1685 Washington Avenue
OPERATIONS PLAN

A. Number of Employees per Shift

AM Shift - Total of 15 associates

8 housekeepers

2 houseman

1-2 laundry attendants for offsite transfer

2 front desk associate

1 engineer

PM Shift - Total of 3 Associates

1 houseman/Laundry

2 front desk associate

Overnight Shift - Total of 3 Associates

1 houseman/security

1 front desk associate

1 night audit/front desk support

B. Employee Parking Plan / Transportation Demand Management (TDM) Plan

1. As contemplated by Policy 5.5 of the Transportation Element of the City of Miami Beach 2025 Comprehensive Plan, the owner shall provide a bicycle parking area on the property to serve guests and employees.

2. The owner shall offer a program to hotel employees to either obtain monthly passes from Miami-Dade Transit to allow employees to travel to and from the property without the need for automobiles, or provide an option for monthly City of Miami Beach parking garage passes (at each employee's option).

3. The owner shall offer hotel employees, who have been employed for at least ninety (90) days, financial assistance of up to $100 to cover the cost of purchasing a bicycle to travel to and from work.

4. The owner shall appoint one employee of the hotel to serve as the Transportation Demand Management (TDM) Program Administrator, whose duties will include encouraging and facilitating employees' use of mass transit or bicycles for travel to work.

5. Bicycle Racks shall be provided on site for us by hotel guests and employees.

6. Guest shall be encouraged to use ride sharing transportation modes such as Uber or Lyft. As such, the hotel shall provide guests with an Uber Discount Code to encourage and facilitate the use of these services for first time uses.

7. Guests shall be provided with promo codes for Citi Bike. Citi Bike currently has two (2) stations in close proximity to the property. We will work with Citi Bike to create a future station at our block.

C. Parking Plan

1. Valet parking will be offered for all hotel guests.
2. Mechanical Parking will be used for the valet operation.
3. Self-parking shall be available only to customers of the accessory bank use.

D. Pool Deck / Bar / Restaurant

1. Food and drink shall be served throughout the day.
2. Alcohol shall be served at all hours when pool is open.
3. The pool deck bar will be open to hotel guests and their invitees.
4. The pool will be open from 7:00 am to 10:00 pm.
5. The property will include two full service restaurants.
6. The hours of the two restaurants are proposed from 6:00 am to 1:00 am and shall be open for breakfast, lunch and dinner.
7. There is no proposed entertainment at the restaurants.
8. Outdoor speakers will be used in the rooftop pool area, but will be limited to ambient background music.

9. The two restaurants will be open to the general public, not only guests of the hotel.
10. The Applicant has not determined the branding of the restaurants, as it still in the preliminary stages, so there is no sample menu available.
11. Off-Street Parking for the restaurants will be valet only.
12. A shuttle service shall be provided and maintained as long as the hotel use and restaurant uses exist

E. Laundry

1. No laundry will be done on site. Laundry will be outsourced to an off-site vendor.

F. Delivery Schedule

All deliveries shall occur through the designated off-street delivery area proposed within the interior of the property. Additionally, trash pickup will also occur internally within the property, as noted on the plans.

Type of Delivery	**Day of Week**	**Time of Day**
Laundry	7 days per week	6:30 am to 8:00 am
Waste/Trash pickup	7 days per week	Morning
Beverage	1 day per week	7:00am to 8:00 am
Food Products	3 days per week	7:00 am to 8:00 am

G. Security Plan

1. Cameras will be provided throughout the hotel in order to assist with security.
2. Hotel staff or security personnel will be available at all times 24/7 to provide security and address guest concerns.
3. During high occupancy of the hotel, additional security may be provided.
4. During the evening hours when the restaurants are open, additional personnel will be provided depending on expected occupancy of each event.

Kimley»Horn

Memorandum

To: Firat Akcay
City of Miami Beach

Cc: Josiel Ferrer, E.I.
City of Miami Beach

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

Date: April 26, 2018

Subject: 1685 Washington Avenue
Response to Comments

We have received comments provided by the City of Miami Beach dated April 23, 2018. We offer the following responses:

1. The site proposes a left-in/right-in driveway at 17th street. However, the driveway will be located across the existing left turn lane onto Washington Avenue. The left-in movement onto the site will conflict with the existing left turn lane; therefore, please considered restricting the driveway to a right-in only.

   Response: Note that the current access to the site includes both a left-in and a right-in from 17th Street. Additionally, crash data was pulled for the project driveway using Signal-Four Analytics. Only one (1) crash (rear-end) attributed to the driveway configuration occurred between 2012 to 2017. Furthermore, the expected future total left-turn volume is 18 which is less than one (1) vehicle every three (3) minutes. Finally, it is unclear how to physically restrict left-turn traffic. Therefore, we respectfully request that the driveway remain with both left-in and right-in access as it is in existing conditions.

2. The study calculated an area wide growth rate, however, this methodology seems to underestimate the growth rate for the north/south roads. Based on the FDOT growth rate summary provided in the appendix, both Collins Avenue and Washington Avenue have growth rates around 3%. Please consider using a growth rate for the north/south roads and one for the east/west roads.

   Response: Note that it is not only unrealistic to apply different growth rates to intersection approaches in an urban core area when the CBD factor is applied to the network but it does not coincide with the travel demand model growth from the SERPM model that nearly matches the results of the FDOT areawide growth rates. However, in an effort to expediate the approval of this project, a 2.85 percent growth rate was applied to the north/south roadways and a 0.50 percent growth rate was applied to the east/west roadways. Note that the traffic study results and conclusions do not change. The updated traffic study is contained in Attachment A.

3. The trips from the committed developments were carried through to the intersection of Collins Avenue and 17th street and then they were assigned to/from the eastbound through and westbound through movements. However, 17th street east of Collins Avenue is a very short segment of roadway that serves the adjacent hotels. Please redistribute these trips to turn right/left onto Collins Avenue.

   Response: The committed development distribution was revised to proportionality reflect the eastbound approach volumes. Note that the revision does not change the analysis results nor conclusions. The updated traffic study is contained in Attachment A.

4. Please review the calculations using the latest version of the ITE Trip Generation Manual.

   Response: The traffic study and valet analysis were updated for the ITE's Trip Generation Manual, 10th Edition. The redevelopment generates an additional 13 P.M. peak hour trips. Note that the results of the analysis nor conclusions change. The updated traffic study is contained in Attachment A and the updated valet analysis is contained in Attachment B.

5. The study used a multimodal reduction of 31.7%. Please note that for the study area, the City will accept a 20% reduction.

   Response: The purpose of traffic study methodology meetings and correspondence is to establish the requirements of the traffic study, including trip generation factors, prior to initiating the study. Establishment of trip generation factors is a critical component to the traffic study as this significantly impacts the trip assignment, intersection capacity analysis, and valet analysis. The City never commented on the 31.7 percent multimodal factor presented in the methodology. However, in an effort to expediate the approval of this project the multimodal factor was revised to 20.0 percent.

   The redevelopment generates an additional 13 P.M. peak hour trips. Note that the results of the analysis nor conclusions change. The updated traffic study is contained in Attachment A and the updated valet analysis is contained in Attachment B.

6. The study used a 42.6% taxi/rideshare trip reduction for the valet analysis. The reduction should not be applied to the retail trips. The supportive documentation presented in the appendix indicates that the site didn't include retail.

   Response: The retail generates a total of 19 trips. However, in an effort to expediate the approval of all retail trips are assumed to be valeted. Note that the intersection capacity analyses were not changed. Note that nine (9) valet attendants may be required during peak times. The updated traffic study is contained in Attachment A and the updated valet analysis is contained in Attachment B.

7. Pass-by distribution – no pass by distribution was assigned to/from Washington Avenue.

Response: The pass-by distribution was revised based on the portion of through traffic at the intersection of Washington Avenue and 17th Street. Note that the results of the analysis nor conclusions change. The updated traffic study is included in Attachment A.

8. Please review the text to indicate that three scenarios were analyzed (not four).

   Response: The report was modified accordingly. The updated report is contained in Attachment A.

9. Synchro models –
   a. Please mark the adjacent parking when present
   b. Please mark the area as a CDB
   c. Please review the signal timing inputs for the intersection of Collins Avenue at 17th street and for Washington Avenue at 17th Street.

   Response: Synchro files were updated to include adjacent parking lanes and the CBD area. Note that signal timings were reviewed and found to be current. Note that the results of the analysis nor conclusions change. The updated traffic study is contained in Attachment A.

10. Please confirm that delivery vans, comparable to P vehicles will be adequate for all deliveries/loading activities and that larger vehicles will not be needed.

    Response: Confirmed.

Note that an updated maneuverability analysis is contained in Attachment C. We trust that these responses adequately address the comments provided. Please contact us should you have questions.

K:\FTL_TPTO\043896000-1685 Washington Avenue\Correspondence\memo\Response to City Comments - Traffic Study .docx

Attachment A
Updated Traffic Study

Traffic Impact Analysis
For Submittal to the
City of Miami Beach

1685 Washington Avenue

Miami Beach, Florida

Kimley»Horn

Updated April 2018
April 2018
043896000

Traffic Impact Analysis
for Submittal to the
City of Miami Beach

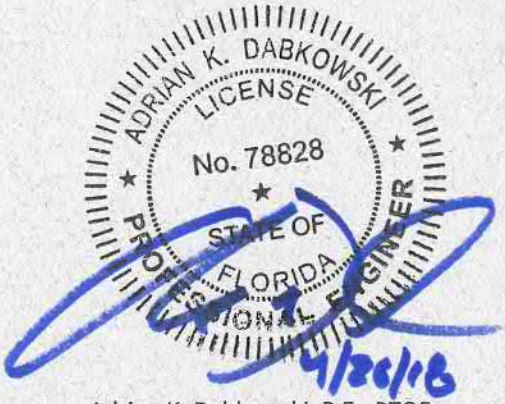
1685 Washington Avenue
Miami Beach, Florida

Prepared for:

Sobe Center, LLC
Miami, Florida

Prepared by:

Kimley-Horn and Associates, Inc.



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

Kimley»Horn

April 2018
043896000

EXECUTIVE SUMMARY

Sobe Center, LLC is proposing to redevelop the property located in the southeast quadrant at the intersection of 17th Street and Washington Avenue in Miami Beach, Florida. The existing land use includes a 6,644 square-foot drive-in bank. The proposed redevelopment consists of a 150-room hotel, 2,023 square feet of retail space, a 4,000 square-foot walk-in bank, and 295 total restaurant seats with 145 seats located on the ground floor (5,258 square feet) and 150 seats located on the rooftop level (2,156 indoor square feet and 2,244 exterior square feet). The project is expected to be completed and opened by year 2020.

A traffic impact analysis was conducted for the project. Trip generation for the existing and proposed redevelopment was calculated using equations contained in the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual,* 10th Edition. The project is expected to generate 54 net new vehicle trips during the weekday P.M. peak hour.

On-site self-parking will be provided for the proposed walk-in bank. All other vehicles with the exception of taxis/shared-rides will be valeted on-site. The redevelopment will be served by one (1) on-site valet drop-off/pick-up area located just south of the project driveway along 17th Street. Please note that valet drop-off trips will be contained within the site, however, valet pick-up trips will exit the site along northbound Washington Avenue and travel eastbound along 17th Street to return vehicles to the on-site porte-cochere.

The results of the intersection capacity analysis indicate that the study intersections are expected to operate at adopted levels of service (LOS D+20% or better) during the P.M. peak hour under all analysis conditions with the exception of the southbound approach at the stop-controlled intersection of James Avenue and Lincoln Road which is expected to operate at LOS F under existing, future background, and future total conditions during the P.M. peak hour. Please note this result is common during peak periods where a high traffic volume free-flowing major street intersects with a stop-controlled minor street. Further note that the project assigns approximately 0.36 percent (0.36%) of the overall traffic volumes at this intersection

during the P.M. peak hour. As the project contributes less than 5 percent (5.0%) of traffic at this intersection, the project does not significantly or adversely impact this intersection.

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 commit to implementing the following strategies:

- The owner will provide the approximate 30 hotel employees with Miami-Dade Transit monthly transit passes to allow employees to travel to and from the property without the need of personal automobiles. The employees will also have the option of a monthly City of Miami Beach parking garage pass that will be provided by the owner.
- The owner will offer hotel employees who have been employed for at least ninety (90) days financial assistance of up to $100 to cover the cost of purchasing a bicycle to travel to and from work.
- Bicycle racks (short-term parking) will be provided on-site. Twelve (12) bicycle racks will be provided in the garage and six (6) will be provided on-street.
- The owner will appoint one (1) hotel employee to serve as the TDM Program Administrator. This role will be to encourage and facilitate employees to use transit or bicycles for travel to work.
- Create an Employee Transportation Coordinator position to run TDM programs.
- Patron and guest rideshare will be encouraged to and from the site. The hotel will provide guests with an Uber promotional code to encourage and facilitate the use of these services for first time uses.
- Citi Bike usage will be encouraged. Hotel guests will be provided with promotional codes to receive discounts on bicycle sharing program.

Please note that three (3) Citi Bike stations with 16 bicycle docks each are located within the vicinity of the project site on the west side of Washington Avenue just north of 17th Street, on the south side of Lincoln Road just west of James Avenue, and on the south side of 17th Street just east of SR A1A/Collins Avenue.

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INTRODUCTION

Sobe Center, LLC is proposing to redevelop the property located in the southeast quadrant at the intersection of 17th Street and Washington Avenue in Miami Beach, Florida. The existing land use includes a 6,644 square-foot drive-in bank. The proposed redevelopment consists of a 150-room hotel, 2,023 square feet of retail space, a 4,000 square-foot walk-in bank, and 295 total restaurant seats with 145 seats located on the ground floor (5,258 square feet) and 150 seats located on the rooftop level (2,156 indoor square feet and 2,244 exterior square feet). The project is expected to be completed and opened by year 2020. A project location map is provided as Figure 1. A conceptual site plan is provided in Appendix A.

On-site self-parking will be provided for the proposed walk-in bank. All other vehicles will be valeted on-site with the exception of taxis and rideshare. The redevelopment will be served by one (1) on-site drop-off/pick-up area for valet, taxi, and rideshare located just south of the project driveway along 17th Street. Please note that valet drop-off trips will be contained within the site, however, valet pick-up trips will exit the site and travel northbound on Washington Avenue and eastbound on 17th Street to return vehicles to the on-site porte-cochere.

Kimley-Horn and Associates, Inc. has completed this traffic impact analysis for submittal to the City of Miami Beach. The purpose of the study is to assess the project's impact on the surrounding roadway network and determine if adequate capacity is available to support future traffic volumes. The study's methodology is consistent with the requirements of the City of Miami Beach. Methodology correspondence detailing the traffic study requirements is included in Appendix B. This report summarizes the data collection, project trip generation and distribution, and capacity analysis for the proposed redevelopment.

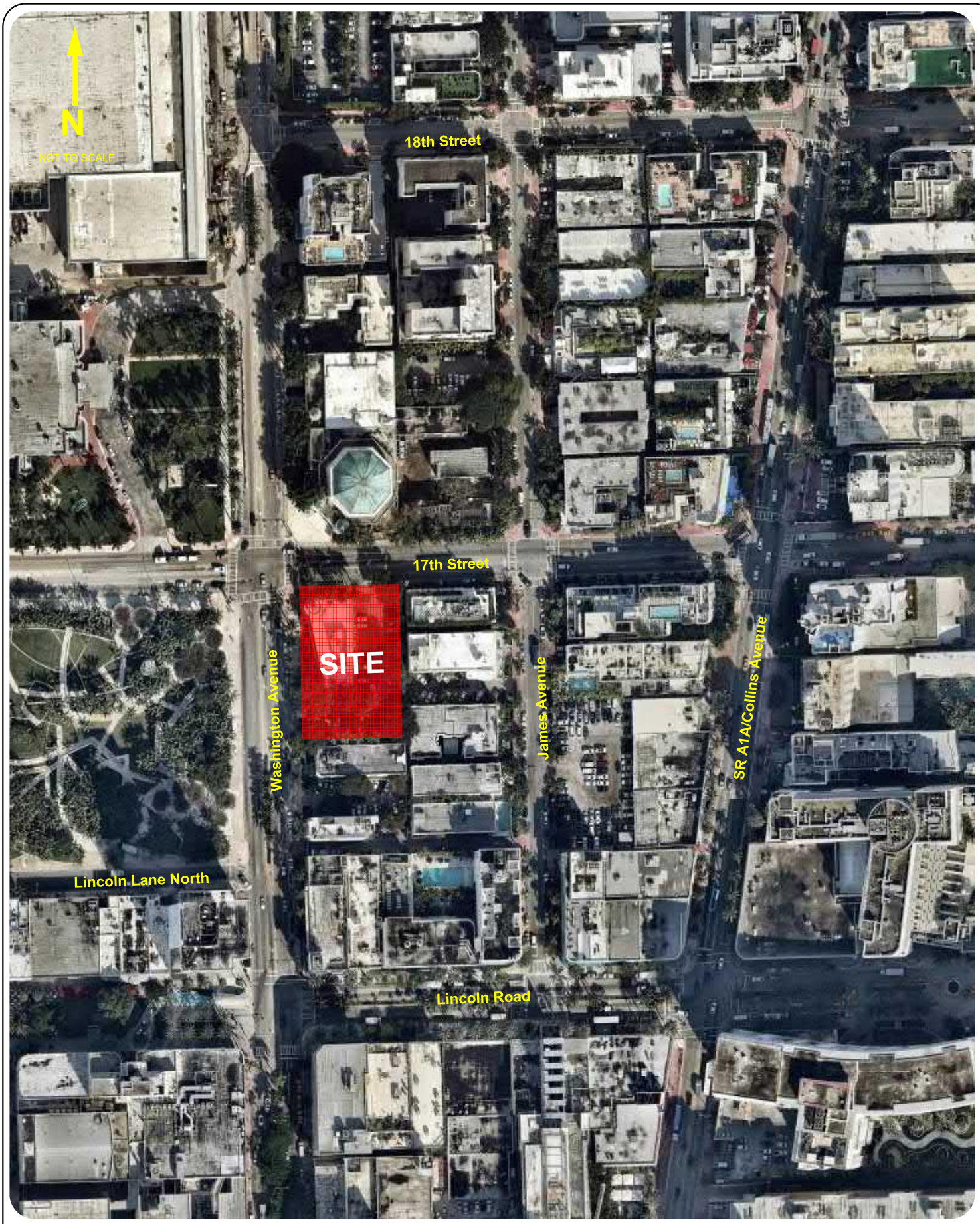


Figure 1
Location Map
1685 Washington Avenue
Miami Beach, Florida

Kimley»Horn

ANALYSIS PERIOD

The two (2) hour analysis period selected for this study was based on the three (3) 72-hour continuous traffic counts gathered from the *Miami Beach Light Rail Modern Streetcar Traffic Report,* February 2017. The 72-hour continuous traffic counts within the vicinity of the proposed redevelopment are located on 17th Street between Michigan Avenue and Jefferson Avenue, Convention Center Drive between 17th Street and Dade Boulevard, and Meridian Avenue between 17th Street and Dade Boulevard. The 72-hour counts were collected on Thursday, April 7, 2016, Friday, April 8, 2016, and Saturday, April 9, 2016. Based on the 72-hour continuous traffic counts, the analysis period was determined to be on Friday from 3:15 P.M. to 5:15 P.M. The 72-hour continuous counts are included in Appendix C.

EXISTING TRAFFIC

P.M. peak period (3:15 P.M. to 5:15 P.M.) turning movement counts were collected on Friday, October 27, 2017 at the following intersections:

- 17th Street and Washington Avenue
- 17th Street and James Avenue
- 17th Street and SR A1A/Collins Avenue
- Lincoln Road and Washington Avenue
- Lincoln Road and James Avenue

The traffic volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. City of Miami Beach peak season conversion factors were developed from Florida Department of Transportation (FDOT) data and were applied to the traffic counts to adjust the traffic to peak season volumes. The appropriate peak season conversion factor of 1.09 was applied to the collected turning movement counts.

Existing signal phasing and timing patterns were obtained from the Miami-Dade County Department of Transportation and Public Works – Traffic Signals and Signs Division for the signalized intersections required to be evaluated in this analysis. The turning movement counts, FDOT peak season factor category report, and signal timing data are included in Appendix C. Figure 2 presents the existing turning movement volumes at the study intersections during the P.M. peak hour.

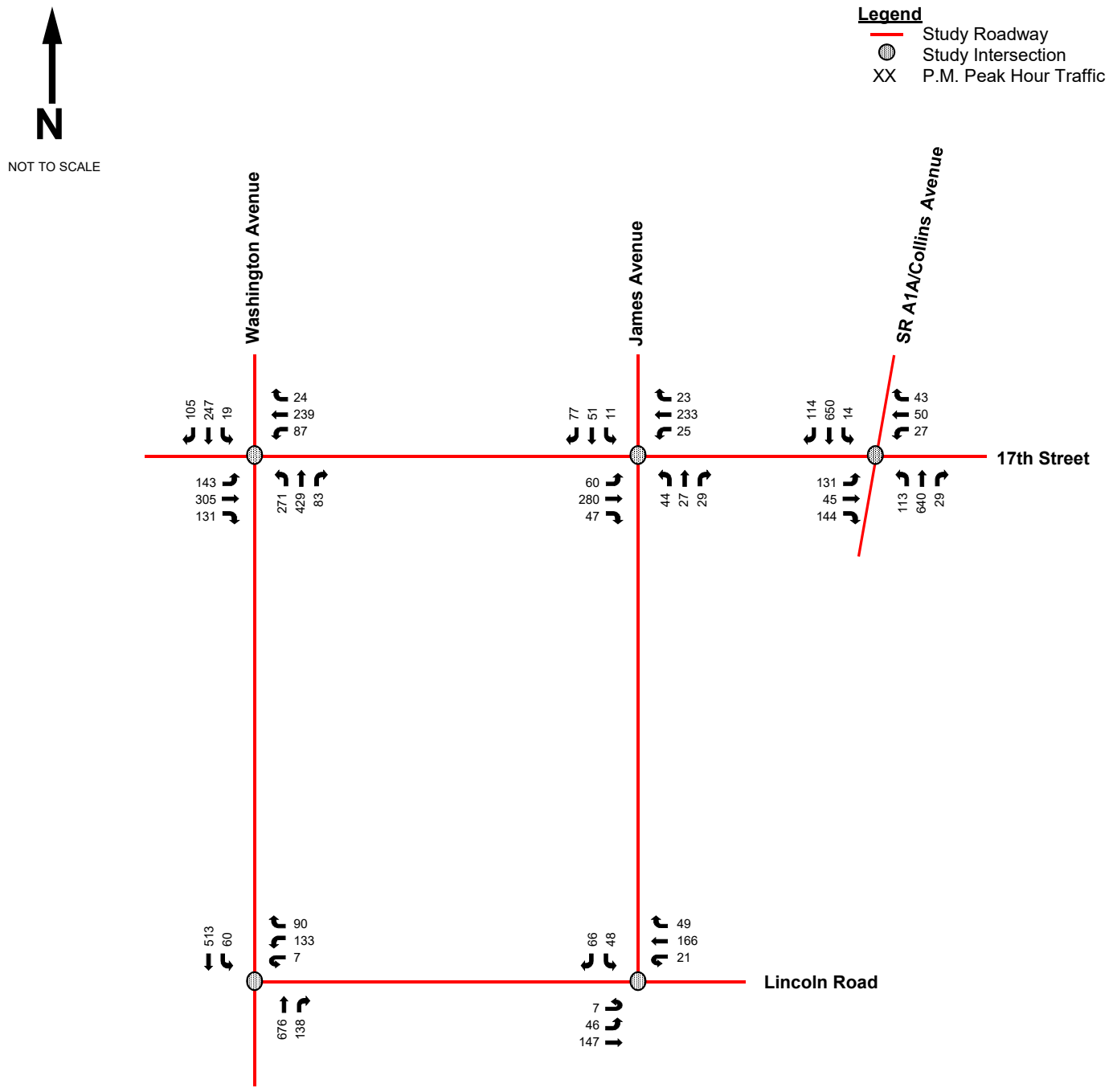


Figure 2
Existing P.M. Peak Hour Traffic
1685 Washington Avenue
Miami Beach, Florida

FUTURE BACKGROUND TRAFFIC

Future background traffic conditions are defined as expected traffic conditions on the roadway network in the year 2020 without the construction of the proposed redevelopment. Future background traffic volumes used in the analysis are the sum of the existing traffic and an additional amount of traffic generated by growth in the study area. Refer to Figure 3 for the 2020 peak hour background traffic volumes.

Background Area Growth

Future traffic growth on the transportation network was determined based upon (a) historic growth trends at nearby FDOT traffic count stations and (b) traffic volume comparisons from the year 2010 and 2040 Florida Standard Urban Transportation Model Structure (FSUTMS) - Southeast Florida Regional Planning Model (SERPM).

FDOT count stations referenced in this analysis include:

- Count Station #5170: SR A1A/Collins Avenue – North of 21st Street
- Count Station #8414: Washington Avenue – 200 feet north of 12th Street
- Count Station #8531: 17th Street – 200 feet east of Meridian Avenue
- Count Station #8567: 16th Street – 200 feet east of Meridian Avenue

The historic growth rate analysis, based on FDOT count stations examined linear, exponential, and decaying exponential growth rates for the most recent five (5) year and 10-year periods. The highest growth rate of 0.74 percent (0.74%) occurred during the most recent five (5) year period along with the highest R-squared value. Based on the forecasted volumes obtained from the 2010 and 2040 FSUTMS SERPM, an annual growth rate of 0.01 percent (0.01%) was calculated in the vicinity of the redevelopment.

However, at the City's request, different growth rates were calculated and applied for east/west roads and north/south roads using FDOT historical data. Calculations for East/West roads resulted in a negative growth rate, and therefore a conservative growth rate of 0.5

percent (0.5%) was applied. Calculations for north/south roads resulted in a growth rate of 2.85 percent (2.85%). The worksheets used to analyze the historic growth trends along with the FSUTMS transportation model outputs are included in Appendix D.

Committed Development

City of Miami Beach staff were contacted to determine the need to include approved but not yet completed in the vicinity of the project site in the analysis. The following committed developments were included as part of future background and future total conditions:

- 1600 Washington
- Miami Beach Convention Center
- Miami Beach Convention Center Hotel

Trip assignments for these developments are included in Appendix E.

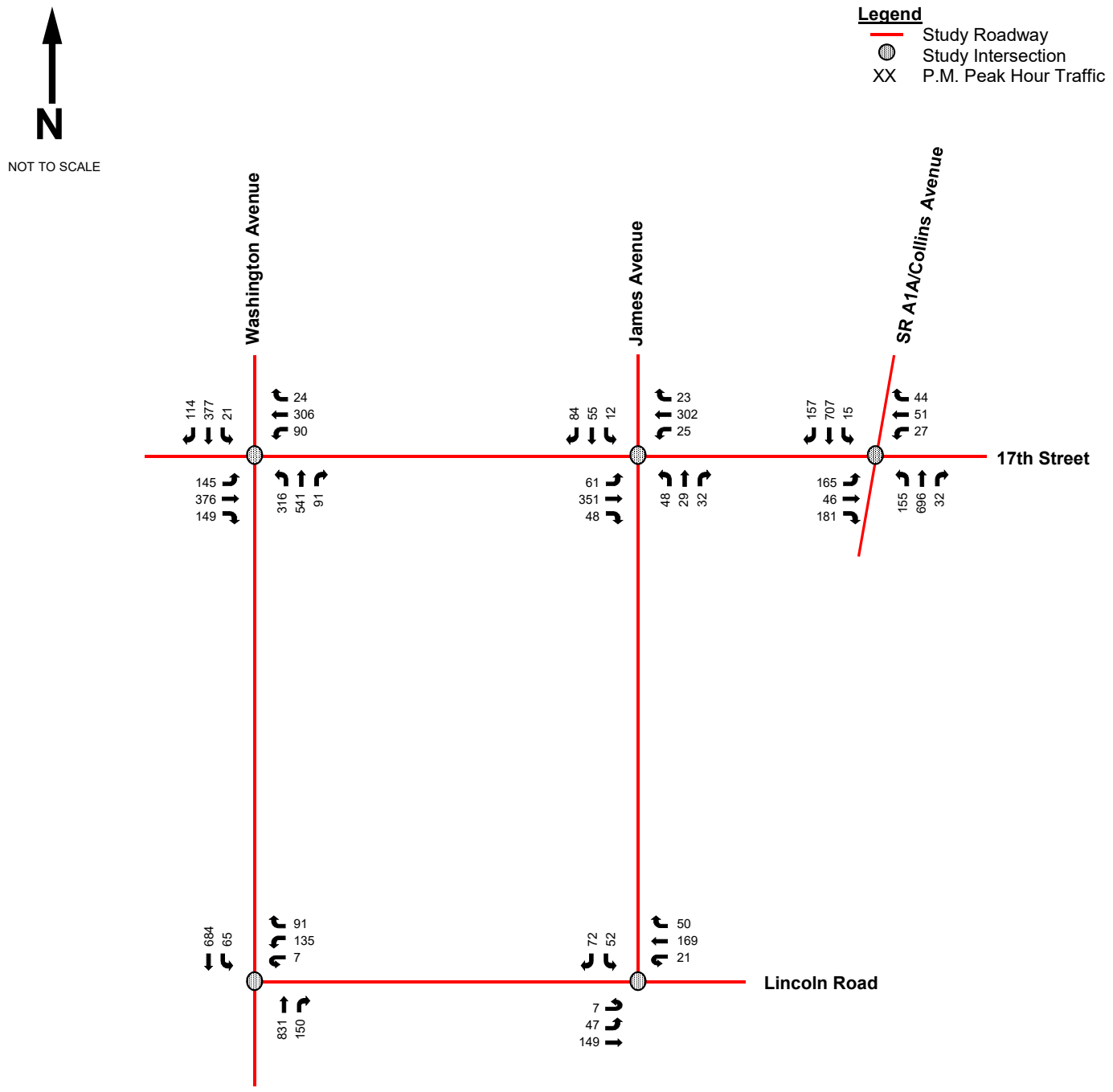


Figure 3
Future Background P.M. Peak Hour Traffic
1685 Washington Avenue
Miami Beach, Florida

PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project and the distribution and assignment of that traffic over the study roadway network.

Existing and Proposed Land Uses

The property proposed for redevelopment is currently occupied by a 6,644 square-foot drive-in bank. The proposed redevelopment consists of 150-room hotel, 2,429 square feet of retail space, a 4,000 square-foot walk-in bank, and 295 total restaurant seats with 145 seats located on the ground floor (5,258 square feet) and 150 seats located on the rooftop level (2,156 indoor square feet and 2,244 exterior square feet). The project is expected to be completed by year 2020.

Project Access

Access to the proposed redevelopment will be provided by one (1) ingress left-in/right-in driveway along 17th Street between Washington Avenue and James Avenue and one (1) egress right-out only driveway along Washington Avenue between 17th Street and Lincoln Road. On-site self-parking will be provided for the proposed walk-in bank. All other vehicles will be valeted on-site with the exception of taxis and rideshare. Please note that valet attendants will travel along northbound Washington Avenue and eastbound 17th Street to return vehicles to the on-site porte-cochere for valet pick-up.

Trip Generation

Trip generation calculations for the existing development and the proposed redevelopment were performed using Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. The trip generation for the existing development was determined using ITE Land Use Code (LUC) 912 (Drive-in Bank). The trip generation for the proposed redevelopment was determined using ITE LUC 310 (Hotel), 820 (Shopping Center), 911 (Walk-in Bank), and 931 (Quality Restaurant). Project trips were estimated for the weekday P.M. peak hour.

