PHO DAC	PHOENIX DACTYLOIDES	MEDJOL PALM	FG.	MIN 30', MATCH EXISTING
03	PHO ROE	PHOENIX ROBERTSONII	PYGMY DATE PALM	45 CAL.	TRIPLE, MIN. 7' O.A. HT.
01	VEI MON	VEITCHIA MONTECOMERYANA	VEITCHIA PALM	15 GAL.	MIN 8' OF GRAY WOOD.

SHRUB AND GROUNDCOVER LEGEND					
QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	DESCRIPTION
50	ALP ZER	ALPINA ZERUMBER?	VARIATED SHELL GINGER	7 GAL.	36" O.C., FULL
856	CAL	CALADRIUM	CALADRIUM	1 GAL.	12" O.C.
77	COD VAR	CODIAEUM VARIEGATUM	CROTON CORKSCREW	3 CAL.	24" O.C., PPP, FULL
		'CORKSCREW'			
217	PHI BUR	PHILODENDRON 'BURLE MARSH'	PHILODENDRON BURLE MARSH	3 CAL.	18" O.C., FULL
22	CRIN	CRINUM ALICUTUM	PURPLE CRINUM L&Y	10 CAL.	36" O.C., FULL, PURPLE
		'QUEEN EMMA'			
734	IMP	IMPATIENS	IMPATIENS	1 GAL.	12" O.C.
253	MIC SCO	MICROSORUM SCOLOPENDRIUM	WART FERN	3 GAL.	24" O.C., FULL
357	NEO FIR	NEORHODIA 'FIREBALL'	BROMELIAD FIREBALL	1 GAL.	18" O.C., FULL
89	NEP FAL	NEPHROLEPSIS FALCATA	MACHO FERN	3 GAL.	30" O.C., FULL
1188	OPH JAP	OPHIPOGON JAPONICUS	MONDO GRASS	4" POTS	4" O.C.
415	PEN SET	PENNISETUM SETACEUM	GREEN FOUNTAIN GRASS	3 CAL.	30" O.C. FULL
338	PHI XAN	PHILODENDRON 'XANADU'	PHILODENDRON XANADU	3 CAL.	18" O.C., FULL
52	SCH ARB	SCHOFFLERA ARBORICOLA	VARESCANT SCHOFFLERA	3 GAL.	24" O.C., FULL
		'IRINEE'			
158	TRA PAL	TRADESCANTIA PALUDA	DWARF PURPLE QUEEN	1 GAL.	18" O.C., FULL
214	RAP IND	RAPHELEPSIS INDICA 'ALBA'	INDIAN HAWTHORNE	3 GAL.	24" O.C., FULL

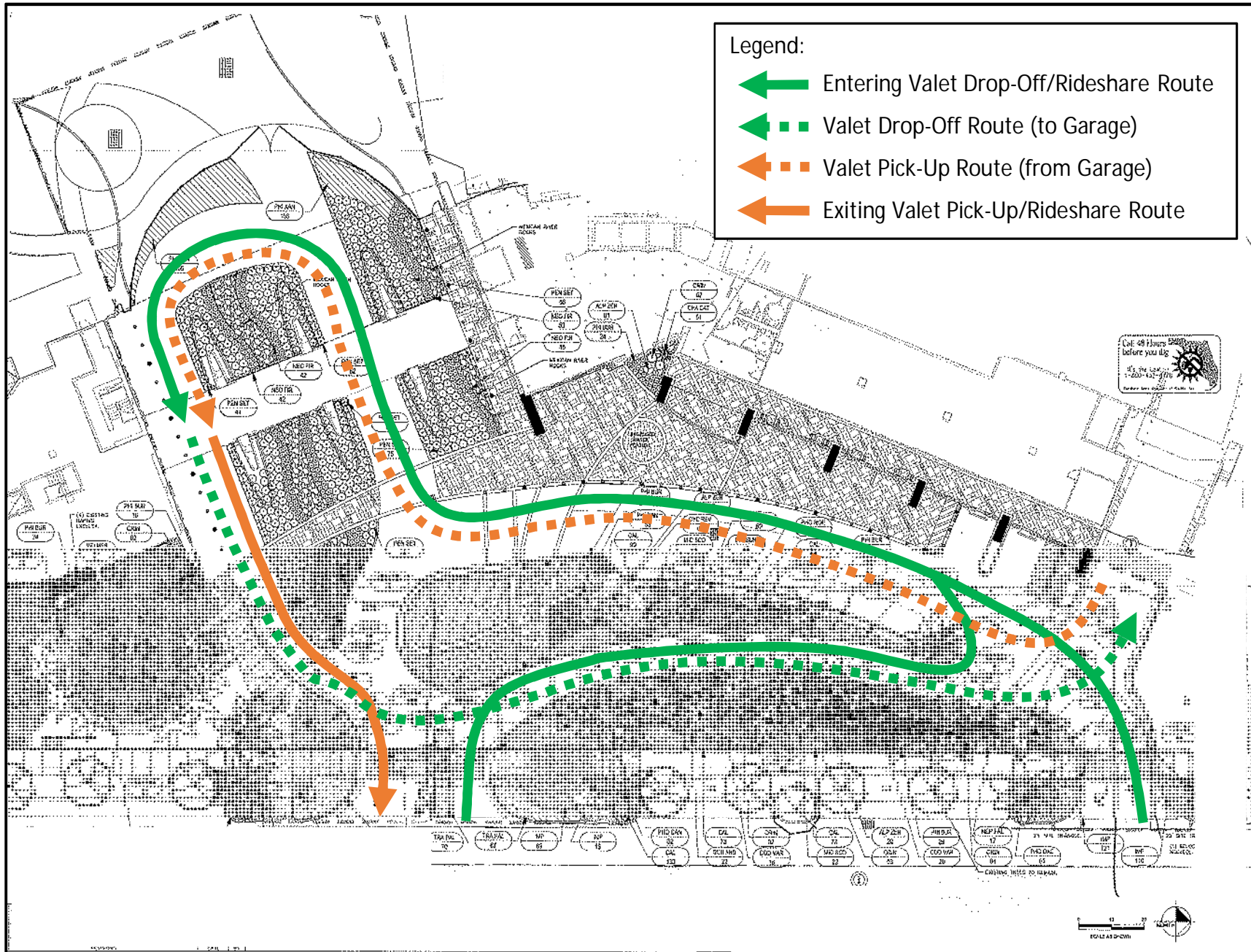


Attachment B

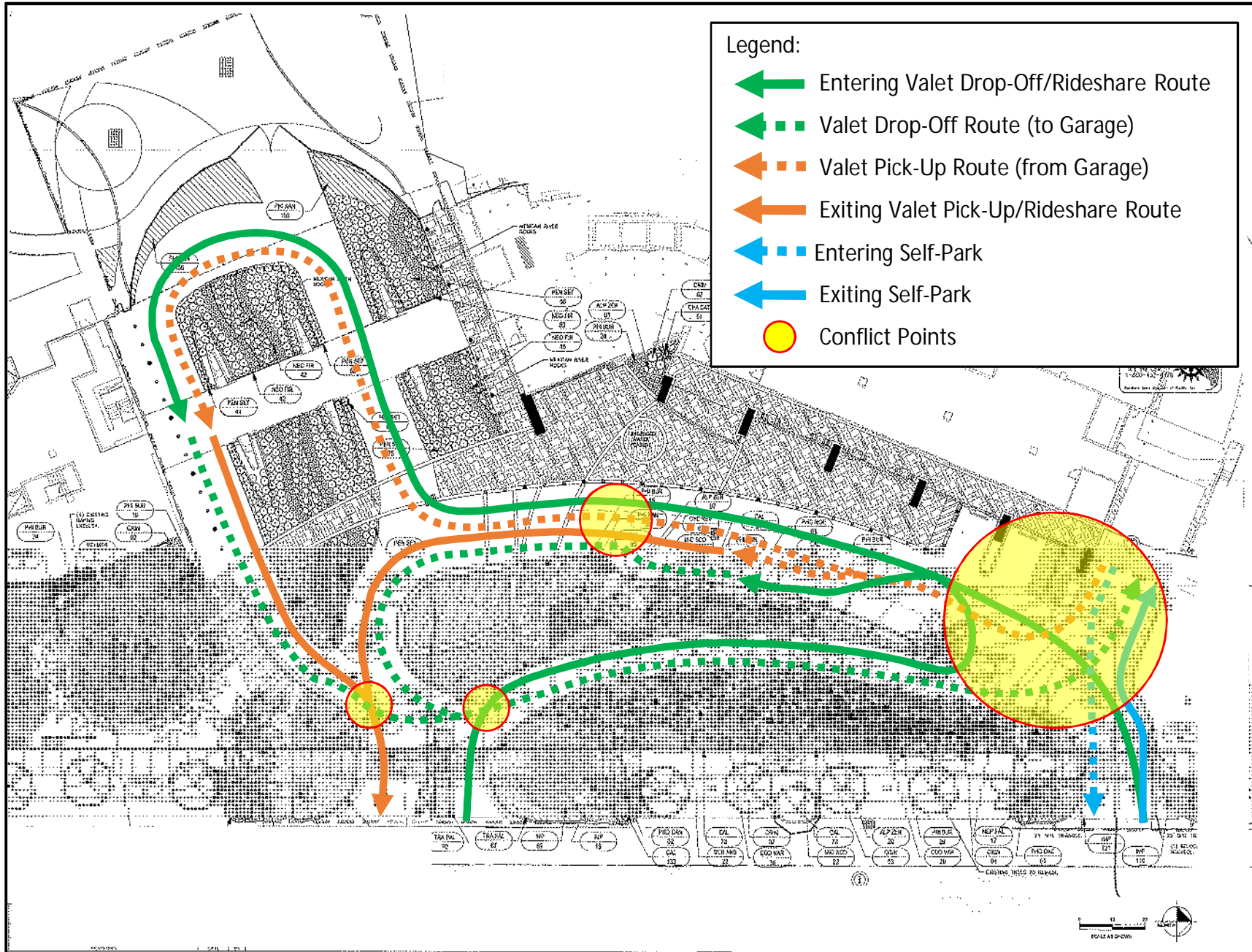
North Tower Valet Circulation



South Tower Valet Circulation



Combined Valet Circulation



Attachment C

Traffic Assessment



August 2, 2017

Josiel Ferrer-Diaz, E.I.
City of Miami Beach
1688 Meridian Avenue, Suite 801
Miami Beach, Florida 33139

***Re: Flamingo Traffic Assessment
Miami Beach, Florida***

Dear Mr. Ferrer-Diaz:

Kimley-Horn and Associates, Inc. has performed a traffic assessment for the Flamingo redevelopment located on the west side of Bay Road and generally bounded by 14th Street and 16th Street in Miami Beach, Florida, refer to Attachment A for a location map. The site currently contains 426 residential condominiums and 1,261 apartments. The existing apartments will be consolidated into larger units but fewer units as part of the redevelopment.

The Flamingo redevelopment consists of 426 residential condominiums, 1,093 apartments, a 299-seat restaurant, and 6,318 square-feet of retail space. The redevelopment is expected to result in a reduction of traffic. A site plan is provided in Attachment A.

The traffic assessment's methodology is consistent with the requirements outlined by the City of Miami Beach. Methodology correspondence detailing the study requirements is included in Attachment B. The following sections summarize the valet service and rideshare operations, trip generation, valet analysis, rideshare analysis, pedestrian traffic operations analysis, parking analysis, and transportation demand management strategies.

SITE ACCESS, VALET SERVICE, AND RIDESHARE OPERATIONS

The site proposed for redevelopment is currently accessed via three (3) driveways along Bay Road, including the following:

1. A resident-only access is provided to the south tower (condominiums) via a gated driveway at 14th Terrace.
2. The center driveway at 15th Street provides access to the valet for residents and guests. All guests currently valet their vehicles.
3. A second resident-only driveway for the north tower (apartments) is provided south of 16th Street.

The redevelopment will consist of the following access:

1. A resident self-park, resident valet, and rideshare access is provided to the south tower (426 condominiums and 154 apartments) via a gated driveway at 14th Terrace.

2. Please note that the 18 apartment units in the south tower fronting Bay Road will have designated self-parking spaces directly adjacent to the units and will not utilize valet services.
3. A rideshare and valet drop-off/pick-up area will be provided for the north tower (939 apartments, 299-seat restaurant, and 6,318 square-foot retail area) with an ingress driveway south of 15th Terrace and egress at the existing driveway south of 16th Street. The center driveway will be removed as part of the redevelopment.
4. Please note that the eight (8) apartment units in the north tower fronting Bay Road will have designated self-parking spaces directly adjacent to the units and will not utilize valet services.
5. The resident-only driveway for the north tower remains south of 16th Street.

A site plan depicting the driveways, valet, and rideshare areas is provided in Attachment A. The Flamingo redevelopment will provide two (2) designated drop-off/pick-up areas located on the north and south sides of the property for both valet and rideshare/taxi modes. The south tower drop-off/pick-up area, located at the existing 14th Terrace driveway, is expected to serve the adjacent 426 condominiums and 154 apartments and provides a dedicated valet drop-off/pick-up lane with an approximate vehicle queuing capacity of 75 feet (approximately three [3] vehicle lengths) and a dedicated rideshare/taxi drop-off/pick-up lane with an approximate vehicle queuing capacity of 66 feet (approximately three [3] vehicle lengths). Valeted vehicles will be parked in the south parking garage and/or surface parking lot.

The north tower drop-off/pick-up area, with an ingress driveway south of 15th Terrace and egress at the existing driveway south of 16th Street, is expected to serve the adjacent 939 apartments, 299-seat restaurant, and 6,318 square-foot retail area and provides a dedicated valet drop-off station, valet pick-up station, and a dedicated rideshare/taxi drop-off/pick-up lane. and. The north tower valet drop-off/pick-up area provides a valet drop-off station with an approximate vehicle queuing capacity of 130 feet (approximately seven [7] vehicle lengths), a valet pick-up station with an approximate vehicle queuing capacity of 50 feet (approximately two [2] vehicle lengths), and a rideshare/taxi drop-off/pick-up area containing two (2) 100-foot vehicle queuing lanes (approximately 10 vehicle lengths) and one (1) by-pass lane. Valeted vehicles will be parked in the north parking garage. Please note that due to the configuration of the parking garage, more than 10 vehicles may be stacked within the drive aisle of the north valet pick-up area.

Self-parking is provided on-site for residents only. Residents access the south parking garage and surface parking lot via the redevelopment's south access driveway at the intersection of Bay Road and 14th Terrace. Residents access the north parking garage via the redevelopments north access driveway along Bay Road between 15th Terrace and 16th Street. All restaurant and retail patrons are expected to valet. Attachment C contains graphics illustrating drop-off/pick-up area stacking, proposed valet routes to and from the site's parking garages, and rideshare/taxi pick-up/drop-off routes.

RIDESHARE ANALYSIS

A rideshare/taxi accumulation analysis was previously conducted and is included in Attachment D. The purpose of the rideshare/taxi accumulation analysis was to determine the amount rideshare/taxi space needed to accommodate demand. Data for the previously submitted accumulation analysis *Flamingo Miami Beach Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis*, April 6, 2017 was collected during a seven (7) hour period from Friday, March 24, 2017 at 6:00 P.M. to Saturday March 25, 2017

at 1:00 A.M. in one (1) minute intervals. Results of the analysis indicate that a maximum vehicle accumulation of two (2) vehicles was observed on Bay Road between 14th Street and 15th Street, in the area that will be serviced by the south tower drop-off/pick-up area. A maximum vehicle accumulation of nine (9) vehicles was observed on Bay Road between 15th Street and 16th Street, in the area serviced by the north tower rideshare/taxi drop-off/pick-up area. Note that the proposed redevelopment is providing stacking distance for three (3) vehicles at the south tower drop-off/pick-up area and stacking distance for 10 vehicles at the north tower rideshare/taxi drop-off/pick-up area.

TRIP GENERATION ANALYSIS

Trip generation calculations for the proposed redevelopment were performed using the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 9th Edition. ITE Land Use Code (LUC) 230 (Residential Condominium/Townhouse) was utilized for the proposed 426 condominium residential units, LUC 220 (Apartment) was utilized for the proposed 1,093 apartments, LUC 931 (Quality Restaurant) was utilized for the 299-seat restaurant, and LUC 820 (Shopping Center) was utilized for the 6,318 square-foot retail area. The redevelopment has minimal self-parking for non-residents. Therefore, it is anticipated that the non-residents that will use the facility will walk and not drive to the site. LUC 220 (Apartment) and LUC 230 (Residential Condominium/Townhouse) were utilized for the existing land uses. Project trips were estimated for the A.M. and P.M. peak hours.

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract containing the redevelopment. A multimodal factor of 19.6 percent (19.6%) was determined for the area based on the census data for this tract. However, based on City of Miami Beach input, a multimodal reduction factor of 10.0 percent (10.0%) was applied to the trip generation. It is expected that residents and guests will choose to walk, bike, or use public transit to and from the proposed redevelopment. City of Miami Beach Trolley's Alton/West Loop route provides service along West Avenue. Miami-Dade Transit (MDT) Metrobus route 123 serves the study area along West Avenue.

A portion of the trips generated by the development will be captured internally within the site based on the interaction between the residential and restaurant land uses. Internal capture rates were based upon values contained in ITE's, *Trip Generation Handbook*, August 2014. An internal capture rate of 2.1 percent (2.1%) was calculated during the A.M. peak hour and 10.8 percent (10.8%) during the P.M. peak hour.

The Flamingo redevelopment is expected to result in a net reduction of 54 A.M. peak hour trips and a net reduction of 24 P.M. peak hour trips. Detailed trip generation calculations and US Census *Means of Transportation to Work* data are included in Attachment E. Table 1 provides a summary of the trip generation for the proposed redevelopment.

Table 1: Trip Generation Summary						
Development Plan	A.M. Peak Hour			P.M. Peak Hour		
	In	Out	Total	In	Out	Total
Existing Development	137	571	708	535	282	817
Proposed Redevelopment South	39	177	216	165	81	247
Proposed Redevelopment North	96	342	438	356	191	546
Net Trip Generation	-2	-52	-54	-14	-10	-24

VALET ANALYSIS

The Flamingo redevelopment will be served by two (2) valet and rideshare/taxi drop-off/pick-up areas. Valet vehicles from the south tower drop-off/pick-up area will be driven by a valet attendant to the south tower surface parking lot or parking garage. Valet vehicles from the north tower drop-off/pick-up area will be driven by a valet attendant to the north tower parking garage. Some residents and all guests are expected to valet vehicles with a portion of residents self-parking. All restaurant and retail patrons are expected to valet.

The proportion of valet and self-park vehicles was determined based on existing conditions at the project site. Valet and self-park data from the existing development were collected on Friday, June 9, 2017 between 4:00 P.M. to 8:00 P.M. to determine the ratio of valet to self-parked vehicles. The collected data indicated that 4 percent (4%) of peak hour trips are valeted and 96 percent (96%) are self-parked. However, to provide a conservative analysis, the analysis assumed that 10 percent (10%) of residential trips of the proposed redevelopment will be valeted and 100 percent (100%) of the restaurant and retail trips of the proposed redevelopment will be valeted. It was determined that approximately 16 valet drop-off vehicles and eight (8) valet pick-up vehicles are expected at the south tower valet drop-off/pick-up area while 85 valet drop-off vehicles and 46 valet pick-up vehicles are expected at the north tower valet drop-off/pick-up area during P.M. peak hour based on assuming 10 percent (10%) of residential trips and 100 percent (100%) of restaurant and retail trips will valet. A summary of expected valet trips is contained in Table 2. Detailed valet utilization data is included in Attachment F.

Table 2: Expected Valet Trips			
Valet Station	Land Use Served	Drop-Off	Pick-Up
South Valet Station	426 Condominiums and 136 Apartments	16	8
North Valet Station	931 Apartments, 299-Seat Restaurant, and 6,318 sf Retail Area	85	46
Total		101	54

The valet queuing operations analysis was performed based on the methodology outlined in ITE's *Transportation and Land Development*, 1988. The analysis was performed to determine if valet operations could accommodate vehicular queues without blocking travel lanes on Bay Road.

Valet Assumptions

The queuing analysis used the multiple-channel waiting line model with Poisson arrivals and exponential service times. The queuing analysis is based on the coefficient of utilization, ρ , which is the ratio of the average vehicle arrival rate over the average service rate multiplied by the number of channels.

Valet attendants for the south tower will be stationed at the south tower and will walk/run to and from the south surface lot and parking garage. Valet attendants for the north tower will be stationed at the north tower and will walk/run to and from the north garage. A valet drop-off trip service time was calculated based on the time it would take a valet parking attendant to obtain and park a drop-off vehicle for both south and north valet areas. Similarly, a valet pick-up trip service time was calculated based

on the time it would take a valet parking attendant to bring a parked vehicle back to a patron for both south and north valet areas.

The calculated service time for vehicles valeted at the south tower is 3.7 minutes for valet drop-off and 3.6 minutes for valet pick-up. Similarly, the calculated service time for vehicles valeted at the north tower is 2.6 minutes for valet drop-off and pick-up. To provide a conservative analysis a 4.0 minute service time was used for the south tower valet drop-off and pick-up operations and a 3.0 minute service time was used for the north tower valet drop-off and pick-up operations. Detailed trip length calculations are included in Attachment G.

If the coefficient of utilization (average service rate/valet attendant service capacity) is greater than one (>1), the calculation methodology does not yield a finite queue length. This result indicates overcapacity conditions for the valet area. The valet attendant service capacity is the number of total trips a valet attendant can make in a one-hour period multiplied by the number of valet attendants.