Multimodal Reduction

A multimodal (public transit, bicycle, and pedestrian) factor of 31.7 percent (31.7%) was identified based on US Census *Means of Transportation to Work* data was for the census tract containing the proposed redevelopment. However, at the City's request, the multimodal factor was limited to 20.0 percent (20.0%). It is expected that residents and patrons will choose to walk or use public transit to and from the proposed redevelopment. Three (3) Citi Bike stations with 16 bicycle docks each are located within the vicinity of the project site on the west side of Washington Avenue just north of 17th Street, on the south side of Lincoln Road just west of James Avenue, and on the south side of 17th Street just east of SR A1A/Collins Avenue. Furthermore, Miami-Dade County Transit (MDT) provides bus service to and from the project area via seven (7) routes and the City of Miami Beach's Trolley provides service to and from the project area via three (3) routes:

- Route 103/Route C operates on 17th Street, Lincoln Road, Washington Avenue, and SR A1A/Collins Avenue within the vicinity of the project. This route serves Downtown (Miami) Bus Terminal, Main Library, Historical Museum of South Florida, Miami Art Museum, Government Center Metrorail station, Omni Metromover Station/Bus Terminal, City of Miami Beach via MacArthur Causeway, South Beach, Washington Avenue, Lincoln Road, Collins Avenue, 41st Street, Alton Road, and Mt. Sinai Hospital. This route operates with 30-minute headways during the P.M. peak hour and provides connecting service to 20 additional MDT bus routes, as well as the Metrorail.
- Route 112/Route L operates on Lincoln Road, Miami Beach Convention Center, Miami Beach Senior High School, 41st Street/Indian Creek Drive, JFK Causeway, Northside Metrorail station, Amtrak Terminal, and Hialeah Metrorail station. This route operates with 12-minute headways during the P.M. peak hour and provides connecting service to 23 additional MDT bus routes, as well as the Metrorail.
- Route 113/Route M operates on 17th Street, Lincoln Road, Washington Avenue, and SR A1A/Collins Avenue within the vicinity of the project. This route serves NW 21st Street and NW 19th Avenue via NW 17th Avenue, NW 19th Avenue/NW 20th Street, Civic Center Metrorail station, University of Miami/Jackson Memorial hospitals and clinics, Cedars

Medical Center, VA Hospital, Omni Metromover Station/Bus Terminal, MacArthur Causeway, City of Miami Beach, South Beach, Lincoln Road, Collins Avenue/41st Street, and Mt. Sinai Hospital. This route operates with 45-minute headways during the P.M. peak hour and provides connecting service to 17 additional MDT bus routes, as well as the Metrorail.

- Route 115 operates on 17th Street, Lincoln Road, Washington Avenue, and James Avenue within the vicinity of the project. This route serves Harding Avenue/88th Street, Alton Road, Sheridan Avenue, Lincoln Road/Washington Avenue, Mt. Sinai Medical Center, and 17th Street/Washington Avenue. This route operates with 50-minute headways during the P.M. peak hour and provides connections to seven (7) additional MDT bus routes.
- Route 119/Route S operates on 17th Street, Lincoln Road, Washington Avenue, and SR A1A/Collins Avenue within the vicinity of the project. This route serves Downtown (Miami) Bus Terminal, Main Library, Historical Museum, Miami Art Museum, Government Center Metrorail station, Omni Bus Terminal, MacArthur Causeway, City of Miami Beach, South Beach, Lincoln Road, Collins Avenue, 192nd Street Causeway, City of Aventura, and Aventura Mall. This route operates with 15-minute headways during the P.M. peak hour and provides connecting service to 25 additional MDT bus routes, as well as the Metrorail.
- Route 120 Beach MAX operates on 17th Street, Lincoln Road, Washington Avenue, and SR A1A/Collins Avenue within the vicinity of the project. This route serves the Downtown Bus Terminal, Main Library, Historical Museum, Miami Art Museum, Government Center Metrorail station, Miami-Dade College Wolfson Campus, Omni Bus Terminal, MacArthur Causeway, City of Miami Beach, Collins Avenue, Town of Surfside, City of Bal Harbour, Haulover Park Marina, and Aventura Mall. This route operates with 12-minute headways during the P.M. peak hour and provides connecting service to 24 additional MDT bus routes, as well as the Metrorail.
- Route 150 Miami Beach Airport Express operates on 17th Street, Lincoln Road, Washington Avenue, and SR A1A/Collins Avenue within the vicinity of the project. This route serves Miami International Airport Metrorail Station, 41st Street, Alton Road, SR

A1A/Collins Avenue, Lincoln Road, and Washington Avenue. This route operates with 20-minute headways during the P.M. peak hour and provides connecting service to 10 additional MDT bus routes.

- The Miami Beach Trolley South Beach Loop, Middle Beach Loop, and Collins Express operate on 17th Street, Lincoln Road, Washington Avenue, SR A1A/Collins Avenue within the vicinity of the project. These routes operate with between 10-minute to 20-minute headways during the P.M. peak hour.

Detailed route information and headway data is provided in Appendix F.

Internal Capture

A portion of the trips generated by the redevelopment will be captured internally on the site. Internal capture rates were based upon values contained in ITE's, *Trip Generation Handbook*, 3rd Edition. The internal capture for the proposed redevelopment is expected to be 25.6 percent (25.6%) during the P.M. peak hour. Internal capture calculations are contained in Appendix F.

Pass-By Capture

Pass-by capture rates were determined based on average rates provided in ITE's *Trip Generation Handbook,* 3rd Edition. The pass-by rate used for the existing drive-in bank is 34.0 percent (34.0%) during the P.M. peak hour. The pass-by rate for the proposed restaurant is 44.0 percent (44.0%) during the P.M. peak hour.

Net New Project Trips

Net new project trips are equal to the gross project trips minus the multimodal reduction factor, internal capture, and pass-by capture. The net new project trips represent the additional vehicles on the roadway network. Table 2 summarizes the project's trip generation for the P.M. peak hour. As shown in Table 1, the redevelopment is expected to generate 54 net new vehicle trips during the P.M. peak hour. Detailed trip generation information is included in Appendix F.

Table 1: Proposed Net New Trip Generation				
P.M. Peak Hour				
			Entering	Exiting
Future Land Use (ITE Code)	Scale	Net New External Trips	Trips	Trips
Existing Development				
Drive-in Bank (912)	6,644 square feet	71	35	36
Subtotal		71	35	36
Proposed Redevelopment				
Hotel (310)	150 rooms	62	31	31
Shopping Center (820)	2,023 square feet	13	7	6
Walk-in Bank (911)	4,000 square feet	26	14	12
Quality Restaurant (931)	295 seats	25	18	6
Subtotal		125	70	55
Net New Redevelopment				
Net New Project Trips		**54**	**35**	**19**
Total Project Trips				
Proposed Redevelopment Subtotal		151	88	63
Walk-in Bank Self-Park Trips		26	14	12
Retail Trips		19	10	9
Proposed Hotels, Retail and Restaurant Vehicle Trips		106	64	42
42.6% Taxi/Rideshare Trips(1)		45	27	18
Proposed Valet Trips		**80**	**47**	**33**

Note: (1) Based on data collected as part of the Cadillac Hotel redevelopment. Detailed data is provided in Appendix F.

Trip Distribution and Assignment

The trip distribution was based on an interpolated cardinal trip distribution for the project site's traffic analysis zone (TAZ) obtained from the Miami-Dade Metropolitan Planning Organization's (MPO's) *2040 Long Range Transportation Plan Directional Trip Distribution Report*. The project is located within TAZ 644. The cardinal distribution is shown in Table 2. Figure 4 presents the project's net new trip distribution for the P.M. peak hour and Figure 5 presents the project's net new pass-by trip distribution for the P.M. peak hour. Detailed cardinal distribution calculations are contained in Appendix G.

Table 2: Cardinal Trip Distribution	
Cardinal Direction	**Percentage of Trips**
North-Northeast	13.0%
East-Northeast	0.0%
East-Southeast	0.0%
South-Southeast	0.0%
South-Southwest	10.0%
West-Southwest	30.0%
West-Northwest	26.0%
North-Northwest	21.0%
Total	**100.0%**

On-site self-parking will be provided for the proposed walk-in bank. All other vehicles will be valeted on-site with the exception of taxis and rideshare. The redevelopment will be served by one (1) on-site valet drop-off/pick-up area located just south of the project driveway along 17th Street. Please note that valet drop-off trips will be contained within the site, however, valet pick-up trips will exit the site onto northbound Washington Avenue and travel eastbound on 17th Street to return vehicles to the on-site porte-cochere. Figure 6 provides a graphic illustration of the proposed valet routes to/from the on-site parking garage and Figure 7 presents the project's net new valet trip distribution. Figure 8 presents the project's net new project trip assignment and Figure 9 presents the project's valet trip assignment for the P.M. peak hour.

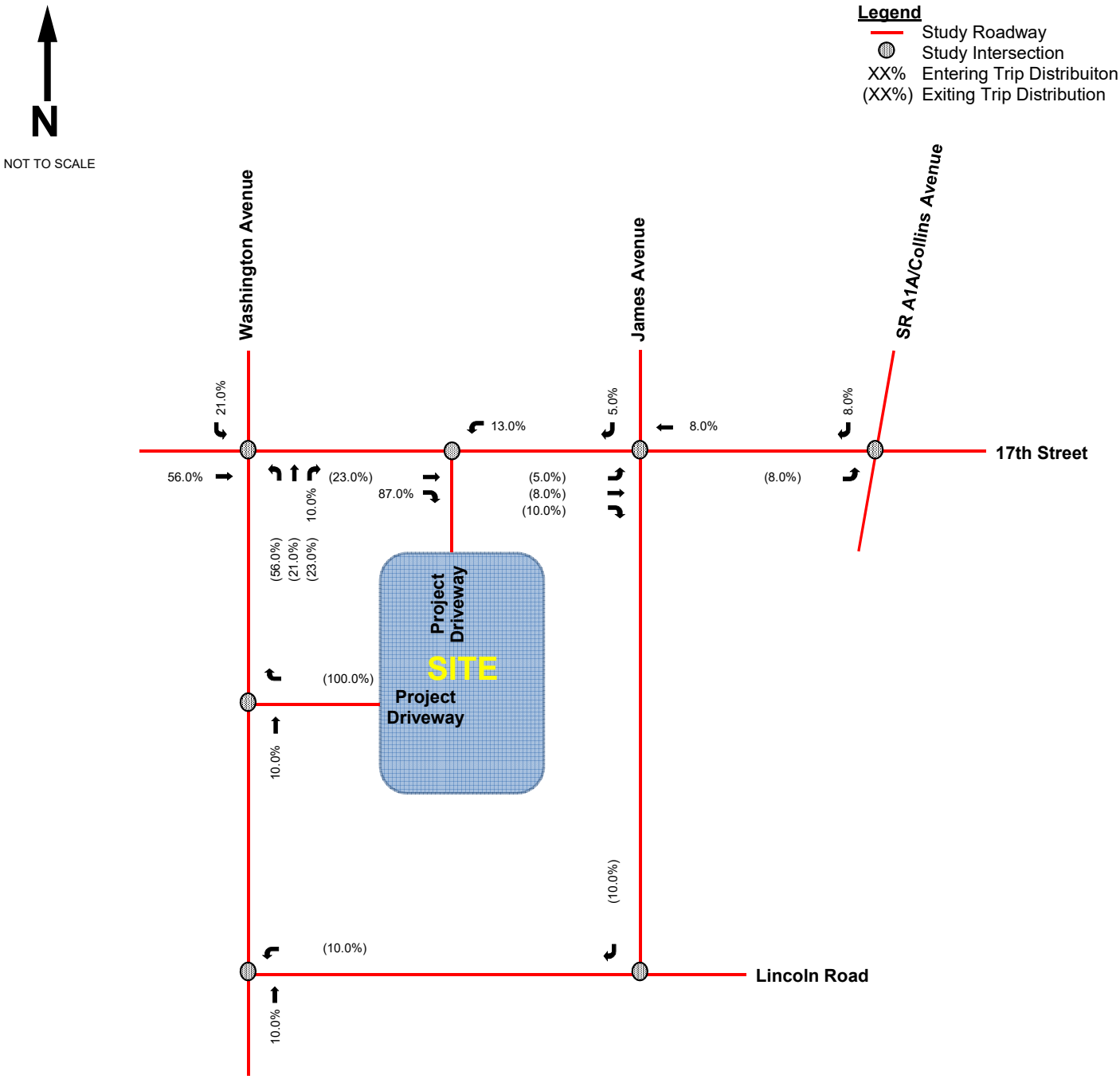


Figure 4
P.M. Peak Hour Net New Trip Distribuiton
1685 Washington Avenue
Miami Beach, Florida

Kimley»Horn

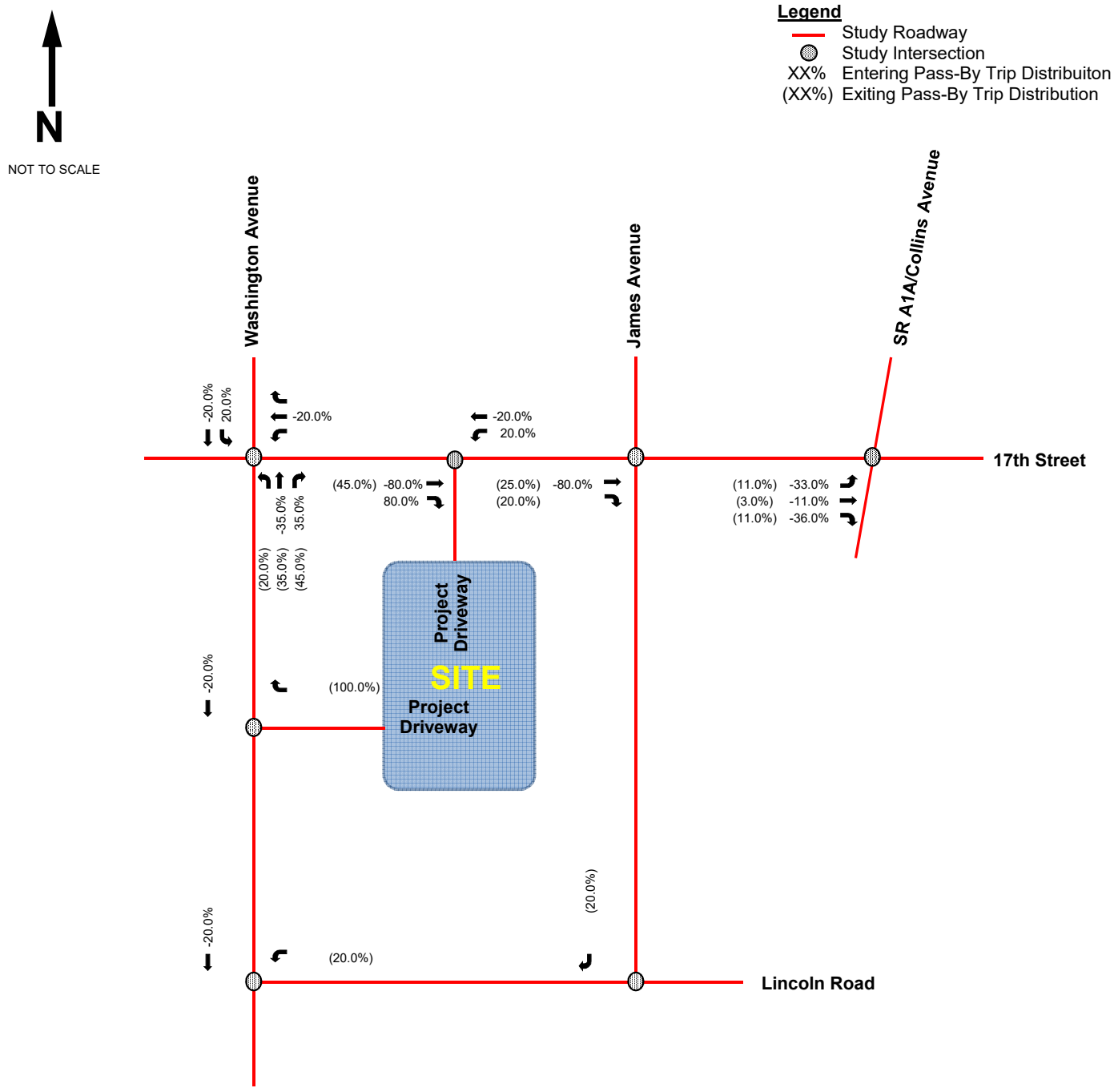


Figure 5
P.M. Peak Hour Pass-By Trip Distribuiton
1685 Washington Avenue
Miami Beach, Florida

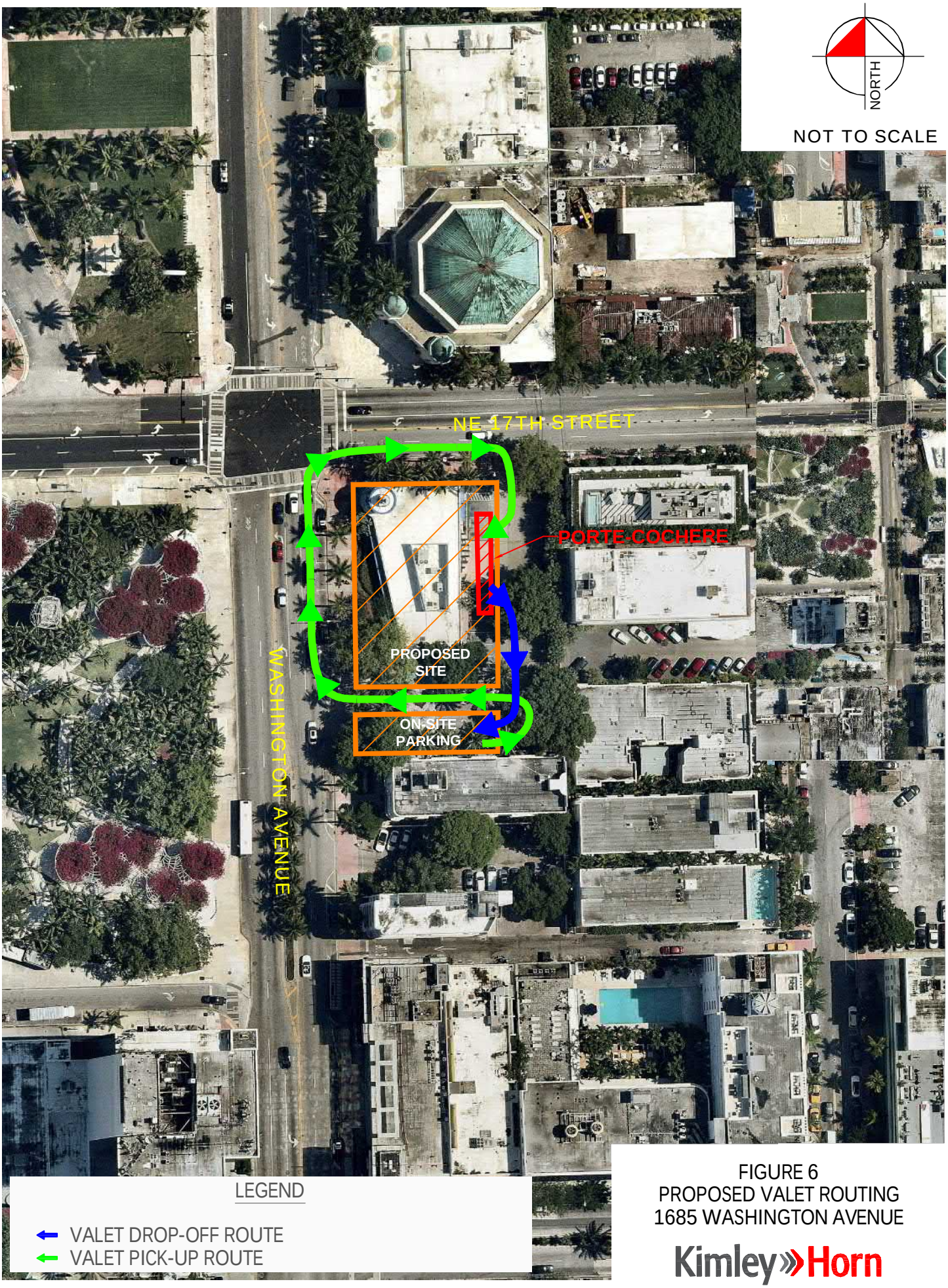


FIGURE 6
PROPOSED VALET ROUTING
1685 WASHINGTON AVENUE

Kimley»Horn

Drawing name: K:\FTL_TPTO\043896000-1685 Washington Avenue\CADD\Valet\Valet Figures.dwg Figure 6 Jan 08, 2018 12:54pm by: cory.dorman

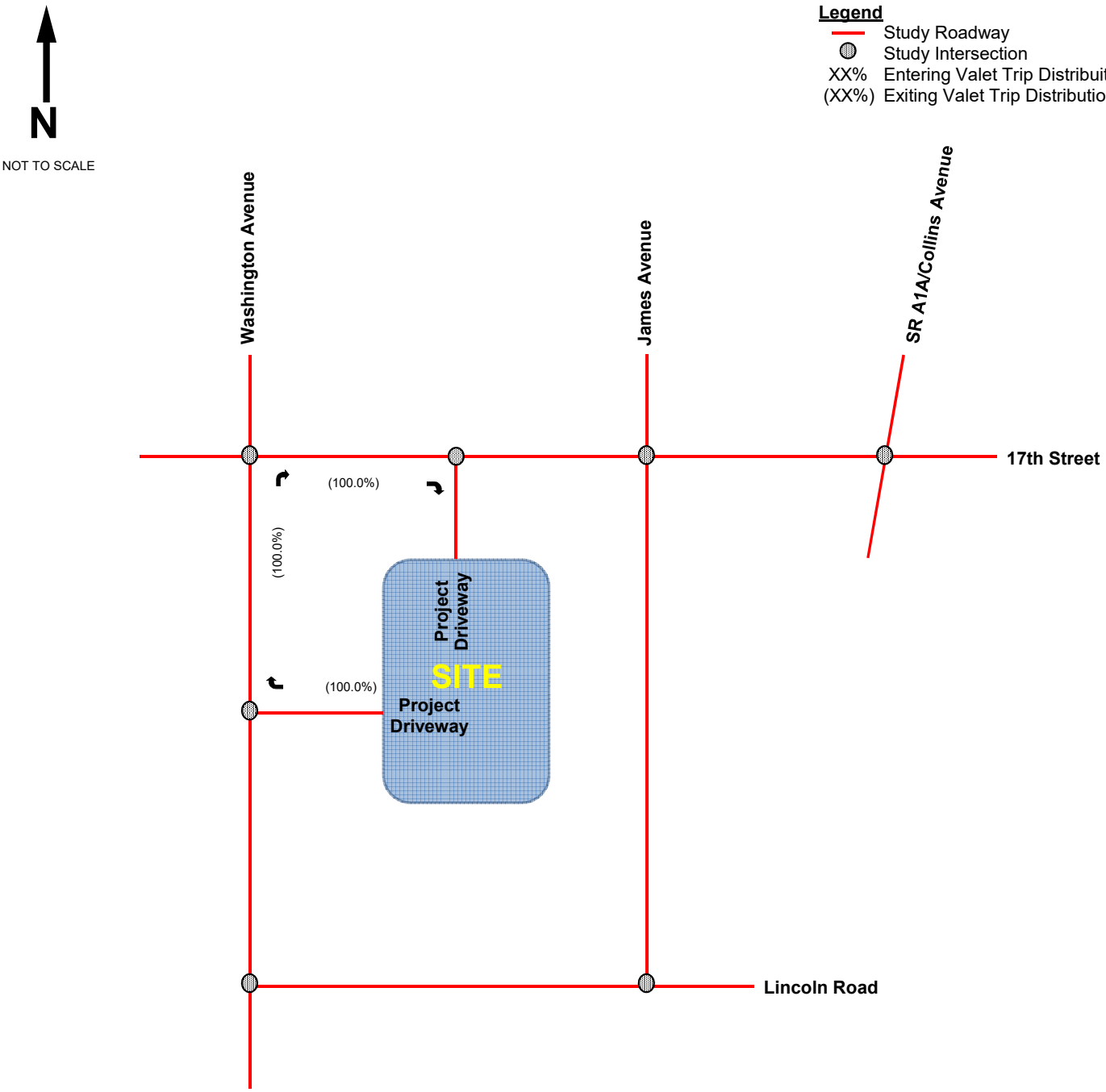


Figure 7
P.M. Peak Hour Valet Trip Distribuiton
1685 Washington Avenue
Miami Beach, Florida

Kimley»Horn

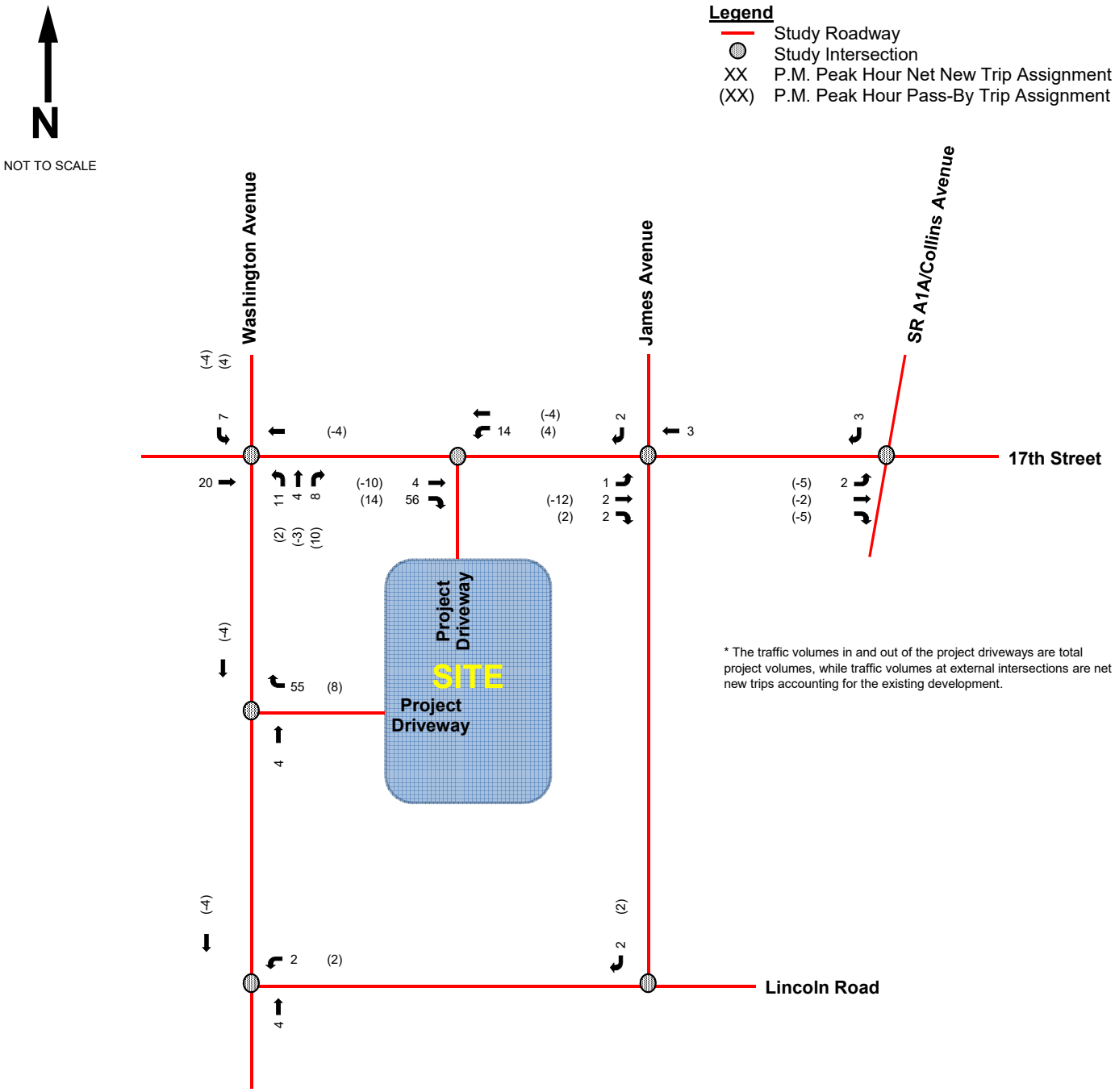


Figure 8
P.M. Peak Hour Project Trip Assignment
1685 Washington Avenue
Miami Beach, Florida

Kimley»Horn

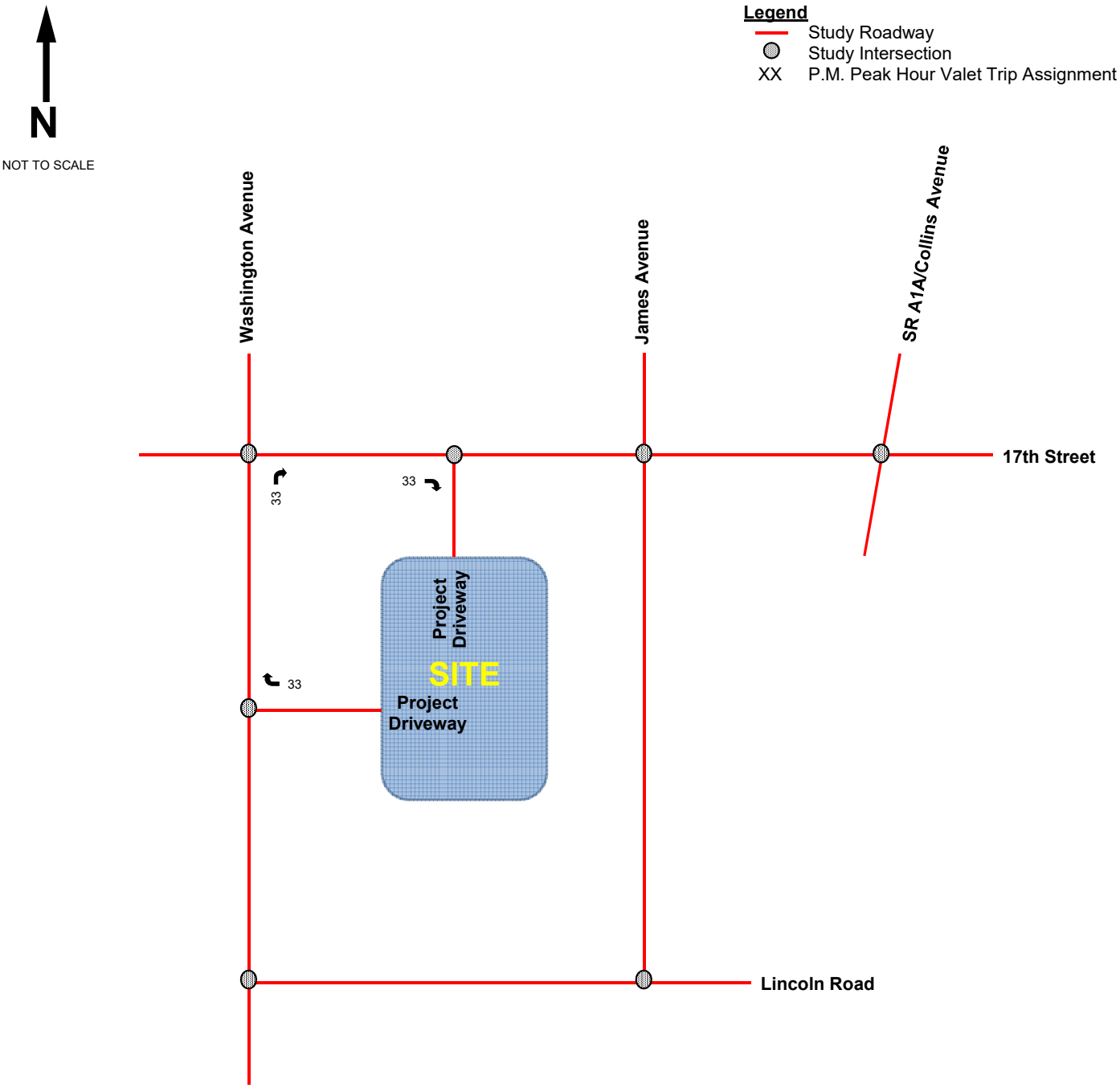


Figure 9
P.M. Peak Hour Valet Trip Assignment
1685 Washington Avenue
Miami Beach, Florida

FUTURE TOTAL TRAFFIC

Future total traffic conditions are defined as the expected traffic conditions in the year 2020 after the opening of the project. Total traffic volumes considered in the analysis for this project are the sum of the background traffic volumes and expected project traffic volumes. The P.M. peak hour future traffic volumes are shown in Figure 7. Volume Development worksheets for the study intersections are included in Appendix H.

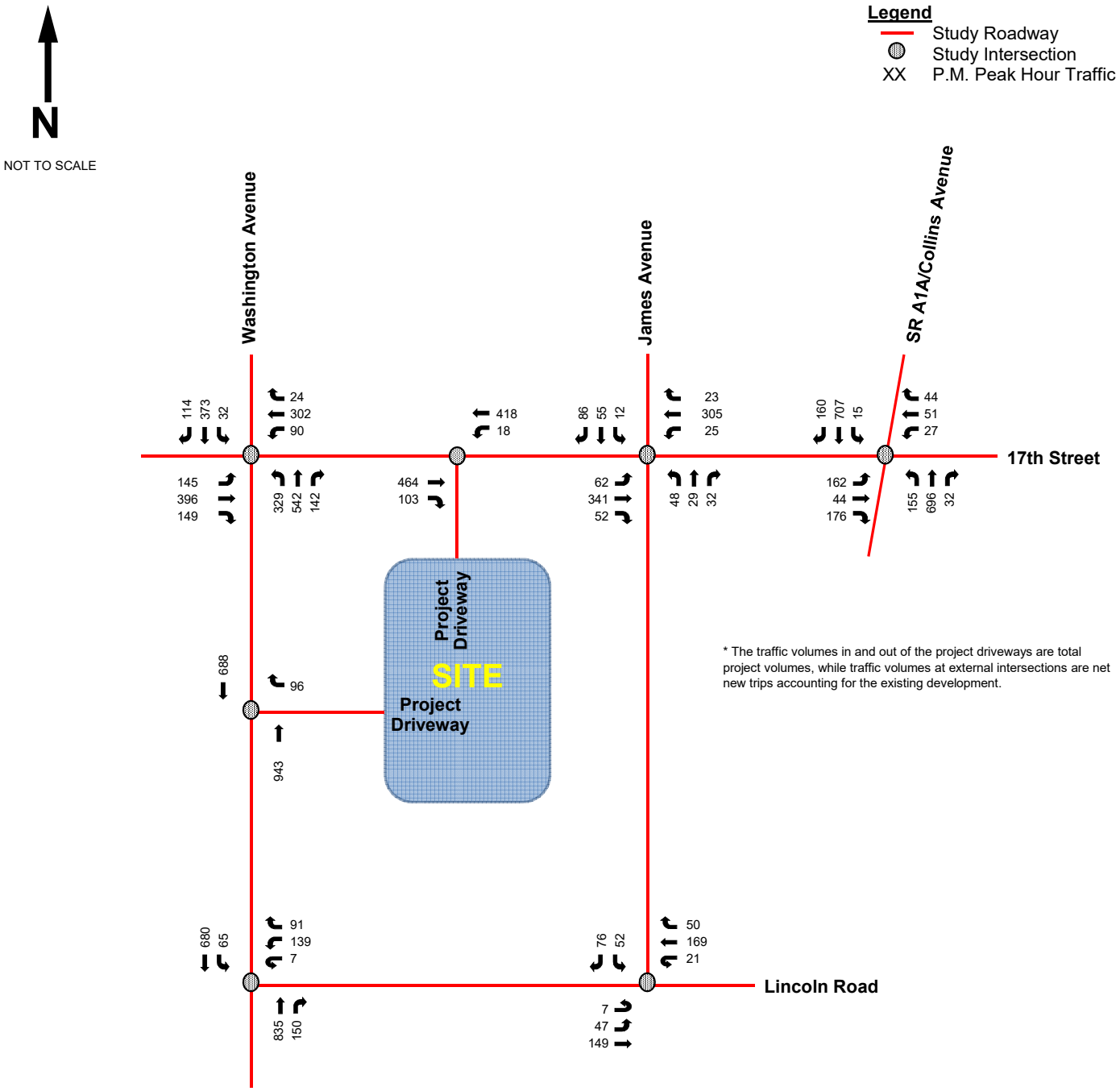


Figure 10
Future Total P.M. Peak Hour Traffic
1685 Washington Avenue
Miami Beach, Florida

Kimley»Horn

INTERSECTION CAPACITY ANALYSIS

The study area intersection operating conditions were analyzed for three (3) scenarios (existing conditions, future background conditions, and future total conditions) using Trafficware's *SYNCHRO 10.0* software, which applies methodologies outlined in the Transportation Research Board's (TRB's) *Highway Capacity Manual (HCM),* 2000 and 2010 Editions. Synchro worksheets for the study intersections are included in Appendix I.

A summary of the intersection analyses for the P.M. peak hour is presented in Table 4. Please note that as mass transit service with headways of 20 minutes or less operates within 0.25 miles of the study area, LOS D+20% was utilized as the adopted level of service standard consistent with the City of Miami Beach's *2025 Comprehensive Plan*. As Table 3 and Table 4 indicate, the study intersections are expected to operate at adopted levels of service (LOS D+20% or better) during the P.M. peak hour under all analysis conditions with the exception of the southbound approach at the stop-controlled intersection of James Avenue and Lincoln Road which is expected to operate at LOS F under existing, future background, and future total conditions during the P.M. peak hour. Please note this result is common during peak periods where a high traffic volume free-flowing major street intersects with a stop-controlled minor street. Further note that the project assigns approximately 0.36 percent (0.36%) of the overall traffic volumes at this intersection during the P.M. peak hour. As the project contributes less than 5 percent (5.0%) of traffic at this intersection, the project does not significantly or adversely impact this intersection.

Table 3: P.M. Peak Hour Intersection Capacity Analysis						
Intersection	**Traffic Control**	**Overall LOS/Delay**	**Approach LOS**			
			EB	**WB**	**NB**	**SB**
Existing Conditions (Future Background Conditions) [Future Total Conditions]						
17th Street and Washington Avenue	Signalized	C/21.9 sec (C/29.1 sec) [C/30.8 sec]	C (C) [C]	C (C) [C]	B (D) [D]	C (C) [C]
17th Street and James Avenue	Signalized	A/9.2 sec (A/9.6 sec) [A/9.7 sec]	A (A) [A]	A (A) [A]	C (C) [C]	C (C) [C]
17th Street and SR A1A/Collins Avenue	Signalized	B/14.7 sec (C/21.6 sec) [C/22.2 sec]	D (F) [F]	D (D) [D]	A (A) [B]	A (A) [A]
Lincoln Road and Washington Avenue	Signalized(1)	C/20.1 sec (B/22.6 sec) [B/23.7 sec]	(5)	C (C) [C]	C (C) [C]	B (B) [B]
Lincoln Road and James Avenue	One-Way, Stop-Controlled	(3)	(4)	(4)	(5)	F (F) [F]
17th Street and Project Driveway	One-Way, Stop-Controlled	(3)	(4)	(4)	(4)	(5)
Washington Avenue and Project Driveway	One-Way, Stop-Controlled	(3)	(5)	(6) ((6)) [B]	(4)	(4)

Notes: (1) Intersection cannot be analyzed in HCM 2010; therefore HCM 2000 was used.
(2) Project driveway only exists under future total conditions.
(3) Overall intersection LOS is not defined, as intersection operates under stop-control conditions.
(4) Approach operates under free-flow conditions. LOS is not defined.
(5) Approach does not exist.
(6) Approach does not exist under existing and future background conditions.

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 commit to implementing the following strategies:

- The owner will provide the approximate 30 hotel employees with Miami-Dade Transit monthly transit passes to allow employees to travel to and from the property without the need of personal automobiles. The employees will also have the option of a monthly City of Miami Beach parking garage pass that will be provided by the owner.
- The owner will offer hotel employees who have been employed for at least ninety (90) days financial assistance of up to $100 to cover the cost of purchasing a bicycle to travel to and from work.
- Bicycle racks (short-term parking) will be provided on-site. (Twelve (12) bicycle racks will be provided in the garage and six (6) will be provided on-street.
- The owner will appoint one (1) hotel employee to serve as the TDM Program Administrator. This role will be to encourage and facilitate employees to use transit or bicycles for travel to work.
- Create an Employee Transportation Coordinator position to run TDM programs.
- Patron and guest rideshare will be encouraged to and from the site. The hotel will provide guests with an Uber promotional code to encourage and facilitate the use of these services for first time uses.
- Citi Bike usage will be encouraged. Hotel guests will be provided with promotional codes to receive discounts on bicycle sharing program.

Please note that three (3) Citi Bike stations with 16 bicycle docks each are located within the vicinity of the project site on the west side of Washington Avenue just north of 17th Street, on the south side of Lincoln Road just west of James Avenue, and on the south side of 17th Street just east of SR A1A/Collins Avenue.

CONCLUSION

Sobe Center, LLC is proposing to redevelop the property located in the southeast quadrant at the intersection of 17th Street and Washington Avenue in Miami Beach, Florida. The existing land use includes a 6,644 square-foot drive-in bank. The proposed redevelopment consists of a 150-room hotel, 2,023 square feet of retail space, a 4,000 square-foot walk-in bank, and 295 total restaurant seats with 145 seats located on the ground floor (5,258 square feet) and 150 seats located on the rooftop level (2,156 indoor square feet and 2,244 exterior square feet).

The results of the intersection capacity analysis indicate that the study intersections are expected to operate at adopted levels of service (LOS D+20% or better) during the P.M. peak hour under all analysis conditions with the exception of the southbound approach at the stop-controlled intersection of James Avenue and Lincoln Road which is expected to operate at LOS F under existing, future background, and future total conditions during the P.M. peak hour. Please note this result is common during peak periods where a high traffic volume free-flowing major street intersects with a stop-controlled minor street. Further note that the project assigns approximately 0.36 percent (0.36%) of the overall traffic volumes at this intersection during the P.M. peak hour. As the project contributes less than 5 percent (5.0%) of traffic at this intersection, the project does not significantly or adversely impact this intersection.

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 commit to implementing the following strategies:

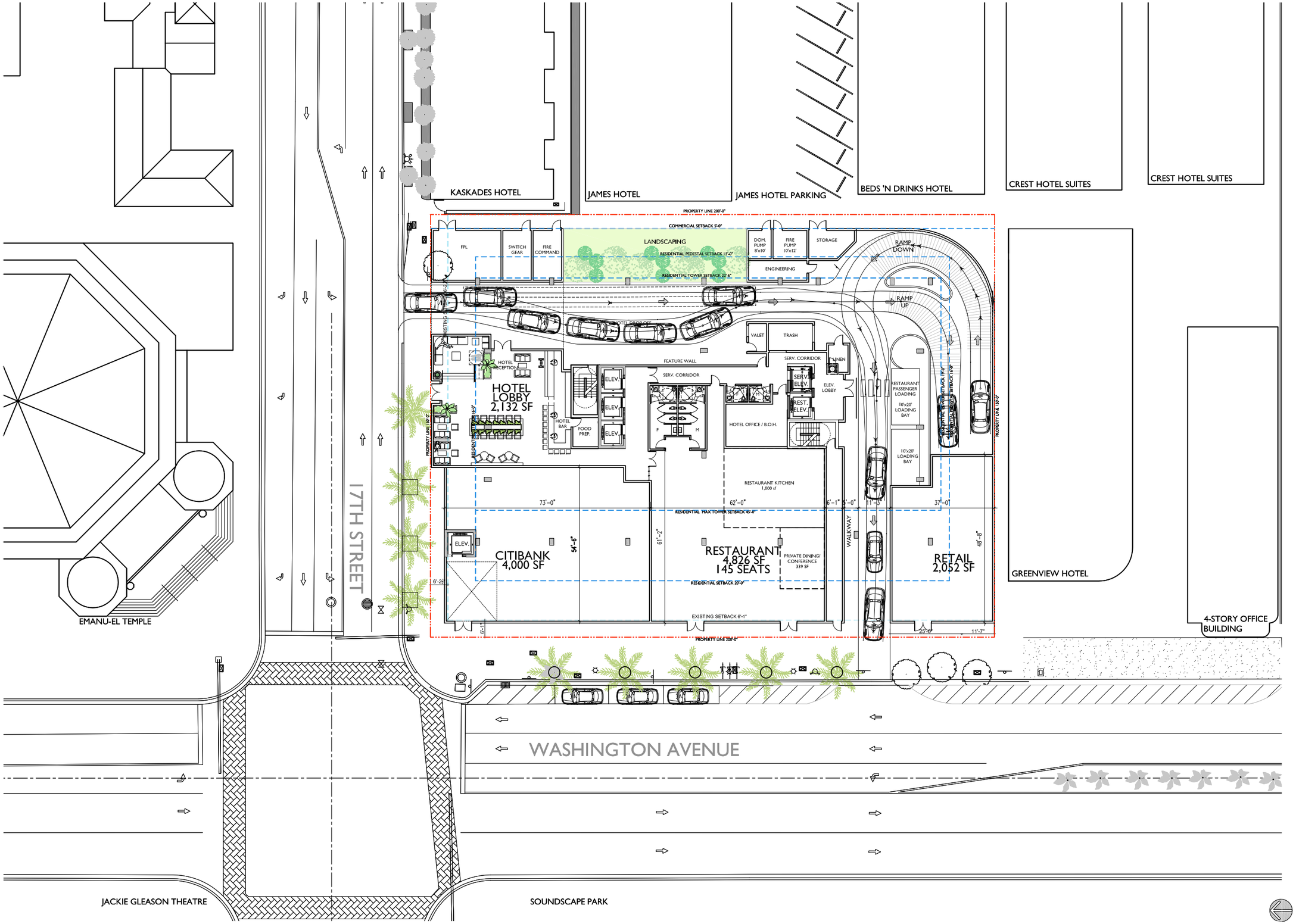
- The owner will provide the approximate 30 hotel employees with Miami-Dade Transit monthly transit passes to allow employees to travel to and from the property without the need of personal automobiles. The employees will also have the option of a monthly City of Miami Beach parking garage pass that will be provided by the owner.
- The owner will offer hotel employees who have been employed for at least ninety (90) days financial assistance of up to $100 to cover the cost of purchasing a bicycle to travel to and from work.

- Bicycle racks (short-term parking) will be provided on-site. Twelve (12) bicycle racks will be provided in the garage and six (6) will be provided on-street.
- The owner will appoint one (1) hotel employee to serve as the TDM Program Administrator. This role will be to encourage and facilitate employees to use transit or bicycles for travel to work.
- Create an Employee Transportation Coordinator position to run TDM programs.
- Patron and guest rideshare will be encouraged to and from the site. The hotel will provide guests with an Uber promotional code to encourage and facilitate the use of these services for first time uses.
- Citi Bike usage will be encouraged. Hotel guests will be provided with promotional codes to receive discounts on bicycle sharing program.

Please note that three (3) Citi Bike stations with 16 bicycle docks each are located within the vicinity of the project site on the west side of Washington Avenue just north of 17th Street, on the south side of Lincoln Road just west of James Avenue, and on the south side of 17th Street just east of SR A1A/Collins Avenue.

Appendix A

Site Plan



PROPOSED SITE PLAN 1/32" = 1'-0"

MCG ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723

PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

RUDY RICCIOTTI architecte
ARTISTIC ADVISOR

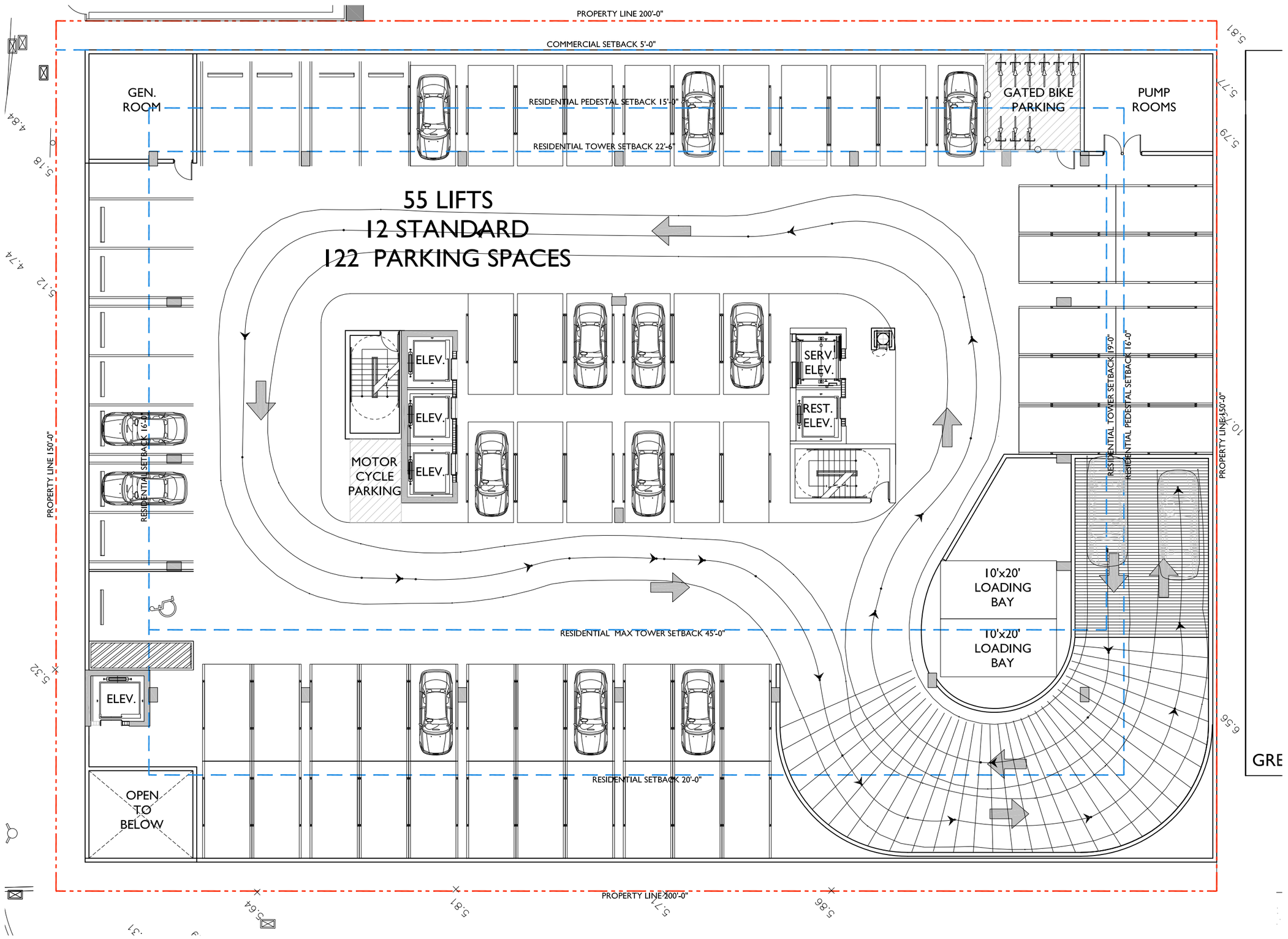
DRAWING:

PROPOSED SITE PLAN

SCALE:	N.T.S.
CHECK:	JMcG
DATE:	04/02/2018

SHEET NUMBER

A2.00B



PROPOSED 2ND LEVEL PLAN PLAN 1/16" = 1'-0"

MCG
ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

RUDY RICCIOTTI architecte
ARTISTIC ADVISOR

DRAWING:

PROPOSED 2ND LEVEL PLAN

SCALE:	N.T.S.
CHECK:	JMcG
DATE:	04/02/2018

SHEET NUMBER

A2.02

Appendix B

Methodology Correspondence

Dorman, Cory

From: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Sent: Friday, November 3, 2017 9:00 AM
To: Dabkowski, Adrian; Ferrer, Josiel
Cc: Dorman, Cory; Ronald Finvarb; Mickey Marrero
Subject: RE: 1685 Washington Avenue | Traffic Study Methodology

Good morning Adrian,

You can proceed with data collection.
I am waiting on the peer reviewer to confirm the reduction factors. I will update you later today.
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: Friday, November 03, 2017 6:57 AM
To: Ferrer, Josiel; Akcay, Firat
Cc: Dorman, Cory; Ronald Finvarb; Mickey Marrero
Subject: RE: 1685 Washington Avenue | Traffic Study Methodology

Good morning Josiel and Firat:

Please let us know if you have any comments on the traffic study methodology for 1685 Washington Avenue. We need to move forward with data collection in order to maintain the project schedule.

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: Dabkowski, Adrian
Sent: Monday, October 9, 2017 10:15 AM
To: JOSIELFERRER@miamibeachfl.gov; Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Cc: Dorman, Cory <cory.dorman@kimley-horn.com>; 'Ronald Finvarb' <ronald@finvarb.com>; Mickey Marrero <mmarrero@brzoninglaw.com>
Subject: 1685 Washington Avenue | Traffic Study Methodology

Good morning Josiel and Firat:

Thank you for taking the time to meet with us last week to discuss the 1685 Washington Avenue redevelopment project. Based on our discussions, our proposed methodology is attached. Please let us know if you have any comments, information on committed developments to include in the analysis, and programmed improvements that the City maybe proposing in the study area.

Thank you
Adrian

Kimley»Horn
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

Kimley»Horn

MEMORANDUM

To: Josiel Ferrer, E.I.
Firat Akcay
City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE
Cory D. Dorman, E.I.

Date: October 10, 2017

Subject: 1685 Washington Avenue
Traffic Study Methodology

The purpose of this memorandum is to summarize the traffic study methodology discussed at our October 5, 2017 meeting. The proposed redevelopment is located in the southeast quadrant at the intersection of 17th Street and Washington Avenue in Miami Beach, Florida. The existing land use includes a 6,644 square-foot drive-in bank. The proposed redevelopment consists of a 150-room hotel, 2,429 square feet of retail space, a 4,000 square-foot walk-in bank, and 295 total restaurant seats with 145 seats located on the ground floor (5,258 square feet) and 150 seats located on the rooftop level (2,156 indoor square feet and 2,244 exterior square feet). A conceptual site plan and project location map are included in Attachment A. Please note that self-parking will be provided for the proposed walk-in bank on-site and all other vehicles with the exception of taxis/shared-rides will be valeted on-site. The following sections summarize our proposed methodology.

ANALYSIS PERIOD DETERMINATION

The analysis period was based on the peak two (2) hour period determined from three (3) 72-hour continuous traffic counts gathered from the *Miami Beach Light Rail Modern Streetcar Traffic Report,* February 2017. The 72-hour continuous traffic counts within the vicinity of the proposed redevelopment are located on 17th Street between Michigan Avenue and Jefferson Avenue, Convention Center Drive between 17th Street and Dade Boulevard, and Meridian Avenue between 17th Street and Dade Boulevard. The 72-hour counts were collected on Thursday, April 7, 2016, Friday, April 8, 2016, and Saturday, April 9, 2016. Based on the 72-hour continuous traffic counts, the analysis period was determined to be on Friday from 3:15 P.M. to 5:15 P.M. The 72-hour continuous traffic counts are included in Attachment B. All traffic counts will be adjusted to peak season conditions using the appropriate Florida Department of Transportation (FDOT) peak season category factors for Miami Beach. Turning movement counts will be collected in 15-minute intervals during the Friday peak period and will include pedestrian and bicycle counts. Signal timing information will be obtained from Miami-Dade County Department of Transportation and Public Works – Signals and Signs Division. All traffic data collected will be provided in the Appendix of the traffic impact study.

STUDY AREA

Based on the proposed redevelopment plan, the following intersections in addition to the project driveways, are proposed to be analyzed:

1. 17th Street and Washington Avenue
2. 17th Street and James Avenue
3. 17th Street and SR A1A/Collins Avenue
4. Lincoln Road and Washington Avenue
5. Lincoln Road and James Avenue

Turning movement counts will include pedestrians and bicyclists.

TRIP GENERATION

Trip generation calculations for the proposed redevelopment were performed using Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 9th Edition. The trip generation for the existing development was determined using ITE Land Use Code (LUC) 912 (Drive-in Bank). The trip generation for the proposed redevelopment was determined using ITE LUC 310 (Hotel), 826 (Specialty Retail Center), 911 (Walk-in Bank), and 931 (Quality Restaurant). Project trips were estimated for the weekday P.M. peak hour, consistent with the analysis peak period.

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract in the vicinity of the redevelopment. The US Census data indicated that there is a 31.7 percent (31.7%) multimodal factor within the vicinity of the redevelopment to account for the urban environment in which the project site is located based on direction by the City of Miami Beach. It is expected that residents and patrons will choose to walk or use public transit to and from the proposed redevelopment. Transit route information will be documented in the report. Detailed trip generation calculations and US Census *Means of Transportation to Work* data are included in Attachment C.

A portion of the trips generated by the redevelopment will be captured internally on the site. Internal capture rates were based upon values contained in ITE's, *Trip Generation Handbook*, August 2014. The internal capture for the proposed redevelopment is expected to be 22.9 percent (22.9%) during the P.M. peak hour.

Pass-by capture rates were determined based on average rates provided in the ITE's *Trip Generation Handbook,* 3rd Edition. The pass-by rate used for the existing drive-in bank is 35.0 percent (35.0%) during the P.M. peak hour. The pass-by rate for the proposed restaurant is 44.0 percent (44.0%) during the P.M. peak hour.

The project is expected to generate 42 net new vehicle trips during the P.M. peak hour. Detailed trip generation calculations are included as Attachment C.

TRIP DISTRIBUTION

Trip distribution will be determined based on turning movements counts collected at the study area intersections as well as the location of parking facilities used by the proposed redevelopment. Additionally, the distribution will be based on an interpolated cardinal trip distribution for the project site's traffic analysis zones (TAZs) obtained from the Miami-Dade Metropolitan Planning Organization's 2040 Cost Feasible Plan travel demand model 2010 and 2040 data. The trip distribution for the anticipated build-out year of 2020 was interpolated from the 2010 and 2040 data. The project is located within TAZ 644. The detailed cardinal distribution is provided in Attachment D.

BACKGROUND GROWTH RATE/MAJOR COMMITTED DEVELOPMENT

A background growth rate will be calculated based on historic growth trends at nearby Florida Department of Transportation (FDOT) traffic count stations. Additionally, growth rates based on Miami-Dade Metropolitan Planning Organization's (MPO) projected 2010 and 2040 model network volumes will be examined. The higher of the two (2) growth rates will be used in the analysis. Documentation will be provided in the Appendix of the traffic impact study.

The City's review of this document will determine any committed projects to include in background conditions. The City will provide the corresponding approved traffic study for any committed projects identified.

CAPACITY ANALYSIS

Capacity analyses will be conducted for the analysis period for the study intersections. Intersection analyses will be performed using *Synchro* traffic engineering analysis software which applies the Transportation Research Board's (TRB's), *Highway Capacity Manual* (HCM), 2000 and 2010 methodologies. Capacity analyses will be conducted for three (3) scenarios: existing, build-out without project, and build-out with project. The redevelopment is expected to be built-out by 2020.

The following figures will be included for the study intersections:

- Existing conditions
- Trip distribution
- Trip assignment (will outline which driveways are used for the various land uses)
- Future background traffic conditions (with growth rate and committed development traffic)
- Future total traffic conditions (with project)

PROGRAMMED IMPROVEMENTS

The City's review of the City of Miami Beach's *Comprehensive Plan* will identify any programmed improvements along 17th Street to be included as part of the analysis.

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

The results of the traffic analysis will be summarized in a report. The report will include supporting documents including signal timings, lane geometry, and software output sheets. The report 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. Additionally, the Synchro analysis files will be provided on the CD.

VALET ANALYSIS

A valet operations queuing analysis will be prepared for the vehicle drop-off/pick-up area to ensure that queues do not spill back into public right-of-way. The vehicle drop-off/pick-up area for the valet operation will be coordinated with the City of Miami Beach Planning Department.

Trip generation estimates will be utilized to provide for the highest demand (weekday P.M. peak hour) scenario. Additionally, a taxi/shared-ride trip percentage factor of 42.6 percent (42.6%) was applied based on actual field observation from the Cadillac Hotel located at 3925 Collins Avenue, Miami Beach to account for valet trips associated with the hotel, retail, and restaurant components of the redevelopment. The valet operations queuing analysis will be conducted consistent with procedures described in ITE's *Transportation and Land Development*, 1988. A final traffic circulation figure will be prepared to illustrate the valet routes to and from the vehicle drop-off/pick-up area. Data related to taxi trips are included in Attachment C.

A technical memorandum documenting analysis assumptions and results, including the location of the valet garage and the required number of valet attendants to service the facility under highest demand conditions will be prepared.

MANEUVERABILITY ANALYSIS

A maneuverability analysis for the loading vehicle access and parking garage will be performed utilizing Transoft Solutions' *AutoTURN* software. Deficiencies related to maneuverability, traffic flow, and vehicular conflicts will be documented in a technical memorandum.