The analysis determined the required queue storage, M, which is exceeded P percent of the time. Since this analysis seeks to examine if the queue length exceeds the storage provided, at a level of confidence of 95 percent (95%). Three (3) vehicle drop-off/pick-up spaces are provided at the south tower drop-off/pick-up area. Seven (7) vehicle drop-off spaces and two (2) designated pick-up spaces are provided at north tower drop-off/pick-up area. However, please note that due to the configuration of the parking garage, more than 10 vehicles may be stacked within the drive aisle of the north valet area for valet pick-up.

Valet Analysis

An iterative approach was used to determine the number of valet attendants required to accommodate the proposed redevelopment demand during the analysis hour and ensure that the 90th percentile valet queue does not extend beyond the designated valet service area. Detailed valet analysis worksheets are provided in Attachment F.

Results of the valet operations analysis demonstrate that three (3) valet attendants would be required at the south tower and ten (10) valet attendants would be required at the north tower so that the vehicle queues from the drop-off/pick-up areas do not extend beyond the designated valet areas.

Valet Conclusion

Based on the valet operations analysis performed, it was determined that the 95th percentile valet queues will not extend beyond the valet drop-off/pick-up areas. Based upon the conservative assumptions applied to the traffic demand conditions, it was estimated that three (3) valet attendants may be required at the south tower valet drop-off/pick-up area and ten (10) valet attendants may be required at the north tower valet drop-off/pick-up area. It should be noted that projected vehicular volumes and estimated valet processing times were conservatively assumed in the analysis. If it is determined that valet processing times can be performed more efficiently and/or actual traffic volumes are lower than projected, a reduced number of valet attendants may be adequate to serve the site.

PEDESTRIAN ASSESSMENT

A graphic depicting pedestrian circulation paths within the proposed redevelopment is included in Attachment H. Pedestrian features including sidewalks, crosswalks, and pedestrian amenities were

evaluated along Bay Road between 14th Street and south of 16th Street. A detailed evaluation of pedestrian features is provided below:

Bay Road between 14th Street and south of 16th Street

Bay Road between 14th Street and south of 16th Street functions as a two-lane, undivided roadway with on-street parking along the east and west sides of Bay Road. Sidewalk widths vary from five (5) feet to 13 feet along the east and west side of Bay Road.

14th Street and Bay Road Intersection

The intersection of 14th Street and Bay Road operates under one-way, stop-controlled conditions and is located southeast of the proposed redevelopment. 14th Street functions as a two-lane, undivided roadway with on-street parking along the north and south sides of 14th Street. Sidewalks vary from five (5) to eight (8) feet along the north and south sides of 14th Street. Pedestrian ramps are provided for the crosswalk at the north leg of the intersection.

14th Terrace/South Project Driveway and Bay Road Intersection

The intersection of 14th Terrace and Bay Road operates under two-way, stop-controlled conditions and is located east of the proposed redevelopment. 14th Terrace functions as a two-lane, undivided roadway and aligns with the redevelopments south access driveway. Sidewalks vary from five (5) to 13 feet along the north and south sides of 14th Terrace. Crosswalks are provided at the east and west legs of the intersection. Additionally, pedestrian ramps with detectable warning surfaces are provided at all corners of the intersection.

Flamingo Way and Bay Road Intersection

The intersection of Flamingo Way and Bay Road operates under one-way, stop-controlled conditions and is located to the east of the proposed redevelopment. Flamingo Way functions as a two-lane, undivided roadway. Sidewalks vary from five (5) to 13 feet along the north and south sides of Flamingo Way. Additionally, a crosswalk with detectable warning surface pedestrian ramps is provided at the east leg of the intersection.

15th Street/Center Project Driveway and Bay Road Intersection

The intersection of 15th Street and Bay Road operates under two-way, stop-controlled conditions and is located to the east of the proposed redevelopment. 15th Street functions as a two-lane, undivided roadway with on-street parking located along the north and south sides of 15th Street. Sidewalk widths vary from eight (8) to 13 feet along the north and south sides of 15th Street. Additionally, crosswalks with detectable warning surface pedestrian ramps are provided at all legs of the intersection. Please note that high-emphasis crosswalks with in-street pedestrian crossing signs are provided on the north and south sides of 15th Street across Bay Road.

Furthermore, pedestrian count data was collected at the intersection of 15th Street and Bay Road on Friday, June 9, 2017 between 4:00 P.M. and 8:00 P.M. to determine the placement of crosswalks at the intersection of 15th Street and Bay Road. The collected pedestrian data was adjusted to account for seasonality using the appropriate Florida Department of Transportation (FDOT) seasonal factors for Miami Beach of 1.13. The data indicates that approximately 50 percent (50%) of pedestrian crossing

the intersection of 15th Street and Bay Road do so at the north leg of the intersection. Figure 1 summarizes the peak hour pedestrian data.

Figure 1: Peak Hour Pedestrian Crossing Volumes



As shown in Figure 1, pedestrians utilize the pedestrian crossings along the four legs of the intersection. Please note that the redevelopment will reconfigure the intersection and eliminate the existing center driveway along the west leg of the intersection thereby improving pedestrian connectivity. Based on the pedestrian volumes it is recommended to maintain both high-emphasis crosswalks on Bay Road, north and south of 15th Street and the crosswalk on the east side Bay Road on 15th Street. Pedestrian data and FDOT seasonal factors are contained in Attachment I.

15th Terrace and Bay Road Intersection

The intersection of 15th Terrace and Bay Road operates under one-way, stop-controlled conditions and is located to the east of the proposed redevelopment. 15th Terrace functions as a two-lane, undivided roadway with on-street parking located along the north and south sides of 15th Terrace. Sidewalk widths vary from five (5) to 13 feet along the north and south sides of 15th Terrace. Additionally, a crosswalk with detectable warning surface pedestrian ramps is provided at the east leg of the intersection.

North Project Driveway and Bay Road Intersection

The intersection of the north project driveway and Bay Road operates under one-way, stop-controlled conditions and is located to the northeast of the proposed redevelopment. A crosswalk with detectable warning surface pedestrian ramps with is provided at the west leg of the intersection.

PARKING ASSESSMENT

The existing development provides 30 scooter parking spaces, 60 bicycle parking spaces (10 short-term and 50 long-term), and 2,032 passenger vehicle parking spaces. The proposed redevelopment will provide 50 scooter parking spaces (an increase of 20 spaces), 100 long-term bicycle parking spaces and 12 short-term bicycle parking spaces (an increase of 52 spaces), and 2,032 passenger vehicle parking spaces.

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

Transportation Demand Management (TDM) strategies are proposed to reduce the impacts of the project traffic on the surrounding roadway network. Typical measures promote bicycling and walking, encourage car/vanpooling and offer alternatives to the typical workday hours. The applicant will provide 100 long-term on-site bicycle parking spaces as well as 12 short-term on-site bicycle parking spaces.

A Citibike station with 24 bike docks will also be provided on-site. The applicant will also commit to providing transit information within the site including route schedules and maps, subsidized transit passes for employees, and designated parking spaces for scooters. The applicant is also contemplating providing designated parking spaces for carpool/vanpool vehicles within the parking garages.

A graphic indicating the locations of proposed bicycle and scooter parking, and Citibike station is included in Attachment H.

CONCLUSION

The analysis results indicate that the proposed redevelopment is expected to result in a reduction of 54 net new vehicle trips during the A.M. peak hour and a reduction of 24 net new vehicle trips during the P.M. peak hour.

The rideshare/taxi accumulation analysis indicated that a maximum vehicle accumulation of two (2) vehicles was observed on Bay Road between 14th Street and 15th Street, in the area serviced by the south tower drop-off/pick-up area and a maximum vehicle accumulation of nine (9) vehicles was observed on Bay Road between 15th Street and 16th Street, in the area serviced by the north tower drop-off/pick-up area. Note that the proposed redevelopment is providing stacking distance for three (3) vehicles at the south tower rideshare drop-off/pick-up area and stacking distance for 10 vehicles at the north tower rideshare drop-off/pick-up area.

The valet operations analysis performed determined that the 90th percentile valet queues will not extend beyond the valet drop-off/pick-up areas. Based upon the conservative assumptions applied to the traffic demand conditions, it was estimated that three (3) valet attendants may be required at the south tower valet drop-off/pick-up area and ten (10) valet attendants may be required at the north tower valet drop-off/pick-up area.

As a result of the pedestrian evaluation, it was determined that pedestrian amenities such as sidewalks and crosswalks are provided in the vicinity of the proposed redevelopment. Furthermore, data collected at the intersection of 15th Street and Bay Road indicates that pedestrians utilize the pedestrian crossings along the four legs of the intersection. However, note that the redevelopment will reconfigure the intersection and eliminate the existing center driveway along the west leg of the intersection thereby improving pedestrian connectivity. Based on the pedestrian volumes it is recommended to maintain both high-emphasis crosswalks on Bay Road, north of 15th Street and south of 15th Street and the crosswalk on the east side Bay Road on 15th Street.

The parking assessment indicated that the existing development provides 30 scooter parking spaces, 60 bicycle parking spaces, and 2,032 passenger vehicle parking spaces. The proposed redevelopment will provide 50 scooter parking spaces (an increase of 20 spaces), 100 long-term bicycle parking spaces and 12 short-term bicycle parking spaces (an increase of 52 spaces), and 2,032 passenger vehicle parking spaces.

TDM strategies are also proposed as part of the redevelopment to reduce the impacts of the project traffic on the surrounding roadway network. The applicant will provide 100 long-term on-site bicycle parking spaces as well as 12 short-term on-site bicycle parking spaces. A Citibike station with 24 bike

docks will also be provided on-site. The applicant will also commit to providing transit information within the site including route schedules and maps, subsidized transit passes for employees, and designated parking spaces for scooters. The applicant is also contemplating designated parking spaces for carpool/vanpool vehicles within the parking garages.

If you have any questions regarding this analysis, please feel free to contact me.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Adrian K. Dabkowski, P.E., PTOE
Associate

Attachments



Adrian K. Dabkowski, P.E., PTOE
Florida Registration Number 78828
Kimley-Horn and Associates, Inc.
600 North Pine Island Road, Suite 450
Plantation, Florida 33324
CA # 00000696

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Attachment A:
Conceptual Site Plan and Location Map



Kimley»Horn

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Location Map
Flamingo Miami Beach
Miami Beach, Florida

FLAMINGO

1420 BAY ROAD, MIAMI BEACH

Stantec Architecture Inc - AA26000733
Jonathan Cardello Lic. # AR93391

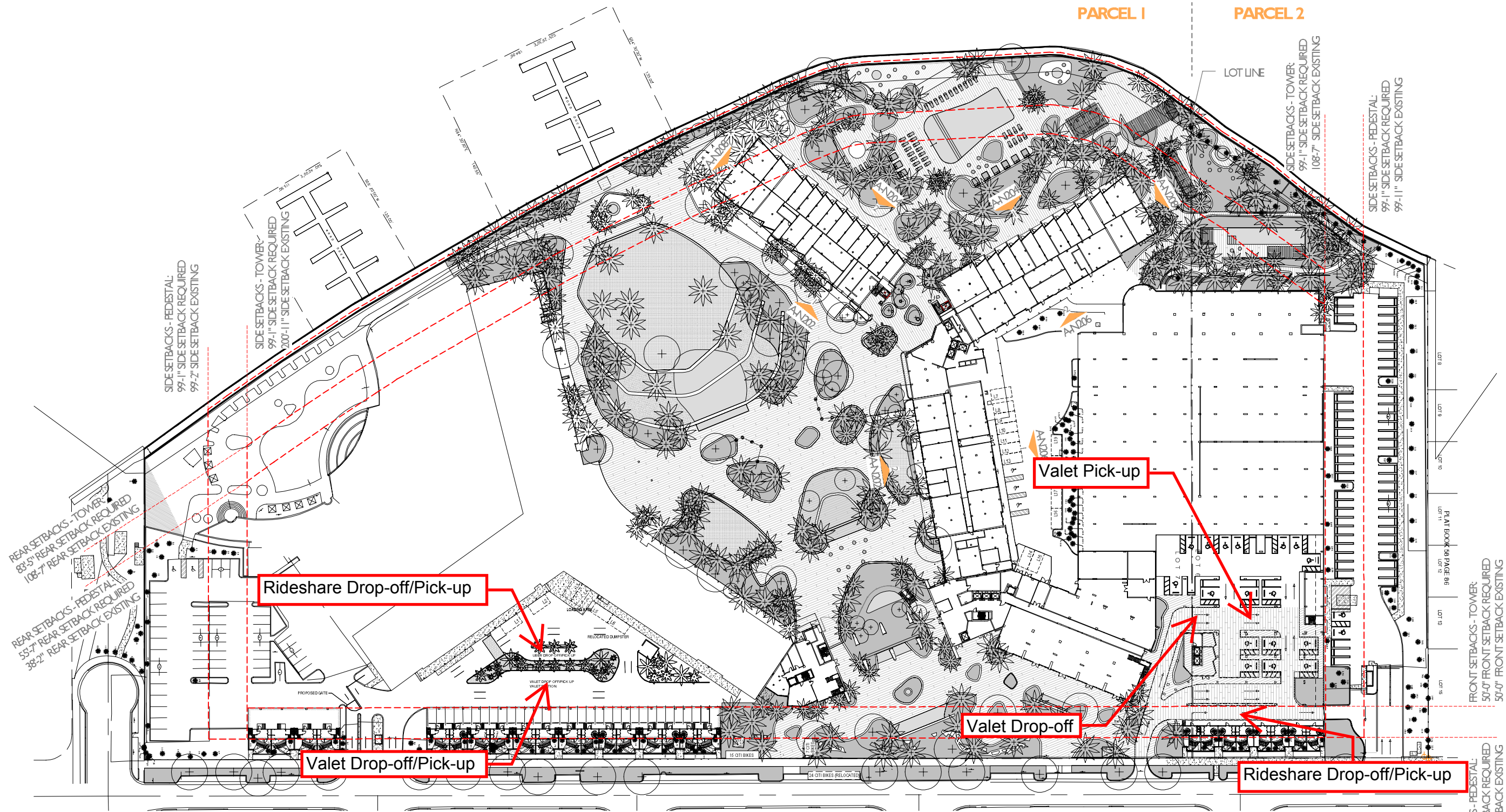


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DRB SUBMITTAL
05.30.2017

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G7B



Site Plan (Proposed)
SCALE: 1" = 50'-0"

Scale: 1" = 50'-0"
Note: When printed on 11 x 17 paper scale is halved

Attachment B:
Methodology Correspondence

Kanaan, Omar

From: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Sent: Monday, June 19, 2017 10:49 AM
To: Dabkowski, Adrian; Ferrer, Josiel
Cc: Matthew Amster; Kanaan, Omar
Subject: RE: Flamingo | Traffic Study Methodology
Attachments: 20925.fo.pdf; 20925.oct.pdf; DRB9191 FINAL ORDER.PDF; DRB9191.NOV.PDF; B9803540 FULL PLANS - Grand Flamingon SITEPLAN ONLY.PDF; DRB20925_02Oct2007.pdf

Hello Adrian,

As per the attached DRB order and based on direction received from the Planning Department, all calculations regarding the internal queueing shall include the drop-off lane approved by the board in 2007 and not current conditions (guard house and gate)

We also require the internal queueing to reflect the restaurant/retail valet services, as well as the locations for delivery vehicles and their queueing.

Thank you

MIAMIBEACH

Firat Akcay, *Transportation Analyst*
TRANSPORTATION DEPARTMENT
1688 Meridian Avenue, Suite 801, Miami Beach, FL 33139
Tel: 305-673-7000 X 6839 / www.miamibeachfl.gov

We are committed to providing excellent public service and safety to all who live, work and play in our vibrant, tropical, historic, community.



Please do not print this e-mail unless necessary.

From: Dabkowski, Adrian [mailto:Adrian.Dabkowski@Kimley-horn.com]
Sent: Monday, June 05, 2017 7:33 PM
To: Ferrer, Josiel
Cc: Akcay, Firat; Matthew Amster; Kanaan, Omar
Subject: Flamingo | Traffic Study Methodology

This message's contents have been archived by the Barracuda Message Archiver.

[06 05 17 Flamingo - Methodology Memo.pdf](#) (3.1M)

Good evening Josiel:

Based on the discussions at our meeting last Friday for the Flamingo redevelopment, attached is our proposed methodology. Please let me know if the City has any comments.

Thank you
Adrian

Kanaan, Omar

From: Dabkowski, Adrian
Sent: Monday, July 10, 2017 1:06 PM
To: 'Ferrer, Josiel'; 'Matthew Amster'
Cc: Akcay, Firat; Claudia Lamus (clamus@fteinc.net); Oliver Rodrigues (oliver@fteinc.net); Belush, Michael; Murphy, James
Subject: RE: Flamingo | Traffic Study Methodology
Attachments: Flamingo Updated Trip Generation_07 10 17.pdf

Good afternoon Josiel:

In order to provide a conservative analysis we will analyze the retail space (6,318 square-feet) as ITE Land Use Code (LUC) Shopping Center in order to provide the redevelopment flexibility to include a wider range of retail uses. We have updated the trip generation for the redevelopment to include the retail space. Please note that during the A.M. peak hour the redevelopment results in a 54 trip reduction and a 24 trip reduction during the P.M. peak hour when compared to the existing development program.

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Ferrer, Josiel [mailto:JOSIELFERRER@miamibeachfl.gov]
Sent: Thursday, July 06, 2017 11:31 AM
To: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>; 'Matthew Amster' <MAmster@brzoninglaw.com>
Cc: Akcay, Firat <FiratAkcay@miamibeachfl.gov>; Claudia Lamus (clamus@fteinc.net) <clamus@fteinc.net>; Oliver Rodrigues (oliver@fteinc.net) <oliver@fteinc.net>; Belush, Michael <MichaelBelush@miamibeachfl.gov>; Murphy, James <JamesMurphy@miamibeachfl.gov>
Subject: RE: Flamingo | Traffic Study Methodology

Adrian,

We have been discussing internally whether the retail could be considered ancillary and it is our opinion that it can be considered ancillary depending on the use. If the proposed use is a neighborhood retail, daycare, dry-cleaners or a similar use, then the use can be considered ancillary; however, the commercial license approved by the City would also permit entertainment use which we could not consider to be ancillary even if there is limited parking. As you know, Quality Restaurant and Drinking Place patrons are relying heavily on ride sharing services which produces vehicular trips. To get over this hurdle, we can allow you to consider it ancillary for this study; however, there will be a condition on the development order requiring that a follow-up traffic memo be completed once the tenant is identified. In addition, there should be short term parking identified for this retail if it is a high turn over establishment.

We have no further comments on the methodology.

Respectfully,



Memorandum

To: Josiel Ferrer-Diaz, E.I.
City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE 

Date: June 8, 2017

**Subject: Flamingo
Traffic Assessment Methodology**

The purpose of this correspondence is to summarize the traffic study methodology for the Flamingo redevelopment based on our discussions at our meeting on June 2, 2017. The proposed redevelopment is located on the west side of Bay Road and is generally bounded by 14th Street and 16th Street. A location map is provided in Attachment A.

Currently, the site contains of 426 residential condominiums and 1,261 apartments.

The existing apartments will be consolidated into larger units but fewer units as part of the redevelopment. The Flamingo redevelopment consists of 426 residential condominiums, 1,093 apartments, a 299-seat restaurant, and 6,318 square-feet of retail space. The 6,318 square-feet of retail is considered ancillary, is not expected to be a destination facility, and is expected to be primarily used by residents. The redevelopment has minimal self-parking for non-residents. Furthermore, the absence of visible designated on-site self-parking will deter the public from driving to the site to use the retail space. Therefore, it is anticipated that the small amount of general public that will use the facility will walk and not drive to the site.

The site proposed for redevelopment is currently accessed via three (3) driveways along Bay Road, including the following:

1. A resident-only access is provided to the south tower (condominiums) via a gated driveway at 14th Terrace.
2. The center driveway at 15th Street provides access to the valet for residents and guests. All guests currently valet their vehicles.
3. A second resident-only driveway for the north tower (apartments) is provided south of 16th Street.

The redevelopment will provide a rideshare and valet drop-off/pick-up area at the 14th Terrace driveway serving the south tower. The center driveway will be removed as part of the redevelopment. A rideshare and valet drop-off/pick-up area will be provided by the redevelopment for the north tower with an ingress driveway south of 15th Terrace and egress at the existing driveway south of 16th Street. The driveway south of 16th Street will continue to be used for resident-only ingress and egress. The existing site plan and detailed redevelopment conceptual site plan are provided in Attachment A.

The following sections summarize the proposed assessment methodology.

TRIP GENERATION ANALYSIS

Trip generation calculations for the existing and proposed redevelopment were performed using Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 9th Edition. ITE Land Use Code (LUC) 230 (Residential Condominium/Townhouse) was utilized for the proposed 426 condominium residential units, LUC 220 (Apartment) was utilized for the proposed 1,093 apartments, and LUC 931 (Quality Restaurant) was utilized for the 299-seat restaurant. The 6,318 square-foot retail area is considered ancillary to the residential component and was not included in trip generation calculations. LUC 220 (Apartment) and LUC 230 (Residential Condominium/Townhouse) were utilized for the existing land uses. Project trips were estimated for the A.M. and P.M. peak hours.

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract containing the redevelopment. A multimodal factor of 19.6 percent (19.6%) was determined for the area based on the census data for this tract. However, based on City of Miami Beach input, a multimodal reduction factor of 10.0 percent (10.0%) was applied to the trip generation. It is expected that residents and guests will choose to walk or use public transit to and from the proposed redevelopment. Transit route information will be documented in the technical letter.

A portion of the trips generated by the development will be captured internally within the site based on the interaction between the residential and restaurant land uses. Internal capture rates were based upon values contained in ITE's, *Trip Generation Handbook*, August 2014. An internal capture rate of 0.3 percent (0.3%) was calculated during the A.M. peak hour and 2.7 percent (2.7%) during the P.M. peak hour.