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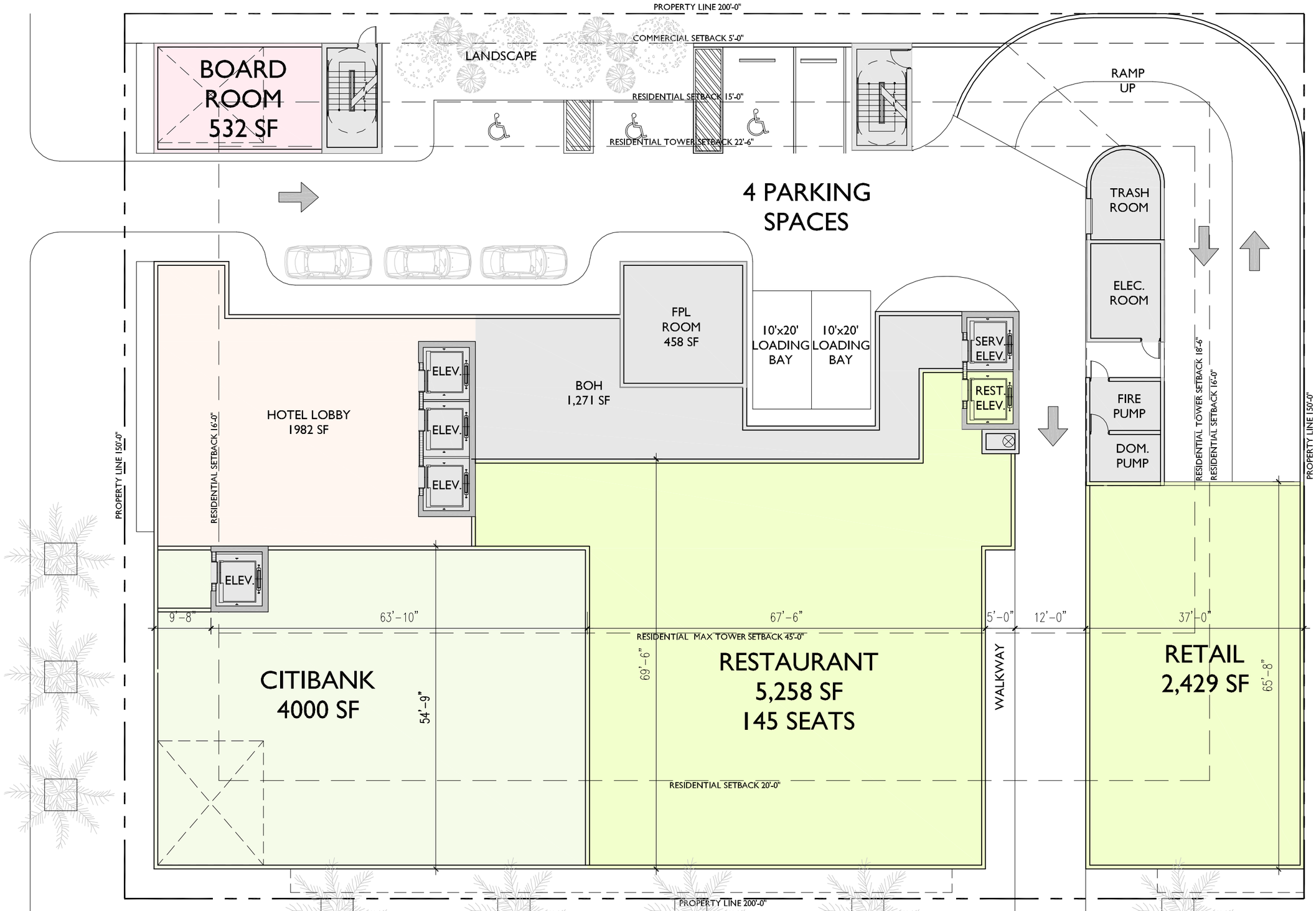
Attachment A

Conceptual Site Plan and Project Location Map



FLOOR PLAN 1ST LEVEL
1/16"=1'-0"

McG ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

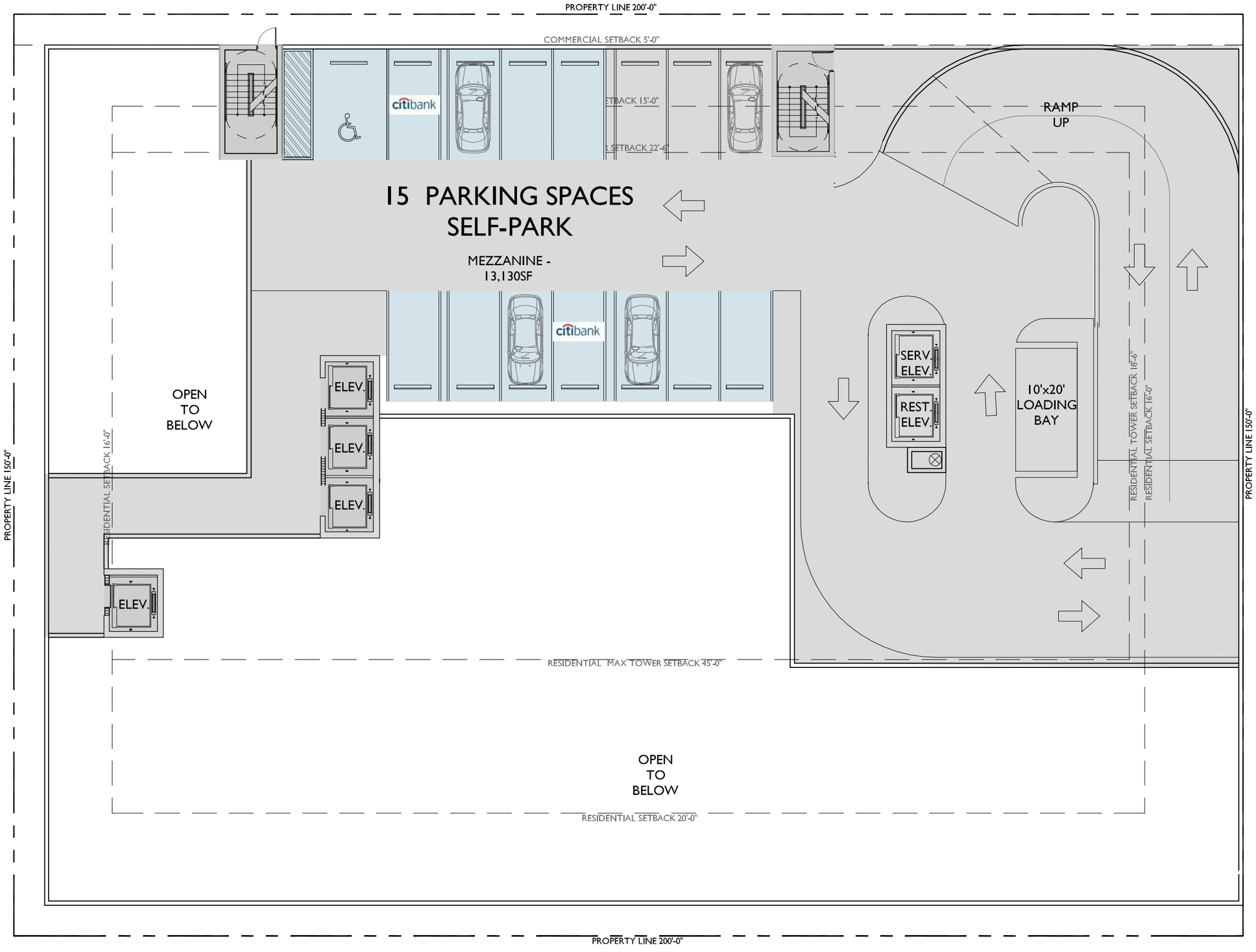
DRAWING:

LEVEL 1 FLOOR PLAN

SCALE:	1/16"=1'-0"
CHECK:	JMcG
DATE:	08/31/2017

SHEET NUMBER

A 1.01



FLOOR PLAN LEVEL MEZZANINE
1/16"=1'-0"

MCG
ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

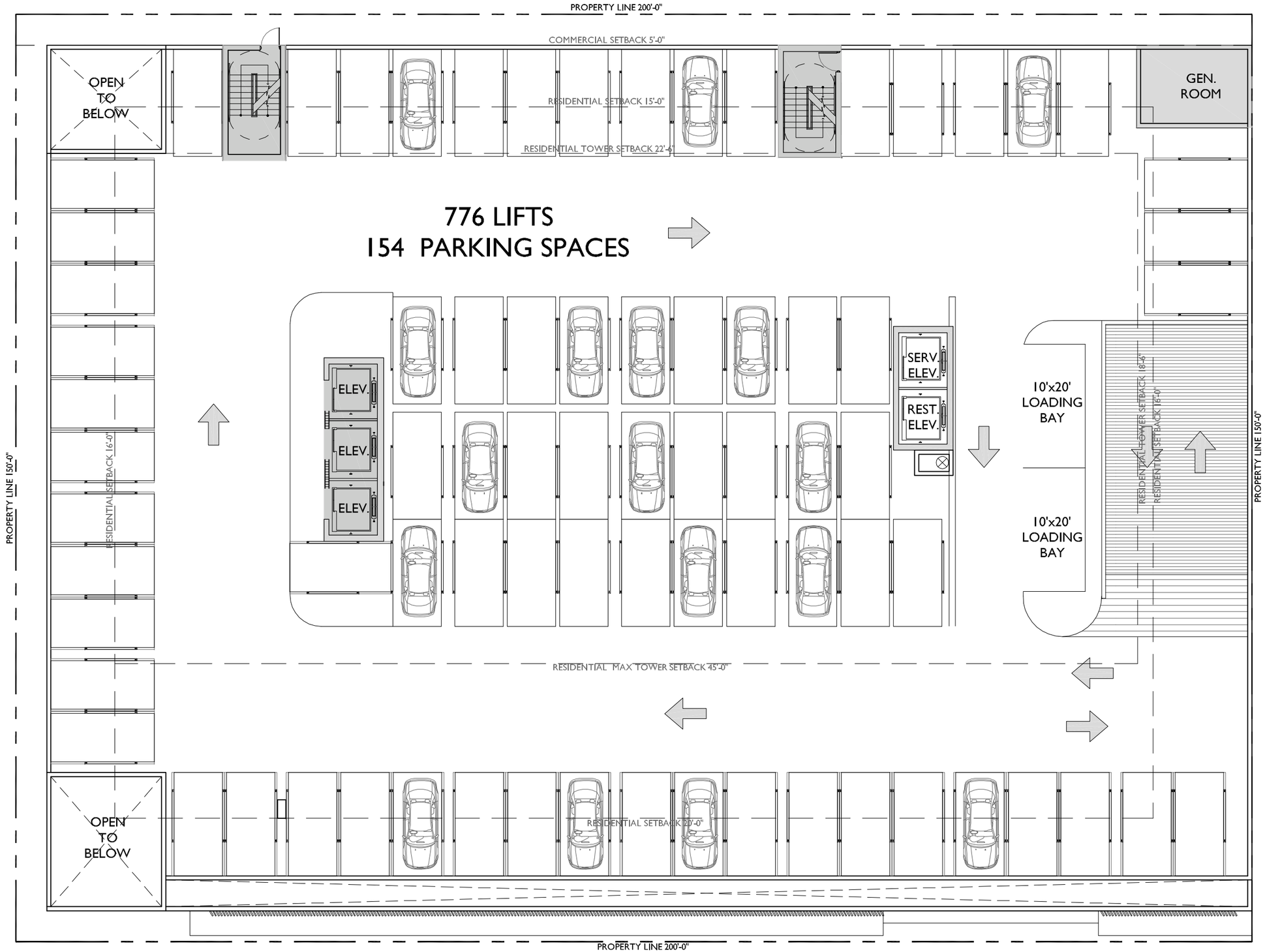
DRAWING:

LEVEL 1.5
MEZZANINE
FLOOR PLAN

SCALE:	1/16"=1'-0"
CHECK:	1/16"=1'-0"McG
DATE:	08/31/2017

SHEET NUMBER

A 1.01.1



FLOOR PLAN LEVEL 2
1/16"= 1'-0"

MCG ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

DRAWING:

LEVEL 2
FLOOR PLAN

SCALE:	1/16"=1'-0"
CHECK:	1/16"=1'-0"McG
DATE:	08/31/2017

SHEET NUMBER

A 1.02

FLOOR PLAN 3RD-5TH LEVELS
1/16"=1'-0"

ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

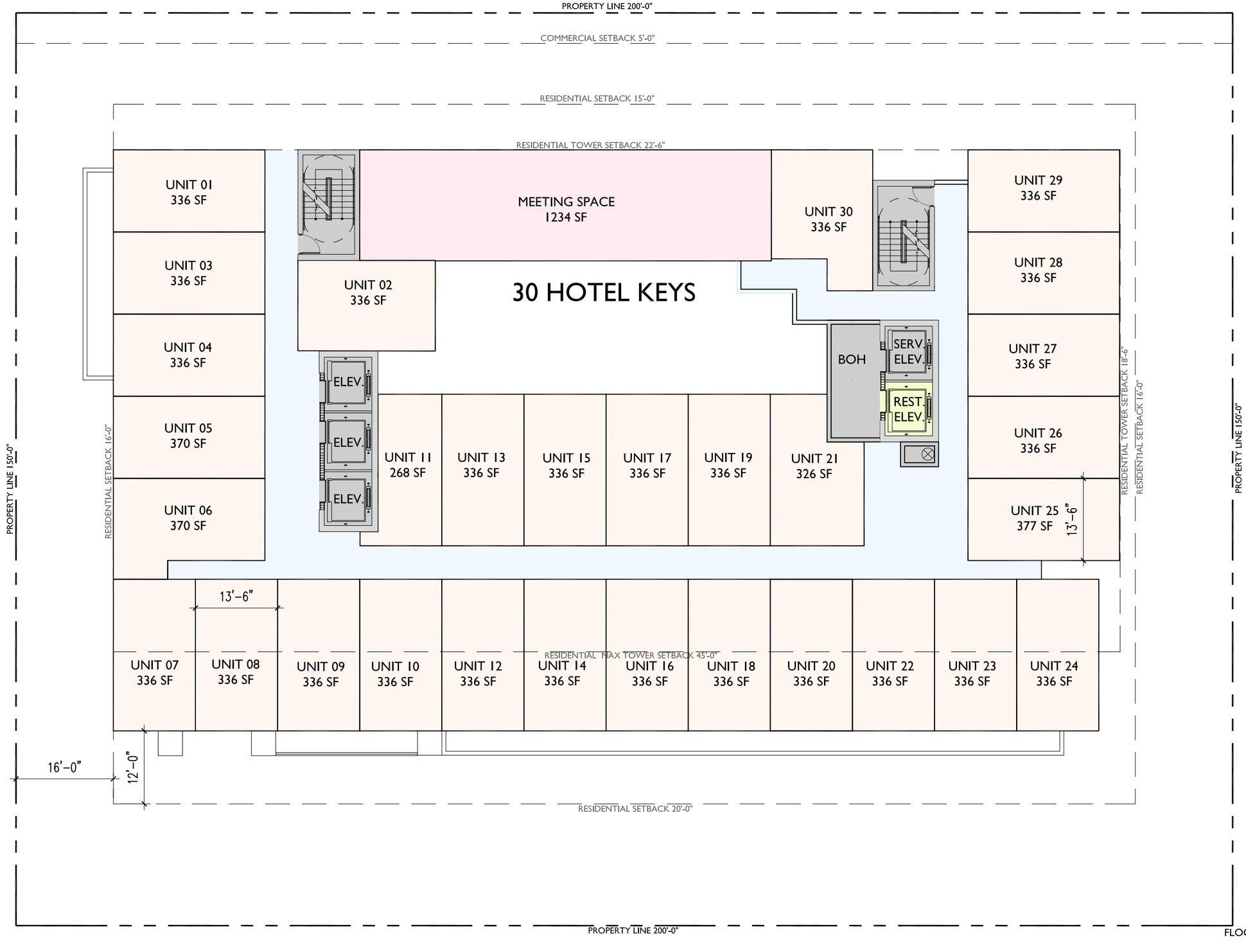
DRAWING:

LEVELS 3-5
FLOOR PLAN

SCALE: 1/16"=1'-0"
CHECK: JMcG
DATE: 08/31/2017

SHEET NUMBER

A 1.03



FLOOR PLAN 6TH LEVEL
1/16"=1'-0"

MCG ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

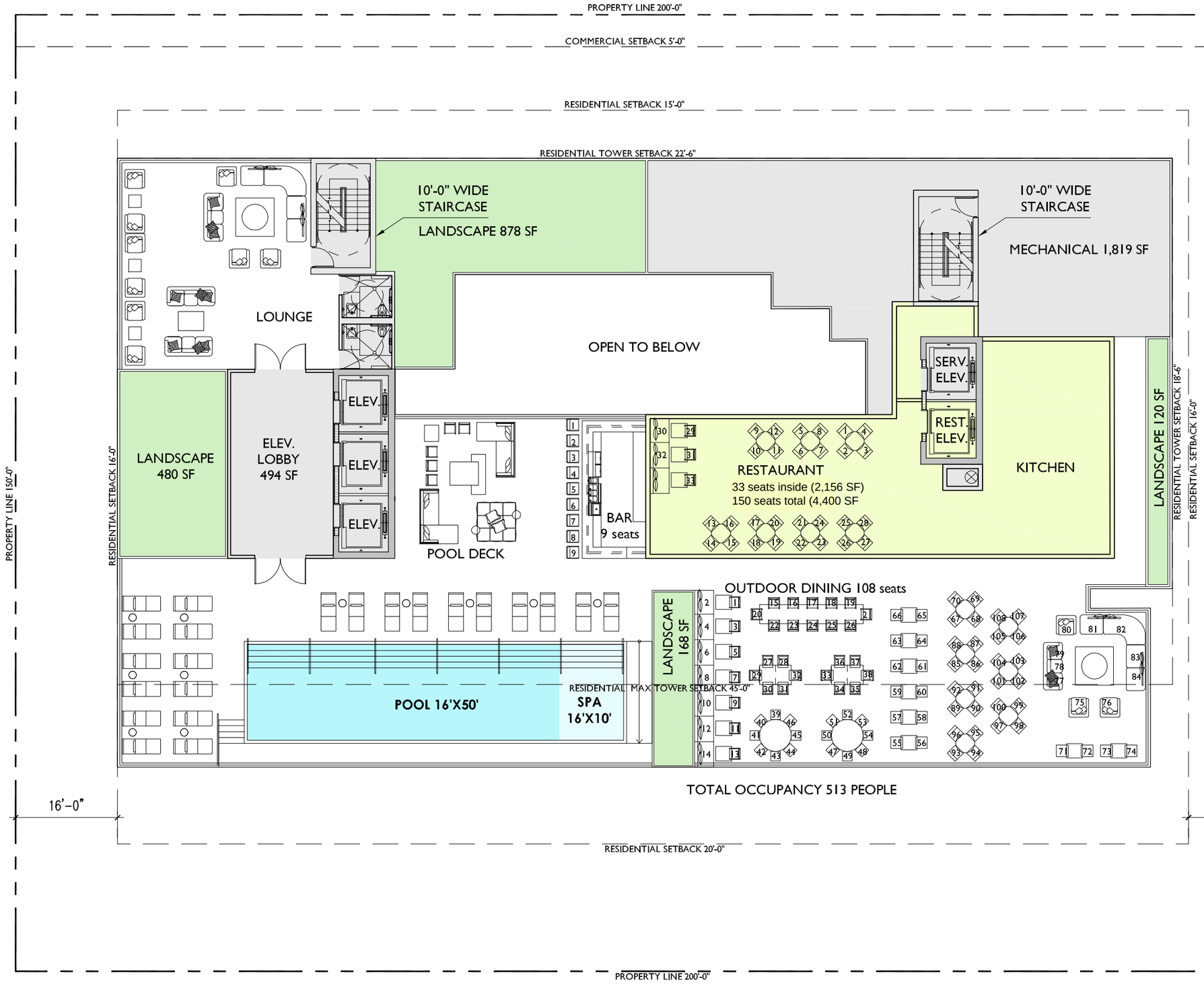
DRAWING:

LEVEL6
FLOOR PLAN

SCALE:	1/16"=1'-0"
CHECK:	JMcG
DATE:	08/31/2017

SHEET NUMBER

A 1.06



FLOOR PLAN ROOF LEVEL 1/16"=1'-0"

MCG ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

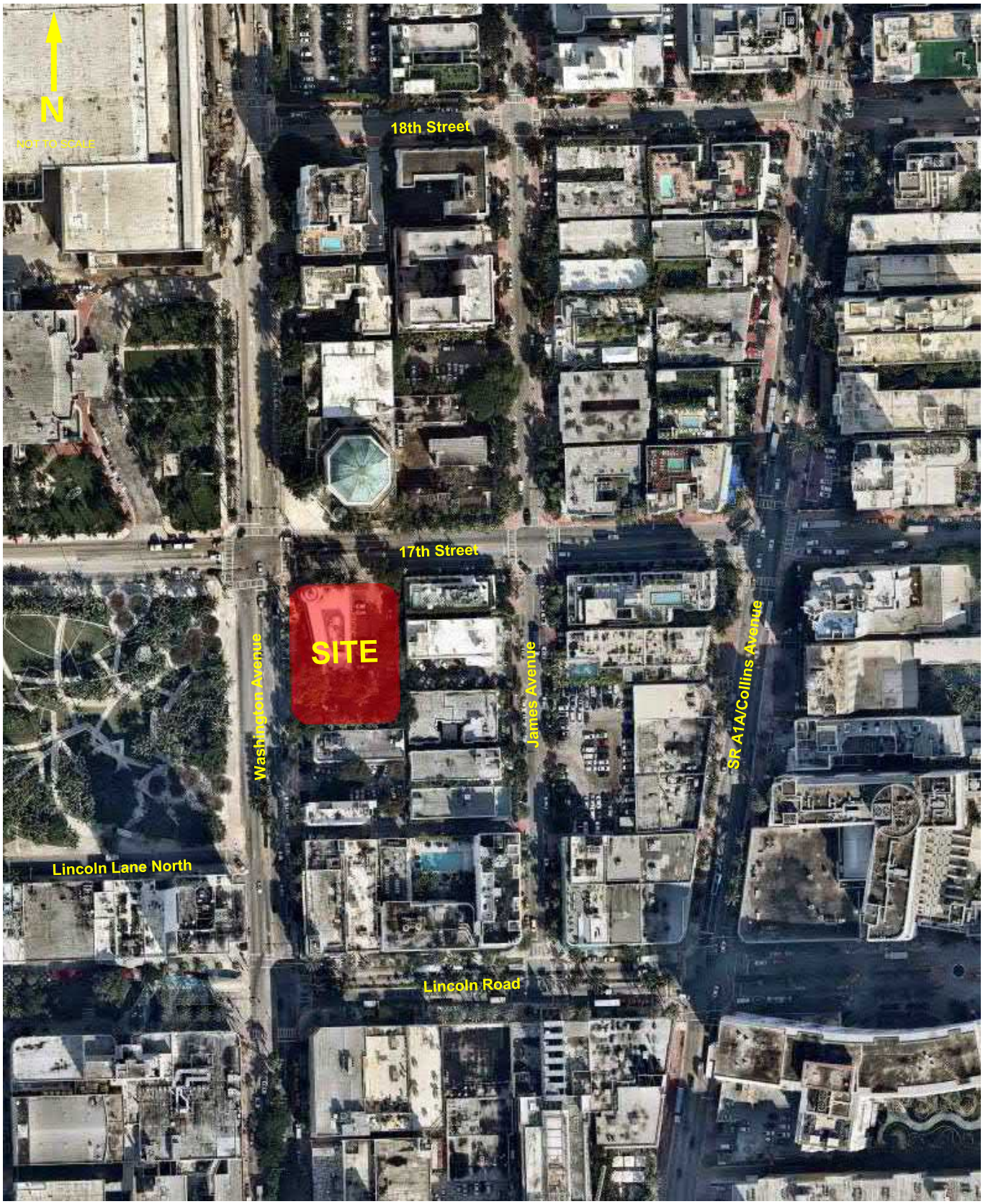
DRAWING:

ROOF FLOOR PLAN

SCALE:	1/16"=1'-0"
CHECK:	JMcG
DATE:	08/31/2017

SHEET NUMBER

A 1.07



Kimley»Horn

Figure 1
Location Map
1685 Washington Avenue
Miami Beach, Florida

Attachment B

72-Hour Continuous Traffic Counts

72-Hour Continuous Count Traffic Data Summary		
Date	**Peak 2-Hour Period**	**Peak 2-Hour Traffic Volume**
Thursday, April 7, 2016	4:00 P.M. - 6:00 P.M.	5,335 vehicles
Friday, April 8, 2016	**3:15 P.M. - 5:15 P.M.**	**5,855 vehicles**
Saturday, April 9, 2016	3:30 P.M. - 5:30 P.M.	4,968 vehicles

Thursday Continuous Counts

	13-3103-002				16-3112-002					16-3112-003					
Thursday	17 St bet. Michigan Ave & Jefferson Ave				Convention Center Dr bet. 17 St & Dade Blvd					Meridian Ave bet. 17 St & Dade Blvd					
Time	**NB/EB**	**SB/WB**	**Total**		**NB/EB**	**SB/WB**	**Total**			**NB/EB**	**SB/WB**	**Total**		**Grand Total**	**2-Hour Peak**
0:00	49	45	94		25	4	29			72	14	86		209	
0:15	43	55	98		15	5	20			53	24	77		195	
0:30	38	48	86		16	5	21			30	14	44		151	
0:45	40	31	71		9	1	10			20	14	34		115	
1:00	30	54	84		4	2	6			32	12	44		134	
1:15	30	31	61		3	4	7			26	11	37		105	
1:30	21	32	53		8	4	12			18	11	29		94	
1:45	21	31	52		3	2	5			11	11	22		79	1,082
2:00	24	22	46		1	0	1			11	7	18		65	938
2:15	20	15	35		1	1	2			10	6	16		53	796
2:30	17	20	37		0	1	1			10	7	17		55	700
2:45	13	18	31		1	1	2			8	7	15		48	633
3:00	13	15	28		4	2	6			6	5	11		45	544
3:15	15	10	25		0	2	2			12	0	12		39	478
3:30	14	18	32		1	0	1			9	5	14		47	431
3:45	11	8	19		2	0	2			5	5	10		31	383
4:00	8	10	18		3	2	5			5	3	8		31	349
4:15	12	10	22		1	0	1			9	8	17		40	336
4:30	18	10	28		2	2	4			8	17	25		57	338
4:45	14	9	23		2	3	5			11	14	25		53	343
5:00	14	12	26		3	4	7			8	15	23		56	354
5:15	28	14	42		1	1	2			8	20	28		72	387
5:30	31	13	44		0	6	6			7	35	42		92	432
5:45	34	12	46		4	11	15			11	55	66		127	528
6:00	54	20	74		4	10	14			21	63	84		172	669
6:15	92	31	123		5	27	32			17	76	93		248	877
6:30	94	21	115		8	24	32			23	90	113		260	1,080
6:45	101	30	131		11	31	42			39	88	127		300	1,327
7:00	95	41	136		35	29	64			51	84	135		335	1,606
7:15	80	42	122		16	46	62			44	97	141		325	1,859
7:30	85	37	122		32	30	62			50	97	147		331	2,098
7:45	106	50	156		16	27	43			53	91	144		343	2,314
8:00	89	58	147		15	33	48			60	102	162		357	2,499
8:15	102	57	159		20	45	65			64	120	184		408	2,659
8:30	123	62	185		36	46	82			73	120	193		460	2,859
8:45	99	69	168		23	55	78			67	123	190		436	2,995
9:00	128	75	203		24	52	76			76	118	194		473	3,133
9:15	126	75	201		20	53	73			62	122	184		458	3,266
9:30	126	74	200		26	54	80			44	120	164		444	3,379
9:45	137	91	228		38	44	82			64	138	202		512	3,548
10:00	116	89	205		20	44	64			63	106	169		438	3,629
10:15	105	93	198		29	30	59			53	84	137		394	3,615
10:30	117	101	218		22	22	44			71	106	177		439	3,594
10:45	112	70	182		22	52	74			70	103	173		429	3,587
11:00	118	82	200		19	37	56			67	94	161		417	3,531
11:15	126	108	234		45	43	88			84	97	181		503	3,576
11:30	137	96	233		28	35	63			77	119	196		492	3,624
11:45	129	114	243		36	40	76			83	118	201		520	3,632
12:00	135	125	260		25	49	74			92	91	183		517	3,711
12:15	126	122	248		36	37	73			90	88	178		499	3,816
12:30	140	117	257		46	29	75			95	110	205		537	3,914
12:45	153	112	265		36	33	69			108	112	220		554	4,039
13:00	136	129	265		36	43	79			88	102	190		534	4,156
13:15	162	132	294		38	43	81			92	105	197		572	4,225
13:30	142	130	272		58	41	99			98	107	205		576	4,309
13:45	167	109	276		34	32	66			101	96	197		539	4,328
14:00	166	130	296		55	41	96			89	83	172		564	4,375
14:15	152	113	265		42	39	81			110	116	226		572	4,448
14:30	156	132	288		51	42	93			138	135	273		654	4,565
14:45	131	118	249		45	45	90			131	115	246		585	4,596
15:00	150	112	262		72	20	92			173	102	275		629	4,691
15:15	136	149	285		65	27	92			168	120	288		665	4,784
15:30	133	157	290		68	30	98			200	96	296		684	4,892
15:45	138	98	236		45	35	80			149	102	251		567	4,920
16:00	152	177	329		72	32	104			171	107	278		711	5,067
16:15	164	148	312		54	18	72			173	107	280		664	5,159
16:30	157	136	293		56	25	81			159	124	283		657	5,162
16:45	153	134	287		48	32	80			157	124	281		648	5,225
17:00	137	160	297		77	23	100			201	74	275		672	5,268
17:15	148	128	276		78	37	115			210	98	308		699	5,302
17:30	131	155	286		69	26	95			182	91	273		654	5,272
17:45	145	149	294		60	26	86			167	83	250		630	**5,335**
18:00	121	134	255		73	25	98			167	86	253		606	5,230
18:15	125	140	265		41	20	61			164	75	239		565	5,131
18:30	121	147	268		43	24	67			133	82	215		550	5,024
18:45	134	131	265		26	25	51			121	85	206		522	4,898
19:00	113	126	239		33	25	58			99	79	178		475	4,701
19:15	117	125	242		35	23	58			97	71	168		468	4,470
19:30	127	112	239		40	25	65			83	83	166		470	4,286
19:45	125	122	247		30	12	42			88	74	162		451	4,107
20:00	116	110	226		24	23	47			85	54	139		412	3,913
20:15	108	118	226		28	16	44			87	78	165		435	3,783
20:30	93	94	187		29	10	39			81	59	140		366	3,599
20:45	126	99	225		19	23	42			70	61	131		398	3,475
21:00	96	97	193		19	10	29			85	53	138		360	3,360
21:15	88	107	195		21	15	36			57	57	114		345	3,237
21:30	97	96	193		29	16	45			78	63	141		379	3,146
21:45	105	86	191		23	20	43			67	59	126		360	3,055
22:00	107	86	193		24	16	40			74	55	129		362	3,005
22:15	97	91	188		29	11	40			89	43	132		360	2,930
22:30	92	88	180		18	15	33			59	53	112		325	2,889
22:45	102	80	182		25	11	36			58	45	103		321	2,812
23:00	83	93	176		24	9	33			67	44	111		320	2,772
23:15	94	89	183		39	13	52			74	35	109		344	2,771
23:30	93	76	169		30	4	34			90	33	123		326	2,718
23:45	71	83	154		15	12	27			80	26	106		287	2,645
TOTAL	**17,047**				**4,822**					**14,008**				**35,877**	**273,524**
													MAX	**711**	**5,335**

Friday Continuous Counts

	13-3103-002				16-3112-002					16-3112-003					
Friday	17 St bet. Michigan Ave & Jefferson Ave				Convention Center Dr bet. 17 St & Dade Blvd					Meridian Ave bet. 17 St & Dade Blvd					
Time	**NB/EB**	**SB/WB**	**Total**		**NB/EB**	**SB/WB**	**Total**			**NB/EB**	**SB/WB**	**Total**		**Grand Total**	**2-Hour Peak**
0:00	74	74	148		19	8	27			81	28	109		284	
0:15	53	71	124		16	4	20			55	27	82		226	
0:30	69	60	129		16	3	19			28	21	49		197	
0:45	53	49	102		7	2	9			36	15	51		162	
1:00	46	52	98		10	5	15			22	19	41		154	
1:15	37	43	80		14	4	18			34	15	49		147	
1:30	35	49	84		6	3	9			24	12	36		129	
1:45	22	44	66		4	0	4			13	13	26		96	1,395
2:00	25	35	60		5	1	6			18	9	27		93	1,204
2:15	22	35	57		2	2	4			11	8	19		80	1,058
2:30	28	26	54		4	2	6			6	4	10		70	931
2:45	15	23	38		3	1	4			16	11	27		69	838
3:00	14	20	34		3	1	4			14	6	20		58	742
3:15	18	18	36		0	0	0			11	4	15		51	646
3:30	31	24	55		2	1	3			7	3	10		68	585
3:45	7	19	26		2	2	4			5	7	12		42	531
4:00	16	22	38		4	1	5			3	8	11		54	492
4:15	11	11	22		5	0	5			7	6	13		40	452
4:30	18	17	35		3	5	8			6	14	20		63	445
4:45	12	8	20		3	7	10			15	16	31		61	437
5:00	17	14	31		4	4	8			5	11	16		55	434
5:15	33	23	56		2	3	5			17	24	41		102	485
5:30	24	7	31		2	6	8			14	33	47		86	503
5:45	44	17	61		7	18	25			12	49	61		147	608
6:00	51	9	60		6	12	18			25	52	77		155	709
6:15	93	14	107		7	16	23			12	91	103		233	902
6:30	96	32	128		7	19	26			28	82	110		264	1,103
6:45	92	26	118		16	35	51			30	100	130		299	1,341
7:00	95	47	142		28	22	50			48	89	137		329	1,615
7:15	80	42	122		23	47	70			55	107	162		354	1,867
7:30	89	52	141		9	44	53			58	90	148		342	2,123
7:45	73	57	130		23	27	50			66	92	158		338	2,314
8:00	116	48	164		19	36	55			67	106	173		392	2,551
8:15	117	71	188		17	51	68			52	111	163		419	2,737
8:30	114	76	190		17	45	62			70	113	183		435	2,908
8:45	129	91	220		21	55	76			75	130	205		501	3,110
9:00	159	80	239		27	35	62			52	101	153		454	3,235
9:15	128	74	202		30	45	75			64	115	179		456	3,337
9:30	139	78	217		21	54	75			83	118	201		493	3,488
9:45	127	103	230		29	49	78			74	107	181		489	3,639
10:00	128	95	223		29	43	72			67	121	188		483	3,730
10:15	132	104	236		26	40	66			81	102	183		485	3,796
10:30	120	110	230		30	47	77			75	95	170		477	3,838
10:45	116	104	220		35	45	80			84	95	179		479	3,816
11:00	140	104	244		39	39	78			78	113	191		513	3,875
11:15	158	99	257		34	47	81			90	107	197		535	3,954
11:30	140	106	246		35	43	78			86	111	197		521	3,982
11:45	150	107	257		38	38	76			106	107	213		546	4,039
12:00	135	133	268		43	28	71			109	122	231		570	4,126
12:15	152	116	268		36	39	75			118	107	225		568	4,209
12:30	146	113	259		37	35	72			107	121	228		559	4,291
12:45	184	107	291		37	50	87			111	114	225		603	4,415
13:00	171	137	308		42	40	82			139	131	270		660	4,562
13:15	170	135	305		42	53	95			120	129	249		649	4,676
13:30	203	135	338		51	41	92			119	116	235		665	4,820
13:45	182	151	333		38	44	82			122	125	247		662	4,936
14:00	182	128	310		54	45	99			118	111	229		638	5,004
14:15	155	110	265		41	37	78			131	100	231		574	5,010
14:30	167	129	296		69	41	110			150	139	289		695	5,146
14:45	189	126	315		49	44	93			156	136	292		700	5,243
15:00	153	145	298		79	46	125			177	121	298		721	5,304
15:15	169	138	307		81	50	131			184	109	293		731	5,386
15:30	194	141	335		63	43	106			232	110	342		783	5,504
15:45	184	153	337		55	43	98			174	129	303		738	5,580
16:00	184	149	333		58	31	89			192	94	286		708	5,650
16:15	187	132	319		72	37	109			165	128	293		721	5,797
16:30	170	158	328		72	28	100			162	119	281		709	5,811
16:45	159	141	300		67	26	93			162	126	288		681	5,792
17:00	174	178	352		89	41	130			198	104	302		784	**5,855**
17:15	166	168	334		68	35	103			180	92	272		709	5,833
17:30	168	147	315		59	28	87			175	109	284		686	5,736
17:45	170	153	323		58	30	88			138	111	249		660	5,658
18:00	151	154	305		56	26	82			153	111	264		651	5,601
18:15	163	166	329		50	32	82			170	103	273		684	5,564
18:30	152	144	296		43	31	74			135	119	254		624	5,479
18:45	172	130	302		59	36	95			127	96	223		620	5,418
19:00	155	115	270		47	49	96			115	90	205		571	5,205
19:15	168	136	304		30	37	67			106	118	224		595	5,091
19:30	176	119	295		44	40	84			95	90	185		564	4,969
19:45	160	132	292		49	33	82			91	97	188		562	4,871
20:00	136	85	221		30	33	63			91	91	182		466	4,686
20:15	125	122	247		41	28	69			98	108	206		522	4,524
20:30	154	104	258		62	41	103			90	88	178		539	4,439
20:45	127	115	242		52	27	79			85	67	152		473	4,292
21:00	117	121	238		22	20	42			79	75	154		434	4,155
21:15	124	123	247		26	12	38			74	84	158		443	4,003
21:30	117	114	231		26	18	44			92	73	165		440	3,879
21:45	127	109	236		23	21	44			77	68	145		425	3,742
22:00	133	94	227		27	17	44			70	63	133		404	3,680
22:15	128	124	252		20	18	38			78	59	137		427	3,585
22:30	109	121	230		33	12	45			87	53	140		415	3,461
22:45	131	182	313		20	21	41			73	55	128		482	3,470
23:00	127	156	283		33	20	53			109	62	171		507	3,543
23:15	113	131	244		51	21	72			135	64	199		515	3,615
23:30	149	122	271		44	18	62			130	49	179		512	3,687
23:45	119	85	204		38	19	57			121	40	161		422	3,684
TOTAL	**19,770**				**5,577**					**15,650**				**40,997**	**308,782**
													MAX	**784**	**5,855**

Saturday Continuous Counts

	13-3103-002				16-3112-002					16-3112-003					
Saturday	17 St bet. Michigan Ave & Jefferson Ave				Convention Center Dr bet. 17 St & Dade Blvd					Meridian Ave bet. 17 St & Dade Blvd					
Time	**NB/EB**	**SB/WB**	**Total**		**NB/EB**	**SB/WB**	**Total**			**NB/EB**	**SB/WB**	**Total**		**Grand Total**	**2-Hour Peak**
0:00	93	115	208		47	10	57			90	39	129		394	
0:15	87	92	179		39	11	50			70	41	111		340	
0:30	104	97	201		21	16	37			62	37	99		337	
0:45	80	84	164		17	11	28			57	39	96		288	
1:00	64	87	151		17	12	29			54	38	92		272	
1:15	82	81	163		13	6	19			50	40	90		272	
1:30	74	83	157		11	3	14			43	17	60		231	
1:45	43	69	112		9	2	11			45	21	66		189	2,323
2:00	49	67	116		11	6	17			37	18	55		188	2,117
2:15	51	59	110		10	5	15			29	10	39		164	1,941
2:30	38	49	87		10	1	11			23	13	36		134	1,738
2:45	29	47	76		10	6	16			24	17	41		133	1,583
3:00	36	45	81		8	3	11			19	9	28		120	1,431
3:15	41	37	78		5	0	5			15	8	23		106	1,265
3:30	24	52	76		6	2	8			20	9	29		113	1,147
3:45	32	42	74		4	1	5			17	10	27		106	1,064
4:00	25	45	70		2	1	3			16	10	26		99	975
4:15	13	28	41		5	3	8			23	13	36		85	896
4:30	28	21	49		4	2	6			12	10	22		77	839
4:45	10	29	39		8	1	9			20	20	40		88	794
5:00	21	26	47		4	5	9			10	17	27		83	757
5:15	29	26	55		5	2	7			17	18	35		97	748
5:30	30	19	49		2	4	6			10	21	31		86	721
5:45	36	20	56		5	10	15			17	48	65		136	751
6:00	42	19	61		5	2	7			21	42	63		131	783
6:15	48	11	59		2	7	9			9	71	80		148	846
6:30	56	27	83		6	11	17			20	72	92		192	961
6:45	91	26	117		8	15	23			18	56	74		214	1,087
7:00	42	20	62		4	9	13			34	42	76		151	1,155
7:15	52	43	95		8	3	11			21	50	71		177	1,235
7:30	80	37	117		10	3	13			24	55	79		209	1,358
7:45	53	31	84		11	13	24			30	38	68		176	1,398
8:00	58	34	92		11	10	21			21	43	64		177	1,444
8:15	67	43	110		5	9	14			31	58	89		213	1,509
8:30	65	37	102		7	18	25			43	63	106		233	1,550
8:45	88	41	129		7	20	27			43	78	121		277	1,613
9:00	89	57	146		9	17	26			41	71	112		284	1,746
9:15	95	57	152		15	10	25			46	63	109		286	1,855
9:30	95	36	131		14	26	40			56	76	132		303	1,949
9:45	113	72	185		22	21	43			38	105	143		371	2,144
10:00	103	59	162		11	20	31			45	69	114		307	2,274
10:15	130	83	213		12	18	30			58	77	135		378	2,439
10:30	118	58	176		6	25	31			61	79	140		347	2,553
10:45	148	102	250		17	29	46			77	84	161		457	2,733
11:00	137	86	223		16	24	40			55	76	131		394	2,843
11:15	153	77	230		17	24	41			69	83	152		423	2,980
11:30	122	94	216		20	23	43			70	69	139		398	3,075
11:45	174	95	269		22	25	47			63	89	152		468	3,172
12:00	153	117	270		19	17	36			73	81	154		460	3,325
12:15	150	107	257		20	23	43			63	100	163		463	3,410
12:30	141	104	245		29	35	64			75	91	166		475	3,538
12:45	152	91	243		25	35	60			71	107	178		481	3,562
13:00	188	113	301		26	26	52			78	95	173		526	3,694
13:15	152	108	260		31	26	57			90	90	180		497	3,768
13:30	155	99	254		19	27	46			84	92	176		476	3,846
13:45	178	123	301		30	40	70			88	105	193		564	3,942
14:00	152	136	288		14	31	45			97	80	177		510	3,992
14:15	158	122	280		30	21	51			83	115	198		529	4,058
14:30	142	113	255		35	39	74			89	115	204		533	4,116
14:45	154	123	277		28	36	64			99	126	225		566	4,201
15:00	180	133	313		48	35	83			115	104	219		615	4,290
15:15	163	129	292		31	39	70			127	96	223		585	4,378
15:30	179	128	307		39	34	73			133	118	251		631	4,533
15:45	203	133	336		32	20	52			103	102	205		593	4,562
16:00	199	139	338		26	25	51			108	115	223		612	4,664
16:15	188	145	333		44	25	69			99	130	229		631	4,766
16:30	190	133	323		42	33	75			124	121	245		643	4,876
16:45	170	146	316		36	30	66			115	124	239		621	4,931
17:00	154	136	290		58	26	84			127	111	238		612	4,928
17:15	152	162	314		42	39	81			134	96	230		625	**4,968**
17:30	150	119	269		40	29	69			126	101	227		565	4,902
17:45	163	148	311		31	37	68			107	115	222		601	4,910
18:00	176	152	328		39	36	75			135	107	242		645	4,943
18:15	158	162	320		28	32	60			107	92	199		579	4,891
18:30	180	139	319		40	32	72			102	84	186		577	4,825
18:45	185	165	350		41	33	74			85	111	196		620	4,824
19:00	186	173	359		35	35	70			98	92	190		619	4,831
19:15	161	170	331		41	53	94			100	87	187		612	4,818
19:30	188	188	376		38	31	69			93	103	196		641	4,894
19:45	149	162	311		30	47	77			72	103	175		563	4,856
20:00	161	148	309		31	24	55			88	95	183		547	4,758
20:15	144	138	282		24	28	52			77	74	151		485	4,664
20:30	163	124	287		30	24	54			87	83	170		511	4,598
20:45	130	131	261		25	24	49			92	84	176		486	4,464
21:00	148	121	269		30	32	62			108	84	192		523	4,368
21:15	127	133	260		28	19	47			71	84	155		462	4,218
21:30	145	119	264		26	12	38			84	80	164		466	4,043
21:45	131	100	231		31	17	48			88	64	152		431	3,911
22:00	140	146	286		42	23	65			103	92	195		546	3,910
22:15	128	165	293		62	24	86			139	76	215		594	4,019
22:30	135	130	265		46	13	59			126	75	201		525	4,033
22:45	138	130	268		42	18	60			85	64	149		477	4,024
23:00	123	112	235		40	15	55			87	66	153		443	3,944
23:15	130	134	264		38	23	61			97	57	154		479	3,961
23:30	117	129	246		57	20	77			103	51	154		477	3,972
23:45	109	116	225		42	22	64			93	48	141		430	3,971
TOTAL	**19,815**				**4,069**					**13,120**				**37,004**	**273,692**
													MAX	**645**	**4,968**

Attachment C

Trip Generation Calculations

PM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION[1]		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Drive-In Bank	9	912	6.644	ksf	50%	50%	81	80	161	31.7%	51	55	55	110	0.0%	0	55	55	110	35.0%	39	36	35	71
	2																									
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	81	81	162	31.7%	51	55	55	110	0.0%	0	55	55	110	47.0%	39	36	35	71
		912		Y=24.3(X)																						

Note: [1]**Multimodal reduction based on census tract data from the US Census Bureau's *Means of Transportation to Work* survey.**

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION[1]		EXTERNAL TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
							Percent																			
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 2	1	Hotel	9	310	150	room	51%	49%	46	44	90	31.7%	29	31	30	61	6.6%	4	29	28	57	0.0%	0	29	28	57
	2	Specialty Retail Center	9	826	2.429	ksf	44%	56%	12	15	27	31.7%	9	8	10	18	30.8%	5	6	7	13	0.0%	0	6	7	13
	3	Walk-in Bank	9	911	4	ksf	44%	56%	22	27	49	31.7%	15	15	19	34	30.8%	11	10	13	23	0.0%	0	10	13	23
	4	Quality Restaurant	9	931	295	seat	67%	33%	52	25	77	31.7%	24	36	17	53	34.0%	18	26	9	35	44.0%	15	15	5	20
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	132	111	243	31.7%	77	90	76	166	22.9%	38	71	57	128	11.7%	15	60	53	113
		310		Y=0.6(X)																						
		826		Y=2.4*(X)+21.48																						
		911		Y=12.13(X)																						
		931		Y=0.26(X)																						

	IN	OUT	TOTAL
NET NEW TRIPS	**24**	**18**	**42**

Note: [1]**Multimodal reduction based on census tract data from the US Census Bureau's *Means of Transportation to Work* survey.**

	IN	OUT	TOTAL
PROPOSED VEHICLE TRIPS	60	53	113
WALK-IN BANK SELF-PARK REDUCTION	10	13	23
PROPOSED VEHICLE TRIPS	50	40	90
42.6% TAXI/SHARED-RIDE REDUCTION	21	17	38
PROPOSED VALET TRIPS	**29**	**23**	**52**

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

	Land Use	P.M. Peak Hour	
		Enter	Exit
INPUT	Office		
	Retail	23	29
	Restaurant	36	17
	Cinema/Entertainment		
	Residential		
	Hotel	31	30
		90	76

INTERNAL TRIPS

	Land Use	P.M. Peak Hour	
		Enter	Exit
OUTPUT	Office	0	0
	Retail	7	9
	Restaurant	10	8
	Cinema/Entertainment	0	0
	Residential	0	0
	Hotel	2	2
		19	19

OUTPUT	***Total % Reduction***	***22.9%***
	Office	
	Retail	30.8%
	Restaurant	34.0%
	Cinema/Entertainment	
	Residential	
	Hotel	6.6%

EXTERNAL TRIPS

	Land Use	P.M. Peak Hour	
		Enter	Exit
OUTPUT	Office	0	0
	Retail	16	20
	Restaurant	26	9
	Cinema/Entertainment	0	0
	Residential	0	0
	Hotel	29	28
		71	57

Hotel and Restaurant Valet Drop-off and Pick-up Traffic Data Summary
Friday October 22, 2010

Hotel Valet Area Observations									
Time	Hotel Pick-up Maximum Queue	Hotel Pick-Up Volume	Hotel Pick-Up Peak Hour Volume	Hotel Drop-off Maximum Queue	Hotel Drop-off Volume	Hotel Drop-Off Peak Hour Volume	Total Hotel Volume		Total Hotel Peak Hour Volume
18:00	0	0		3	18		18		
18:15	2	4		2	3		7		
18:30	2	6		3	7		13		
18:45	4	23	40	4	13	37	36		77
19:00	3	9		1	3		12		
19:15	2	6		2	7		13		
19:30	1	2		3	14		16		
19:45	0	0		2	4		4		
20:00	1	3		2	7		10		
20:15	1	3		1	2		5		
20:30	3	11		2	7		18		
20:45	3	13		2	6		19		

Restaurant Valet Area Observations						
Time	Restaurnt Pick-up Maximum Queue	Restaurant Pick-Up Volume	Restaurant Pick-Up Peak Hour Volume	Restaurant Drop-off Maximum Queue	Restaurant Drop-off Volume	Restaurant Drop-off Peak Hour Volume
18:00	5	17		0	0	
18:15	4	13		2	7	8
18:30	3	9		0	0	
18:45	3	18		0	0	
19:00	4	15		1	1	
19:15	4	14		1	1	
19:30	5	18		1	1	
19:45	6	27		1	2	
20:00	5	18	81	1	1	
20:15	5	15		0	0	
20:30	5	15		0	1	
20:45	6	33		0	0	

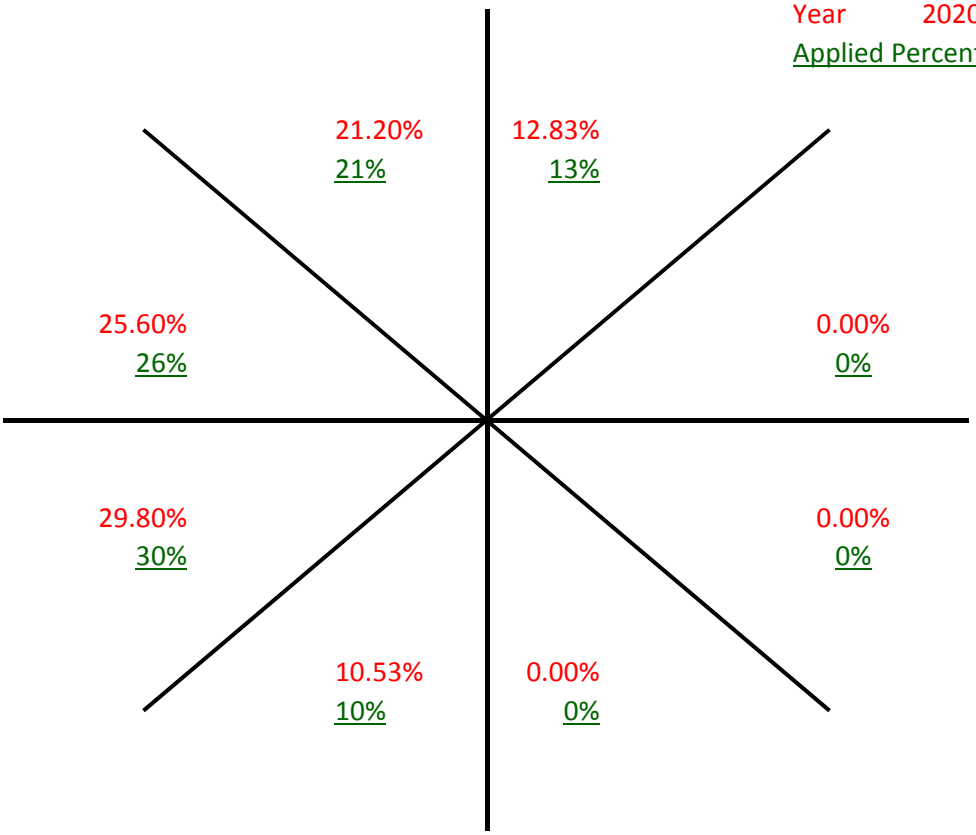
Taxi vs Valet Trips									
Time	Valet Pick-up Trips	Valet Drop-off Trips	Total Valet Trips	Taxi Pick-up Trips	Taxi Drop-off Trips	Total Taxi Pick-up Trips	Total Site Pick-up Trips	Total Site Drop-off Trips	Total Site Trips
18:00	1	11	12	16	7	23	17	18	35
18:15	5	6	11	12	4	16	17	10	27
18:30	3	3	6	12	4	16	15	7	22
18:45	32	10	42	9	3	12	41	13	54
19:00	17	1	18	7	3	10	24	4	28
19:15	12	5	17	8	3	11	20	8	28
19:30	12	12	24	8	3	11	20	15	35
19:45	20	4	24	7	2	9	27	6	33
20:00	10	4	14	11	4	15	21	8	29
20:15	3	1	4	15	1	16	18	2	20
20:30	15	4	19	11	4	15	26	8	34
20:45	35	2	37	11	4	15	46	6	52

Taxi Trips Observed 42.6%

Attachment D

Trip Distribution

Cardinal Distribution for TAZ 644



Cardinal Trip Distribution

Cardinal Direction	Percentage of Trips		2020 Interpolated	2020 Rounded
	2010	2040		
North-Northeast	11.2%	16.10%	12.83%	13.00%
East-Northeast	0.0%	0.00%	0.00%	0.00%
East-Southeast	0.0%	0.00%	0.00%	0.00%
South-Southeast	0.0%	0.00%	0.00%	0.00%
South-Southwest	9.6%	12.40%	10.53%	10.00%
West-Southwest	29.7%	30.00%	29.80%	30.00%
West-Northwest	27.3%	22.20%	25.60%	26.00%
North-Northwest	22.1%	19.40%	21.20%	21.00%
Total	**99.9%**	**100.1%**	**99.97%**	**100.00%**

Miami-Dade 2010 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
636	3536	PERCENT	10.7	0.0	0.0	4.4	10.0	34.0	20.8	20.1	
637	3537	TRIPS	437	39	52	212	109	449	313	207	1,818
637	3537	PERCENT	24.0	2.2	2.9	11.7	6.0	24.7	17.2	11.4	
638	3538	TRIPS	148	25	57	108	66	231	258	107	1,000
638	3538	PERCENT	14.8	2.5	5.7	10.8	6.6	23.1	25.8	10.7	
639	3539	TRIPS	694	286	232	913	139	1,445	989	693	5,391
639	3539	PERCENT	12.9	5.3	4.3	16.9	2.6	26.8	18.4	12.9	
640	3540	TRIPS	436	242	845	100	107	663	503	303	3,199
640	3540	PERCENT	13.6	7.6	26.4	3.1	3.3	20.7	15.7	9.5	
641	3541	TRIPS	1,374	1,440	228	555	352	2,014	2,014	1,124	9,101
641	3541	PERCENT	15.1	15.8	2.5	6.1	3.9	22.1	22.1	12.4	
642	3542	TRIPS	2,054	891	109	1,000	541	3,435	3,075	2,196	13,301
642	3542	PERCENT	15.4	6.7	0.8	7.5	4.1	25.8	23.1	16.5	
643	3543	TRIPS	1,551	277	0	514	462	2,180	2,043	1,648	8,675
643	3543	PERCENT	17.9	3.2	0.0	5.9	5.3	25.1	23.6	19.0	
644	3544	TRIPS	1,376	0	0	0	1,181	3,638	3,350	2,709	12,254
644	3544	PERCENT	11.2	0.0	0.0	0.0	9.6	29.7	27.3	22.1	
645	3545	TRIPS	547	0	0	0	341	1,032	1,603	1,258	4,781
645	3545	PERCENT	11.4	0.0	0.0	0.0	7.1	21.6	33.5	26.3	
646	3546	TRIPS	862	0	61	243	184	1,226	1,566	1,133	5,275
646	3546	PERCENT	16.3	0.0	1.2	4.6	3.5	23.2	29.7	21.5	
647	3547	TRIPS	454	68	83	148	89	427	406	402	2,077
647	3547	PERCENT	21.9	3.3	4.0	7.1	4.3	20.6	19.6	19.4	
648	3548	TRIPS	1,234	415	131	265	56	788	950	546	4,385
648	3548	PERCENT	28.1	9.5	3.0	6.0	1.3	18.0	21.7	12.5	
649	3549	TRIPS	846	215	84	123	15	631	680	403	2,997
649	3549	PERCENT	28.2	7.2	2.8	4.1	0.5	21.1	22.7	13.5	
650	3550	TRIPS	124	133	83	0	20	325	229	66	980
650	3550	PERCENT	12.7	13.6	8.5	0.0	2.0	33.2	23.4	6.7	
651	3551	TRIPS	612	46	55	0	11	438	656	555	2,373
651	3551	PERCENT	25.8	1.9	2.3	0.0	0.5	18.5	27.6	23.4	
652	3552	TRIPS	743	68	63	25	87	625	873	981	3,465
652	3552	PERCENT	21.4	2.0	1.8	0.7	2.5	18.0	25.2	28.3	
653	3553	TRIPS	708	34	64	143	67	703	835	753	3,307
653	3553	PERCENT	21.4	1.0	1.9	4.3	2.0	21.3	25.3	22.8	
654	3554	TRIPS	490	0	203	74	114	628	1,068	1,058	3,635
654	3554	PERCENT	13.5	0.0	5.6	2.0	3.1	17.3	29.4	29.1	
655	3555	TRIPS	1,475	0	0	0	368	1,892	2,676	2,034	8,445
655	3555	PERCENT	17.5	0.0	0.0	0.0	4.4	22.4	31.7	24.1	
656	3556	TRIPS	372	0	0	0	96	740	997	698	2,903
656	3556	PERCENT	12.8	0.0	0.0	0.0	3.3	25.5	34.3	24.0	

Miami-Dade 2040 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
636	3536	PERCENT	19.5	0.0	0.0	8.2	14.8	29.5	14.8	13.3	
637	3537	TRIPS	374	82	83	225	55	396	261	151	1,627
637	3537	PERCENT	23.0	5.0	5.1	13.8	3.4	24.3	16.0	9.3	
638	3538	TRIPS	232	28	34	125	70	269	193	126	1,077
638	3538	PERCENT	21.5	2.6	3.2	11.6	6.5	25.0	17.9	11.7	
639	3539	TRIPS	735	283	169	948	113	1,300	821	476	4,845
639	3539	PERCENT	15.2	5.8	3.5	19.6	2.3	26.8	17.0	9.8	
640	3540	TRIPS	430	255	683	151	73	932	515	373	3,412
640	3540	PERCENT	12.6	7.5	20.0	4.4	2.1	27.3	15.1	10.9	
641	3541	TRIPS	1,419	1,154	177	632	303	1,982	1,752	1,049	8,468
641	3541	PERCENT	16.8	13.6	2.1	7.5	3.6	23.4	20.7	12.4	
642	3542	TRIPS	2,179	1,098	137	956	454	3,066	2,615	1,535	12,040
642	3542	PERCENT	18.1	9.1	1.1	7.9	3.8	25.5	21.7	12.8	
643	3543	TRIPS	2,025	464	0	785	437	2,968	1,920	1,574	10,173
643	3543	PERCENT	19.9	4.6	0.0	7.7	4.3	29.2	18.9	15.5	
644	3544	TRIPS	2,373	0	0	0	1,831	4,426	3,267	2,854	14,751
644	3544	PERCENT	16.1	0.0	0.0	0.0	12.4	30.0	22.2	19.4	
645	3545	TRIPS	1,336	0	0	0	789	1,367	1,649	1,160	6,301
645	3545	PERCENT	21.2	0.0	0.0	0.0	12.5	21.7	26.2	18.4	
646	3546	TRIPS	950	0	142	324	255	1,435	1,393	1,140	5,639
646	3546	PERCENT	16.9	0.0	2.5	5.8	4.5	25.5	24.7	20.2	
647	3547	TRIPS	400	97	99	84	58	528	545	323	2,134
647	3547	PERCENT	18.7	4.6	4.6	3.9	2.7	24.7	25.5	15.1	
648	3548	TRIPS	1,129	496	172	440	46	1,080	1,249	650	5,262
648	3548	PERCENT	21.5	9.4	3.3	8.4	0.9	20.5	23.7	12.4	
649	3549	TRIPS	917	197	118	194	38	829	1,043	478	3,814
649	3549	PERCENT	24.0	5.2	3.1	5.1	1.0	21.7	27.4	12.5	
650	3550	TRIPS	88	112	79	9	31	340	412	150	1,221
650	3550	PERCENT	7.2	9.2	6.5	0.7	2.5	27.9	33.7	12.3	
651	3551	TRIPS	833	9	103	0	52	472	1,049	629	3,147
651	3551	PERCENT	26.5	0.3	3.3	0.0	1.7	15.0	33.3	20.0	
652	3552	TRIPS	856	91	112	82	128	551	1,157	859	3,836
652	3552	PERCENT	22.3	2.4	2.9	2.1	3.3	14.4	30.2	22.4	
653	3553	TRIPS	659	74	119	117	68	718	812	627	3,194
653	3553	PERCENT	20.6	2.3	3.7	3.7	2.1	22.5	25.4	19.6	
654	3554	TRIPS	814	0	220	127	186	1,003	1,184	881	4,415
654	3554	PERCENT	18.4	0.0	5.0	2.9	4.2	22.7	26.8	20.0	
655	3555	TRIPS	2,196	0	0	0	807	1,970	3,347	2,212	10,532
655	3555	PERCENT	20.9	0.0	0.0	0.0	7.7	18.7	31.8	21.0	
656	3556	TRIPS	565	0	0	0	108	489	1,022	769	2,953
656	3556	PERCENT	19.1	0.0	0.0	0.0	3.7	16.6	34.6	26.0	

Appendix C

Traffic Data

Turning Movement Counts

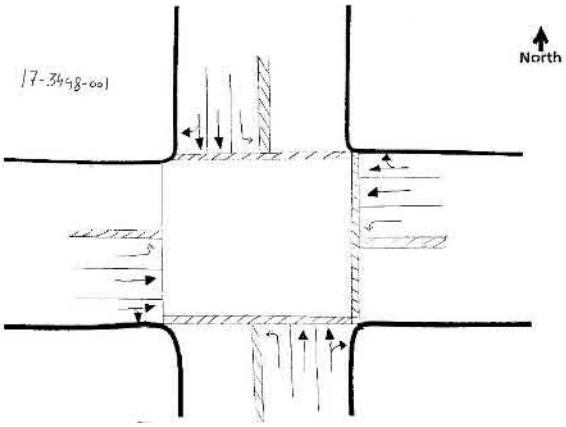
LOCATION: Washington Ave & 17th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 17-03448-001
DATE: 10/27/2017