The Flamingo redevelopment is expected to result in a net decrease of 68 A.M. peak hour trips and a net decrease of 34 P.M. peak hour trips. Detailed trip generation calculations are included in Attachment B.

VALET AND RIDESHARE ANALYSIS

The Flamingo redevelopment will be served by two (2) valet and rideshare drop-off/pick-up areas. A valet and rideshare drop-off/pick-up is located at the 14th Terrace driveway. This valet and rideshare drop-off/pick-up will serve the south tower. The second valet and rideshare drop-off/pick-up is provided with an ingress driveway south of 15th Terrace and egress at the existing driveway south of 16th Street. Valet vehicles will be driven by a valet attendant to the parking garages. Some residents and all guests are expected to valet vehicles with a portion of residents self-parking. Valet and self-park data from the existing facility will be collected to determine the ratio of valet to self-parked vehicles. This ratio will be used in the valet analysis. Valet and self-park data will be collected on a Friday between 4:00 P.M. to 8:00 P.M. A valet operations queuing analysis will be prepared for the vehicle drop-off/pick-up area so that queues are not expected to spill back into public right-of-way.

Trip generation estimates will be utilized to provide for the highest demand (peak hour of generator) scenario. The valet operations queuing analysis will be conducted consistent with procedures described in ITE's *Transportation and Land Development*, 1988. The queuing analysis will document analysis assumptions and results, including the required vehicle queuing area and the required number of valet attendants to service the facility under the highest demand will be prepared. A traffic circulation figure will be prepared to illustrate the valet routes to and from the vehicle drop-off/pick-up areas.

The Flamingo *Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis* dated April 6, 2017 will also be included in the analysis. A traffic circulation figure will be prepared to illustrate the rideshare/taxi routes to and from the vehicle drop-off/pick-up areas.

PEDESTRIAN ASSESSMENT

Pedestrian features and infrastructure around the site will be evaluated. The evaluation will include examining sidewalks, crosswalks, and pedestrian amenities along Bay Road between 14th Terrace and the project driveway south of 16th Street.

Additionally, pedestrian count data will be collected at the intersection of 15th Street and Bay Road on a Friday between 4:00 P.M. and 8:00 P.M. All traffic counts will be adjusted to account for seasonality using the appropriate Florida Department of Transportation (FDOT) seasonal factors for Miami Beach. The count data will be used to determine the placement of crosswalks at the intersection of 15th Street and Bay Road.

A pedestrian circulation figure illustrating ingress and egress to the site will also be prepared.

PARKING ASSESSMENT

The existing and proposed parking for vehicles, scooters and bicycles (short-term, long-term, and Citibike locations) will be documented. The City of Miami Beach's *Bicycle Parking Guidelines*, March 2011 will be used in determining on-site bicycle parking feasibility. The site plan will denote bicycle parking that can be accommodated on-site.

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

Transportation Demand Management (TDM) strategies will be developed to reduce the impact of project traffic on the surrounding roadway network and promote trip reduction. Typical measures promote bicycling and walking, encourage car/vanpooling and offer alternatives to the typical workday hours.

DOCUMENTATION OF FINDINGS

A technical letter documenting the trip generation analysis, valet and rideshare analysis, pedestrian assessment, and parking assessment will be provided. The letter will include supporting documents including data collection, calculations, and analysis findings. The letter will also include text and graphics necessary to summarize the assumptions and analysis.

A CD and electronic copy of the reports will be provided as part of the submittal package. The submittal package will also include the latest site plan.

k:\ftl_tpto\043347005-flamingo sobel\correspondence\memo\06 08 17 flamingo - methodology memo.docx

Attachment A



Kimley»Horn

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Location Map
Flamingo Miami Beach
Miami Beach, Florida

FLAMINGO

1420 BAY ROAD, MIAMI BEACH

Stantec Architecture Inc - AA26000733
Jonathan Cardello Lic. # AR93391

Stantec

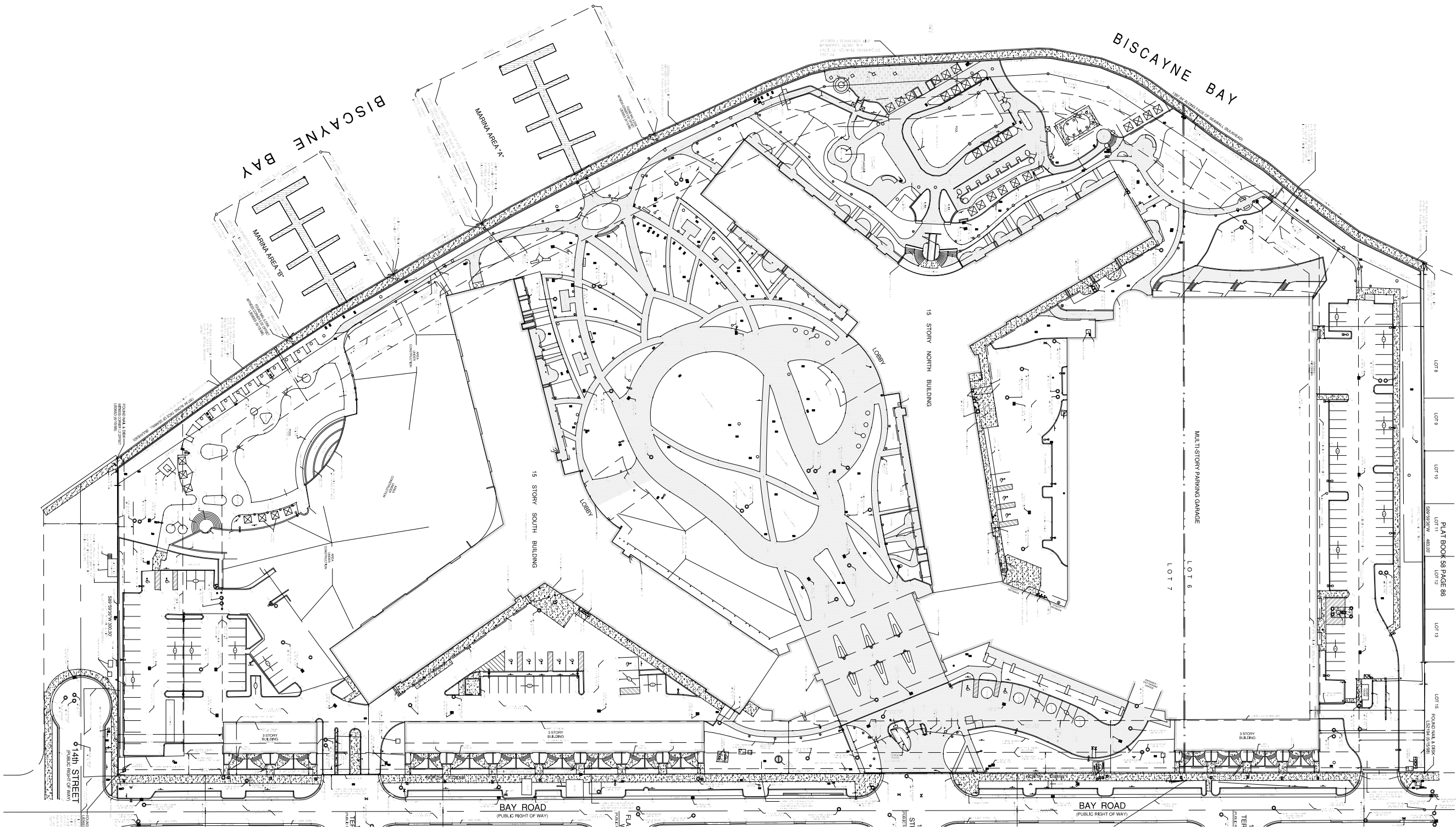
Stantec Architecture Inc.
One Biscayne Tower Suite 1670
2 South Biscayne Boulevard
Miami, FL 33131-1804
Tel: (305) 482-8700 / Fax: (305) 482-8770

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05.23.2017

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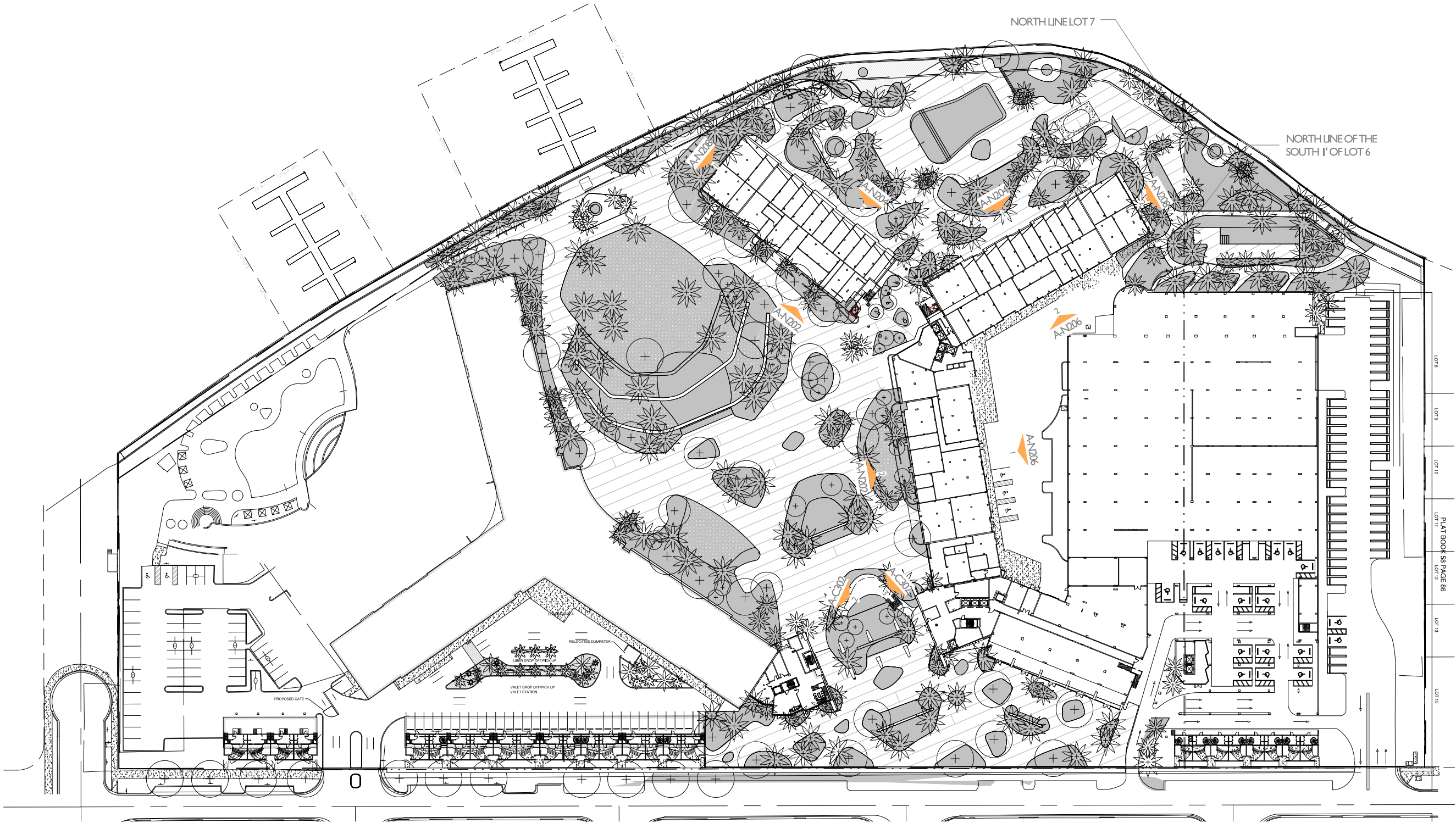


SITE SURVEY
SCALE: 1" = 50'-0"

Scale: 1" = 50'-0"
Note: When printed on 11 x 17 paper scale is halved

FLAMINGO

1420 BAY ROAD, MIAMI BEACH



Site Plan (Proposed)
SCALE: 1" = 50'-0"

Scale: 1" = 50'-0"
Note: When printed on 11 x 17 paper scale is halved



Stantec Architecture Inc - AA26000733
Jonathan Cardello Lic. # AR93391

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Attachment B

PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS							DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS					
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total					
					In	Out																							
1 Residential Condominium/Townhouse	9	230	426	du	17%	83%	28	137	165	10.0%	17	25	123	148	0.0%	0	25	123	148	0.0%	0	25	123	148					
2 Apartment	9	220	1261	du	20%	80%	124	498	622	10.0%	62	112	448	560	0.0%	0	112	448	560	0.0%	0	112	448	560					
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													
13																													
14																													
15																													
ITE Land Use Code							Rate or Equation		Total:			152	635	787	10.0%	79	137	571	708	0.0%	0	137	571	708	0.0%	0	137	571	708
230							LN(Y) = 0.8*LN(X)+0.26																						
220							Y=0.49*(X)+3.73																						

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS							
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total					
					In	Out																							
1 Residential Condominium/Townhouse	9	230	426	du	17%	83%	28	137	165	10.0%	16	25	124	149	0.2%	0	25	124	149	0.0%	0	25	124	149					
2 Apartment	9	220	1093	du	20%	80%	108	431	539	10.0%	54	97	388	485	0.2%	1	97	387	484	0.0%	0	97	387	484					
3 Quality Restaurant	9	931	299	seat	50%	50%	5	4	9	10.0%	1	4	4	8	12.5%	1	3	4	7	0.0%	0	3	4	7					
4																													
5																													
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11																													
12																													
13																													
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15																													
ITE Land Use Code					Rate or Equation		Total:			141	572	713	10.0%	71	126	516	642	0.3%	2	125	515	640	0.0%	0	125	515	640		
230					LN(Y) = 0.8*LN(X)+0.26																								
220					Y=0.49*(X)+3.73																								
931					Y=0.03(X)																								
																						Net New Vehicle Trips		IN	OUT	TOTAL			
																								-12	-56	-68			

	IN	OUT	TOTAL
Net New Vehicle Trips	-12	-56	-68

PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS					
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total				
					In	Out																						
1 Residential Condominium/Townhouse	9	230	426	du	67%	33%	132	65	197	10.0%	20	119	58	177	0.0%	0	119	58	177	0.0%	0	119	58	177				
2 Apartment	9	220	1261	du	65%	35%	462	249	711	10.0%	71	416	224	640	0.0%	0	416	224	640	0.0%	0	416	224	640				
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												
13																												
14																												
15																												
ITE Land Use Code						Rate or Equation		Total:			594	314	908	10.0%	91	535	282	817	0.0%	0	535	282	817	0.0%	0	535	282	817
230						LN(Y) = 0.82*LN(X)+0.32																						
220						Y=0.55*(X)+17.65																						

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS							
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total					
					In	Out																							
1 Residential Condominium/Townhouse	9	230	426	du	67%	33%	132	65	197	10.0%	19	119	59	178	1.5%	3	118	57	175	0.0%	0	118	57	175					
2 Apartment	9	220	1093	du	65%	35%	402	217	619	10.0%	62	362	195	557	1.5%	8	359	190	549	0.0%	0	359	190	549					
3 Quality Restaurant	9	931	299	seat	67%	33%	52	26	78	10.0%	8	47	23	70	15.7%	11	40	19	59	0.0%	0	40	19	59					
4																													
5																													
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8																													
9																													
10																													
11																													
12																													
13																													
14																													
15																													
ITE Land Use Code					Rate or Equation		Total:			586	308	894	10.0%	89	528	277	805	2.7%	22	517	266	783	0.0%	0	517	266	783		
230					LN(Y) = 0.82*LN(X)+0.32																								
220					Y=0.55*(X)+17.65																								
931					Y=0.26(X)																								
																						Net New Vehicle Trips		IN	OUT	TOTAL			
																								-18	-16	-34			

	IN	OUT	TOTAL
Net New Vehicle Trips	-18	-16	-34

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION					
INPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office				
	Retail				
	Restaurant	4	4	47	23
	Cinema/Entertainment				
	Residential	122	512	481	254
	Hotel				
		126	516	528	277
INTERNAL TRIPS					
OUTPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	1	0	7	4
	Cinema/Entertainment	0	0	0	0
	Residential	0	1	4	7
	Hotel	0	0	0	0
		1	1	11	11
OUTPUT	Total % Reduction	0.3%		2.7%	
	Office				
	Retail				
	Restaurant	12.5%		15.7%	
	Cinema/Entertainment				
	Residential	0.2%		1.5%	
	Hotel				
EXTERNAL TRIPS					
OUTPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	3	4	40	19
	Cinema/Entertainment	0	0	0	0
	Residential	122	511	477	247
	Hotel	0	0	0	0
		125	515	517	266

Attachment C:
Drop-Off/Pick-Up Area Stacking and
Valet Routes



4 TERRACE

BAY ROAD

PROPOSED ENHANCED
PEDESTRIAN CROSSWALK

PROPOSED ENTRANCE ONLY
VALET & UBER DROP-OFF PICK-UP

PROPOSED RESIDENT
& VISITOR EXIT

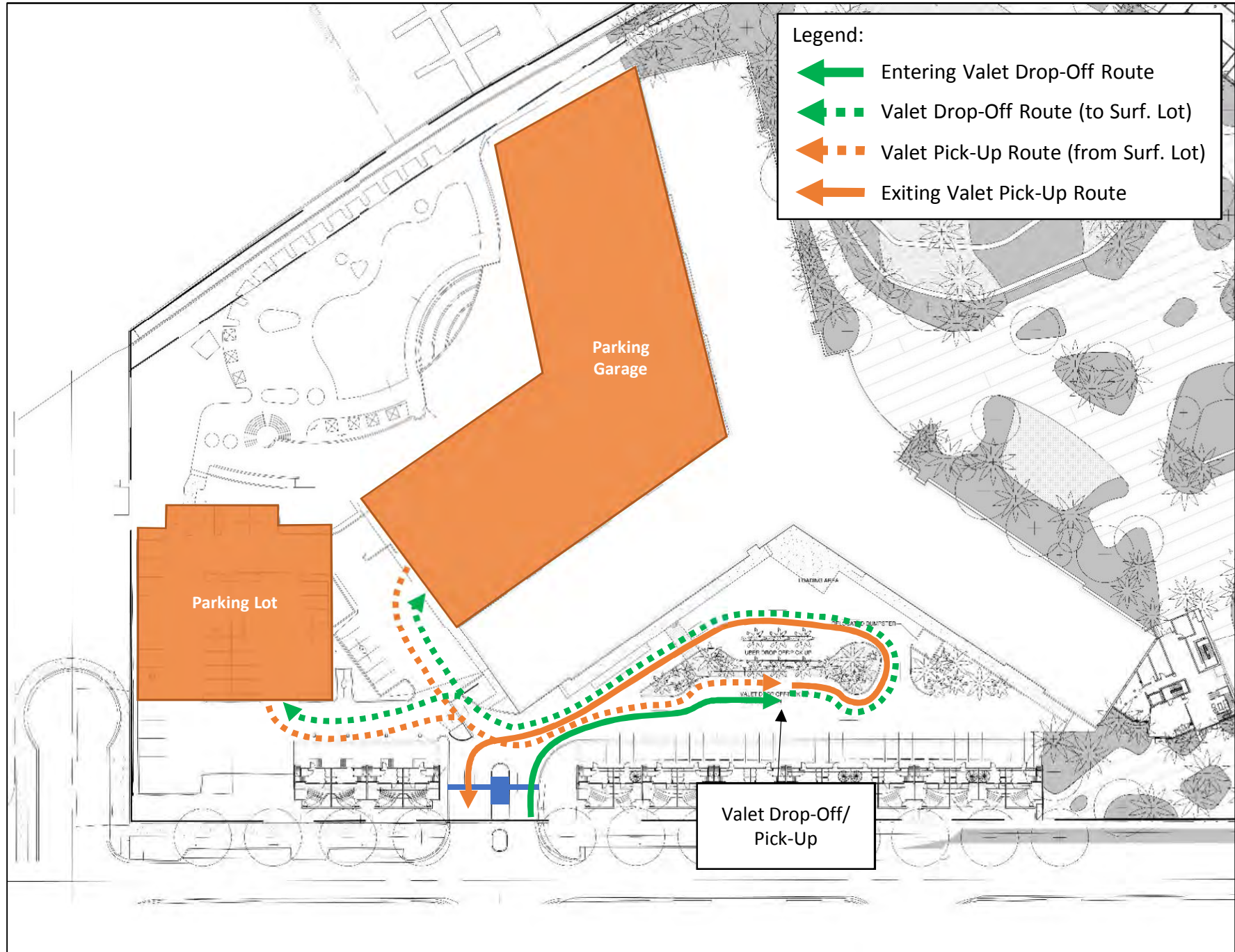
PROPOSED
RESIDENT
ENTRANCE

© 2017 KIMLEY-HORN AND ASSOCIATES, INC.
 100 N. PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100
 WWW.KIMLEY-HORN.COM CA 00000696