Peak-Hour: 04:15 PM - 05:15 PM
Peak 15-Minute: 05:00 PM - 05:15 PM

Peak Hour Factor
0.91

National Data & Surveying Services



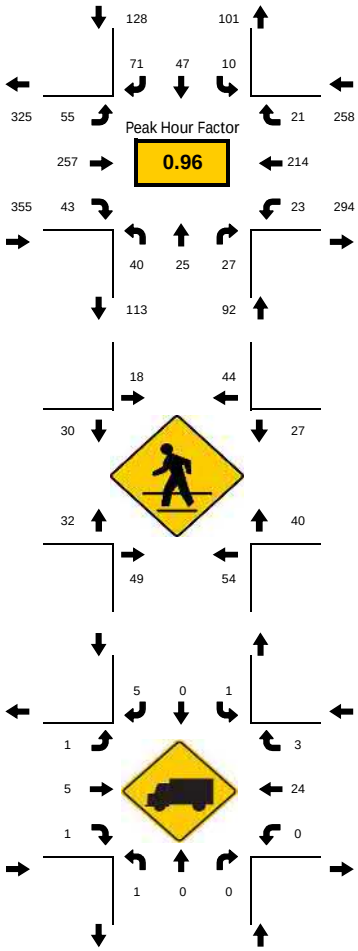
15-Min Count Period Beginning At	Washington Ave Northbound					Washington Ave Southbound					17th St Eastbound					17th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
03:15 PM	52	90	13	0		1	38	16	0		23	60	43	0		16	51	8	0		411	1698
03:30 PM	53	77	26	0		2	46	24	0		32	64	34	0		15	51	6	0		430	1757
03:45 PM	47	69	18	2		4	38	21	0		25	76	42	0		12	41	14	0		409	1797
04:00 PM	47	91	17	0		0	48	23	0		23	69	42	0		17	66	5	0		448	1836
04:15 PM	62	93	10	1		1	69	24	0		36	64	31	0		19	50	10	0		470	1911
04:30 PM	60	82	19	0		6	62	26	0		30	68	37	0		15	59	6	0		470	1441
04:45 PM	45	107	25	1		7	32	19	0		26	76	30	0		23	53	4	0		448	971
05:00 PM	79	112	22	1		3	64	27	0		39	72	22	0		23	57	2	0		523	523

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	316	448	100	4		28	276	108	0		156	304	148	0		92	236	40	0		**2256**
Heavy Trucks	20	12	8			0	16	8			8	8	16			28	8	4			**136**
Pedestrians		144					96					88					96				**424**
Bicycles	4	12	12			0	12	8			12	20	4			12	8	0			**104**
Railroad																					
Stopped Buses																					

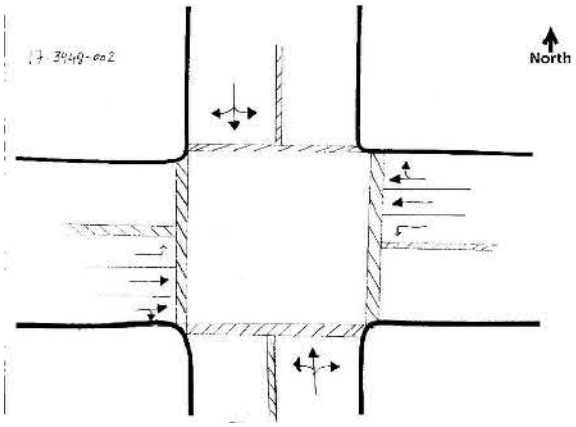
LOCATION: James Ave & 17th St
CITY/STATE: Miami Beach, FL

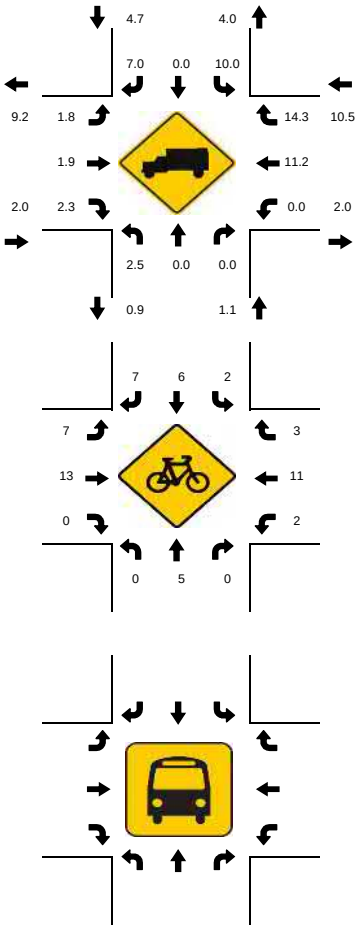
PROJECT ID: 17-03448-002
DATE: 10/27/2017

Peak-Hour: 04:00 PM - 05:00 PM
Peak 15-Minute: 04:30 PM - 04:45 PM



National Data & Surveying Services





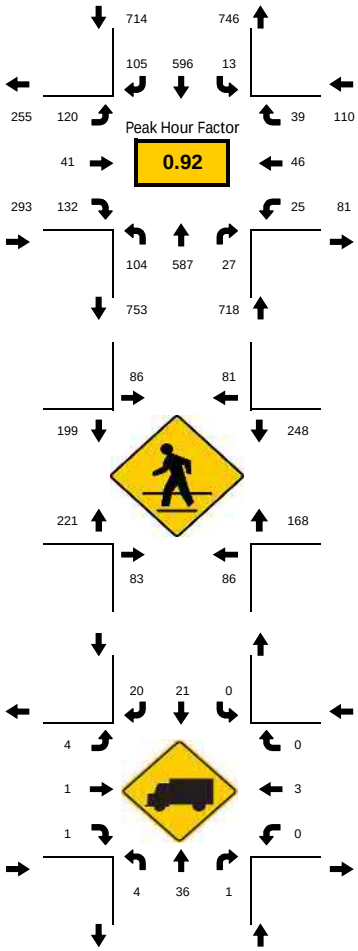
15-Min Count Period Beginning At	James Ave Northbound					James Ave Southbound					17th St Eastbound					17th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
03:15 PM	11	4	8	0		1	14	13	0		10	47	9	2		10	49	5	0		183	785
03:30 PM	6	11	5	0		6	13	15	0		14	55	14	0		4	51	5	0		199	787
03:45 PM	8	5	2	0		2	8	14	0		13	62	18	0		7	46	3	0		188	806
04:00 PM	8	7	4	1		2	10	19	0		9	67	14	0		6	60	8	0		215	833
04:15 PM	11	6	11	0		4	10	14	0		15	47	9	1		3	51	3	0		185	811
04:30 PM	10	5	8	0		1	15	18	0		15	65	12	0		4	58	6	1		218	626
04:45 PM	10	7	4	0		3	12	20	0		15	78	8	0		9	45	4	0		215	408
05:00 PM	9	7	4	0		3	2	9	0		14	62	15	0		7	56	5	0		193	193

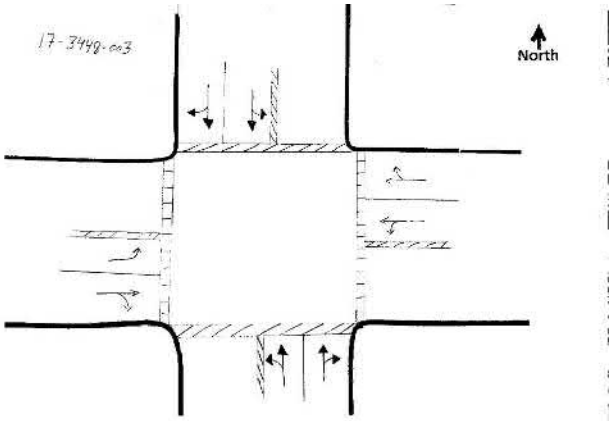
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	44	28	44	4		16	60	80	0		60	312	56	4		36	240	32	4		**1020**
Heavy Trucks	4	0	0			4	0	8			4	8	4			0	32	8			**72**
Pedestrians		128					92					80					80				**380**
Bicycles	0	8	0			4	12	12			8	20	0			4	20	12			**100**
Railroad																					
Stopped Buses																					

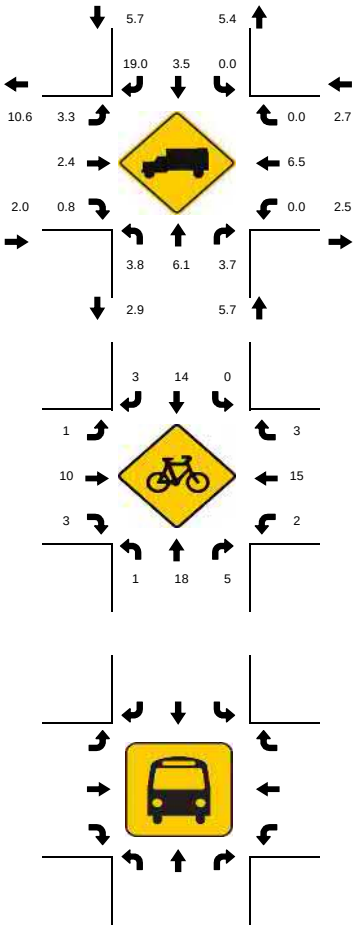
LOCATION: Collins Ave & 17th St
CITY/STATE: Miami Beach, FL

PROJECT ID: 17-03448-003
DATE: 10/27/2017

Peak-Hour: 04:00 PM - 05:00 PM
Peak 15-Minute: 04:45 PM - 05:00 PM





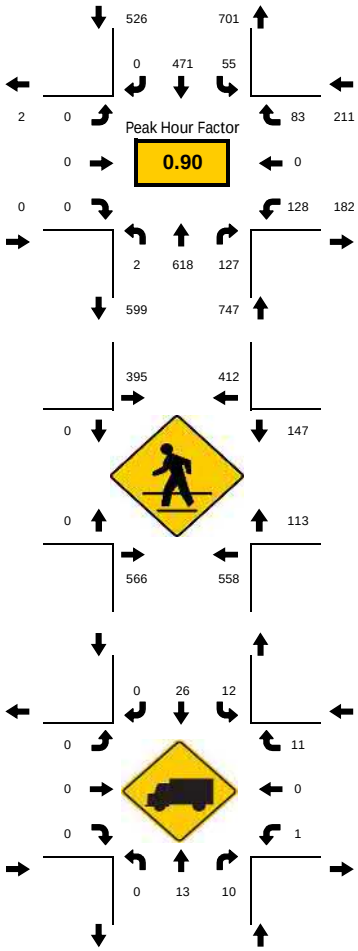


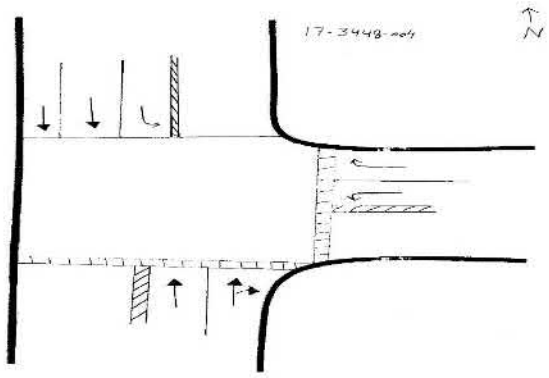
15-Min Count Period Beginning At	Collins Ave Northbound					Collins Ave Southbound					17th St Eastbound					17th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
03:15 PM	21	149	7	0		10	150	31	0		18	5	32	0		3	10	6	0		442	1754
03:30 PM	21	140	8	0		5	139	29	0		28	6	31	0		8	11	17	0		443	1729
03:45 PM	20	137	8	0		5	126	27	0		24	16	26	0		10	9	8	0		416	1753
04:00 PM	30	151	2	0		2	143	33	0		28	9	34	0		4	11	6	0		453	1835
04:15 PM	22	133	9	0		2	136	27	0		27	7	29	0		6	11	8	0		417	1821
04:30 PM	28	146	10	0		6	146	27	0		25	14	34	0		9	12	10	0		467	1404
04:45 PM	24	157	6	0		3	171	18	0		40	11	35	0		6	12	15	0		498	937
05:00 PM	22	141	4	0		8	129	34	2		31	9	28	0		7	16	8	0		439	439
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***		
All Vehicles	120	628	40	0		24	684	132	0		160	56	140	0		36	48	60	0		**2128**	
Heavy Trucks	4	44	4			0	32	32			8	4	4			0	4	0			**136**	
Pedestrians		196					200					452					560				**1408**	
Bicycles	4	24	20			0	24	12			4	16	8			4	24	12			**152**	
Railroad																						
Stopped Buses																						

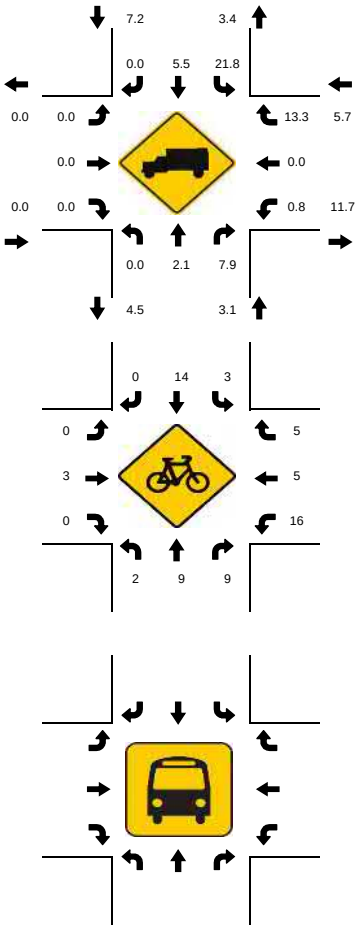
LOCATION: Washington Ave & Lincoln Rd
CITY/STATE: Miami Beach, FL

PROJECT ID: 17-03448-004
DATE: 10/27/2017

Peak-Hour: 04:15 PM - 05:15 PM
Peak 15-Minute: 05:00 PM - 05:15 PM



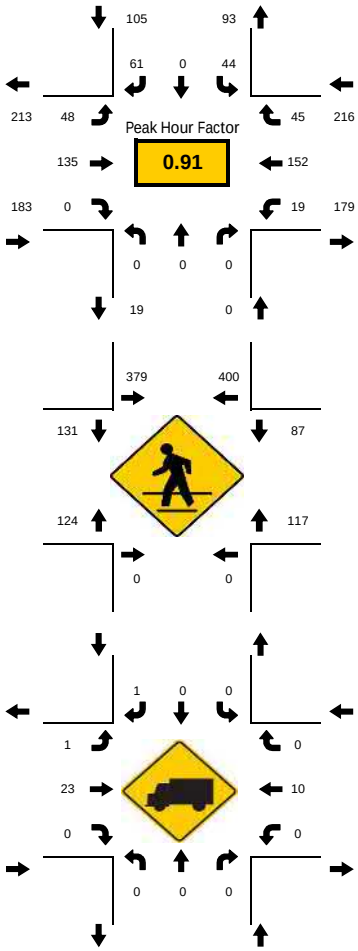




15-Min Count Period Beginning At	Washington Ave Northbound					Washington Ave Southbound					Lincoln Rd Eastbound					Lincoln Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
03:15 PM	0	120	29	0		12	97	0	0		0	0	0	0		31	0	24	0		313	1325
03:30 PM	0	131	23	1		15	114	0	1		0	0	0	0		30	0	22	2		339	1391
03:45 PM	0	115	26	1		12	112	0	0		0	0	0	0		30	0	17	1		314	1390
04:00 PM	0	126	34	1		8	123	0	2		0	0	0	0		36	0	29	0		359	1433
04:15 PM	0	149	31	0		22	124	0	0		0	0	0	0		25	0	24	4		379	1484
04:30 PM	0	134	33	0		9	116	0	0		0	0	0	0		27	0	17	2		338	1105
04:45 PM	0	159	28	2		13	102	0	0		0	0	0	0		33	0	20	0		357	767
05:00 PM	0	176	35	0		11	129	0	0		0	0	0	0		37	0	22	0		410	410
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***		
All Vehicles	0	704	140	8		88	516	0	0		0	0	0	0		148	0	96	16		**1716**	
Heavy Trucks	0	16	16			16	36	0			0	0	0			4	0	16			**104**	
Pedestrians		1140					900					0					296				**2336**	
Bicycles	4	24	16			12	24	0			0	8	0			32	16	12			**148**	
Railroad																						
Stopped Buses																						

LOCATION: James Ave & Lincoln Rd
CITY/STATE: Miami Beach, FL

PROJECT ID: 17-03448-005
DATE: 10/27/2017

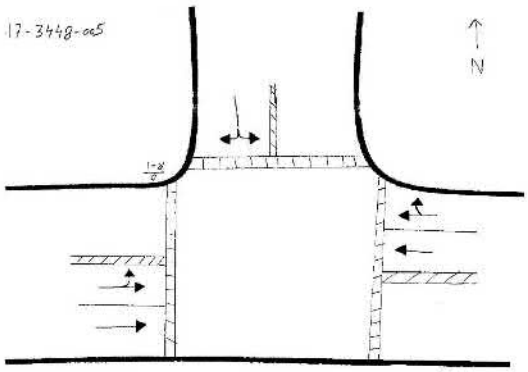


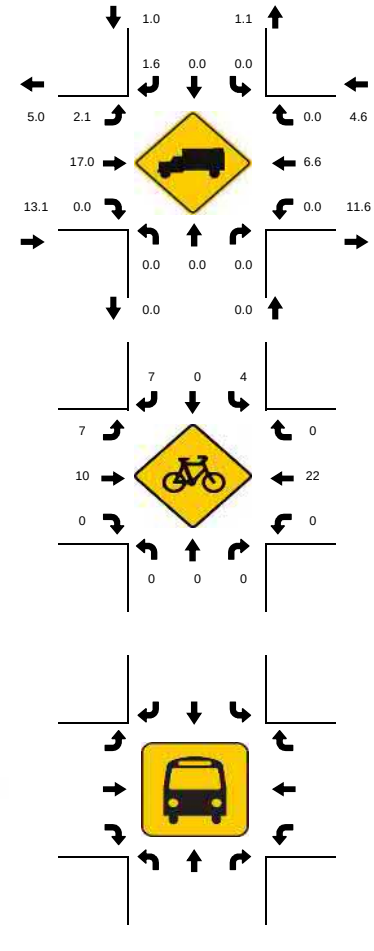
Peak Hour Factor

0.91

Peak-Hour: 04:00 PM - 05:00 PM
Peak 15-Minute: 04:15 PM - 04:30 PM

National Data & Surveying Services





15-Min Count Period Beginning At	James Ave Northbound					James Ave Southbound					Lincoln Rd Eastbound					Lincoln Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
03:15 PM	0	0	0	0		7	0	17	0		3	35	0	0		0	36	14	2		114	465
03:30 PM	0	0	0	0		11	0	20	0		8	35	0	0		0	34	9	3		120	490
03:45 PM	0	0	0	0		11	0	13	0		5	31	0	2		0	33	6	8		109	487
04:00 PM	0	0	0	0		7	0	19	0		11	27	0	1		0	45	7	5		122	504
04:15 PM	0	0	0	0		6	0	16	0		14	44	0	2		0	37	12	8		139	503
04:30 PM	0	0	0	0		16	0	11	0		7	31	0	2		0	34	14	2		117	364
04:45 PM	0	0	0	0		15	0	15	0		10	33	0	1		0	36	12	4		126	247
05:00 PM	0	0	0	0		6	0	17	0		10	33	0	1		0	40	9	5		121	121

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	0	0	0	0		64	0	76	0		56	176	0	8		0	180	56	32		**648**
Heavy Trucks	0	0	0			0	0	4			4	32	0			0	12	0			**52**
Pedestrians		0					912					288					224				**1424**
Bicycles	0	0	0			8	0	12			16	16	0			0	40	0			**92**
Railroad																					
Stopped Buses																					

72-Hour Continuous Counts

72-Hour Continuous Count Traffic Data Summary		
Date	**Peak 2-Hour Period**	**Peak 2-Hour Traffic Volume**
Thursday, April 7, 2016	4:00 P.M. - 6:00 P.M.	5,335 vehicles
Friday, April 8, 2016	**3:15 P.M. - 5:15 P.M.**	**5,855 vehicles**
Saturday, April 9, 2016	3:30 P.M. - 5:30 P.M.	4,968 vehicles

Thursday Continuous Counts

	13-3103-002				16-3112-002					16-3112-003					
Thursday	17 St bet. Michigan Ave & Jefferson Ave				Convention Center Dr bet. 17 St & Dade Blvd					Meridian Ave bet. 17 St & Dade Blvd					
Time	**NB/EB**	**SB/WB**	**Total**		**NB/EB**	**SB/WB**	**Total**			**NB/EB**	**SB/WB**	**Total**		**Grand Total**	**2-Hour Peak**
0:00	49	45	94		25	4	29			72	14	86		209	
0:15	43	55	98		15	5	20			53	24	77		195	
0:30	38	48	86		16	5	21			30	14	44		151	
0:45	40	31	71		9	1	10			20	14	34		115	
1:00	30	54	84		4	2	6			32	12	44		134	
1:15	30	31	61		3	4	7			26	11	37		105	
1:30	21	32	53		8	4	12			18	11	29		94	
1:45	21	31	52		3	2	5			11	11	22		79	1,082
2:00	24	22	46		1	0	1			11	7	18		65	938
2:15	20	15	35		1	1	2			10	6	16		53	796
2:30	17	20	37		0	1	1			10	7	17		55	700
2:45	13	18	31		1	1	2			8	7	15		48	633
3:00	13	15	28		4	2	6			6	5	11		45	544
3:15	15	10	25		0	2	2			12	0	12		39	478
3:30	14	18	32		1	0	1			9	5	14		47	431
3:45	11	8	19		2	0	2			5	5	10		31	383
4:00	8	10	18		3	2	5			5	3	8		31	349
4:15	12	10	22		1	0	1			9	8	17		40	336
4:30	18	10	28		2	2	4			8	17	25		57	338
4:45	14	9	23		2	3	5			11	14	25		53	343
5:00	14	12	26		3	4	7			8	15	23		56	354
5:15	28	14	42		1	1	2			8	20	28		72	387
5:30	31	13	44		0	6	6			7	35	42		92	432
5:45	34	12	46		4	11	15			11	55	66		127	528
6:00	54	20	74		4	10	14			21	63	84		172	669
6:15	92	31	123		5	27	32			17	76	93		248	877
6:30	94	21	115		8	24	32			23	90	113		260	1,080
6:45	101	30	131		11	31	42			39	88	127		300	1,327
7:00	95	41	136		35	29	64			51	84	135		335	1,606
7:15	80	42	122		16	46	62			44	97	141		325	1,859
7:30	85	37	122		32	30	62			50	97	147		331	2,098
7:45	106	50	156		16	27	43			53	91	144		343	2,314
8:00	89	58	147		15	33	48			60	102	162		357	2,499
8:15	102	57	159		20	45	65			64	120	184		408	2,659
8:30	123	62	185		36	46	82			73	120	193		460	2,859
8:45	99	69	168		23	55	78			67	123	190		436	2,995
9:00	128	75	203		24	52	76			76	118	194		473	3,133
9:15	126	75	201		20	53	73			62	122	184		458	3,266
9:30	126	74	200		26	54	80			44	120	164		444	3,379
9:45	137	91	228		38	44	82			64	138	202		512	3,548
10:00	116	89	205		20	44	64			63	106	169		438	3,629
10:15	105	93	198		29	30	59			53	84	137		394	3,615
10:30	117	101	218		22	22	44			71	106	177		439	3,594
10:45	112	70	182		22	52	74			70	103	173		429	3,587
11:00	118	82	200		19	37	56			67	94	161		417	3,531
11:15	126	108	234		45	43	88			84	97	181		503	3,576
11:30	137	96	233		28	35	63			77	119	196		492	3,624
11:45	129	114	243		36	40	76			83	118	201		520	3,632
12:00	135	125	260		25	49	74			92	91	183		517	3,711
12:15	126	122	248		36	37	73			90	88	178		499	3,816
12:30	140	117	257		46	29	75			95	110	205		537	3,914
12:45	153	112	265		36	33	69			108	112	220		554	4,039
13:00	136	129	265		36	43	79			88	102	190		534	4,156
13:15	162	132	294		38	43	81			92	105	197		572	4,225
13:30	142	130	272		58	41	99			98	107	205		576	4,309
13:45	167	109	276		34	32	66			101	96	197		539	4,328
14:00	166	130	296		55	41	96			89	83	172		564	4,375
14:15	152	113	265		42	39	81			110	116	226		572	4,448
14:30	156	132	288		51	42	93			138	135	273		654	4,565
14:45	131	118	249		45	45	90			131	115	246		585	4,596
15:00	150	112	262		72	20	92			173	102	275		629	4,691
15:15	136	149	285		65	27	92			168	120	288		665	4,784
15:30	133	157	290		68	30	98			200	96	296		684	4,892
15:45	138	98	236		45	35	80			149	102	251		567	4,920
16:00	152	177	329		72	32	104			171	107	278		711	5,067
16:15	164	148	312		54	18	72			173	107	280		664	5,159
16:30	157	136	293		56	25	81			159	124	283		657	5,162
16:45	153	134	287		48	32	80			157	124	281		648	5,225
17:00	137	160	297		77	23	100			201	74	275		672	5,268
17:15	148	128	276		78	37	115			210	98	308		699	5,302
17:30	131	155	286		69	26	95			182	91	273		654	5,272
17:45	145	149	294		60	26	86			167	83	250		630	**5,335**
18:00	121	134	255		73	25	98			167	86	253		606	5,230
18:15	125	140	265		41	20	61			164	75	239		565	5,131
18:30	121	147	268		43	24	67			133	82	215		550	5,024
18:45	134	131	265		26	25	51			121	85	206		522	4,898
19:00	113	126	239		33	25	58			99	79	178		475	4,701
19:15	117	125	242		35	23	58			97	71	168		468	4,470
19:30	127	112	239		40	25	65			83	83	166		470	4,286
19:45	125	122	247		30	12	42			88	74	162		451	4,107
20:00	116	110	226		24	23	47			85	54	139		412	3,913
20:15	108	118	226		28	16	44			87	78	165		435	3,783
20:30	93	94	187		29	10	39			81	59	140		366	3,599
20:45	126	99	225		19	23	42			70	61	131		398	3,475
21:00	96	97	193		19	10	29			85	53	138		360	3,360
21:15	88	107	195		21	15	36			57	57	114		345	3,237
21:30	97	96	193		29	16	45			78	63	141		379	3,146
21:45	105	86	191		23	20	43			67	59	126		360	3,055
22:00	107	86	193		24	16	40			74	55	129		362	3,005
22:15	97	91	188		29	11	40			89	43	132		360	2,930
22:30	92	88	180		18	15	33			59	53	112		325	2,889
22:45	102	80	182		25	11	36			58	45	103		321	2,812
23:00	83	93	176		24	9	33			67	44	111		320	2,772
23:15	94	89	183		39	13	52			74	35	109		344	2,771
23:30	93	76	169		30	4	34			90	33	123		326	2,718
23:45	71	83	154		15	12	27			80	26	106		287	2,645
TOTAL	**17,047**				**4,822**					**14,008**				**35,877**	**273,524**
													MAX	**711**	**5,335**

Friday Continuous Counts

	13-3103-002				16-3112-002					16-3112-003					
Friday	17 St bet. Michigan Ave & Jefferson Ave				Convention Center Dr bet. 17 St & Dade Blvd					Meridian Ave bet. 17 St & Dade Blvd					
Time	**NB/EB**	**SB/WB**	**Total**		**NB/EB**	**SB/WB**	**Total**			**NB/EB**	**SB/WB**	**Total**		**Grand Total**	**2-Hour Peak**
0:00	74	74	148		19	8	27			81	28	109		284	
0:15	53	71	124		16	4	20			55	27	82		226	
0:30	69	60	129		16	3	19			28	21	49		197	
0:45	53	49	102		7	2	9			36	15	51		162	
1:00	46	52	98		10	5	15			22	19	41		154	
1:15	37	43	80		14	4	18			34	15	49		147	
1:30	35	49	84		6	3	9			24	12	36		129	
1:45	22	44	66		4	0	4			13	13	26		96	1,395
2:00	25	35	60		5	1	6			18	9	27		93	1,204
2:15	22	35	57		2	2	4			11	8	19		80	1,058
2:30	28	26	54		4	2	6			6	4	10		70	931
2:45	15	23	38		3	1	4			16	11	27		69	838
3:00	14	20	34		3	1	4			14	6	20		58	742
3:15	18	18	36		0	0	0			11	4	15		51	646
3:30	31	24	55		2	1	3			7	3	10		68	585
3:45	7	19	26		2	2	4			5	7	12		42	531
4:00	16	22	38		4	1	5			3	8	11		54	492
4:15	11	11	22		5	0	5			7	6	13		40	452
4:30	18	17	35		3	5	8			6	14	20		63	445
4:45	12	8	20		3	7	10			15	16	31		61	437
5:00	17	14	31		4	4	8			5	11	16		55	434
5:15	33	23	56		2	3	5			17	24	41		102	485
5:30	24	7	31		2	6	8			14	33	47		86	503
5:45	44	17	61		7	18	25			12	49	61		147	608
6:00	51	9	60		6	12	18			25	52	77		155	709
6:15	93	14	107		7	16	23			12	91	103		233	902
6:30	96	32	128		7	19	26			28	82	110		264	1,103
6:45	92	26	118		16	35	51			30	100	130		299	1,341
7:00	95	47	142		28	22	50			48	89	137		329	1,615
7:15	80	42	122		23	47	70			55	107	162		354	1,867
7:30	89	52	141		9	44	53			58	90	148		342	2,123
7:45	73	57	130		23	27	50			66	92	158		338	2,314
8:00	116	48	164		19	36	55			67	106	173		392	2,551
8:15	117	71	188		17	51	68			52	111	163		419	2,737
8:30	114	76	190		17	45	62			70	113	183		435	2,908
8:45	129	91	220		21	55	76			75	130	205		501	3,110
9:00	159	80	239		27	35	62			52	101	153		454	3,235
9:15	128	74	202		30	45	75			64	115	179		456	3,337
9:30	139	78	217		21	54	75			83	118	201		493	3,488
9:45	127	103	230		29	49	78			74	107	181		489	3,639
10:00	128	95	223		29	43	72			67	121	188		483	3,730
10:15	132	104	236		26	40	66			81	102	183		485	3,796
10:30	120	110	230		30	47	77			75	95	170		477	3,838
10:45	116	104	220		35	45	80			84	95	179		479	3,816
11:00	140	104	244		39	39	78			78	113	191		513	3,875
11:15	158	99	257		34	47	81			90	107	197		535	3,954
11:30	140	106	246		35	43	78			86	111	197		521	3,982
11:45	150	107	257		38	38	76			106	107	213		546	4,039
12:00	135	133	268		43	28	71			109	122	231		570	4,126
12:15	152	116	268		36	39	75			118	107	225		568	4,209
12:30	146	113	259		37	35	72			107	121	228		559	4,291
12:45	184	107	291		37	50	87			111	114	225		603	4,415
13:00	171	137	308		42	40	82			139	131	270		660	4,562
13:15	170	135	305		42	53	95			120	129	249		649	4,676
13:30	203	135	338		51	41	92			119	116	235		665	4,820
13:45	182	151	333		38	44	82			122	125	247		662	4,936
14:00	182	128	310		54	45	99			118	111	229		638	5,004
14:15	155	110	265		41	37	78			131	100	231		574	5,010
14:30	167	129	296		69	41	110			150	139	289		695	5,146
14:45	189	126	315		49	44	93			156	136	292		700	5,243
15:00	153	145	298		79	46	125			177	121	298		721	5,304
15:15	169	138	307		81	50	131			184	109	293		731	5,386
15:30	194	141	335		63	43	106			232	110	342		783	5,504
15:45	184	153	337		55	43	98			174	129	303		738	5,580
16:00	184	149	333		58	31	89			192	94	286		708	5,650
16:15	187	132	319		72	37	109			165	128	293		721	5,797
16:30	170	158	328		72	28	100			162	119	281		709	5,811
16:45	159	141	300		67	26	93			162	126	288		681	5,792
17:00	174	178	352		89	41	130			198	104	302		784	**5,855**
17:15	166	168	334		68	35	103			180	92	272		709	5,833
17:30	168	147	315		59	28	87			175	109	284		686	5,736
17:45	170	153	323		58	30	88			138	111	249		660	5,658
18:00	151	154	305		56	26	82			153	111	264		651	5,601
18:15	163	166	329		50	32	82			170	103	273		684	5,564
18:30	152	144	296		43	31	74			135	119	254		624	5,479
18:45	172	130	302		59	36	95			127	96	223		620	5,418
19:00	155	115	270		47	49	96			115	90	205		571	5,205
19:15	168	136	304		30	37	67			106	118	224		595	5,091
19:30	176	119	295		44	40	84			95	90	185		564	4,969
19:45	160	132	292		49	33	82			91	97	188		562	4,871
20:00	136	85	221		30	33	63			91	91	182		466	4,686
20:15	125	122	247		41	28	69			98	108	206		522	4,524
20:30	154	104	258		62	41	103			90	88	178		539	4,439
20:45	127	115	242		52	27	79			85	67	152		473	4,292
21:00	117	121	238		22	20	42			79	75	154		434	4,155
21:15	124	123	247		26	12	38			74	84	158		443	4,003
21:30	117	114	231		26	18	44			92	73	165		440	3,879
21:45	127	109	236		23	21	44			77	68	145		425	3,742
22:00	133	94	227		27	17	44			70	63	133		404	3,680
22:15	128	124	252		20	18	38			78	59	137		427	3,585
22:30	109	121	230		33	12	45			87	53	140		415	3,461
22:45	131	182	313		20	21	41			73	55	128		482	3,470
23:00	127	156	283		33	20	53			109	62	171		507	3,543
23:15	113	131	244		51	21	72			135	64	199		515	3,615
23:30	149	122	271		44	18	62			130	49	179		512	3,687
23:45	119	85	204		38	19	57			121	40	161		422	3,684
TOTAL	**19,770**				**5,577**					**15,650**				**40,997**	**308,782**
													MAX	**784**	**5,855**