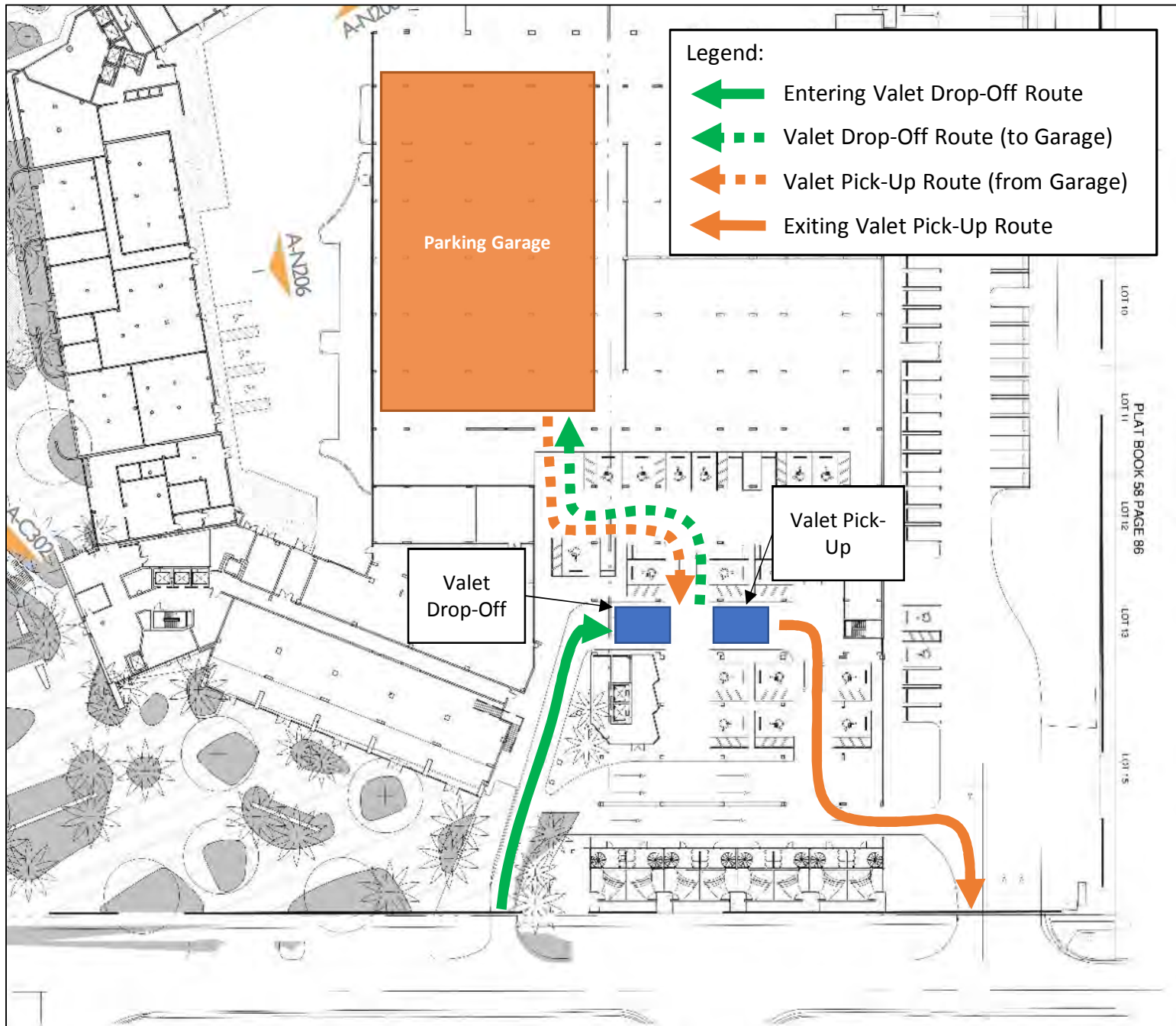
MIAMI BEACH, FL

DROP-OFF/PICK-UP AREA STACKING

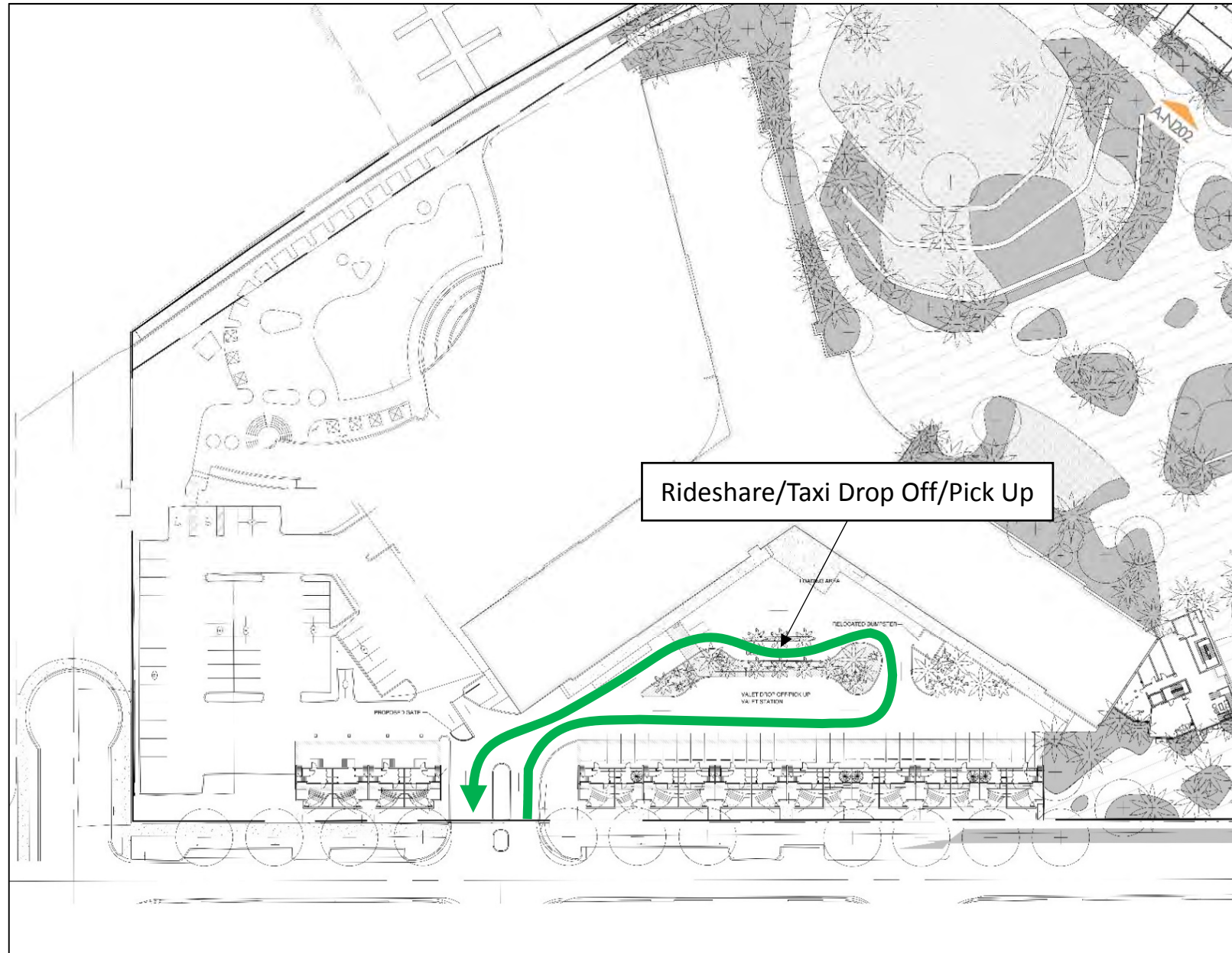
South Tower Proposed Valet Routing



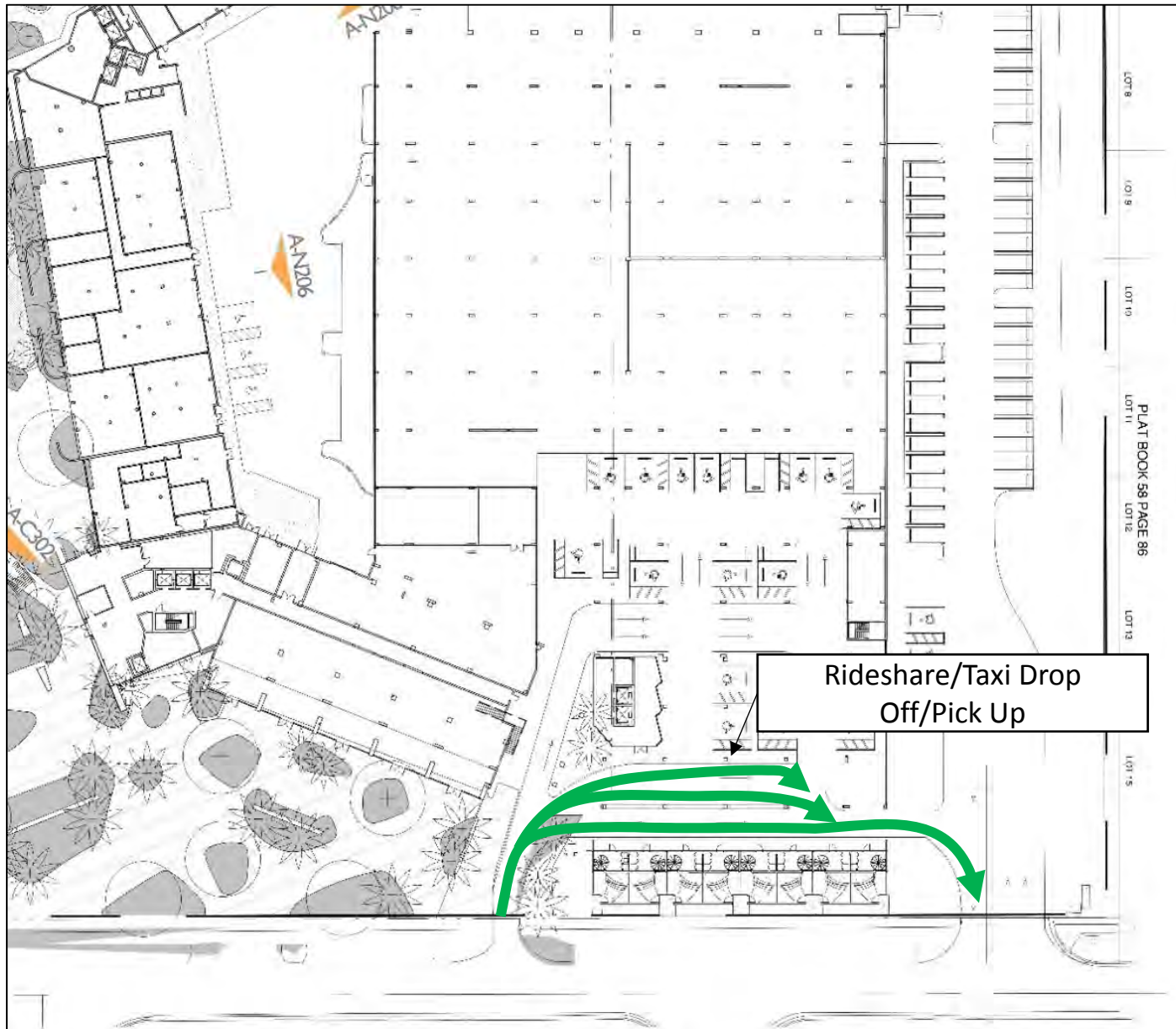
North Tower Proposed Valet Routing



South Tower Proposed Rideshare/Taxi Routing



North Tower Proposed Rideshare/Taxi Routing



Attachment D:
Rideshare/Taxi Accumulation Analysis



Memorandum

To: Lee Hodges
Flamingo South Beach

From: Adrian K. Dabkowski, P.E., PTOE
Omar Kanaan, P.E.

AK

OK

Date: April 6, 2017

**Subject: Flamingo Miami Beach
Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis**

The purpose of this memorandum is to summarize the shared-ride/taxi drop-off/pick-up accumulation analysis completed for the Flamingo Miami Beach residential development. Flamingo Miami Beach is located on the west side of Bay Road and is generally bounded by 14th Street and 16th Street. A location map is provided in Attachment A.

SITE OPERATIONS

Flamingo Miami Beach consists of three (3) residential towers (south, central, and north towers). The south tower contains condominium units while the central and north towers contain rental apartment units. Parking for residents and guests is provided via one (1) parking garage, located at the north end of the site, and several premium surface parking lots. The project site currently does not provide a shared-ride/taxi drop-off/pick-up area. However, three (3) on-street parking spaces along the west side of Bay Road between 15th Terrace and 15th Street are designated for shared-ride/taxi drop-off/pick-up operations.

Flamingo Miami Beach is served by three (3) driveways along Bay Road. The northernmost and southernmost driveways serve residential vehicular traffic accessing the site's internal parking garage and surface parking lots while the central driveway, which aligns with 15th Street, provides vehicular access, valet service, and access to pedestrians utilizing shared-ride/taxi drop-off/pick-up operations.

The south condominium tower is served by two (2) premium surface parking lots and a loading area. However, residents of the southern tower typically self-park or valet in the Flamingo Miami Beach's parking garage located in the north end of the site and walk to/from the south condominium tower. Residents that require assistance to load/unload their vehicles typically do so at the tower's loading area before parking in the site's parking garage.

Parking for the central and north apartment towers is provided in the site's parking garage located in the north end of the site.

DATA COLLECTION/FIELD OBSERVATIONS

Weekend peak period shared-ride/taxi drop-off/pick-up accumulation data was collected during a seven (7) hour period from Friday, March 24, 2017 at 6:00 P.M. to Saturday March 25, 2017 at 1:00 A.M. in one (1) minute intervals. All traffic counts were adjusted to account for seasonality using the appropriate Florida Department of Transportation (FDOT) seasonal adjustment factors specific for Miami Beach. The appropriate seasonal adjustment factor for the date on which the counts were collected is 1.00.

Vehicular accumulation data was collected in three (3) zones utilized for shared-ride/taxi drop-off/pick-up operations for the Flamingo Miami Beach. The data collection zones included segments along Bay Road from 14th Street to Lincoln Terrace, 15th Street, 15th Terrace, and 16th Street from Bay Road to West Avenue and are listed below. A graphic depicting the data collection zone boundaries, accumulation data, and FDOT seasonal factors are contained in Attachment B.

Table 1: Vehicular Accumulation Data Collection Zones	
Zone	Boundary
A	Bay Road between Lincoln Terrace and 15 th Terrace, and 16 th Street and 15 th Terrace between Bay Road and West Avenue (contains north driveway)
B	Bay Road between 15 th Terrace and 15 th Street, and 15 th Street between Bay Road and West Avenue (contains main driveway)
C	Bay Road between 15 th Street and 15 th Street (contains south driveway)

Field observations were conducted on March 17, 2017 (Friday) from 8:00 P.M. to 8:30 P.M. and from 11:00 P.M. to 11:30 P.M. throughout the study area. A photo log and qualitative information collected from the field review are included in Attachment C. The following observations are noted:

Bay Road

1. Shared-ride drop-off/pick-up operations occur along Bay Road generally between Flamingo Way and 15th Terrace and are more prevalent near 15th Street (Central Site Driveway).
2. Shared-ride drop-off/pick-up operations occur within both the northbound and southbound travel lanes along Bay Road.
3. Shared-ride drop-off/pick-up operations were observed to occur within the intersections of Bay Road at 15th Street and Bay Road at 15th Terrace.
4. Three (3) on-street parking spaces along the west side of Bay Road between 15th Terrace and 15th Street are designated for shared-ride/taxi drop-off/pick-up operations.

15th Terrace

1. Shared-ride drop-off/pick-up operations were observed to occur within the eastbound and westbound travel lanes along 15th Terrace near Bay Road.

15th Street

1. Shared-ride drop-off/pick-up operations were observed to occur within the eastbound and westbound travel lanes along 15th Street between Bay Road and West Avenue.
2. Shared-ride drop-off/pick-up operations were observed to occur within the intersection of Bay Road and 15th Street.

Central Site Driveway

1. Shared-ride drop-off/pick-up operations were observed to occur within the central site driveway.
2. Shared-ride drop-off/pick-up vehicles were observed using the newly installed pavement markings and flex-posts as a drop-off/pick-up porte-cochere/roundabout.
3. Shared-ride drop-off/pick-up vehicles were observed driving the wrong-way within the central site driveway.

Please note that shared-ride drop-off/pick-up operations disrupt vehicular and pedestrian crossing operations when completed within travel lanes and intersections.

SHARED-RIDE/TAXI DROP-OFF/PICK-UP

The accumulation data indicates that a maximum vehicle accumulation of nine (9) vehicles was observed at 7:20 P.M. comprised of 9 shared-ride vehicles and at 8:19 P.M. comprised of six (6) shared-ride vehicles and three (3) taxi vehicles. Please note that the maximum observed taxi accumulation was three (3) vehicles. The accumulation data also indicated that the average shared-ride/taxi vehicle accumulation (50th percentile) during the peak period was three (3) vehicles and the 95th percentile shared-ride/taxi vehicle accumulation was five (5) vehicles. A summary of the maximum observed, average (50th percentile), and 95th percentile vehicle accumulations is provided in Table 2.

Table 2: Vehicle Accumulation Data Summary		
Zone	Accumulation	UBER/LYFT/Taxi
A, B, and C	Maximum	9
	50 th Percentile	3
	95 th Percentile	6
A	Maximum	3
	50 th Percentile	0
	95 th Percentile	2
B	Maximum	9
	50 th Percentile	2
	95 th Percentile	5
C	Maximum	2
	50 th Percentile	0
	95 th Percentile	1

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Attachment A



Kimley»Horn

© 2017

Location Map
Flamingo Miami Beach
Miami Beach, Florida

Attachment B

Flamingo Shared-Ride/Taxi Drop-Off/Pick-Up

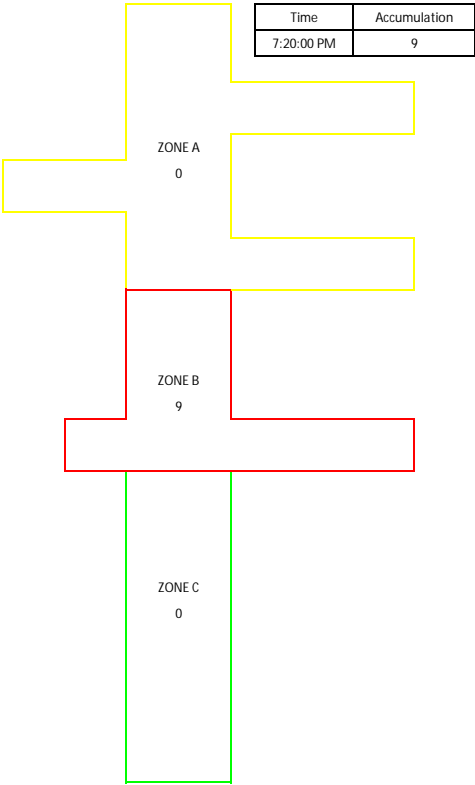
Legend
Data Collection Zone



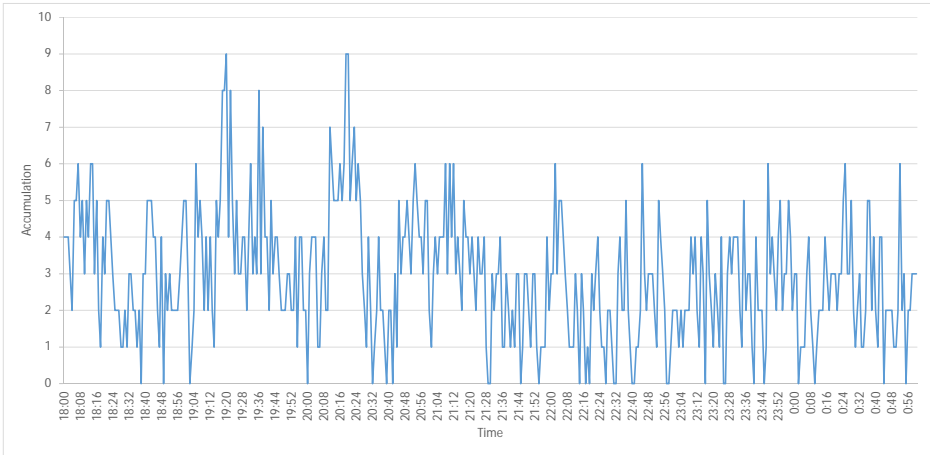
MacArthur Causeway Peak Season Conversion Factor				
Week	Weekly Volume	PSCF	Month	Days
1	97461	1.08	Jan	1-2
2	94621	1.11		5-9
3	92597	1.14		12-16
4	94820	1.11		19-23
5	95103	1.11		26-30
6	93310	1.13	Feb	2-6
7	97965	1.07		9-13
8	97595	1.08		16-20
9	98306	1.07		23-27
10	99061	1.06	Mar	2-6
11	103197	1.02		9-13
12	104700	1.00		16-20
13	105181	1.00		23-27
14	103378	1.02	Apr	30-3
15	98388	1.07		6-10
16	97132	1.08		13-17
17	92368	1.14		20-24
18	93079	1.13	May	27-1
19	94513	1.11		4-8
20	96765	1.09		11-15
21	90955	1.16		18-22
22	88187	1.19		25-29
23	94751	1.11	June	1-5
24	93310	1.13		8-12
25	94745	1.11		15-19
26	95914	1.10		22-26
27	92680	1.13	July	29-3
28	93320	1.13		6-10
29	95119	1.11		13-17
30	95499	1.10		20-24
31	94958	1.11		27-31
32	97362	1.08	Aug	3-7
33	94929	1.11		10-14
34	96230	1.09		17-21
35	92110	1.14		24-28
36	91826	1.15	Sept	1-4
37	90955	1.16		7-11
38	89712	1.17		14-18
39	92517	1.14		21-25
40	90393	1.16	Oct	28-2
41	88712	1.19		5-9
42	87533	1.20		12-16
43	94636	1.11		19-23
44	96168	1.09		26-30
45	96752	1.09	Nov	2-6
46	99482	1.06		9-13
47	96147	1.09		16-20
48	90693	1.16		23-27
49	102796	1.02	Dec	30-4
50	96703	1.09		7-11
51	97695	1.08		14-18
52	92309	1.14		21-25
53	103003	1.02		28-31