Saturday Continuous Counts

	13-3103-002				16-3112-002					16-3112-003					
Saturday	17 St bet. Michigan Ave & Jefferson Ave				Convention Center Dr bet. 17 St & Dade Blvd					Meridian Ave bet. 17 St & Dade Blvd					
Time	**NB/EB**	**SB/WB**	**Total**		**NB/EB**	**SB/WB**	**Total**			**NB/EB**	**SB/WB**	**Total**		**Grand Total**	**2-Hour Peak**
0:00	93	115	208		47	10	57			90	39	129		394	
0:15	87	92	179		39	11	50			70	41	111		340	
0:30	104	97	201		21	16	37			62	37	99		337	
0:45	80	84	164		17	11	28			57	39	96		288	
1:00	64	87	151		17	12	29			54	38	92		272	
1:15	82	81	163		13	6	19			50	40	90		272	
1:30	74	83	157		11	3	14			43	17	60		231	
1:45	43	69	112		9	2	11			45	21	66		189	2,323
2:00	49	67	116		11	6	17			37	18	55		188	2,117
2:15	51	59	110		10	5	15			29	10	39		164	1,941
2:30	38	49	87		10	1	11			23	13	36		134	1,738
2:45	29	47	76		10	6	16			24	17	41		133	1,583
3:00	36	45	81		8	3	11			19	9	28		120	1,431
3:15	41	37	78		5	0	5			15	8	23		106	1,265
3:30	24	52	76		6	2	8			20	9	29		113	1,147
3:45	32	42	74		4	1	5			17	10	27		106	1,064
4:00	25	45	70		2	1	3			16	10	26		99	975
4:15	13	28	41		5	3	8			23	13	36		85	896
4:30	28	21	49		4	2	6			12	10	22		77	839
4:45	10	29	39		8	1	9			20	20	40		88	794
5:00	21	26	47		4	5	9			10	17	27		83	757
5:15	29	26	55		5	2	7			17	18	35		97	748
5:30	30	19	49		2	4	6			10	21	31		86	721
5:45	36	20	56		5	10	15			17	48	65		136	751
6:00	42	19	61		5	2	7			21	42	63		131	783
6:15	48	11	59		2	7	9			9	71	80		148	846
6:30	56	27	83		6	11	17			20	72	92		192	961
6:45	91	26	117		8	15	23			18	56	74		214	1,087
7:00	42	20	62		4	9	13			34	42	76		151	1,155
7:15	52	43	95		8	3	11			21	50	71		177	1,235
7:30	80	37	117		10	3	13			24	55	79		209	1,358
7:45	53	31	84		11	13	24			30	38	68		176	1,398
8:00	58	34	92		11	10	21			21	43	64		177	1,444
8:15	67	43	110		5	9	14			31	58	89		213	1,509
8:30	65	37	102		7	18	25			43	63	106		233	1,550
8:45	88	41	129		7	20	27			43	78	121		277	1,613
9:00	89	57	146		9	17	26			41	71	112		284	1,746
9:15	95	57	152		15	10	25			46	63	109		286	1,855
9:30	95	36	131		14	26	40			56	76	132		303	1,949
9:45	113	72	185		22	21	43			38	105	143		371	2,144
10:00	103	59	162		11	20	31			45	69	114		307	2,274
10:15	130	83	213		12	18	30			58	77	135		378	2,439
10:30	118	58	176		6	25	31			61	79	140		347	2,553
10:45	148	102	250		17	29	46			77	84	161		457	2,733
11:00	137	86	223		16	24	40			55	76	131		394	2,843
11:15	153	77	230		17	24	41			69	83	152		423	2,980
11:30	122	94	216		20	23	43			70	69	139		398	3,075
11:45	174	95	269		22	25	47			63	89	152		468	3,172
12:00	153	117	270		19	17	36			73	81	154		460	3,325
12:15	150	107	257		20	23	43			63	100	163		463	3,410
12:30	141	104	245		29	35	64			75	91	166		475	3,538
12:45	152	91	243		25	35	60			71	107	178		481	3,562
13:00	188	113	301		26	26	52			78	95	173		526	3,694
13:15	152	108	260		31	26	57			90	90	180		497	3,768
13:30	155	99	254		19	27	46			84	92	176		476	3,846
13:45	178	123	301		30	40	70			88	105	193		564	3,942
14:00	152	136	288		14	31	45			97	80	177		510	3,992
14:15	158	122	280		30	21	51			83	115	198		529	4,058
14:30	142	113	255		35	39	74			89	115	204		533	4,116
14:45	154	123	277		28	36	64			99	126	225		566	4,201
15:00	180	133	313		48	35	83			115	104	219		615	4,290
15:15	163	129	292		31	39	70			127	96	223		585	4,378
15:30	179	128	307		39	34	73			133	118	251		631	4,533
15:45	203	133	336		32	20	52			103	102	205		593	4,562
16:00	199	139	338		26	25	51			108	115	223		612	4,664
16:15	188	145	333		44	25	69			99	130	229		631	4,766
16:30	190	133	323		42	33	75			124	121	245		643	4,876
16:45	170	146	316		36	30	66			115	124	239		621	4,931
17:00	154	136	290		58	26	84			127	111	238		612	4,928
17:15	152	162	314		42	39	81			134	96	230		625	**4,968**
17:30	150	119	269		40	29	69			126	101	227		565	4,902
17:45	163	148	311		31	37	68			107	115	222		601	4,910
18:00	176	152	328		39	36	75			135	107	242		645	4,943
18:15	158	162	320		28	32	60			107	92	199		579	4,891
18:30	180	139	319		40	32	72			102	84	186		577	4,825
18:45	185	165	350		41	33	74			85	111	196		620	4,824
19:00	186	173	359		35	35	70			98	92	190		619	4,831
19:15	161	170	331		41	53	94			100	87	187		612	4,818
19:30	188	188	376		38	31	69			93	103	196		641	4,894
19:45	149	162	311		30	47	77			72	103	175		563	4,856
20:00	161	148	309		31	24	55			88	95	183		547	4,758
20:15	144	138	282		24	28	52			77	74	151		485	4,664
20:30	163	124	287		30	24	54			87	83	170		511	4,598
20:45	130	131	261		25	24	49			92	84	176		486	4,464
21:00	148	121	269		30	32	62			108	84	192		523	4,368
21:15	127	133	260		28	19	47			71	84	155		462	4,218
21:30	145	119	264		26	12	38			84	80	164		466	4,043
21:45	131	100	231		31	17	48			88	64	152		431	3,911
22:00	140	146	286		42	23	65			103	92	195		546	3,910
22:15	128	165	293		62	24	86			139	76	215		594	4,019
22:30	135	130	265		46	13	59			126	75	201		525	4,033
22:45	138	130	268		42	18	60			85	64	149		477	4,024
23:00	123	112	235		40	15	55			87	66	153		443	3,944
23:15	130	134	264		38	23	61			97	57	154		479	3,961
23:30	117	129	246		57	20	77			103	51	154		477	3,972
23:45	109	116	225		42	22	64			93	48	141		430	3,971
TOTAL	**19,815**				**4,069**					**13,120**				**37,004**	**273,692**
													MAX	**645**	**4,968**

Signal Timings

TOD Schedule Report

for 2808: Washington Av&17 St

Print Date: 6/30/2017

Print Time: 2:04 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2808	Washington Av&17 St	DOW-6		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBL	WBT	-	NBT	-	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 5 - 5	9 - 7 - 9	3.7	2.3
2 SBT	5 - 5 - 5	16 - 16 - 16	5 - 5 - 5	1 - 1 - 1	15 - 15 - 15	0 - 15 - 15	4	2.3
3 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	5 - 5 - 5	8 - 5 - 8	3.7	3.4
4 WBT	5 - 5 - 5	18 - 18 - 18	7 - 7 - 7	2.5 - 2.5 - 2.5	50 - 18 - 12	24 - 24 - 24	4	3.4
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	2.3
6 NBT	5 - 5 - 5	16 - 16 - 16	5 - 5 - 5	1 - 1 - 1	15 - 15 - 15	0 - 15 - 15	4	2.3
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 EBT	5 - 5 - 5	18 - 18 - 18	7 - 7 - 7	2.5 - 2.5 - 2.5	50 - 18 - 12	24 - 24 - 24	4	3.4

Last In Service Date: unknown

Permitted Phases

	12345678
Default	1234-6-8
External Permit 0	-2-4-6-8
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

TOD Schedule Report

for 2808: Washington Av&17 St

Print Date: 6/30/2017

Print Time: 2:04 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 EBL	4 WBT	5 -	6 NBT	7 -	8 EBT	Ring Offset	Offset
	1	70	0	21	6	23	0	21	0	36	0	25
	2	90	6	29	6	23	0	41	0	36	0	53
	4	100	6	39	6	23	0	51	0	36	0	54
	5	90	6	29	6	23	0	41	0	36	0	69
	6	90	6	29	6	23	0	41	0	36	0	73
	7	90	6	29	6	23	0	41	0	36	0	59
	11	100	6	39	6	23	0	51	0	36	0	93
	12	110	6	49	6	23	0	61	0	36	0	36
	14	90	6	29	6	23	0	41	0	36	0	73
	15	110	6	49	6	23	0	61	0	36	0	102
	16	150	6	89	6	23	0	101	0	36	0	82
	18	90	6	29	6	23	0	41	0	36	0	29
	19	100	6	39	6	23	0	51	0	36	0	0
	20	110	6	49	6	23	0	61	0	36	0	0
	21	110	6	49	6	23	0	61	0	36	0	0

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su S
0000	Free	M T W Th F
0100	Free	M T W Th F
0530	Free	Su S
0600	1	M T W Th F
0715	2	M T W Th F
0800	11	M T W Th F
0900	4	M T W Th F
1000	Free	Su S
1330	12	M T W Th F
1530	6	M T W Th F
1800	Free	M T W Th F
2000	Free	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	M T W ThF
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0100	TOD OUTPUTS	--------	M T W ThF
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S
0550	TOD OUTPUTS	---5----	M T W ThF
0600	TOD OUTPUTS	--------	M T W ThF
0720	TOD OUTPUTS	--------	M T W ThF

Local Time of Day Function

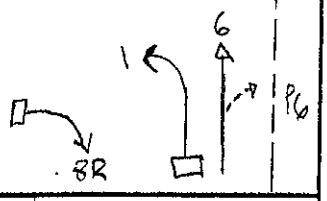
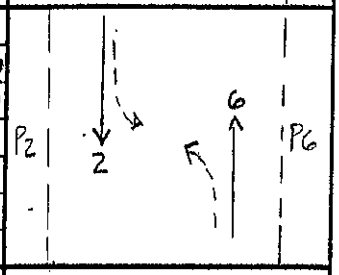
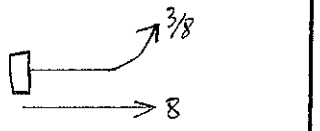
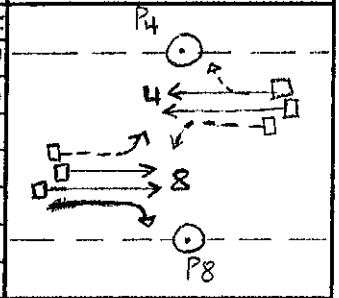
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	Su S
0000	TOD OUTPUTS	--------	M T W ThF
0000	TOD LOCAL MULTIFUNCT	----4---	SuM T W ThF S
0100	TOD OUTPUTS	--------	M T W ThF
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S
0520	TOD OUTPUTS	---5----	Su S
0530	TOD OUTPUTS	--------	Su S
0550	TOD OUTPUTS	---5----	M T W ThF
0600	TOD OUTPUTS	--------	M T W ThF
0605	TOD OUTPUTS	--------	Su S
0720	TOD OUTPUTS	--------	M T W ThF

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

Timing Phases	Direction	NB		SB	EB			WB	Ped Heads				N / Movements/Display/Actuation
	Head No.	1/6	6	2	3/8	8	8R	4	P2	P6	P4	P8	
1+6 NB WASHINGTON AV ACTUATED	Dwell	←/G	G	R	R	R	R/→	R	DW	W/F	DW	DW	
	Clear to 2+6	~~←~~/G	G	R	R	R	R/~~→~~	R	DW	DW	DW	DW	
2+6 N/S WASHINGTON AV RECALL	Dwell	G	G	G	R	R	R	R	W/F	W/F	DW	DW	
	Clear to 3+8	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	
	Clear to ~~4+8~~	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	
3+8 EB 17 ST ACTUATED	Dwell	R	R	R	←/G	G	G	R	DW	DW	DW	DW	
	Clear to 4+8	R	R	R	~~←~~/G	G	G	R	DW	DW	DW	DW	
	Clear to 1+6	R	R	R	~~→~~/Y	Y	Y	R	DW	DW	DW	DW	
	Clear to 2+6	R	R	R	~~→~~/Y	Y	Y	R	DW	DW	DW	DW	
4+8 E/W 17 ST ACTUATED	Dwell	R	R	R	G	G	G	G	DW	DW	W/F	W/F	
	Clear to 1+6	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	
	Clear to 2+6	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	
	Dwell												
	Clear to												
	Dwell												
	Clear to												
Flashing Operation		FY	FY	FY	FR	FR	FR	FR					Page 1 of 1

Miami-Dade County Public Works Department

Drawn	Date	WASHINGTON AV & 17 ST		
H. FRANCILLON	4/10/03			
Checked	Date	Placed in Service	Phasing No.	Asset Number
H. HERNANDEZ	4/11/3	Date / By STI	6	2808

Blank12

TOD Schedule Report

for 2726: James Av&17 St

Print Date: 6/27/2017

Print Time: 8:37 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2726	James Av&17 St	DOW-3		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	WBT	-	NBT	-	EBT	-	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
	Phase Bank 1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3		
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 WBT	7 - 7 - 7	22 - 22 - 22	7 - 7 - 7	1 - 1 - 1	35 - 34 - 35	0 - 34 - 35	4	0
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 NBT	7 - 7 - 7	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 28 - 12	35 - 22 - 22	4	0.3
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 EBT	7 - 7 - 7	22 - 22 - 22	7 - 7 - 7	1 - 1 - 1	35 - 34 - 35	0 - 34 - 35	4	0
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 SBT	7 - 7 - 7	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 28 - 12	35 - 22 - 22	4	0.3

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4-6-8
External Permit 0	-2-4-6-8
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

TOD Schedule Report

for 2726: James Av&17 St

Print Date: 6/27/2017

Print Time: 8:37 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 WBT	3 -	4 NBT	5 -	6 EBT	7 -	8 SBT	Ring Offset	Offset
	2	90	0	54	0	28	0	54	0	28	0	86
	3	80	0	44	0	28	0	44	0	28	0	65
	4	90	0	54	0	28	0	54	0	28	0	78
	5	90	0	54	0	28	0	54	0	28	0	47
	6	90	0	54	0	28	0	54	0	28	0	46
	7	90	0	54	0	28	0	54	0	28	0	26
	8	80	0	44	0	28	0	44	0	28	0	65
	9	80	0	44	0	28	0	44	0	28	0	65
	10	80	0	44	0	28	0	44	0	28	0	65
	11	90	0	54	0	28	0	54	0	28	0	86
	12	90	0	54	0	28	0	54	0	28	0	67
	13	80	0	44	0	28	0	44	0	28	0	53
	14	90	0	54	0	28	0	54	0	28	0	46
	15	110	0	74	0	28	0	74	0	28	0	83
	16	150	0	114	0	28	0	114	0	28	0	123
	17	70	0	34	0	28	0	34	0	28	0	43
	18	90	0	54	0	28	0	54	0	28	0	57
	22	70	0	34	0	28	0	34	0	28	0	43

Local TOD Schedule

Time	Plan	DOW
0000	22	Su S
0000	10	M T W Th F
0100	Free	M T W Th F
0530	Free	Su S
0715	2	M T W Th F
0800	11	M T W Th F
0900	4	M T W Th F
1000	4	Su S
1330	12	M T W Th F
1430	5	W
1530	6	M T W Th F
1800	8	M T W Th F
2000	10	Su S
2130	10	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0100	TOD OUTPUTS	-------1	M T W ThF
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S
0715	TOD OUTPUTS	--------	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0000	TOD LOCAL MULTIFUNCT	----4---	SuM T W ThF S
0100	TOD OUTPUTS	-------1	M T W ThF
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S
0530	TOD OUTPUTS	-------1	Su S
0715	TOD OUTPUTS	--------	M T W ThF
1000	TOD OUTPUTS	--------	Su S

* Settings

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

N

	Direction	EB		WB		SB		NB		Ped Heads				
Timing Phases	Head No.		6		2		8		4	P2	P4	P6	P8	Movements/Display/Actuation
(2+6)	Dwell		G		G		R		R	W/F	DW	W/F	DW	
	Clear to 4+8		Y		Y		R		R	DW	DW	DW	DW	P2 2 6 P6
E/WB 17 ST														
(RECALL)														
	Dwell													
	Clear to													
(4+8)	Dwell		R		R		G		G	DW	W/F	DW	W/F	P8 8 4 P4
	Clear to (2+6)		R		R		Y		Y	DW	DW	DW	DW	
N/SB JAMES AV														
(ACTUATED)														
	Dwell													
	Clear to													
	Dwell													
	Clear to													
	Dwell													
	Clear to													
Flashing Operation			FY		FY		FR		FR					Page 1 of 1

Miami-Dade County Public Works Department

Drawn	Date	JAMES AV & 17 ST		
WILLIAM RIVERA-PAZ	8/25/2006			
Checked	Date	Placed in Service	Phasing No.	Asset Number
HIRAM HERNANDEZ	8/25/06	Date 2/17/2007 By MAGESCO	3	2726

TOD Schedule Report
for 2665: Collins Av&17 St

Print Date: 6/27/2017

Print Time: 8:29 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2665	Collins Av&17 St	DOW-3		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	NBT	-	EBT	-	SBT	-	WBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1	Walk Phase Bank 2	Walk Phase Bank 3	Don't Walk Phase Bank 1	Don't Walk Phase Bank 2	Don't Walk Phase Bank 3	Min Initial Phase Bank 1	Min Initial Phase Bank 2	Min Initial Phase Bank 3	Veh Ext Phase Bank 1	Veh Ext Phase Bank 2	Veh Ext Phase Bank 3	Max Limit Phase Bank 1	Max Limit Phase Bank 2	Max Limit Phase Bank 3	Max 2 Phase Bank 1	Max 2 Phase Bank 2	Max 2 Phase Bank 3	Yellow	Red
1 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 NBT	5	5	5	20	20	20	7	7	7	1	1	1	50	50	50	0	0	0	4	3
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 EBT	10	10	10	14	14	14	7	7	7	2.5	2.5	2.5	12	12	12	24	25	24	4	2.2
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 SBT	5	5	5	20	20	20	7	7	7	1	1	1	50	50	50	0	0	0	4	3
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 WBT	10	10	10	14	14	14	7	7	7	2.5	2.5	2.5	12	12	12	24	25	24	4	2.2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4-6-8
External Permit 0	-2-4-6-8
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

TOD Schedule Report

for 2665: Collins Av&17 St

Print Date: 6/27/2017

Print Time: 8:29 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 NBT	3 -	4 EBT	5 -	6 SBT	7 -	8 WBT	Ring Offset	Offset
	1	100	0	54	0	33	0	54	0	33	0	94
	2	95	0	58	0	24	0	58	0	24	0	7
	3	100	0	54	0	33	0	54	0	33	0	81
	4	90	0	53	0	24	0	53	0	24	0	68
	5	110	0	73	0	24	0	73	0	24	0	101
	6	130	0	90	0	27	0	90	0	27	0	30
	7	120	0	74	0	33	0	74	0	33	0	90
	8	150	0	113	0	24	0	113	0	24	0	117
	11	90	0	53	0	24	0	53	0	24	0	17
	12	90	0	53	0	24	0	53	0	24	0	59
	13	90	0	53	0	24	0	53	0	24	0	56
	14	120	0	83	0	24	0	83	0	24	0	89
	15	120	0	83	0	24	0	83	0	24	0	111
	16	90	0	53	0	24	0	53	0	24	0	70
	17	90	0	53	0	24	0	53	0	24	0	70
	18	100	0	54	0	33	0	54	0	33	0	17
	21	90	0	53	0	24	0	53	0	24	0	17
	22	100	0	54	0	33	0	54	0	33	0	37
	23	100	0	54	0	33	0	54	0	33	0	17
	25	140	0	94	0	33	0	94	0	33	0	85

Local TOD Schedule

Time	Plan	DOW
0000	1	Su M T W Th
0000	7	F S
0300	1	F S
0300	22	M T W Th
0300	4	Su
0700	5	Su
0700	1	M T W Th F S
0930	2	M T W Th
0930	1	Su F S
1500	5	Su F S
1500	3	M T W Th
1800	1	M T W Th
1800	6	Su F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0000	TOD LOCAL MULTIFUNCT	----4---	SuM T W ThF S
0500	TOD LOCAL MULTIFUNCT	--------	SuM T W ThF S

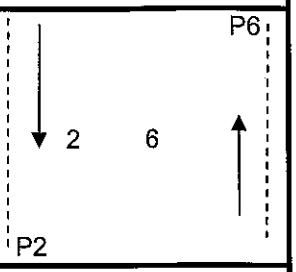
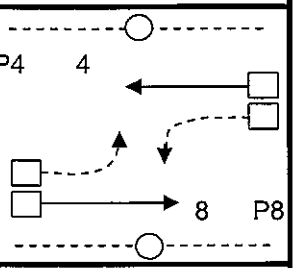
*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

N

Timing Phases	Direction	NB	SB	EB	WB	Ped Heads				Movements/Display/Actuation
	Head No.	6	2	8	4	P6	P2	P8	P4	
	Dwell									
	Clear to									
	Dwell									
	Clear to									
(2+6)	Dwell	G	G	R	R	W/F	W/F	DW	DW	
	4+8	Y	Y	R	R	DW	DW	DW	DW	
N/SB	Clear to									
Collins Av										
(RECALL)										
	Dwell									
	Clear to									
(4+8)	Dwell	R	R	G	G	DW	DW	W/F	W/F	
	2+6	R	R	Y	Y	DW	DW	DW	DW	
E/WB	Clear to									
17 Street										
(ACTUATED)										
	Dwell									
	Clear to									
Flashing Operation		FY	FY	FR	FR					Page 1 of 1

Miami-Dade County Public Works Department

Drawn	Date	COLLINS AV & 17 STREET		
WILLIAM RIVERA PAZ	3/7/2013			
Checked	Date	Placed in Service	Phasing No.	Asset Number
H. Hernandez	4/1/13	Date / By UND	4	2665

Blank12

TOD Schedule Report

for 2807: Lincoln Rd&Washington Av

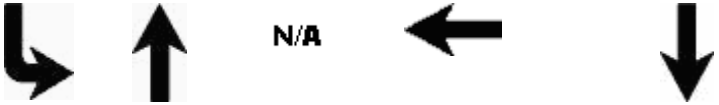
Print Date: 6/27/2017

Print Time: 8:49 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2807	Lincoln Rd&Washington Av	DOW-3		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
SBL	NBT	XPD	WBT	-	SBT	-	-
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1 2 3	Don't Walk 1 2 3	Min Initial 1 2 3	Veh Ext 1 2 3	Max Limit 1 2 3	Max 2 1 2 3	Yellow	Red
1 SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	1 - 1 - 1	5 - 5 - 5	6 - 5 - 5	3	0
2 NBT	0 - 0 - 0	0 - 0 - 0	14 - 14 - 14	1 - 1 - 1	20 - 20 - 20	0 - 20 - 20	4	1
3 XPD	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	1 - 1 - 1	8 - 32 - 32	32 - 32 - 32	4	1
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 SBT	0 - 0 - 0	0 - 0 - 0	14 - 14 - 14	1 - 1 - 1	20 - 20 - 20	0 - 20 - 20	4	1
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: 05/13/2010 12:31

Permitted Phases

	12345678
Default	1234-6--
External Permit 0	-234-6--
External Permit 1	-234-6--
External Permit 2	-234-6--

TOD Schedule Report

for 2807: Lincoln Rd&Washington Av

Print Date: 6/27/2017

Print Time: 8:49 AM

Current TOD Schedule	Plan	Cycle	Green Time 1 SBL	2 NBT	3 XPD	4 WBT	5 -	6 SBT	7 -	8 -	Ring Offset	Offset
	2	100	6	36	27	18	0	45	0	0	0	84
	3	80	6	24	27	10	0	33	0	0	0	64
	4	100	6	36	27	18	0	45	0	0	0	65
	5	100	6	36	27	18	0	45	0	0	0	44
	6	110	6	46	27	18	0	55	0	0	0	48
	7	90	6	26	27	18	0	35	0	0	0	70
	8	100	6	36	27	18	0	45	0	0	0	13
	9	80	6	24	27	10	0	33	0	0	0	61
	10	90	6	26	27	18	0	35	0	0	0	13
	11	100	6	24	27	30	0	33	0	0	0	41
	12	110	6	46	27	18	0	55	0	0	0	33
	13	80	6	24	27	10	0	33	0	0	0	17
	14	90	6	34	27	10	0	43	0	0	0	45
	15	110	6	46	27	18	0	55	0	0	0	89
	16	150	6	86	27	18	0	95	0	0	0	102
	18	90	6	34	27	10	0	43	0	0	0	45
	19	100	0	22	27	41	0	22	0	0	0	0
	20	110	0	44	27	29	0	44	0	0	0	0
	21	100	0	34	27	29	0	34	0	0	0	0

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su S
0000	10	M T W Th F
0100	Free	M T W Th F
0530	Free	Su S
0600	Free	M T W Th F
0715	2	M T W Th F
0800	11	M T W Th F
0900	4	M T W Th F
1000	4	Su S
1330	12	M T W Th F
1530	6	M T W Th F
1800	8	M T W Th F
2000	10	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	8-------	SuM T W ThF S
0000	TOD LOCAL MULTIFU	----4---	SuM T W ThF S
0100	TOD OUTPUTS	8------1	M T W ThF
0200	TOD OUTPUTS	8--5---1	SuM T W ThF S
0500	TOD LOCAL MULTIFU	--------	SuM T W ThF S
0530	TOD OUTPUTS	8------1	M T W ThF
0700	TOD OUTPUTS	--------	SuM T W ThF S
0715	TOD OUTPUTS	--------	M T W ThF
2300	TOD OUTPUTS	8-------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	8-------	SuM T W ThF S
0000	TOD LOCAL MULTIFUNCT	----4---	SuM T W ThF S
0100	TOD OUTPUTS	8------1	M T W ThF
0200	TOD OUTPUTS	8--5---1	SuM T W ThF S
0500	TOD LOCAL MULTIFUNCT	-------	SuM T W ThF S
0530	TOD OUTPUTS	8------1	M T W ThF
0530	TOD OUTPUTS	8------1	Su S
0700	TOD OUTPUTS	--------	SuM T W ThF S
0715	TOD OUTPUTS	--------	M T W ThF
1000	TOD OUTPUTS	--------	Su S
2300	TOD OUTPUTS	8-------	SuM T W ThF S

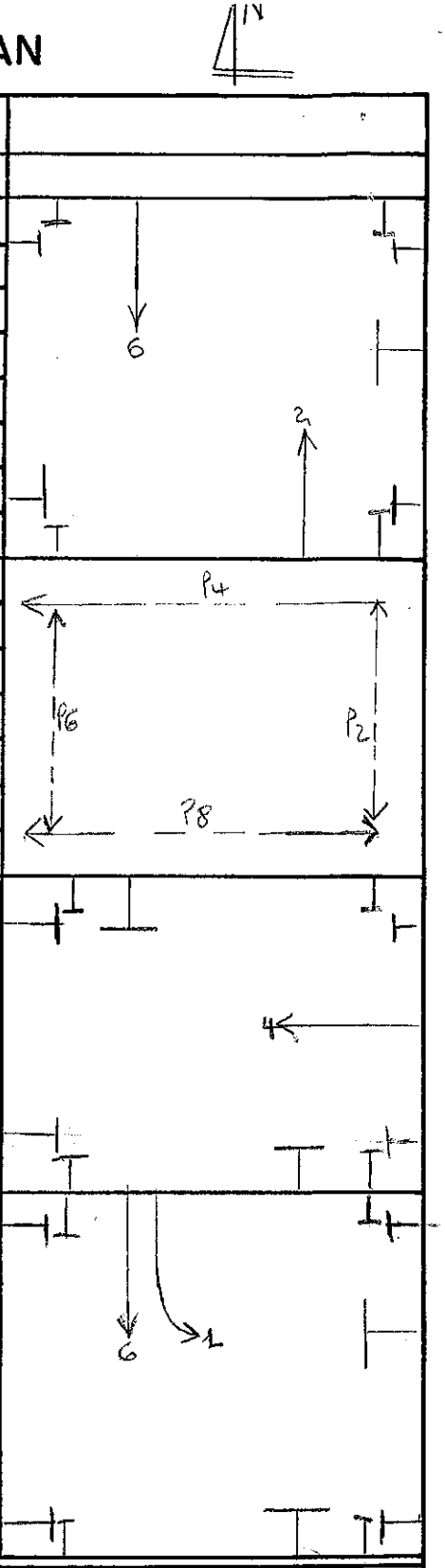
*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

PHASE	INT	SIGNAL HEAD NUMBER 1	2	4	6	P2	P4	P8	P6
Φ2+6 (1+2+6) NBND & SBND WASHINGTON AV RECALL	R/W	G	G	R	G	DW	DW	DW	DW
	PED. CL.								
	TO CLEAR XPED	Y	Y	R	Y	DW	DW	DW	DW
XPED RECALL	R/W	R	R	R	R	W	W	W	W
	PED. CL.	R	R	R	R	FDW	FDW	FDW	FDW
	TO CLEAR Φ4	R	R	R	R	DW	DW	DW	DW
Φ4 (4) WBND LINCOLN Rd. RECALL	R/W	R	R	G	R	DW	DW	DW	DW
	PED. CL.								
	TO CLEAR Φ1+6	R	R	Y	R	DW	DW	DW	DW
Φ1+6 (1+6) SBND & SL WASHINGTON AV RECALL	R/W	R/G	R	R	G	DW	DW	DW	DW
	PED. CL.								
	TO CLEAR Φ2+6	R/G	R	R	G	DW	DW	DW	DW
FLASH OPERATION		FY	FY	FR	FY				



Drawn	Date
H. FRANCILLON	2/2/98
Check	Date
H. HERNANDEZ	4/20/98
Division Engineer	Date

METROPOLITAN DADE COUNTY
DEPARTMENT OF TRAFFIC AND TRANSPORTATION

ASSET NO. 2807

WASHINGTON AV & LINCOLN Rd.