# of Vehicles East/North Side		TIME	# of Vehicles West/South Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
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3	0	18:01	1	0	4	0
1	0	18:02	3	0	4	0
0	0	18:03	3	0	3	0
0	0	18:04	2	0	2	0
0	1	18:05	3	1	3	2
0	0	18:06	3	2	3	2
1	1	18:07	3	1	4	2
1	0	18:08	3	0	4	0
2	0	18:09	3	0	5	0
0	0	18:10	3	0	3	0
2	0	18:11	3	0	5	0
1	0	18:12	3	0	4	0
3	0	18:13	3	0	6	0
2	0	18:14	4	0	6	0
0	0	18:15	3	0	3	0
3	0	18:16	2	0	5	0
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1	0	18:19	3	0	4	0
1	0	18:20	2	0	3	0
1	0	18:21	4	0	5	0
1	0	18:22	2	2	3	2
2	0	18:23	1	1	3	1
1	0	18:24	2	0	3	0
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2	0	18:26	0	0	2	0
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0	0	18:38	0	0	0	0
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1	1	18:40	1	0	2	1
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1	0	19:08	3	0	4	0
1	0	19:09	1	0	2	0
1	0	19:10	3	0	4	0
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2	0	19:43	1	0	3	0
3	0	19:44	1	0	4	0
2	0	19:45	2	0	4	0
1	0	19:46	2	0	3	0
1	0	19:47	1	0	2	0
1	0	19:48	1	0	2	0

	UBER/LYFT	TAXI	Combined
Time of Max Accumulation	19:20	20:16	20:19
Maximum Accumulation	9	3	9
50th %	3	0	3
95th %	5	1	6



Time	Accumulation
7:20:00 PM	9



Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

LOCATION: All
ZONE: A,B, and C

DAY: Friday
DATE: 3/24/2017

Miami Beach PSCF:

1.00

# of Vehicles East/North Side		TIME	# of Vehicles West/South Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
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1	0	19:54	3	0	4	0
1	0	19:55	0	0	1	0
0	0	19:56	4	0	4	0
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1	1	20:14	3	0	4	1
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2	0	20:46	1	0	3	0
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3	0	20:48	1	0	4	0
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Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

LOCATION: All
ZONE: A,B, and C

DAY: Friday
DATE: 3/24/2017

Miami Beach PSCF:

1.00

# of Vehicles East/North Side		TIME	# of Vehicles West/South Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
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1	0	21:39	1	0	2	0
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0	0	21:56	1	0	1	0
0	0	21:57	1	0	1	0
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1	0	22:02	4	1	5	1
0	0	22:03	2	1	2	1
2	0	22:04	3	0	5	0
2	0	22:05	3	0	5	0
0	0	22:06	4	0	4	0
0	0	22:07	3	0	3	0
2	0	22:08	0	0	2	0
0	1	22:09	0	0	0	1
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0	0	22:22	3	0	3	0
0	0	22:23	4	0	4	0
0	0	22:24	2	0	2	0
0	0	22:25	1	0	1	0
0	0	22:26	1	0	1	0
0	0	22:27	0	0	0	0
1	0	22:28	1	0	2	0
1	0	22:29	1	0	2	0
1	0	22:30	0	0	1	0
0	0	22:31	0	0	0	0
0	0	22:32	0	0	0	0
1	0	22:33	2	0	3	0
2	0	22:34	2	0	4	0
1	0	22:35	1	0	2	0
0	0	22:36	2	0	2	0
1	0	22:37	3	1	4	1
0	0	22:38	2	0	2	0
0	0	22:39	1	0	1	0
0	0	22:40	0	0	0	0
0	0	22:41	0	0	0	0
0	0	22:42	1	0	1	0
0	0	22:43	1	0	1	0
2	0	22:44	0	0	2	0
2	0	22:45	2	2	4	2
1	0	22:46	2	0	3	0
0	0	22:47	1	1	1	1
1	0	22:48	2	0	3	0
0	0	22:49	3	0	3	0
0	0	22:50	3	0	3	0
2	0	22:51	0	0	2	0
0	0	22:52	1	0	1	0
3	0	22:53	2	0	5	0
3	0	22:54	1	0	4	0
2	0	22:55	1	0	3	0
1	0	22:56	0	1	1	1
0	0	22:57	0	0	0	0
0	0	22:58	0	0	0	0
0	0	22:59	1	0	1	0
1	0	23:00	1	0	2	0
1	0	23:01	1	0	2	0
0	0	23:02	2	0	2	0
1	0	23:03	0	0	1	0
0	0	23:04	2	0	2	0
1	0	23:05	0	0	1	0
1	0	23:06	1	0	2	0
1	0	23:07	1	0	2	0
1	0	23:08	1	0	2	0
2	0	23:09	2	0	4	0
2	0	23:10	1	0	3	0
1	0	23:11	3	0	4	0
0	0	23:12	2	0	2	0
1	0	23:13	0	0	1	0
1	0	23:14	2	1	3	1
2	0	23:15	1	0	3	0
0	0	23:16	0	0	0	0
4	0	23:17	0	1	4	1
1	0	23:18	2	0	3	0
0	0	23:19	2	0	2	0
1	0	23:20	0	0	1	0
0	0	23:21	3	0	3	0
1	0	23:22	1	0	2	0
0	0	23:23	1	0	1	0
3	0	23:24	1	0	4	0
0	0	23:25	0	0	0	0
0	0	23:26	0	0	0	0

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

LOCATION: All
ZONE: A,B, and C

DAY: Friday
DATE: 3/24/2017

Miami Beach PSCF: 1.00

# of Vehicles East/North Side		TIME	# of Vehicles West/South Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
1	0	23:27	1	1	2	1
1	0	23:28	2	1	3	1
0	0	23:29	3	0	3	0
0	0	23:30	4	0	4	0
1	0	23:31	3	0	4	0
3	0	23:32	1	0	4	0
1	0	23:33	1	0	2	0
1	0	23:34	0	0	1	0
2	0	23:35	3	0	5	0
0	0	23:36	2	0	2	0
1	0	23:37	2	0	3	0
0	0	23:38	3	0	3	0
0	0	23:39	1	0	1	0
0	0	23:40	0	0	0	0
1	0	23:41	3	0	4	0
0	0	23:42	2	0	2	0
1	0	23:43	1	0	2	0
1	0	23:44	1	0	2	0
0	0	23:45	0	0	0	0
1	0	23:46	0	0	1	0
2	0	23:47	4	0	6	0
0	2	23:48	1	0	1	2
1	0	23:49	3	0	4	0
2	0	23:50	1	0	3	0
1	0	23:51	1	0	2	0
2	0	23:52	2	0	4	0
2	0	23:53	3	0	5	0
0	0	23:54	2	0	2	0
2	0	23:55	1	0	3	0
0	0	23:56	2	1	2	1
0	0	23:57	4	1	4	1
0	0	23:58	4	0	4	0
1	0	23:59	1	0	2	0
0	0	0:00	2	1	2	1
0	1	0:01	2	0	2	1
0	0	0:02	0	0	0	0
0	0	0:03	1	0	1	0
0	0	0:04	1	0	1	0
0	0	0:05	1	0	1	0
1	0	0:06	2	0	3	0
1	0	0:07	3	0	4	0
0	0	0:08	2	0	2	0
0	0	0:09	1	0	1	0
0	0	0:10	0	0	0	0
0	0	0:11	1	0	1	0
0	0	0:12	1	1	1	1
0	0	0:13	1	1	1	1
0	0	0:14	2	0	2	0
1	0	0:15	3	0	4	0
1	0	0:16	2	0	3	0
0	0	0:17	2	0	2	0
0	0	0:18	3	0	3	0
1	0	0:19	1	1	2	1
1	0	0:20	2	0	3	0
0	0	0:21	2	0	2	0
1	0	0:22	1	1	2	1
1	0	0:23	2	0	3	0
0	0	0:24	5	0	5	0
4	0	0:25	2	0	6	0
0	0	0:26	3	0	3	0
1	0	0:27	2	0	3	0
2	0	0:28	3	0	5	0
1	0	0:29	1	0	2	0
0	0	0:30	1	0	1	0
0	0	0:31	2	0	2	0
1	0	0:32	2	0	3	0
0	0	0:33	1	0	1	0
0	0	0:34	1	0	1	0
0	0	0:35	2	0	2	0
2	0	0:36	3	0	5	0
4	0	0:37	1	0	5	0
1	0	0:38	1	0	2	0
2	0	0:39	2	0	4	0
2	0	0:40	0	0	2	0
0	0	0:41	1	0	1	0
0	0	0:42	4	0	4	0
1	0	0:43	3	0	4	0
0	0	0:44	0	0	0	0
1	1	0:45	0	0	1	1
1	0	0:46	1	0	2	0
0	0	0:47	1	1	1	1
1	0	0:48	1	0	2	0
1	0	0:49	0	0	1	0
0	0	0:50	1	0	1	0
2	0	0:51	0	0	2	0
2	0	0:52	4	0	6	0
2	0	0:53	0	0	2	0
1	0	0:54	2	0	3	0
0	0	0:55	0	0	0	0
1	1	0:56	0	0	1	1
0	0	0:57	2	0	2	0
2	0	0:58	1	0	3	0
3	0	0:59	0	0	3	0
1	0	1:00	2	0	3	0

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

Bay Rd Btwn Lincoln Ter & 15th
LOCATION: Ter, 15th Ter & 16th St Btwn Bay
Rd & West Ave
ZONE: A

DAY: Friday

Miami Beach PSCF:

1.00

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	18:00	0	0	0	0
0	0	18:01	0	0	0	0
0	0	18:02	1	0	1	0
0	0	18:03	0	0	0	0
0	0	18:04	0	0	0	0
0	0	18:05	0	0	0	0
0	0	18:06	1	0	1	0
1	0	18:07	1	0	2	0
1	0	18:08	1	0	2	0
1	0	18:09	1	0	2	0
0	0	18:10	0	0	0	0
1	0	18:11	1	0	2	0
0	0	18:12	0	0	0	0
1	0	18:13	0	0	1	0
1	0	18:14	1	0	2	0
0	0	18:15	0	0	0	0
0	0	18:16	0	0	0	0
0	0	18:17	0	0	0	0
0	0	18:18	0	0	0	0
0	0	18:19	1	0	1	0
0	0	18:20	0	0	0	0
0	0	18:21	2	0	2	0
0	0	18:22	1	0	1	0
1	0	18:23	1	0	2	0
0	0	18:24	2	0	2	0
0	0	18:25	0	0	0	0
1	0	18:26	0	0	1	0
0	0	18:27	0	0	0	0
0	0	18:28	0	0	0	0
0	0	18:29	0	0	0	0
0	0	18:30	0	0	0	0
0	0	18:31	0	0	0	0
0	0	18:32	0	0	0	0
0	0	18:33	0	0	0	0
0	0	18:34	0	0	0	0
0	0	18:35	0	0	0	0
0	0	18:36	0	0	0	0
0	0	18:37	1	0	1	0
0	0	18:38	0	0	0	0
0	0	18:39	0	0	0	0
0	0	18:40	0	0	0	0
0	0	18:41	0	0	0	0
0	0	18:42	0	0	0	0
0	0	18:43	0	0	0	0
0	0	18:44	1	0	1	0
0	0	18:45	1	0	1	0
0	0	18:46	0	0	0	0
0	0	18:47	0	0	0	0
1	0	18:48	0	0	1	0
0	0	18:49	0	0	0	0
0	0	18:50	0	1	0	1
0	0	18:51	0	0	0	0
0	0	18:52	1	0	1	0
0	0	18:53	1	0	1	0
0	0	18:54	0	0	0	0
1	0	18:55	0	0	1	0
1	0	18:56	0	0	1	0
0	0	18:57	1	0	1	0
0	0	18:58	1	0	1	0
0	0	18:59	1	0	1	0
0	0	19:00	0	0	0	0
0	0	19:01	0	0	0	0
0	0	19:02	0	0	0	0
0	0	19:03	0	0	0	0
0	0	19:04	0	0	0	0
1	0	19:05	0	0	1	0
0	0	19:06	1	0	1	0
0	0	19:07	0	0	0	0
1	0	19:08	1	0	2	0
0	0	19:09	1	0	1	0
0	0	19:10	1	0	1	0
0	0	19:11	1	0	1	0
0	0	19:12	0	0	0	0
0	0	19:13	0	0	0	0
0	0	19:14	0	0	0	0
1	0	19:15	0	0	1	0
0	0	19:16	0	0	0	0
0	0	19:17	1	0	1	0
2	0	19:18	1	0	3	0
0	0	19:19	0	0	0	0
0	0	19:20	0	0	0	0
0	0	19:21	0	0	0	0
0	0	19:22	0	0	0	0
0	0	19:23	0	0	0	0
0	0	19:24	0	0	0	0
0	0	19:25	0	0	0	0
1	0	19:26	0	0	1	0
0	0	19:27	0	0	0	0
0	0	19:28	0	0	0	0
0	0	19:29	0	0	0	0
0	0	19:30	0	0	0	0
0	0	19:31	0	0	0	0
1	0	19:32	0	0	1	0
0	0	19:33	0	0	0	0
0	0	19:34	0	0	0	0
0	0	19:35	0	0	0	0
1	0	19:36	1	0	2	0
0	0	19:37	0	0	0	0
0	0	19:38	0	0	0	0
0	0	19:39	0	0	0	0
0	0	19:40	0	0	0	0
0	0	19:41	0	0	0	0
1	0	19:42	0	0	1	0
0	0	19:43	0	0	0	0
0	0	19:44	0	0	0	0
0	0	19:45	0	0	0	0
0	0	19:46	0	0	0	0
0	0	19:47	0	0	0	0
0	0	19:48	0	0	0	0
0	0	19:49	0	0	0	0

	UBER/LYFT	TAXI	Combined
Time of Max Accumulation	Multiple	Multiple	Multiple
Maximum Accumulation	3	1	3
50th %	0	0	0
95th %	2	0	2

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

Bay Rd Btwn Lincoln Ter & 15th

LOCATION: Ter, 15th Ter & 16th St Btwn Bay
Rd & West Ave

ZONE: A

DAY: Friday

Miami Beach PSCF:

1.00

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	19:50	0	0	0	0
0	0	19:51	0	0	0	0
0	0	19:52	0	0	0	0
0	0	19:53	1	0	1	0
0	0	19:54	1	0	1	0
1	0	19:55	0	0	1	0
0	0	19:56	0	0	0	0
1	0	19:57	0	0	1	0
0	0	19:58	0	0	0	0
0	1	19:59	0	0	0	1
0	0	20:00	0	0	0	0
0	0	20:01	1	0	1	0
0	0	20:02	0	0	0	0
0	0	20:03	0	0	0	0
0	0	20:04	0	0	0	0
0	0	20:05	0	0	0	0
0	0	20:06	0	0	0	0
0	0	20:07	0	0	0	0
0	0	20:08	1	0	1	0
0	0	20:09	0	0	0	0
0	0	20:10	0	0	0	0
1	0	20:11	2	0	3	0
2	0	20:12	0	0	2	0
0	0	20:13	0	0	0	0
0	0	20:14	0	0	0	0
0	0	20:15	1	0	1	0
1	0	20:16	0	0	1	0
0	0	20:17	0	0	0	0
0	0	20:18	0	0	0	0
0	0	20:19	0	0	0	0
2	0	20:20	1	0	3	0
1	0	20:21	0	0	1	0
0	0	20:22	1	0	1	0
0	0	20:23	1	0	1	0
0	0	20:24	0	0	0	0
0	0	20:25	1	0	1	0
0	0	20:26	0	0	0	0
0	0	20:27	0	0	0	0
0	0	20:28	0	0	0	0
0	0	20:29	0	0	0	0
0	0	20:30	0	0	0	0
0	0	20:31	0	0	0	0
0	0	20:32	0	0	0	0
0	0	20:33	0	0	0	0
0	0	20:34	0	0	0	0
0	0	20:35	1	0	1	0
0	0	20:36	0	0	0	0
0	0	20:37	0	0	0	0
0	0	20:38	0	0	0	0
0	0	20:39	0	0	0	0
0	0	20:40	0	0	0	0
0	0	20:41	0	0	0	0
0	0	20:42	0	0	0	0
0	0	20:43	0	0	0	0
0	0	20:44	0	0	0	0
1	0	20:45	0	0	1	0
1	0	20:46	0	0	1	0
1	0	20:47	0	0	1	0
2	0	20:48	0	0	2	0
1	0	20:49	0	0	1	0
1	1	20:50	0	0	1	1
1	1	20:51	0	0	1	1
2	1	20:52	0	0	2	1
2	1	20:53	0	0	2	1
1	1	20:54	0	0	1	1
0	1	20:55	0	0	0	1
0	1	20:56	0	0	0	1
0	1	20:57	0	0	0	1
0	1	20:58	0	0	0	1
0	0	20:59	0	0	0	0
0	0	21:00	0	0	0	0
0	0	21:01	0	0	0	0
0	0	21:02	1	0	1	0
0	0	21:03	2	0	2	0
0	0	21:04	0	0	0	0
0	0	21:05	1	0	1	0
0	0	21:06	2	0	2	0
0	0	21:07	2	0	2	0
1	0	21:08	0	0	1	0
0	0	21:09	0	0	0	0
0	0	21:10	0	1	0	1
0	0	21:11	1	1	1	1
0	0	21:12	2	1	2	1
0	0	21:13	0	0	0	0
0	0	21:14	0	0	0	0
0	0	21:15	0	0	0	0
0	0	21:16	0	0	0	0
1	0	21:17	0	0	1	0
2	0	21:18	0	0	2	0
0	0	21:19	1	0	1	0
1	0	21:20	0	0	1	0
1	0	21:21	0	0	1	0
0	0	21:22	0	0	0	0
0	0	21:23	0	0	0	0
1	0	21:24	0	0	1	0
0	0	21:25	1	0	1	0
0	0	21:26	2	0	2	0
0	0	21:27	1	0	1	0
0	0	21:28	0	0	0	0
0	0	21:29	0	0	0	0
0	0	21:30	0	0	0	0
0	0	21:31	0	0	0	0
0	0	21:32	1	0	1	0
1	0	21:33	1	0	2	0
1	0	21:34	0	0	1	0
1	0	21:35	0	0	1	0
0	0	21:36	0	0	0	0
0	0	21:37	0	0	0	0
0	0	21:38	0	0	0	0
0	0	21:39	0	0	0	0

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

Bay Rd Btwn Lincoln Ter & 15th
LOCATION: Ter, 15th Ter & 16th St Btwn Bay
Rd & West Ave
ZONE: A

DAY: Friday

Miami Beach PSCF:

1.00

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	21:40	1	0	1	0
0	0	21:41	1	0	1	0
0	0	21:42	1	0	1	0
1	0	21:43	1	0	2	0
1	0	21:44	1	0	2	0
0	0	21:45	0	0	0	0
0	0	21:46	0	0	0	0
0	0	21:47	0	0	0	0
0	0	21:48	0	0	0	0
0	0	21:49	0	0	0	0
0	0	21:50	0	0	0	0
1	0	21:51	0	0	1	0
0	0	21:52	0	0	0	0
1	0	21:53	0	0	1	0
0	0	21:54	0	0	0	0
0	0	21:55	0	0	0	0
0	0	21:56	0	0	0	0
0	0	21:57	0	0	0	0
1	0	21:58	0	0	1	0
0	0	21:59	0	0	0	0
0	0	22:00	0	0	0	0
0	0	22:01	0	0	0	0
1	0	22:02	1	0	2	0
0	0	22:03	0	0	0	0
0	0	22:04	1	0	1	0
0	0	22:05	1	0	1	0
0	0	22:06	1	0	1	0
0	0	22:07	1	0	1	0
0	0	22:08	0	0	0	0
0	0	22:09	0	0	0	0
0	0	22:10	1	0	1	0
0	0	22:11	0	0	0	0
1	0	22:12	0	0	1	0
1	0	22:13	0	0	1	0
0	0	22:14	0	0	0	0
0	0	22:15	0	0	0	0
1	0	22:16	0	0	1	0
0	0	22:17	0	0	0	0
1	0	22:18	0	0	1	0
0	0	22:19	0	0	0	0
0	0	22:20	0	0	0	0
1	0	22:21	0	0	1	0
0	0	22:22	1	0	1	0
0	0	22:23	2	0	2	0
0	0	22:24	0	0	0	0
0	0	22:25	0	0	0	0
0	0	22:26	1	0	1	0
0	0	22:27	0	0	0	0
0	0	22:28	0	0	0	0
0	0	22:29	0	0	0	0
0	0	22:30	0	0	0	0
0	0	22:31	0	0	0	0
0	0	22:32	0	0	0	0
0	0	22:33	0	0	0	0
0	0	22:34	0	0	0	0
0	0	22:35	0	0	0	0
0	0	22:36	0	0	0	0
1	0	22:37	1	0	2	0
0	0	22:38	0	0	0	0
0	0	22:39	0	0	0	0
0	0	22:40	0	0	0	0
0	0	22:41	0	0	0	0
0	0	22:42	0	0	0	0
0	0	22:43	0	0	0	0
1	0	22:44	0	0	1	0
1	0	22:45	1	0	2	0
0	0	22:46	1	0	1	0
0	0	22:47	1	0	1	0
0	0	22:48	2	0	2	0
0	0	22:49	3	0	3	0
0	0	22:50	2	0	2	0
0	0	22:51	0	0	0	0
0	0	22:52	0	0	0	0
2	0	22:53	1	0	3	0
2	0	22:54	0	0	2	0
1	0	22:55	0	0	1	0
0	0	22:56	0	0	0	0
0	0	22:57	0	0	0	0
0	0	22:58	0	0	0	0
0	0	22:59	0	0	0	0
0	0	23:00	0	0	0	0
0	0	23:01	0	0	0	0
0	0	23:02	0	0	0	0
0	0	23:03	0	0	0	0
0	0	23:04	1	0	1	0
0	0	23:05	0	0	0	0
0	0	23:06	0	0	0	0
0	0	23:07	0	0	0	0
0	0	23:08	0	0	0	0
0	0	23:09	1	0	1	0
0	0	23:10	1	0	1	0
0	0	23:11	1	0	1	0
0	0	23:12	0	0	0	0
0	0	23:13	0	0	0	0
1	0	23:14	0	0	1	0
0	0	23:15	0	0	0	0
0	0	23:16	0	0	0	0
1	0	23:17	0	1	1	1
0	0	23:18	0	0	0	0
0	0	23:19	0	0	0	0
0	0	23:20	0	0	0	0
0	0	23:21	0	0	0	0
0	0	23:22	0	0	0	0
0	0	23:23	0	0	0	0
0	0	23:24	0	0	0	0
0	0	23:25	0	0	0	0
0	0	23:26	0	0	0	0
1	0	23:27	0	0	1	0
0	0	23:28	0	0	0	0
0	0	23:29	2	0	2	0

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	23:30	2	0	2	0
1	0	23:31	1	0	2	0
1	0	23:32	0	0	1	0
1	0	23:33	0	0	1	0
1	0	23:34	0	0	1	0
1	0	23:35	1	0	2	0
0	0	23:36	1	0	1	0
0	0	23:37	0	0	0	0
0	0	23:38	1	0	1	0
0	0	23:39	0	0	0	0
0	0	23:40	0	0	0	0
1	0	23:41	0	0	1	0
0	0	23:42	0	0	0	0
1	0	23:43	0	0	1	0
0	0	23:44	0	0	0	0
0	0	23:45	0	0	0	0
1	0	23:46	0	0	1	0
1	0	23:47	0	0	1	0
0	1	23:48	0	0	0	1
1	0	23:49	1	0	2	0
2	0	23:50	0	0	2	0
1	0	23:51	0	0	1	0
2	0	23:52	0	0	2	0
1	0	23:53	1	0	2	0
0	0	23:54	1	0	1	0
1	0	23:55	0	0	1	0
0	0	23:56	0	0	0	0
0	0	23:57	1	0	1	0
0	0	23:58	1	0	1	0
0	0	23:59	1	0	1	0
0	0	0:00	1	0	1	0
0	0	0:01	0	0	0	0
0	0	0:02	0	0	0	0
0	0	0:03	0	0	0	0
0	0	0:04	0	0	0	0
0	0	0:05	0	0	0	0
0	0	0:06	0	0	0	0
0	0	0:07	0	0	0	0
0	0	0:08	0	0	0	0
0	0	0:09	0	0	0	0
0	0	0:10	0	0	0	0
0	0	0:11	0	0	0	0
0	0	0:12	0	0	0	0
0	0	0:13	0	1	0	1
0	0	0:14	1	0	1	0
0	0	0:15	1	0	1	0
1	0	0:16	1	0	2	0
0	0	0:17	2	0	2	0
0	0	0:18	1	0	1	0
0	0	0:19	0	1	0	1
0	0	0:20	0	0	0	0
0	0	0:21	0	0	0	0
1	0	0:22	0	0	1	0
1	0	0:23	2	0	3	0
0	0	0:24	1	0	1	0
1	0	0:25	0	0	1	0
0	0	0:26	0	0	0	0
0	0	0:27	0	0	0	0
0	0	0:28	0	0	0	0
0	0	0:29	1	0	1	0
0	0	0:30	0	0	0	0
0	0	0:31	0	0	0	0
0	0	0:32	0	0	0	0
0	0	0:33	0	0	0	0
0	0	0:34	0	0	0	0
0	0	0:35	0	0	0	0
0	0	0:36	0	0	0	0
1	0	0:37	0	0	1	0
0	0	0:38	0	0	0	0
1	0	0:39	0	0	1	0
0	0	0:40	0	0	0	0
0	0	0:41	0	0	0	0
0	0	0:42	1	0	1	0
0	0	0:43	1	0	1	0
0	0	0:44	0	0	0	0
0	0	0:45	0	0	0	0
0	0	0:46	0	0	0	0
0	0	0:47	0	0	0	0
0	0	0:48	0	0	0	0
0	0	0:49	0	0	0	0
0	0	0:50	0	0	0	0
0	0	0:51	0	0	0	0
0	0	0:52	0	0	0	0
0	0	0:53	0	0	0	0
0	0	0:54	0	0	0	0
0	0	0:55	0	0	0	0
0	0	0:56	0	0	0	0
0	0	0:57	0	0	0	0
0	0	0:58	1	0	1	0
1	0	0:59	0	0	1	0
1	0	1:00	2	0	3	0

Prepared by National Data & Surveying Services

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

Bay Rd Btwn 15th Ter & 15th St,
LOCATION: 15th St Btwn Bay Rd & West Ave

DAY: Friday

Miami Beach PSCF:

1.00

ZONE: B

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
2	0	18:00	1	0	3	0
3	0	18:01	0	0	3	0
1	0	18:02	2	0	3	0
0	0	18:03	3	0	3	0
0	0	18:04	2	0	2	0
0	0	18:05	2	1	2	1
0	0	18:06	2	2	2	2
0	1	18:07	2	1	2	2
0	0	18:08	2	0	2	0
1	0	18:09	2	0	3	0
0	0	18:10	3	0	3	0
1	0	18:11	2	0	3	0
1	0	18:12	3	0	4	0
2	0	18:13	3	0	5	0
1	0	18:14	3	0	4	0
0	0	18:15	3	0	3	0
3	0	18:16	2	0	5	0
1	0	18:17	1	0	2	0
0	0	18:18	1	0	1	0
1	0	18:19	2	0	3	0
1	0	18:20	2	0	3	0
1	0	18:21	2	0	3	0
1	0	18:22	1	2	2	2
1	0	18:23	0	1	1	1
1	0	18:24	0	0	1	0
2	0	18:25	0	0	2	0
1	0	18:26	0	0	1	0
1	0	18:27	0	0	1	0
1	0	18:28	0	0	1	0
1	0	18:29	0	0	1	0
1	1	18:30	0	0	1	1
1	0	18:31	0	0	1	0
2	0	18:32	1	0	3	0
2	0	18:33	1	0	3	0
1	0	18:34	1	0	2	0
0	0	18:35	2	0	2	0
1	0	18:36	0	0	1	0
0	0	18:37	1	0	1	0
0	0	18:38	0	0	0	0
1	0	18:39	2	0	3	0
0	1	18:40	1	0	1	1
2	0	18:41	3	0	5	0
1	0	18:42	2	2	3	2
1	0	18:43	3	0	4	0
2	0	18:44	0	1	2	1
2	0	18:45	1	0	3	0
0	1	18:46	0	0	0	1
0	0	18:47	1	0	1	0
1	0	18:48	1	0	2	0
0	0	18:49	0	0	0	0
1	1	18:50	0	0	1	1
1	0	18:51	0	0	1	0
0	0	18:52	2	0	2	0
0	1	18:53	0	0	0	1
0	0	18:54	2	0	2	0
0	0	18:55	1	0	1	0
0	0	18:56	0	1	0	1
1	0	18:57	0	1	1	1
1	0	18:58	1	1	2	1
3	0	18:59	0	1	3	1
3	0	19:00	2	0	5	0
1	0	19:01	2	0	3	0
0	0	19:02	0	0	0	0
1	0	19:03	0	0	1	0
1	0	19:04	1	0	2	0
1	0	19:05	3	1	4	1
1	0	19:06	1	1	2	1
1	0	19:07	3	0	4	0
0	0	19:08	2	0	2	0
1	0	19:09	0	0	1	0
1	0	19:10	2	0	3	0
0	0	19:11	1	0	1	0
0	0	19:12	4	0	4	0
0	0	19:13	1	0	1	0
0	0	19:14	1	0	1	0
1	0	19:15	3	0	4	0
1	0	19:16	3	0	4	0
0	0	19:17	4	0	4	0
1	0	19:18	4	0	5	0
3	0	19:19	4	0	7	0
5	0	19:20	4	0	9	0
2	0	19:21	2	0	4	0
3	0	19:22	4	0	7	0
2	0	19:23	3	0	5	0
0	0	19:24	2	0	2	0
2	0	19:25	3	0	5	0
0	0	19:26	2	0	2	0
1	0	19:27	2	0	3	0
0	0	19:28	4	0	4	0
0	0	19:29	3	0	3	0
0	0	19:30	2	0	2	0
0	1	19:31	3	0	3	1
0	0	19:32	4	0	4	0
0	0	19:33	3	0	3	0
0	0	19:34	2	2	2	2
0	1	19:35	2	0	2	1
3	0	19:36	2	0	5	0
3	0	19:37	0	0	3	0
4	1	19:38	0	1	4	2
2	0	19:39	1	1	3	1
1	1	19:40	1	0	2	1
1	0	19:41	1	0	2	0
2	0	19:42	1	0	3	0
2	0	19:43	1	0	3	0
3	0	19:44	1	0	4	0
2	0	19:45	2	0	4	0
1	0	19:46	2	0	3	0
1	0	19:47	1	0	2	0
1	0	19:48	1	0	2	0
1	0	19:49	1	0	2	0

	UBER/LYFT	TAXI	Combined
Time of Max Accumulation	19:20	20:16	20:19
Maximum Accumulation	9	3	9
50th %	2	0	2
95th %	4	1	5

Prepared by National Data & Surveying Services

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

Bay Rd Btwn 15th Ter & 15th St,
LOCATION: 15th St Btwn Bay Rd & West Ave

DAY: Friday

Miami Beach PSCF:

1.00

ZONE: B

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
1	0	19:50	2	0	3	0
0	0	19:51	2	0	2	0
0	0	19:52	1	0	1	0
0	0	19:53	1	0	1	0
1	0	19:54	2	0	3	0
0	0	19:55	0	0	0	0
0	0	19:56	4	0	4	0
1	1	19:57	1	0	2	1
0	0	19:58	1	1	1	1
1	0	19:59	0	0	1	0
0	0	20:00	0	0	0	0
0	0	20:01	1	1	1	1
2	0	20:02	2	0	4	0
2	0	20:03	1	0	3	0
1	0	20:04	2	0	3	0
0	0	20:05	1	0	1	0
0	0	20:06	1	0	1	0
0	0	20:07	3	0	3	0
0	0	20:08	3	0	3	0
0	0	20:09	2	0	2	0
0	0	20:10	2	0	2	0
1	0	20:11	2	1	3	1
1	1	20:12	2	0	3	1
1	2	20:13	2	0	3	2
1	1	20:14	3	0	4	1
1	1	20:15	2	0	3	1
0	1	20:16	2	2	2	3
0	1	20:17	2	2	2	3
1	1	20:18	2	2	3	3
3	1	20:19	2	2	5	3
0	1	20:20	3	1	3	2
0	1	20:21	3	0	3	1
1	1	20:22	3	0	4	1
0	1	20:23	5	0	5	1
0	1	20:24	4	0	4	1
1	1	20:25	2	1	3	2
0	0	20:26	3	0	3	0
0	0	20:27	2	0	2	0
1	0	20:28	1	0	2	0
1	0	20:29	0	0	1	0
3	0	20:30	1	0	4	0
1	0	20:31	1	0	2	0
0	0	20:32	0	0	0	0
0	0	20:33	1	0	1	0
0	0	20:34	1	0	1	0
1	0	20:35	1	0	2	0
1	0	20:36	1	0	2	0
2	0	20:37	0	0	2	0
0	0	20:38	1	0	1	0
0	0	20:39	0	0	0	0
0	0	20:40	2	0	2	0
1	0	20:41	1	0	2	0
0	0	20:42	0	0	0	0
1	0	20:43	2	0	3	0
0	0	20:44	1	0	1	0
0	0	20:45	2	0	2	0
1	0	20:46	0	0	1	0
2	0	20:47	1	0	3	0
1	0	20:48	1	0	2	0
1	0	20:49	3	0	4	0
1	0	20:50	0	0	1	0
1	0	20:51	0	0	1	0
1	0	20:52	0	0	1	0
3	0	20:53	0	0	3	0
2	0	20:54	1	0	3	0
2	0	20:55	1	0	3	0
2	0	20:56	1	0	3	0
2	0	20:57	0	0	2	0
2	0	20:58	0	0	2	0
2	0	20:59	2	0	4	0
1	0	21:00	1	0	2	0
0	0	21:01	1	0	1	0
0	0	21:02	2	0	2	0
0	0	21:03	2	0	2	0
0	0	21:04	2	1	2	1
2	0	21:05	0	0	2	0
0	0	21:06	1	0	1	0
1	0	21:07	0	1	1	1
1	0	21:08	3	0	4	0
1	0	21:09	2	0	3	0
1	0	21:10	3	1	4	1
1	0	21:11	1	0	2	0
1	0	21:12	1	0	2	0
2	0	21:13	0	0	2	0
1	0	21:14	1	0	2	0
1	0	21:15	1	0	2	0
0	0	21:16	1	0	1	0
2	0	21:17	1	0	3	0
1	0	21:18	1	0	2	0
1	0	21:19	1	0	2	0
0	0	21:20	1	0	1	0
0	0	21:21	1	0	1	0
0	0	21:22	2	1	2	1
0	0	21:23	1	0	1	0
0	0	21:24	1	0	1	0
0	0	21:25	2	0	2	0
0	0	21:26	1	0	1	0
0	0	21:27	3	0	3	0
0	0	21:28	1	0	1	0
0	0	21:29	0	0	0	0
0	0	21:30	0	0	0	0
0	0	21:31	2	0	2	0
0	0	21:32	1	0	1	0
0	1	21:33	0	0	0	1
0	0	21:34	0	0	0	0
1	1	21:35	0	0	1	1
0	0	21:36	1	0	1	0
0	0	21:37	1	0	1	0
0	0	21:38	2	0	2	0
0	0	21:39	1	0	1	0

Prepared by National Data & Surveying Services

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

Bay Rd Btwn 15th Ter & 15th St,
LOCATION: 15th St Btwn Bay Rd & West Ave

DAY: Friday

Miami Beach PSCF:

1.00

ZONE: B

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	21:40	0	0	0	0
0	0	21:41	0	0	0	0
0	0	21:42	0	0	0	0
0	0	21:43	1	0	1	0
0	0	21:44	0	0	0	0
0	0	21:45	0	0	0	0
0	0	21:46	1	0	1	0
0	0	21:47	1	0	1	0
0	0	21:48	3	0	3	0
1	0	21:49	1	0	2	0
0	0	21:50	1	0	1	0
0	0	21:51	2	0	2	0
1	0	21:52	1	0	2	0
0	0	21:53	0	0	0	0
0	0	21:54	0	0	0	0
0	1	21:55	0	0	0	1
0	0	21:56	1	0	1	0
0	0	21:57	1	0	1	0
3	0	21:58	0	0	3	0
1	0	21:59	1	0	2	0
1	0	22:00	2	0	3	0
0	0	22:01	1	1	1	1
0	0	22:02	3	1	3	1
0	0	22:03	2	1	2	1
1	0	22:04	2	0	3	0
1	0	22:05	2	0	3	0
0	0	22:06	3	0	3	0
0	0	22:07	2	0	2	0
2	0	22:08	0	0	2	0
0	1	22:09	0	0	0	1
0	0	22:10	0	0	0	0
0	0	22:11	1	0	1	0
1	0	22:12	0	1	1	1
0	0	22:13	0	0	0	0
0	0	22:14	0	0	0	0
0	0	22:15	1	0	1	0
0	0	22:16	0	0	0	0
0	0	22:17	0	0	0	0
0	0	22:18	0	0	0	0
0	0	22:19	0	0	0	0
0	0	22:20	3	0	3	0
0	0	22:21	1	0	1	0
0	0	22:22	2	0	2	0
0	0	22:23	2	0	2	0
0	0	22:24	2	0	2	0
0	0	22:25	1	0	1	0
0	0	22:26	0	0	0	0
0	0	22:27	0	0	0	0
1	0	22:28	1	0	2	0
1	0	22:29	1	0	2	0
1	0	22:30	0	0	1	0
0	0	22:31	0	0	0	0
0	0	22:32	0	0	0	0
0	0	22:33	1	0	1	0
1	0	22:34	1	0	2	0
1	0	22:35	1	0	2	0
0	0	22:36	2	0	2	0
0	0	22:37	2	1	2	1
0	0	22:38	2	0	2	0
0	0	22:39	1	0	1	0
0	0	22:40	0	0	0	0
0	0	22:41	0	0	0	0
0	0	22:42	1	0	1	0
0	0	22:43	1	0	1	0
0	0	22:44	0	0	0	0
0	0	22:45	1	2	1	2
0	0	22:46	1	0	1	0
0	0	22:47	0	1	0	1
0	0	22:48	0	0	0	0
0	0	22:49	0	0	0	0
0	0	22:50	1	0	1	0
1	0	22:51	0	0	1	0
0	0	22:52	1	0	1	0
0	0	22:53	1	0	1	0
1	0	22:54	1	0	2	0
0	0	22:55	1	0	1	0
0	0	22:56	0	1	0	1
0	0	22:57	0	0	0	0
0	0	22:58	0	0	0	0
0	0	22:59	1	0	1	0
1	0	23:00	1	0	2	0
1	0	23:01	1	0	2	0
0	0	23:02	2	0	2	0
1	0	23:03	0	0	1	0
0	0	23:04	1	0	1	0
0	0	23:05	0	0	0	0
0	0	23:06	0	0	0	0
0	0	23:07	1	0	1	0
1	0	23:08	1	0	2	0
1	0	23:09	1	0	2	0
1	0	23:10	0	0	1	0
1	0	23:11	2	0	3	0
0	0	23:12	2	0	2	0
0	0	23:13	0	0	0	0
0	0	23:14	2	1	2	1
1	0	23:15	1	0	2	0
0	0	23:16	0	0	0	0
2	0	23:17	0	0	2	0
1	0	23:18	1	0	2	0
0	0	23:19	0	0	0	0
0	0	23:20	0	0	0	0
0	0	23:21	3	0	3	0
0	0	23:22	1	0	1	0
0	0	23:23	1	0	1	0
1	0	23:24	1	0	2	0
0	0	23:25	0	0	0	0
0	0	23:26	0	0	0	0
0	0	23:27	1	1	1	1
1	0	23:28	2	1	3	1
0	0	23:29	1	0	1	0

ZONE: B

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	23:30	1	0	1	0
0	0	23:31	2	0	2	0
2	0	23:32	0	0	2	0
0	0	23:33	1	0	1	0
0	0	23:34	0	0	0	0
1	0	23:35	2	0	3	0
0	0	23:36	1	0	1	0
1	0	23:37	2	0	3	0
0	0	23:38	2	0	2	0
0	0	23:39	1	0	1	0
0	0	23:40	0	0	0	0
0	0	23:41	3	0	3	0
0	0	23:42	1	0	1	0
0	0	23:43	1	0	1	0
0	0	23:44	1	0	1	0
0	0	23:45	0	0	0	0
0	0	23:46	0	0	0	0
0	0	23:47	3	0	3	0
0	0	23:48	0	0	0	0
0	0	23:49	2	0	2	0
0	0	23:50	1	0	1	0
0	0	23:51	1	0	1	0
0	0	23:52	2	0	2	0
1	0	23:53	0	0	1	0
0	0	23:54	0	0	0	0
1	0	23:55	1	0	2	0
0	0	23:56	2	1	2	1
0	0	23:57	3	1	3	1
0	0	23:58	2	0	2	0
0	0	23:59	0	0	0	0
0	0	0:00	1	1	1	1
0	1	0:01	2	0	2	1
0	0	0:02	0	0	0	0
0	0	0:03	1	0	1	0
0	0	0:04	1	0	1	0
0	0	0:05	1	0	1	0
0	0	0:06	2	0	2	0
0	0	0:07	2	0	2	0
0	0	0:08	2	0	2	0
0	0	0:09	1	0	1	0
0	0	0:10	0	0	0	0
0	0	0:11	1	0	1	0
0	0	0:12	1	1	1	1
0	0	0:13	1	0	1	0
0	0	0:14	1	0	1	0
1	0	0:15	2	0	3	0
0	0	0:16	0	0	0	0
0	0	0:17	0	0	0	0
0	0	0:18	2	0	2	0
1	0	0:19	1	0	2	0
1	0	0:20	2	0	3	0
0	0	0:21	2	0	2	0
0	0	0:22	1	1	1	1
0	0	0:23	0	0	0	0
0	0	0:24	3	0	3	0
2	0	0:25	1	0	3	0
0	0	0:26	3	0	3	0
1	0	0:27	2	0	3	0
2	0	0:28	3	0	5	0
1	0	0:29	0	0	1	0
0	0	0:30	0	0	0	0
0	0	0:31	2	0	2	0
1	0	0:32	1	0	2	0
0	0	0:33	1	0	1	0
0	0	0:34	1	0	1	0
0	0	0:35	2	0	2	0
2	0	0:36	3	0	5	0
1	0	0:37	1	0	2	0
1	0	0:38	1	0	2	0
1	0	0:39	2	0	3	0
2	0	0:40	0	0	2	0
0	0	0:41	0	0	0	0
0	0	0:42	3	0	3	0
1	0	0:43	2	0	3	0
0	0	0:44	0	0	0	0
1	1	0:45	0	0	1	1
1	0	0:46	1	0	2	0
0	0	0:47	1	1	1	1
0	0	0:48	1	0	1	0
1	0	0:49	0	0	1	0
0	0	0:50	1	0	1	0
2	0	0:51	0	0	2	0
1	0	0:52	4	0	5	0
1	0	0:53	0	0	1	0
0	0	0:54	2	0	2	0
0	0	0:55	0	0	0	0
0	1	0:56	0	0	0	1
0	0	0:57	2	0	2	0
2	0	0:58	0	0	2	0
2	0	0:59	0	0	2	0
0	0	1:00	0	0	0	0

Prepared by National Data & Surveying Services

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

LOCATION: Bay Rd Btwn 15th St & 14th St

DAY: Friday

Miami Beach PSCF:

1.00

ZONE: C

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	18:00	1	0	1	0
0	0	18:01	1	0	1	0
0	0	18:02	0	0	0	0
0	0	18:03	0	0	0	0
0	0	18:04	0	0	0	0
0	1	18:05	1	0	1	1
0	0	18:06	0	0	0	0
0	0	18:07	0	0	0	0
0	0	18:08	0	0	0	0
0	0	18:09	0	0	0	0
0	0	18:10	0	0	0	0
0	0	18:11	0	0	0	0
0	0	18:12	0	0	0	0
0	0	18:13	0	0	0	0
0	0	18:14	0	0	0	0
0	0	18:15	0	0	0	0
0	0	18:16	0	0	0	0
0	0	18:17	0	0	0	0
0	0	18:18	0	0	0	0
0	0	18:19	0	0	0	0
0	0	18:20	0	0	0	0
0	0	18:21	0	0	0	0
0	0	18:22	0	0	0	0
0	0	18:23	0	0	0	0
0	0	18:24	0	0	0	0
0	0	18:25	0	0	0	0
0	0	18:26	0	0	0	0
0	0	18:27	1	0	1	0
0	0	18:28	0	0	0	0
0	0	18:29	0	0	0	0
0	0	18:30	0	0	0	0
0	0	18:31	0	0	0	0
0	0	18:32	0	0	0	0
0	0	18:33	0	0	0	0
0	0	18:34	0	0	0	0
0	0	18:35	0	0	0	0
0	0	18:36	0	0	0	0
0	0	18:37	0	0	0	0
0	0	18:38	0	0	0	0
0	0	18:39	0	0	0	0
1	0	18:40	0	0	1	0
0	0	18:41	0	0	0	0
0	0	18:42	0	0	0	0
1	0	18:43	0	0	1	0
0	0	18:44	0	0	0	0
0	0	18:45	0	0	0	0
0	0	18:46	1	0	1	0
0	0	18:47	0	0	0	0
0	0	18:48	1	0	1	0
0	0	18:49	0	0	0	0
0	0	18:50	0	0	0	0
0	0	18:51	1	0	1	0
0	0	18:52	0	0	0	0
0	0	18:53	0	0	0	0
0	0	18:54	0	0	0	0
0	0	18:55	0	0	0	0
0	0	18:56	0	0	0	0
0	0	18:57	0	0	0	0
0	0	18:58	0	0	0	0
0	0	18:59	0	0	0	0
0	0	19:00	0	0	0	0
0	0	19:01	0	0	0	0
0	0	19:02	0	0	0	0
0	0	19:03	0	0	0	0
0	0	19:04	0	0	0	0
0	0	19:05	0	0	0	0
0	0	19:06	0	0	0	0
1	0	19:07	0	0	1	0
0	0	19:08	0	0	0	0
0	0	19:09	0	0	0	0
0	0	19:10	0	0	0	0
0	0	19:11	0	0	0	0
0	0	19:12	0	0	0	0
0	0	19:13	1	0	1	0
0	0	19:14	0	0	0	0
0	0	19:15	0	0	0	0
0	0	19:16	0	0	0	0
0	0	19:17	0	0	0	0
0	0	19:18	0	0	0	0
0	0	19:19	1	0	1	0
0	0	19:20	0	0	0	0
0	0	19:21	0	0	0	0
0	0	19:22	1	0	1	0
0	0	19:23	0	0	0	0
1	0	19:24	0	0	1	0
0	0	19:25	0	0	0	0
0	0	19:26	0	0	0	0
0	0	19:27	0	0	0	0
0	0	19:28	0	0	0	0
0	0	19:29	1	0	1	0
0	0	19:30	0	0	0	0
0	0	19:31	0	0	0	0
1	0	19:32	0	0	1	0
0	0	19:33	0	0	0	0
0	0	19:34	0	0	0	0
0	0	19:35	0	0	0	0
0	0	19:36	1	0	1	0
0	0	19:37	0	0	0	0
0	0	19:38	1	0	1	0
0	0	19:39	0	0	0	0
0	0	19:40	1	0	1	0
0	0	19:41	0	0	0	0
0	0	19:42	1	0	1	0
0	0	19:43	0	0	0	0
0	0	19:44	0	0	0	0
0	0	19:45	0	0	0	0
0	0	19:46	0	0	0	0
0	0	19:47	0	0	0	0
0	0	19:48	0	0	0	0
0	0	19:49	0	0	0	0

	UBER/LYFT	TAXI	Combined
Time of Max Accumulation	Multiple	Multiple	Multiple
Maximum Accumulation	2	1	2
50th %	0	0	0
95th %	1	0	1

Prepared by National Data & Surveying Services

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

LOCATION: Bay Rd Btwn 15th St & 14th St

DAY: Friday

Miami Beach PSCF:

1.00

ZONE: C

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	19:50	0	0	0	0
0	0	19:51	1	0	1	0
0	0	19:52	1	0	1	0
0	0	19:53	0	0	0	0
0	0	19:54	0	0	0	0
0	0	19:55	0	0	0	0
0	0	19:56	0	0	0	0
0	0	19:57	0	0	0	0
0	0	19:58	0	0	0	0
0	0	19:59	0	0	0	0
0	0	20:00	0	0	0	0
0	0	20:01	0	0	0	0
0	0	20:02	0	0	0	0
1	0	20:03	0	0	1	0
0	0	20:04	1	0	1	0
0	0	20:05	0	0	0	0
0	0	20:06	0	0	0	0
0	0	20:07	0	0	0	0
0	0	20:08	0	0	0	0
0	0	20:09	0	0	0	0
0	0	20:10	0	0	0	0
0	0	20:11	0	0	0	0
0	0	20:12	0	0	0	0
0	0	20:13	0	0	0	0
0	0	20:14	0	0	0	0
0	0	20:15	0	0	0	0
0	0	20:16	0	0	0	0
0	0	20:17	0	0	0	0
0	0	20:18	0	0	0	0
0	0	20:19	1	0	1	0
0	0	20:20	1	0	1	0
0	0	20:21	0	0	0	0
0	0	20:22	0	0	0	0
0	0	20:23	0	0	0	0
0	0	20:24	0	0	0	0
0	0	20:25	0	0	0	0
0	1	20:26	1	0	1	1
1	0	20:27	0	0	1	0
0	0	20:28	0	0	0	0
0	0	20:29	0	0	0	0
0	0	20:30	0	0	0	0
0	0	20:31	0	0	0	0
0	0	20:32	0	0	0	0
0	0	20:33	0	0	0	0
1	0	20:34	0	0	1	0
0	0	20:35	1	0	1	0
0	0	20:36	0	0	0	0
0	0	20:37	0	0	0	0
0	0	20:38	0	0	0	0
0	0	20:39	0	0	0	0
0	0	20:40	0	0	0	0
0	0	20:41	0	0	0	0
0	0	20:42	0	0	0	0
0	0	20:43	0	0	0	0
0	0	20:44	0	0	0	0
1	0	20:45	1	0	2	0
0	0	20:46	1	0	1	0
0	0	20:47	0	0	0	0
0	0	20:48	0	0	0	0
0	0	20:49	0	0	0	0
1	0	20:50	0	0	1	0
0	0	20:51	0	0	0	0
0	0	20:52	1	0	1	0
0	0	20:53	0	0	0	0
0	0	20:54	0	0	0	0
0	0	20:55	0	0	0	0
0	0	20:56	0	0	0	0
0	0	20:57	0	0	0	0
2	0	20:58	0	0	2	0
0	0	20:59	1	0	1	0
0	0	21:00	0	0	0	0
0	0	21:01	0	0	0	0
0	0	21:02	0	0	0	0
0	0	21:03	0	0	0	0
0	0	21:04	0	0	0	0
1	0	21:05	0	0	1	0
1	0	21:06	0	0	1	0
0	0	21:07	0	0	0	0
0	0	21:08	1	0	1	0
0	0	21:09	0	0	0	0
0	0	21:10	0	0	0	0
0	0	21:11	0	0	0	0
1	0	21:12	0	0	1	0
1	0	21:13	0	0	1	0
1	0	21:14	1	0	2	0
0	0	21:15	1	0	1	0
1	0	21:16	0	0	1	0
1	0	21:17	0	0	1	0
0	0	21:18	0	0	0	0
1	0	21:19	0	0	1	0
1	0	21:20	0	0	1	0
0	0	21:21	2	0	2	0
0	0	21:22	0	0	0	0
0	0	21:23	1	0	1	0
1	0	21:24	0	1	1	1
0	0	21:25	0	0	0	0
0	0	21:26	0	0	0	0
0	0	21:27	0	0	0	0
0	0	21:28	0	0	0	0
0	0	21:29	0	0	0	0
0	0	21:30	0	0	0	0
0	0	21:31	1	0	1	0
0	0	21:32	0	0	0	0
0	0	21:33	0	0	0	0
1	0	21:34	0	1	1	1
0	0	21:35	1	0	1	0
0	0	21:36	0	0	0	0
0	0	21:37	0	0	0	0
1	0	21:38	0	0	1	0
1	0	21:39	0	0	1	0

Prepared by National Data & Surveying Services

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

LOCATION: Bay Rd Btwn 15th St & 14th St

DAY: Friday

Miami Beach PSCF:

1.00

ZONE: C

DATE: 3/24/2017

# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	21:40	0	0	0	0
1	0	21:41	0	0	1	0
0	0	21:42	0	0	0	0
0	0	21:43	0	0	0	0
0	0	21:44	1	0	1	0
0	0	21:45	0	0	0	0
0	0	21:46	0	0	0	0
1	1	21:47	0	0	1	1
0	0	21:48	0	0	0	0
0	0	21:49	0	0	0	0
0	0	21:50	0	0	0	0
0	0	21:51	0	0	0	0
1	0	21:52	0	0	1	0
0	0	21:53	0	0	0	0
0	0	21:54	0	0	0	0
0	0	21:55	0	0	0	0
0	0	21:56	0	0	0	0
0	0	21:57	0	0	0	0
0	0	21:58	0	0	0	0
0	0	21:59	0	0	0	0
0	0	22:00	0	0	0	0
0	0	22:01	1	0	1	0
0	0	22:02	0	0	0	0
0	0	22:03	0	0	0	0
1	0	22:04	0	0	1	0
1	0	22:05	0	0	1	0
0	0	22:06	0	0	0	0
0	0	22:07	0	0	0	0
0	0	22:08	0	0	0	0
0	0	22:09	0	0	0	0
0	0	22:10	0	0	0	0
0	0	22:11	0	0	0	0
0	0	22:12	0	0	0	0
0	0	22:13	1	0	1	0
0	0	22:14	0	0	0	0
1	0	22:15	1	0	2	0
0	0	22:16	1	0	1	0
0	0	22:17	0	0	0	0
0	0	22:18	0	0	0	0
0	0	22:19	0	0	0	0
0	0	22:20	0	0	0	0
0	0	22:21	0	0	0	0
0	0	22:22	0	0	0	0
0	0	22:23	0	0	0	0
0	0	22:24	0	0	0	0
0	0	22:25	0	0	0	0
0	0	22:26	0	0	0	0
0	0	22:27	0	0	0	0
0	0	22:28	0	0	0	0
0	0	22:29	0	0	0	0
0	0	22:30	0	0	0	0
0	0	22:31	0	0	0	0
0	0	22:32	0	0	0	0
1	0	22:33	1	0	2	0
1	0	22:34	1	0	2	0
0	0	22:35	0	0	0	0
0	0	22:36	0	0	0	0
0	0	22:37	0	0	0	0
0	0	22:38	0	0	0	0
0	0	22:39	0	0	0	0
0	0	22:40	0	0	0	0
0	0	22:41	0	0	0	0
0	0	22:42	0	0	0	0
0	0	22:43	0	0	0	0
1	0	22:44	0	0	1	0
1	0	22:45	0	0	1	0
1	0	22:46	0	0	1	0
0	0	22:47	0	0	0	0
1	0	22:48	0	0	1	0
0	0	22:49	0	0	0	0
0	0	22:50	0	0	0	0
1	0	22:51	0	0	1	0
0	0	22:52	0	0	0	0
1	0	22:53	0	0	1	0
0	0	22:54	0	0	0	0
1	0	22:55	0	0	1	0
1	0	22:56	0	0	1	0
0	0	22:57	0	0	0	0
0	0	22:58	0	0	0	0
0	0	22:59	0	0	0	0
0	0	23:00	0	0	0	0
0	0	23:01	0	0	0	0
0	0	23:02	0	0	0	0
0	0	23:03	0	0	0	0
0	0	23:04	0	0	0	0
1	0	23:05	0	0	1	0
1	0	23:06	1	0	2	0
1	0	23:07	0	0	1	0
0	0	23:08	0	0	0	0
1	0	23:09	0	0	1	0
1	0	23:10	0	0	1	0
0	0	23:11	0	0	0	0
0	0	23:12	0	0	0	0
1	0	23:13	0	0	1	0
0	0	23:14	0	0	0	0
1	0	23:15	0	0	1	0
0	0	23:16	0	0	0	0
1	0	23:17	0	0	1	0
0	0	23:18	1	0	1	0
0	0	23:19	2	0	2	0
1	0	23:20	0	0	1	0
0	0	23:21	0	0	0	0
1	0	23:22	0	0	1	0
0	0	23:23	0	0	0	0
2	0	23:24	0	0	2	0
0	0	23:25	0	0	0	0
0	0	23:26	0	0	0	0
0	0	23:27	0	0	0	0
0	0	23:28	0	0	0	0
0	0	23:29	0	0	0	0

Prepared by National Data & Surveying Services

Shared-Ride/Taxi Drop-off/Pick-up Accumulation Analysis

LOCATION: Bay Rd Btwn 15th St & 14th St

DAY: Friday

Miami Beach PSCF:

1.00

ZONE: C

DATE: 3/24/2017

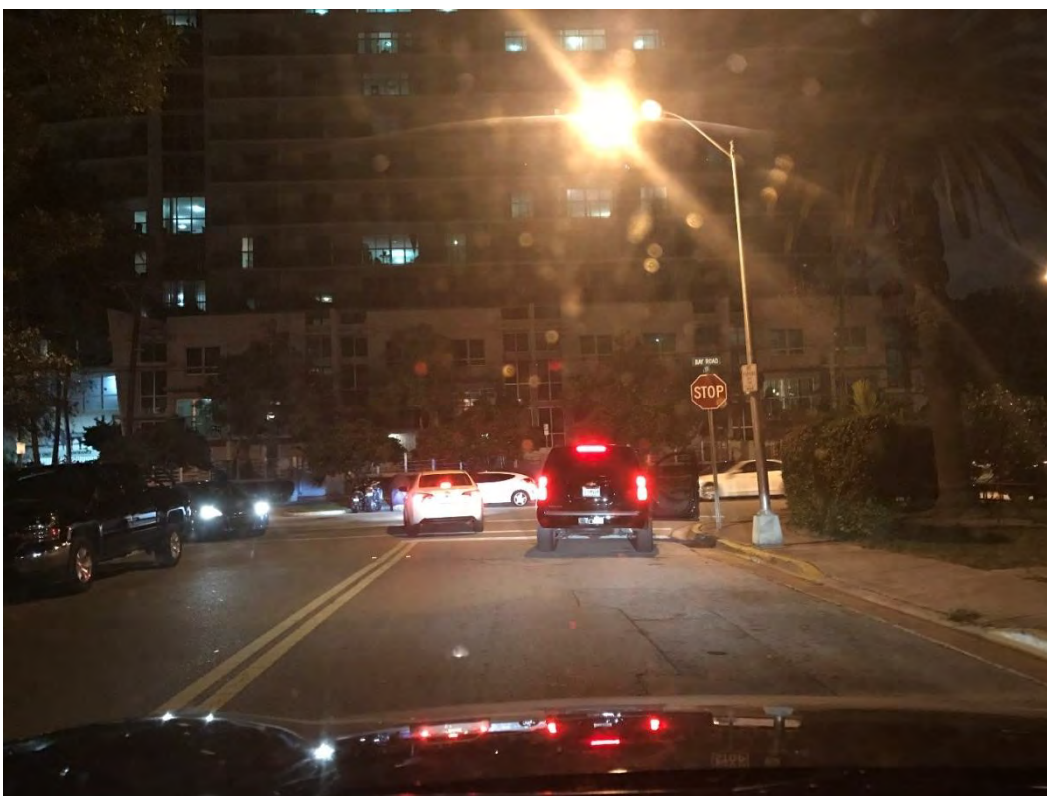
# of Vehicles East Side		TIME	# of Vehicles West Side		Total # of Vehicles	
UBER/LYFT	TAXI		UBER/LYFT	TAXI	UBER/LYFT	TAXI
0	0	23:30	1	0	1	0
0	0	23:31	0	0	0	0
0	0	23:32	1	0	1	0
0	0	23:33	0	0	0	0
0	0	23:34	0	0	0	0
0	0	23:35	0	0	0	0
0	0	23:36	0	0	0	0
0	0	23:37	0	0	0	0
0	0	23:38	0	0	0	0
0	0	23:39	0	0	0	0
0	0	23:40	0	0	0	0
0	0	23:41	0	0	0	0
0	0	23:42	1	0	1	0
0	0	23:43	0	0	0	0
1	0	23:44	0	0	1	0
0	0	23:45	0	0	0	0
0	0	23:46	0	0	0	0
1	0	23:47	1	0	2	0
0	1	23:48	1	0	1	1
0	0	23:49	0	0	0	0
0	0	23:50	0	0	0	0
0	0	23:51	0	0	0	0
0	0	23:52	0	0	0	0
0	0	23:53	2	0	2	0
0	0	23:54	1	0	1	0
0	0	23:55	0	0	0	0
0	0	23:56	0	0	0	0
0	0	23:57	0	0	0	0
0	0	23:58	1	0	1	0
1	0	23:59	0	0	1	0
0	0	0:00	0	0	0	0
0	0	0:01	0	0	0	0
0	0	0:02	0	0	0	0
0	0	0:03	0	0	0	0
0	0	0:04	0	0	0	0
0	0	0:05	0	0	0	0
1	0	0:06	0	0	1	0
1	0	0:07	1	0	2	0
0	0	0:08	0	0	0	0
0	0	0:09	0	0	0	0
0	0	0:10	0	0	0	0
0	0	0:11	0	0	0	0
0	0	0:12	0	0	0	0
0	0	0:13	0	0	0	0
0	0	0:14	0	0	0	0
0	0	0:15	0	0	0	0
0	0	0:16	1	0	1	0
0	0	0:17	0	0	0	0
0	0	0:18	0	0	0	0
0	0	0:19	0	0	0	0
0	0	0:20	0	0	0	0
0	0	0:21	0	0	0	0
0	0	0:22	0	0	0	0
0	0	0:23	0	0	0	0
0	0	0:24	1	0	1	0
1	0	0:25	1	0	2	0
0	0	0:26	0	0	0	0
0	0	0:27	0	0	0	0
0	0	0:28	0	0	0	0
0	0	0:29	0	0	0	0
0	0	0:30	1	0	1	0
0	0	0:31	0	0	0	0
0	0	0:32	1	0	1	0
0	0	0:33	0	0	0	0
0	0	0:34	0	0	0	0
0	0	0:35	0	0	0	0
0	0	0:36	0	0	0	0
2	0	0:37	0	0	2	0
0	0	0:38	0	0	0	0
0	0	0:39	0	0	0	0
0	0	0:40	0	0	0	0
0	0	0:41	1	0	1	0
0	0	0:42	0	0	0	0
0	0	0:43	0	0	0	0
0	0	0:44	0	0	0	0
0	0	0:45	0	0	0	0
0	0	0:46	0	0	0	0
0	0	0:47	0	0	0	0
1	0	0:48	0	0	1	0
0	0	0:49	0	0	0	0
0	0	0:50	0	0	0	0
0	0	0:51	0	0	0	0
1	0	0:52	0	0	1	0
1	0	0:53	0	0	1	0
1	0	0:54	0	0	1	0
0	0	0:55	0	0	0	0
1	0	0:56	0	0	1	0
0	0	0:57	0	0	0	0
0	0	0:58	0	0	0	0
0	0	0:59	0	0	0	0
0	0	1:00	0	0	0	0

Attachment C

Field Observation Summary



Shared-ride drop-off/pick-up operation being completed within the intersection of Bay Road and 15th Street.



Shared-ride drop-off/pick-up operation being completed along 15th Terrace.

Field Observation Summary



Shared-ride drop-off/pick-up operation being completed along Bay Road.



Shared-ride drop-off/pick-up operation being completed within the site's main driveway (15th Street) while driving the wrong way.

Field Observation Summary



Shared-ride vehicle accumulation at the site's main driveway (15th Street).

Attachment E:

Trip Generation

PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
						In	Out																		
GROUP 1	1 Residential Condominium/Townhouse	9	230	426	du	17%	83%	28	137	165	10.0%	17	25	123	148	0.0%	0	25	123	148	0.0%	0	25	123	148
	2 Apartment	9	220	1261	du	20%	80%	124	498	622	10.0%	62	112	448	560	0.0%	0	112	448	560	0.0%	0	112	448	560
	3																								
	4																								
	5																								
	6																								
	7																								
	8																								
	9																								
	10																								
	11																								
	12																								
	13																								
	14																								
	15																								
ITE Land Use Code								Rate or Equation		Total:			152	635	787	10.0%	79	137	571	708	0.0%	0	137	571	708
230								LN(Y) = 0.8*LN(X)+0.26																	
220								Y=0.49*(X)+3.73																	

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS					
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total			
					In	Out																					
GROUP 2	1 Residential Condominium/Townhouse	9	230	426	du	17%	83%	28	137	165	10.0%	16	25	124	149	0.8%	1	25	123	148	0.0%	0	25	123	148		
	2 Apartment	9	220	1093	du	20%	80%	108	431	539	10.0%	54	97	388	485	0.8%	4	96	385	481	0.0%	0	96	385	481		
	3 Quality Restaurant	9	931	299	seat	50%	50%	5	4	9	10.0%	1	4	4	8	37.5%	3	2	3	5	0.0%	0	2	3	5		
	4 Shopping Center	9	820	6,318	ksf	62%	38%	18	11	29	10.0%	3	16	10	26	23.1%	6	12	8	20	0.0%	0	12	8	20		
	5																										
	6																										
	7																										
	8																										
	9																										
	10																										
	11																										
	12																										
	13																										
	14																										
	15																										
ITE Land Use Code					Rate or Equation		Total:			159	583	742	10.0%	74	142	526	668	2.1%	14	135	519	654	0.0%	0	135	519	654
230					LN(Y) = 0.8*LN(X)+0.26																						
220					Y=0.49*(X)+3.73																						
931					Y=0.03(X)																						
820					LN(Y) = 0.61*LN(X)+2.24																						
																						Net New Vehicle Trips			-2	-52	-54

PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS					
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total			
					In	Out																					
1	Residential Condominium/Townhouse	9	230	426	du	67%	33%	132	65	197	10.0%	20	119	58	177	0.0%	0	119	58	177	0.0%	0	119	58	177		
2	Apartment	9	220	1261	du	65%	35%	462	249	711	10.0%	71	416	224	640	0.0%	0	416	224	640	0.0%	0	416	224	640		
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13																											
14																											
15																											
ITE Land Use Code					Rate or Equation		Total:			594	314	908	10.0%	91	535	282	817	0.0%	0	535	282	817	0.0%	0	535	282	817
230					LN(Y) = 0.82*LN(X)+0.32																						
220					Y=0.55*(X)+17.65																						

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS								
Land Use					ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total		
GROUP 2	1	Residential Condominium/Townhouse	9	230	426	du	67%	33%	132	65	197	10.0%	20	119	58	177	3.5%	6	116	55	171	0.0%	0	116	55	171				
	2	Apartment	9	220	1093	du	65%	35%	402	217	619	10.0%	62	362	195	557	3.5%	20	350	187	537	0.0%	0	350	187	537				
	3	Quality Restaurant	9	931	299	seat	67%	33%	52	26	78	10.0%	8	47	23	70	47.1%	33	27	10	37	0.0%	0	27	10	37				
	4	Shopping Center	9	820	6,318	ksf	48%	52%	45	49	94	10.0%	9	41	44	85	43.5%	37	28	20	48	0.0%	0	28	20	48				
	5																													
	6																													
	7																													
	8																													
	9																													
	10																													
	11																													
	12																													
	13																													
	14																													
	15																													
ITE Land Use Code					Rate or Equation					Total:			631	357	988	10.0%	99	569	320	889	10.8%	96	521	272	793	0.0%	0	521	272	793
230					LN(Y) = 0.82*LN(X)+0.32																									
220					Y=0.55*(X)+17.65																									
931					Y=0.26(X)																									
820					LN(Y) = 0.67*LN(X)+3.31																									
																							Net New Vehicle Trips		IN	OUT	TOTAL			
																									-14	-10	-24			

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION					
INPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office				
	Retail	16	10	41	44
	Restaurant	4	4	47	23
	Cinema/Entertainment				
	Residential	122	512	481	253
	Hotel				
		142	526	569	320
INTERNAL TRIPS					
OUTPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office	0	0	0	0
	Retail	4	2	13	24
	Restaurant	2	1	20	13
	Cinema/Entertainment	0	0	0	0
	Residential	1	4	15	11
	Hotel	0	0	0	0
		7	7	48	48
OUTPUT	Total % Reduction	2.1%		10.8%	
	Office				
	Retail	23.1%		43.5%	
	Restaurant	37.5%		47.1%	
	Cinema/Entertainment				
	Residential	0.8%		3.5%	
	Hotel				
EXTERNAL TRIPS					
OUTPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office	0	0	0	0
	Retail	12	8	28	20
	Restaurant	2	3	27	10
	Cinema/Entertainment	0	0	0	0
	Residential	121	508	466	242
	Hotel	0	0	0	0
		135	519	521	272

Table 6.1 Unconstrained Internal Person Trip Capture Rates
for Trip Origins within a Mixed-Use Development (A.M. Peak Hour)

A.M. PEAK	Origin Land Use	Destination Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	63%	0%	1%	0%
	Retail	13%	0%	14%	0%
	Restaurant		0%	4%	3%
	Cinema/Entertainment	0%		0%	0%
	Residential	20%	0%		0%
	Hotel	9%	0%	0%	

Table 6.2 Unconstrained Internal Person Trip Capture Rates
for Trip Destinations within a Mixed-Use Development (A.M. Peak Hour)

A.M. PEAK	Origin Land Use	Destination Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	23%	0%	0%	0%
	Retail	50%	0%	2%	0%
	Restaurant		0%	5%	4%
	Cinema/Entertainment	0%		0%	0%
	Residential	20%	0%		0%
	Hotel	6%	0%	0%	

*** BASED ON EXIT ***

A.M. PEAK	(Exit) Land Use	(Enter) Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant		0	0	0
	Cinema/Entertainment	0		0	0
	Residential	102	0		0
	Hotel	0	0	0	

*** BASED ON ENTER ***

A.M. PEAK	(Exit) Land Use	(Enter) Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	1	0	0	0
	Retail	2	0	2	0
	Restaurant		0	6	0
	Cinema/Entertainment	0		0	0
	Residential	1	0		0
	Hotel	0	0	0	

*** MINIMUM ***

A.M. PEAK	(Exit) Land Use	(Enter) Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant		0	0	0
	Cinema/Entertainment	0		0	0
	Residential	1	0		0
	Hotel	0	0	0	

Table 6.1 Unconstrained Internal Person Trip Capture Rates
for Trip Origins within a Mixed-Use Development (P.M. Peak Hour)

P.M. PEAK	Origin Land Use	Destination Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	4%	0%	2%	0%
	Retail	29%	4%	26%	5%
	Restaurant		8%	18%	7%
	Cinema/Entertainment	31%		8%	2%
	Residential	21%	0%		3%
	Hotel	68%	0%	2%	

Table 6.2 Unconstrained Internal Person Trip Capture Rates
for Trip Destinations within a Mixed-Use Development (P.M. Peak Hour)

P.M. PEAK	Origin Land Use	Destination Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	2%	1%	4%	0%
	Retail	29%	26%	46%	17%
	Restaurant		32%	16%	71%
	Cinema/Entertainment	3%		4%	1%
	Residential	14%	0%		12%
	Hotel	5%	0%	0%	

*** BASED ON EXIT ***

P.M. PEAK	(Exit) Land Use	(Enter) Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant		2	4	2
	Cinema/Entertainment	0		0	0
	Residential	53	0		8
	Hotel	0	0	0	

*** BASED ON ENTER ***

P.M. PEAK	(Exit) Land Use	(Enter) Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	1	0	19	0
	Retail	14	0	221	0
	Restaurant		0	77	0
	Cinema/Entertainment	1		19	0
	Residential	7	0		0
	Hotel	2	0	0	

*** MINIMUM ***

P.M. PEAK	(Exit) Land Use	(Enter) Land Use			
		Restaurant	Cinema/Ent.	Residential	Hotel
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant		0	4	0
	Cinema/Entertainment	0		0	0
	Residential	7	0		0
	Hotel	0	0	0	

B08301

MEANS OF TRANSPORTATION TO WORK

Universe: Workers 16 years and over

2011-2015 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

$$(112+186+338)/3,248 = 19.6\%$$

	Census Tract 42.03, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	3,248	+/-509
Car, truck, or van:	1,812	+/-396
Drove alone	1,612	+/-383
Carpooled:	200	+/-126
In 2-person carpool	200	+/-126
In 3-person carpool	0	+/-13
In 4-person carpool	0	+/-13
In 5- or 6-person carpool	0	+/-13
In 7-or-more-person carpool	0	+/-13
Public transportation (excluding taxicab):	112	+/-119
Bus or trolley bus	112	+/-119
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	0	+/-13
Railroad	0	+/-13
Ferryboat	0	+/-13
Taxicab	26	+/-32
Motorcycle	89	+/-62
Bicycle	186	+/-166
Walked	338	+/-200
Other means	28	+/-33
Worked at home	657	+/-271

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

Attachment F:
Valet Utilization Data

Flamingo Existing Valet Utilization Data Collection Friday, June 09, 2017			
Time	Entering Self-Park and Valet	Exiting Self-Park and Valet	Valet Drop-Off/Pick- Up
4:00 PM	18	18	3
4:15 PM	35	18	4
4:30 PM	23	25	0
4:45 PM	23	30	1
5:00 PM	28	16	1
5:15 PM	32	28	1
5:30 PM	33	22	4
5:45 PM	36	17	2
6:00 PM	37	18	3
6:15 PM	28	20	3
6:30 PM	28	21	2
6:45 PM	33	15	2
7:00 PM	32	13	5
7:15 PM	33	22	5
7:30 PM	28	24	5
7:45 PM	23	16	5
Total	470	323	46
Peak Hour 5:15-6:15	138	85	10

	Peak Hour 5:15-6:15
Total Self-Park	213
Total Valet	10
Percent (%) Valet	4%

Attachment G:

Valet Analysis

Valet Drop-off/Pick-Up Calculated Travel Time

South Tower Parking Garage Calculated Travel Time

VALET DROP-OFF			
VEHICLE TRAVEL TIME		VALET ATTENDANT TRAVEL TIME	
Travel Times (Assume 15 mph speed)		Travel Times (Assume 5 ft/s speed)	
To Valet Garage (In vehicle)		Return from Valet Garage (Walk/Run) to Valet Area	
Distance	Travel Time	Distance	Travel Time
0.16 miles	0.6 minutes	0.12 miles	2.1 minutes
Controlled Delay	1.0 Minutes		
Total Time	3.7 Minutes		

South Parking Garage Calculated Travel Time

VALET PICK-UP			
VALET ATTENDANT TRAVEL TIME		VALET ATTENDANT TRAVEL TIME	
Travel Times (Assume 5 ft/s speed)		Travel Times (Assume 15 mph speed)	
To Valet Garage (Walk/Run)		Return from Valet Garage (In Vehicle) to Valet Area	
Distance	Travel Time	Distance	Travel Time
0.12 miles	2.1 minutes	0.13 miles	0.5 minutes
Controlled Delay	1.0 Minutes		
Total Time	3.6 Minutes		

Valet Drop-off/Pick-Up Calculated Travel Time

North Tower Parking Garage Calculated Travel Time

VALET DROP-OFF			
VEHICLE TRAVEL TIME		VALET ATTENDANT TRAVEL TIME	
Travel Times (Assume 15 mph speed)		Travel Times (Assume 5 ft/s speed)	
To Valet Garage (In vehicle)		Return from Valet Garage (Walk/Run) to Valet Area	
Distance	Travel Time	Distance	Travel Time
0.08 miles	0.3 minutes	0.08 miles	1.3 minutes
Controlled Delay	1.0 Minutes		
Total Time	2.6 Minutes		

North Parking Garage Calculated Travel Time

VALET PICK-UP			
VALET ATTENDANT TRAVEL TIME		VALET ATTENDANT TRAVEL TIME	
Travel Times (Assume 5 ft/s speed)		Travel Times (Assume 15 mph speed)	
To Valet Garage (Walk/Run)		Return from Valet Garage (In Vehicle) to Valet Area	
Distance	Travel Time	Distance	Travel Time
0.08 miles	1.3 minutes	0.08 miles	0.3 minutes
Controlled Delay	1.0 Minutes		
Total Time	2.6 Minutes		

South Tower Valet Drop-Off/Pick-Up Analysis

Arrival Rate

IN	OUT
16	8

veh/hr

Number of Valet Attendants (N) = 3

Level of Confidence = 0.95

Storage Provided On-Site = 3 vehicles

Service Rate

IN	OUT
4.00	4.00

mins/veh

Total Entering and Exiting Vehicles(q) = 24 veh/hr

Service Capacity per N (60 mins/Service Rate) (Q) = 15.00 veh/hr/pos

Average Service Rate (t) = 4.00 mins/veh

rho (t/Q) = 0.533

Control Delay = min

Service Time = 4.00 mins/veh

Expected (avg.) number of vehicles in the system	E(m)=	0.31	
Expected (avg.) number of vehicles waiting in queue	E(n)=	1.91	
Mean time in the queue	E(w)=	0.78	mins
Mean time in system	E(t)=	4.78	mins

Proportion of customers who wait (P) (E(w) > 0)= 27.38%

Probability of a queue exceeding a length (M) P(x > M)= 5.00%

Queue length which is exceeded 5.00% of the times is equal to 1.5 vehicles

North Tower Valet Drop-Off Analysis

Arrival Rate

IN	OUT
85	0

veh/hr

Number of Valet Attendants (N) = 6

Level of Confidence = 0.95

Storage Provided On-Site = 7 vehicles

Service Rate

IN	OUT
3.00	0.00

mins/veh

Total Entering and Exiting Vehicles(q) = 85 veh/hr

Service Capacity per N (60 mins/Service Rate) (Q) = 20.00 veh/hr/pos

Average Service Rate (t) = 3.00 mins/veh

rho (t/Q) = 0.708

Control Delay = min

Service Time = 3.00 mins/veh

Expected (avg.) number of vehicles in the system	E(m)=	0.85	
Expected (avg.) number of vehicles waiting in queue	E(n)=	5.10	
Mean time in the queue	E(w)=	0.60	mins
Mean time in system	E(t)=	3.60	mins

Proportion of customers who wait (P) (E(w) > 0)= 34.95%

Probability of a queue exceeding a length (M) P(x > M)= 5.00%

Queue length which is exceeded 5.00% of the times is equal to 4.4 vehicles

North Tower Valet Pick-Up Analysis

Arrival Rate

IN	OUT
0	46

veh/hr

Number of Valet Attendants (N) = 4

Level of Confidence = 0.95

Storage Provided On-Site = 2 vehicles

Service Rate

IN	OUT
0.00	3.00

mins/veh

Total Entering and Exiting Vehicles(q) = 46 veh/hr

Service Capacity per N (60 mins/Service Rate) (Q) = 20.00 veh/hr/pos

Average Service Rate (t) = 3.00 mins/veh

rho (t/Q) = 0.575

Control Delay = min

Service Time = 3.00 mins/veh

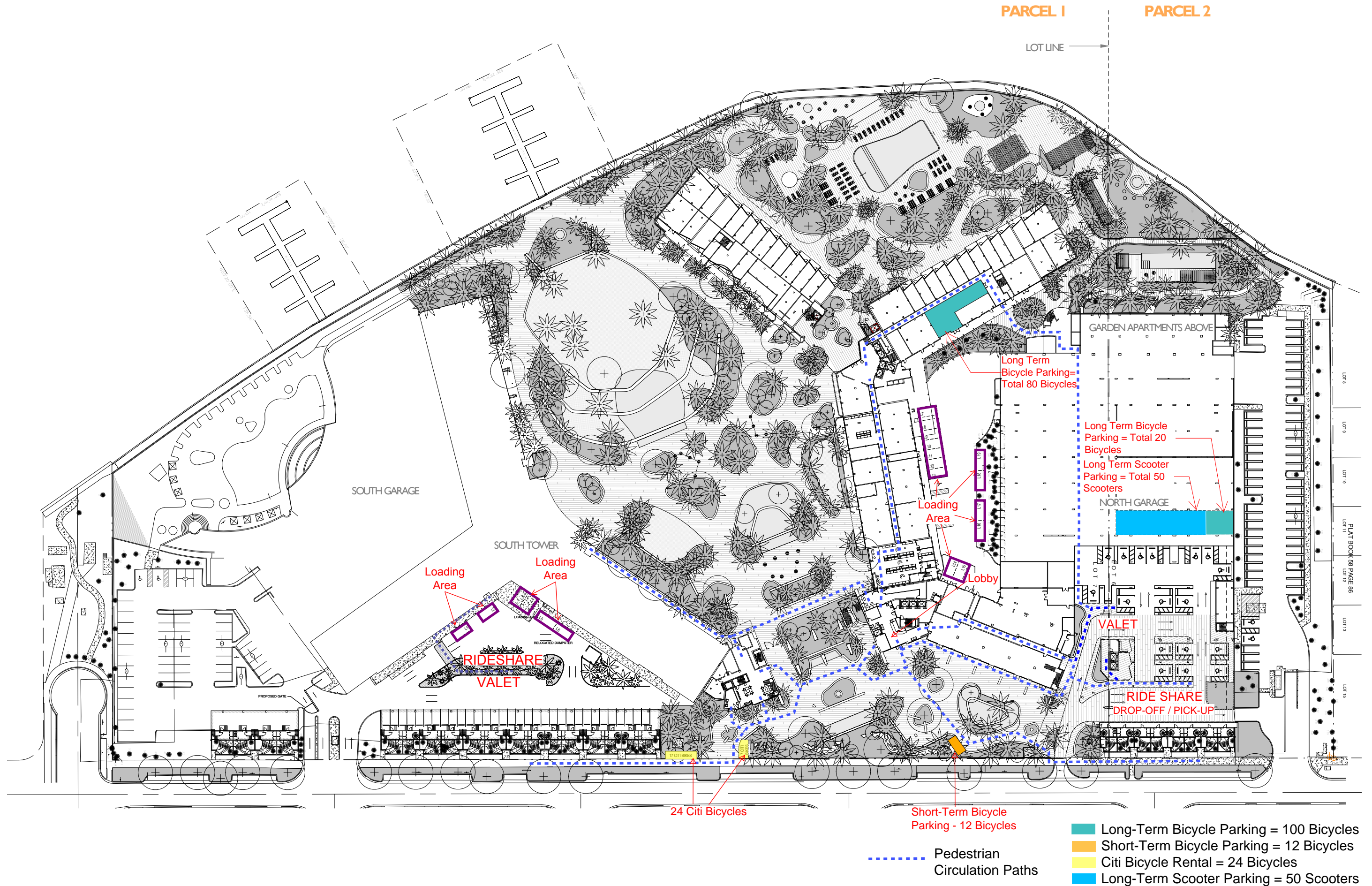
Expected (avg.) number of vehicles in the system	E(m)=	0.35	
Expected (avg.) number of vehicles waiting in queue	E(n)=	2.65	
Mean time in the queue	E(w)=	0.45	mins
Mean time in system	E(t)=	3.45	mins

Proportion of customers who wait (P) (E(w) > 0)= 25.60%

Probability of a queue exceeding a length (M) P(x > M)= 5.00%

Queue length which is exceeded 5.00% of the times is equal to 1.8 vehicles

Attachment H:
**Pedestrian Data and FDOT Seasonal
Factors**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 17-3274-004

N/S Street: Bay Rd

E/W Street: 15th St

DATE: 6/9/2017

CITY: Miami Beach

DAY: Friday

PSCF 1.13

P M

PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	12	27	3	5	8	0	6	3
4:15 PM	21	14	1	2	0	1	6	5
4:30 PM	25	11	0	2	1	1	26	8
4:45 PM	25	9	2	2	1	2	6	8
5:00 PM	15	11	2	5	6	2	10	10
5:15 PM	17	5	1	5	2	2	8	5
5:30 PM	20	21	3	7	2	3	12	9
5:45 PM	11	19	3	3	1	0	7	9
6:00 PM	27	18	5	2	6	2	7	5
6:15 PM	18	9	0	5	1	3	11	10
6:30 PM	16	19	1	7	5	6	17	8
6:45 PM	20	23	5	1	3	0	7	9
7:00 PM	12	12	2	12	7	3	12	12
7:15 PM	8	12	2	5	2	2	9	12
7:30 PM	15	21	2	5	2	1	12	3
7:45 PM	18	28	3	6	1	0	8	6
TOTALS	281	261	37.3	72.3	48.6	30.5	164	122

PEAK HOURS

PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:15 PM	67	63	8	25	16	12	47	40

PM

MacArthur Causeway Peak Season Conversion Factor				
Week	Weekly Volume	PSCF	Month	Days
1	97461	1.08	Jan	1-2
2	94621	1.11		5-9
3	92597	1.14		12-16
4	94820	1.11		19-23
5	95103	1.11		26-30
6	93310	1.13	Feb	2-6
7	97965	1.07		9-13
8	97595	1.08		16-20
9	98306	1.07		23-27
10	99061	1.06	Mar	2-6
11	103197	1.02		9-13
12	104700	1.00		16-20
13	105181	1.00		23-27
14	103378	1.02	Apr	30-3
15	98388	1.07		6-10
16	97132	1.08		13-17
17	92368	1.14		20-24
18	93079	1.13	May	27-1
19	94513	1.11		4-8
20	96765	1.09		11-15
21	90955	1.16		18-22
22	88187	1.19		25-29
23	94751	1.11	June	1-5
24	93310	1.13		8-12
25	94745	1.11		15-19
26	95914	1.10		22-26
27	92680	1.13	July	29-3
28	93320	1.13		6-10
29	95119	1.11		13-17
30	95499	1.10		20-24
31	94958	1.11		27-31
32	97362	1.08	Aug	3-7
33	94929	1.11		10-14
34	96230	1.09		17-21
35	92110	1.14		24-28
36	91826	1.15	Sept	1-4
37	90955	1.16		7-11
38	89712	1.17		14-18
39	92517	1.14		21-25
40	90393	1.16	Oct	28-2
41	88712	1.19		5-9
42	87533	1.20		12-16
43	94636	1.11		19-23
44	96168	1.09		26-30
45	96752	1.09	Nov	2-6
46	99482	1.06		9-13
47	96147	1.09		16-20
48	90693	1.16		23-27
49	102796	1.02	Dec	30-4
50	96703	1.09		7-11
51	97695	1.08		14-18
52	92309	1.14		21-25
53	103003	1.02		28-31

Attachment B
Existing Sidewalks and Crosswalks



Exhibit 1:
Existing Pedestrian Amenities
Legend:

- Existing Sidewalks
- Existing Crosswalk