Placed in Service			Phasing Number
Date: -/95	By: ALS		5

Peak Season Conversion Factor

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

Appendix D

Growth Rate Calculations

FDOT Historic Growth Trends

FDOT Growth Rate Summary

Station Number	Location	Linear				Exponential				Decaying Exponential			
		5-year	R-squared	10-year	R-squared	5-year	R-squared	10-year	R-squared	5-year	R-squared	10-year	R-squared
5170	SR A1A/Collins Avenue -- North of 21st Street	2.48%	28.35%	-0.13%	0.55%	2.50%	27.90%	-0.13%	0.63%	2.21%	24.42%	-0.21%	1.21%
8414	Washington Avenue -- 200 feet north of 12th Street	3.21%	66.48%	-	-	3.06%	67.05%	-	-	3.10%	69.28%	-	-
8531	17th Street -- 200 feet east of Meridian Avenue	0.00%	1.67%	-	-	0.00%	1.65%	-	-	0.00%	6.78%	-	-
8567	16th Street -- 200 feet east of Meridian Avenue	-2.75%	90.22%	-	-	-2.87%	89.94%	-	-	-2.57%	76.11%	-	-
Total		**0.74%**	**46.68%**	**-0.13%**	**0.55%**	**0.67%**	**46.64%**	**-0.13%**	**0.63%**	**0.69%**	**44.15%**	**-0.21%**	**1.21%**

Growth Rate Summary

Station Number	Location	Historic Growth	
		5-year	10-year
North/South Streets			
5170	SR A1A/Collins Avenue -- North of 21st Street	2.48%	-0.13%
8414	Washington Avenue -- 200 feet north of 12th Street	3.21%	-
	Average	**2.85%**	**-0.13%**
East/West Streets			
8531	17th Street -- 200 feet east of Meridian Avenue	0.00%	-
8567	16th Street -- 200 feet east of Meridian Avenue	-2.75%	-
	Average	**-1.38%**	**-0.13%**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 5170 - SR A1A/COLLINS AV, N OF 21 ST (MIAMI BEACH)

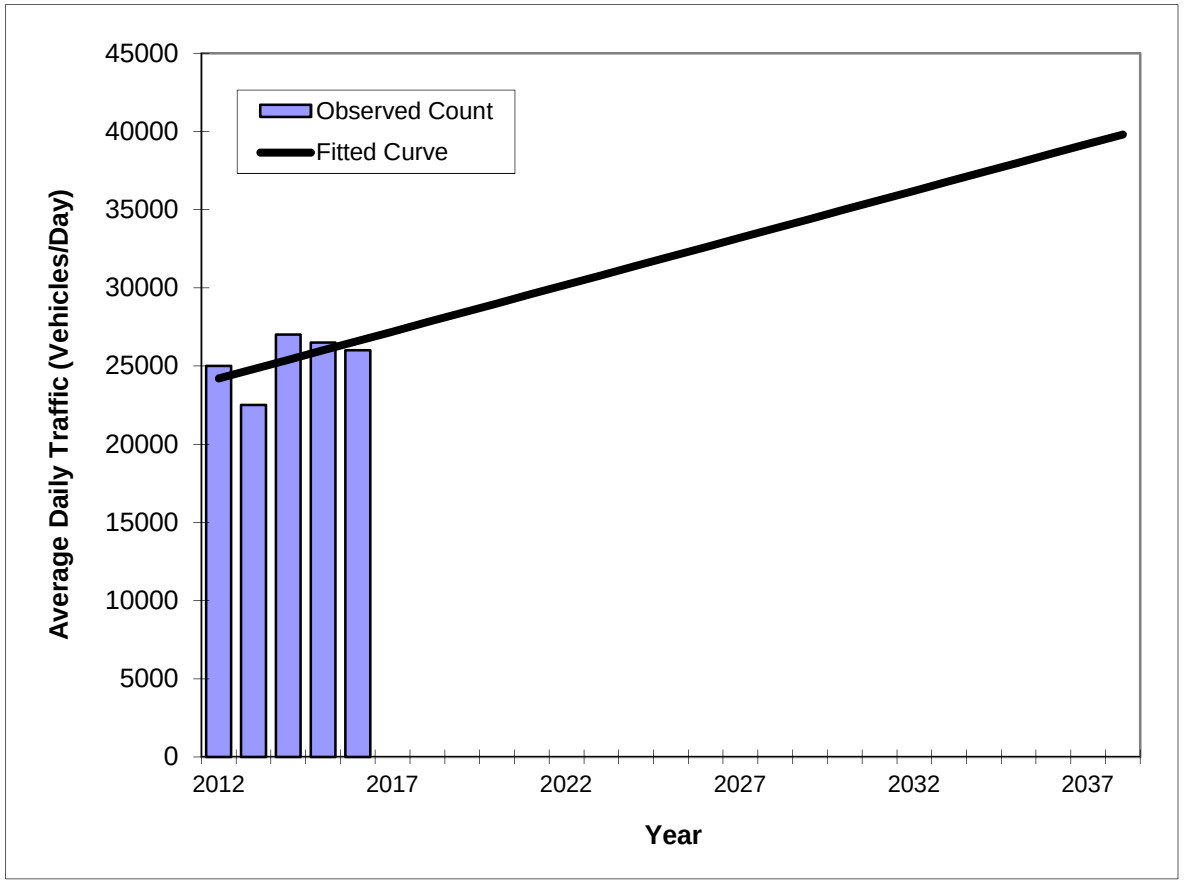
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2016	26000 C	N 13500	S 12500	9.00	54.50	20.20
2015	26500 C	N 12500	S 14000	9.00	54.70	4.20
2014	27000 C	N 12500	S 14500	9.00	54.50	4.10
2013	22500 C	N 10500	S 12000	9.00	52.40	9.00
2012	25000 C	N 12000	S 13000	9.00	55.70	4.30
2011	26500 C	N 13500	S 13000	9.00	55.10	2.80
2010	25000 C	N 12500	S 12500	8.98	54.08	2.80
2009	26500 C	N 13000	S 13500	8.99	53.24	2.70
2008	27000 C	N 13500	S 13500	9.09	55.75	4.60
2007	25500 C	N 12500	S 13000	8.01	54.34	5.10
2006	25500 C	N 12500	S 13000	7.97	54.22	2.70
2005	25500 C	N 13000	S 12500	8.80	53.80	11.60
2004	30500 C	N 15000	S 15500	9.00	53.30	11.60
2003	23500 C	N 11500	S 12000	8.80	53.40	6.90
2002	31500 C	N 16000	S 15500	9.80	52.30	4.00
2001	29500 F	N 14500	S 15000	8.20	53.50	6.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends

SR A1A/Collins Avenue -- North of 21st Street

County:	Miami (87)
Station #:	5170
Highway:	SR A1A/Collins Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	25000	24200
2013	22500	24800
2014	27000	25400
2015	26500	26000
2016	26000	26600

Trend R-squared:	28.35%
Trend Annual Historic Growth Rate:	2.48%
Printed:	24-Oct-17

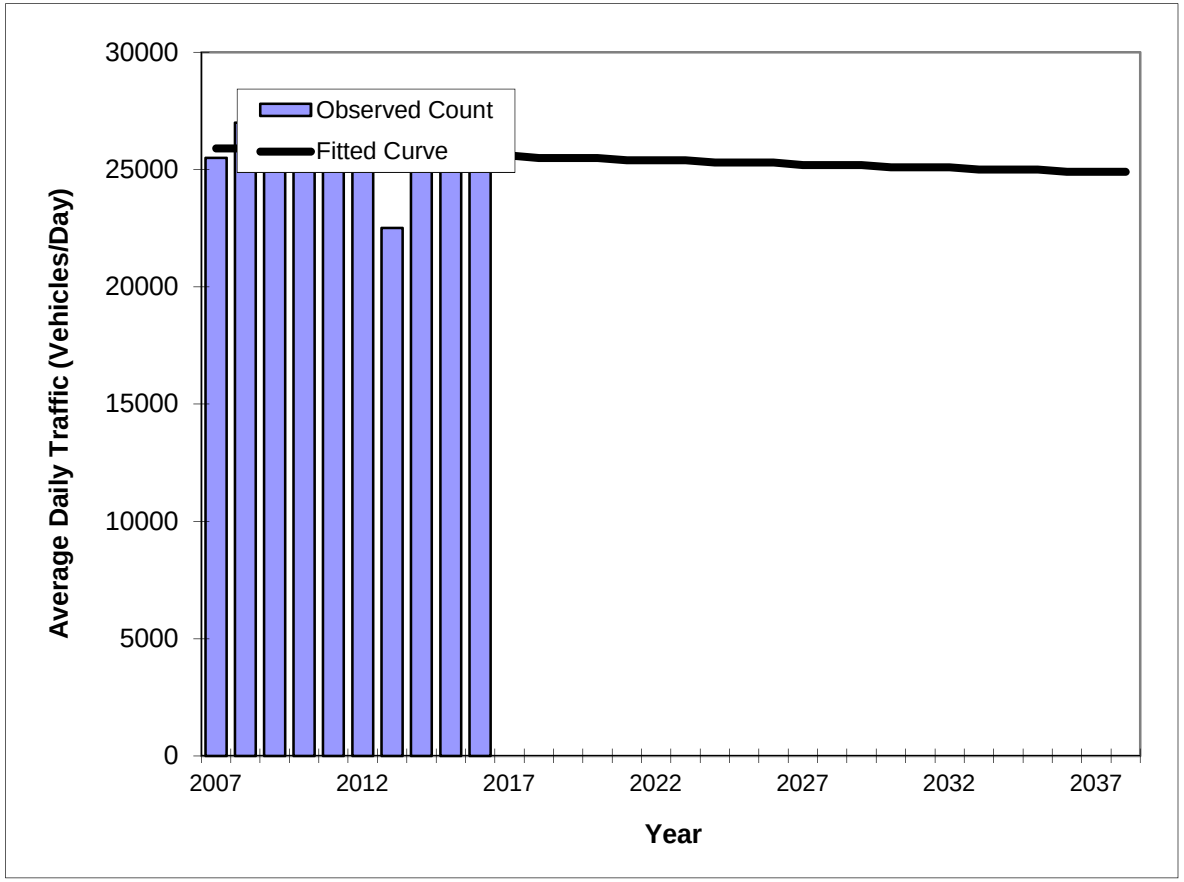
Straight Line Growth Option

*Axle-Adjusted

Traffic Trends

SR A1A/Collins Avenue -- North of 21st Street

County:	Miami (87)
Station #:	5170
Highway:	SR A1A/Collins Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	25500	25900
2008	27000	25900
2009	26500	25800
2010	25000	25800
2011	26500	25800
2012	25000	25700
2013	22500	25700
2014	27000	25700
2015	26500	25600
2016	26000	25600

Trend R-squared:	0.55%
Trend Annual Historic Growth Rate:	-0.13%
Printed:	24-Oct-17

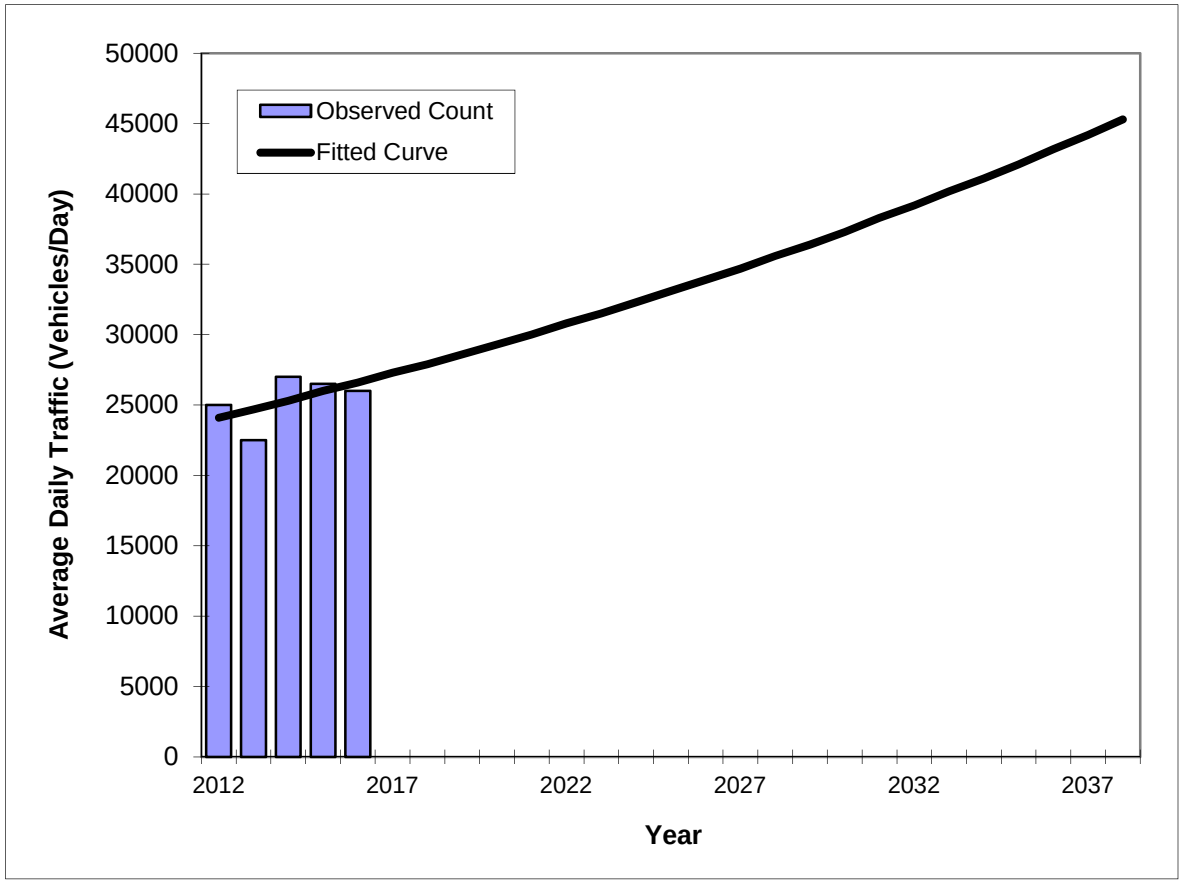
Straight Line Growth Option

*Axle-Adjusted

Traffic Trends

SR A1A/Collins Avenue -- North of 21st Street

County:	Miami (87)
Station #:	5170
Highway:	SR A1A/Collins Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	25000	24100
2013	22500	24700
2014	27000	25300
2015	26500	26000
2016	26000	26600

Trend R-squared:	27.90%
Compounded Annual Historic Growth Rate:	2.50%
Printed:	24-Oct-17

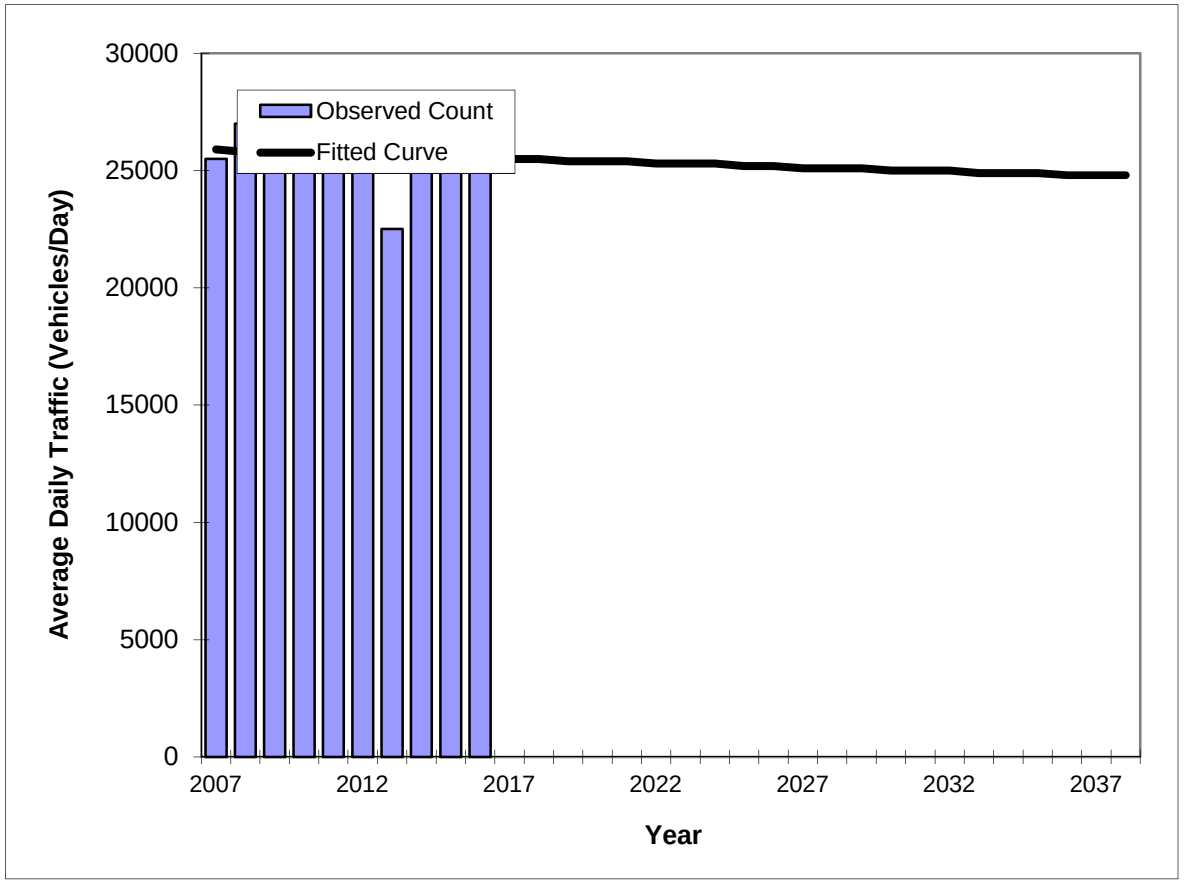
Exponential Growth Option

*Axle-Adjusted

Traffic Trends

SR A1A/Collins Avenue -- North of 21st Street

County:	Miami (87)
Station #:	5170
Highway:	SR A1A/Collins Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	25500	25900
2008	27000	25800
2009	26500	25800
2010	25000	25800
2011	26500	25700
2012	25000	25700
2013	22500	25700
2014	27000	25600
2015	26500	25600
2016	26000	25600

Trend R-squared:	0.63%
Compounded Annual Historic Growth Rate:	-0.13%
Printed:	24-Oct-17

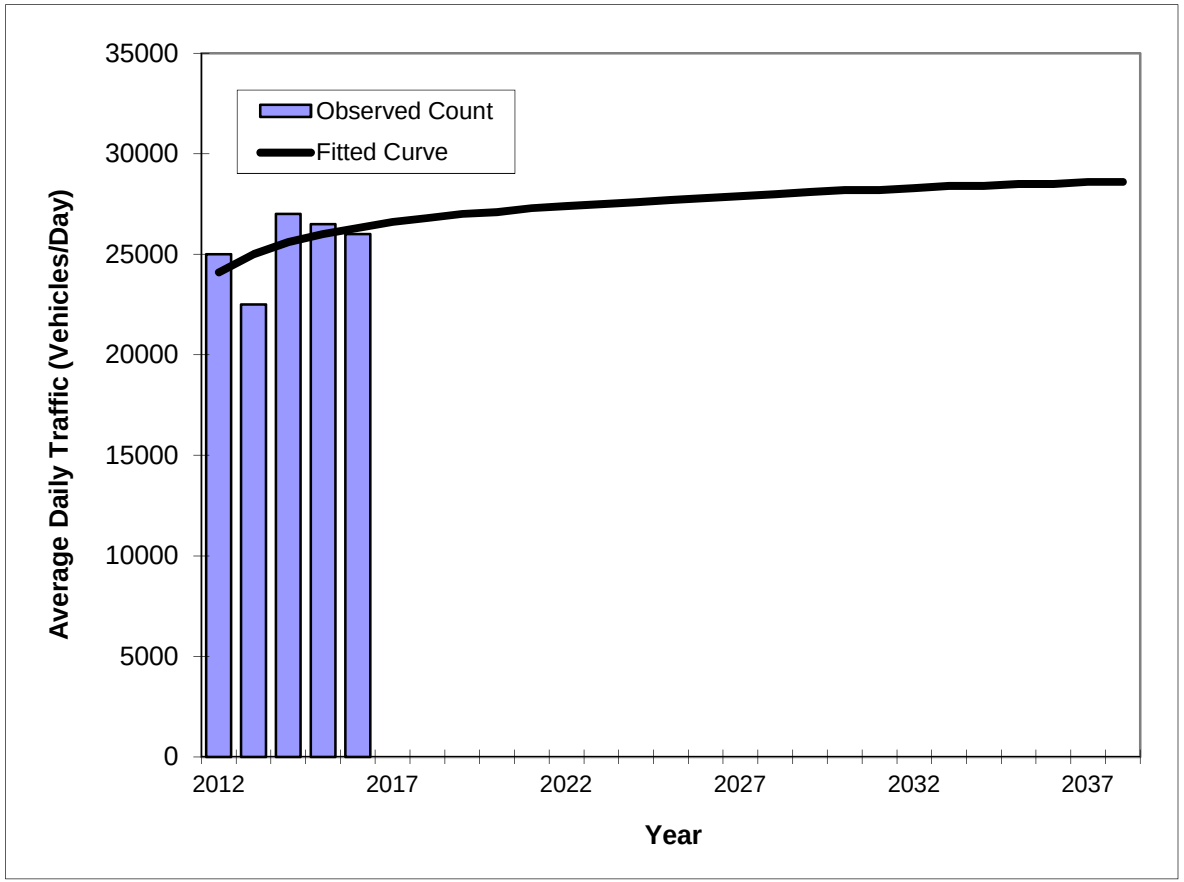
Exponential Growth Option

*Axle-Adjusted

Traffic Trends

SR A1A/Collins Avenue -- North of 21st Street

County:	Miami (87)
Station #:	5170
Highway:	SR A1A/Collins Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	25000	24100
2013	22500	25000
2014	27000	25600
2015	26500	26000
2016	26000	26300

Trend R-squared:	24.42%
Compounded Annual Historic Growth Rate:	2.21%
Printed:	24-Oct-17

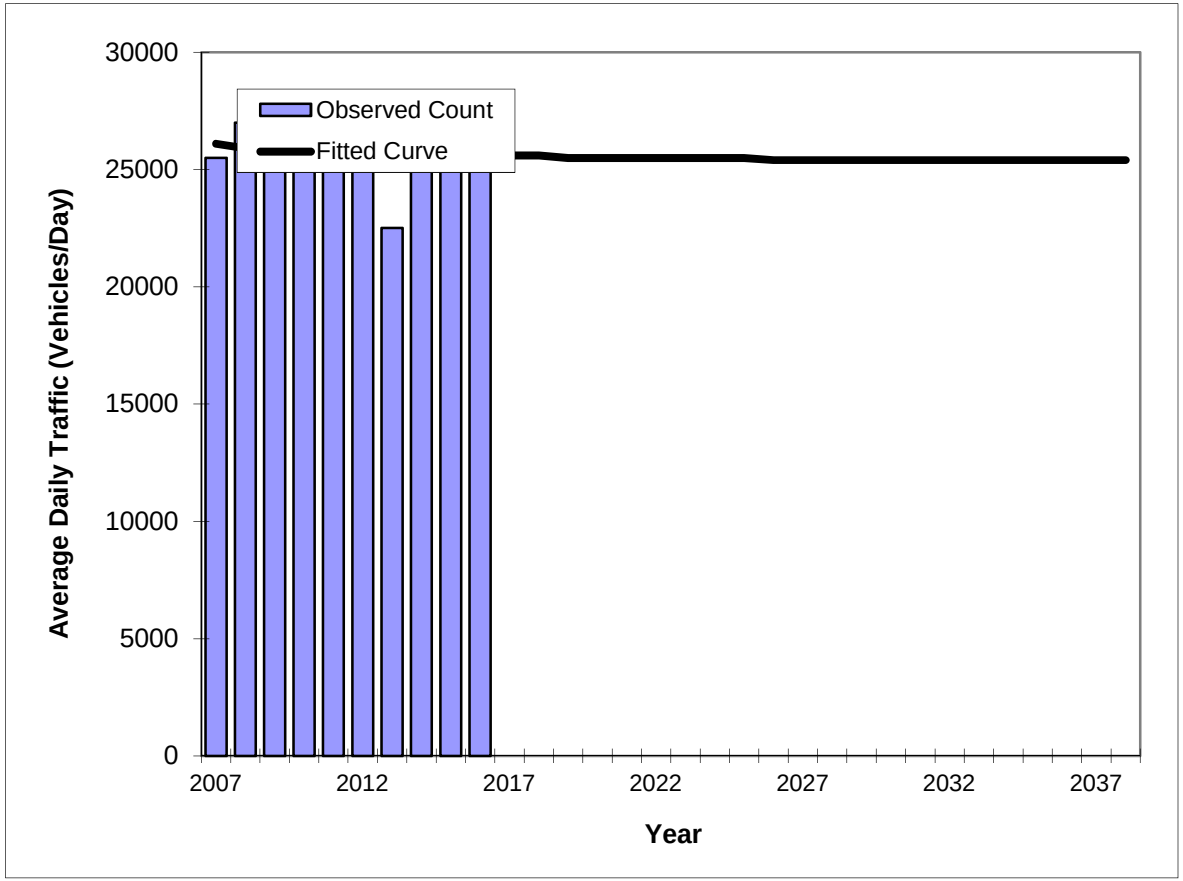
Decaying Exponential Growth Option

*Axle-Adjusted

Traffic Trends

SR A1A/Collins Avenue -- North of 21st Street

County:	Miami (87)
Station #:	5170
Highway:	SR A1A/Collins Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	25500	26100
2008	27000	25900
2009	26500	25800
2010	25000	25800
2011	26500	25700
2012	25000	25700
2013	22500	25700
2014	27000	25600
2015	26500	25600
2016	26000	25600

*Axle-Adjusted

Trend R-squared:	1.21%
Compounded Annual Historic Growth Rate:	-0.21%
Printed:	24-Oct-17

Decaying Exponential Growth Option

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8414 - WASHINGTON AVE, 200 FT N OF 12 ST (2011 OFF SYSTEM CYCLE)

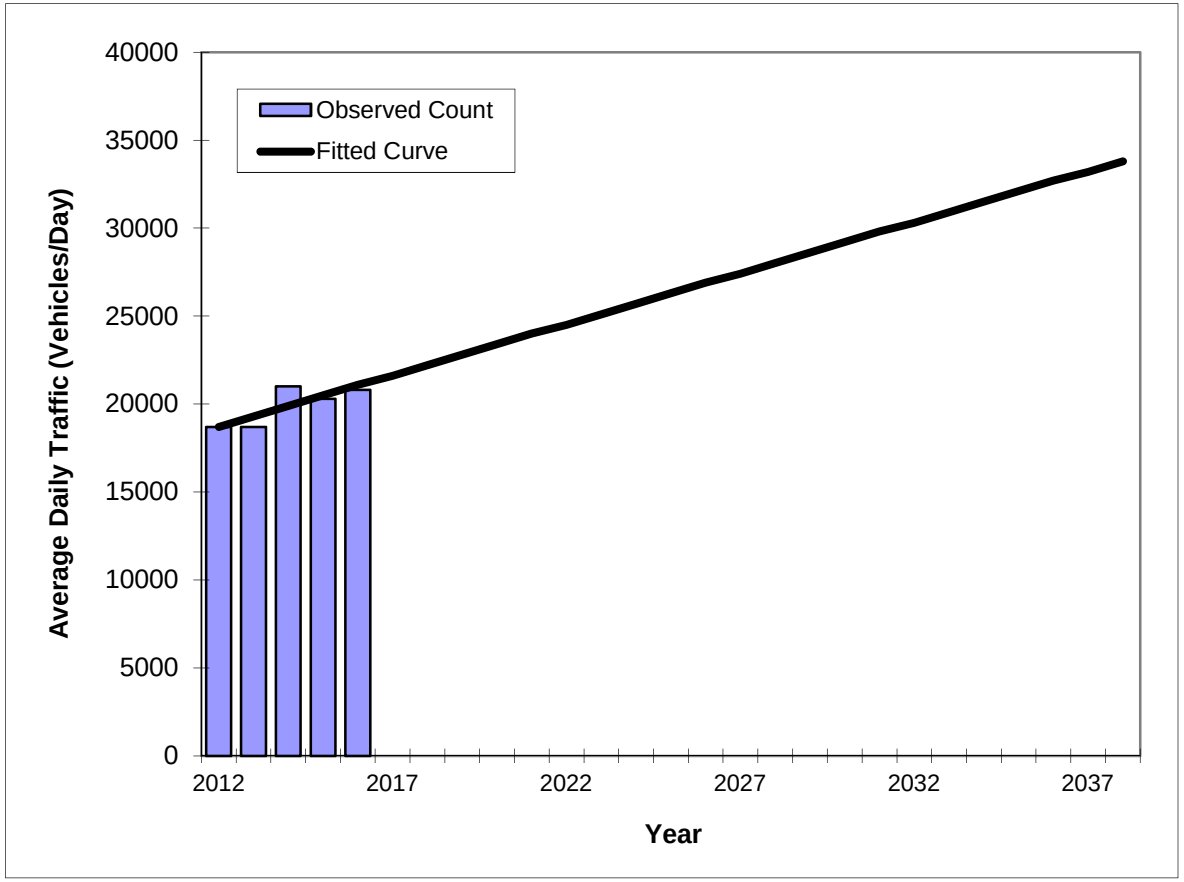
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2016	20800 C	N 9800	S 11000	9.00	56.10	1.90
2015	20300 C	N 9800	S 10500	9.00	57.40	17.50
2014	21000 C	N 10000	S 11000	9.00	59.30	13.90
2013	18700 F	N 9200	S 9500	9.00	58.90	16.20
2012	18700 C	N 9200	S 9500	9.00	59.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends

Washington Avenue -- 200 feet north of 12th Street

County:	Miami (87)
Station #:	8414
Highway:	Washington Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	18700	18700
2013	18700	19300
2014	21000	19900
2015	20300	20500
2016	20800	21100

Trend R-squared:	66.48%
Trend Annual Historic Growth Rate:	3.21%
Printed:	24-Oct-17

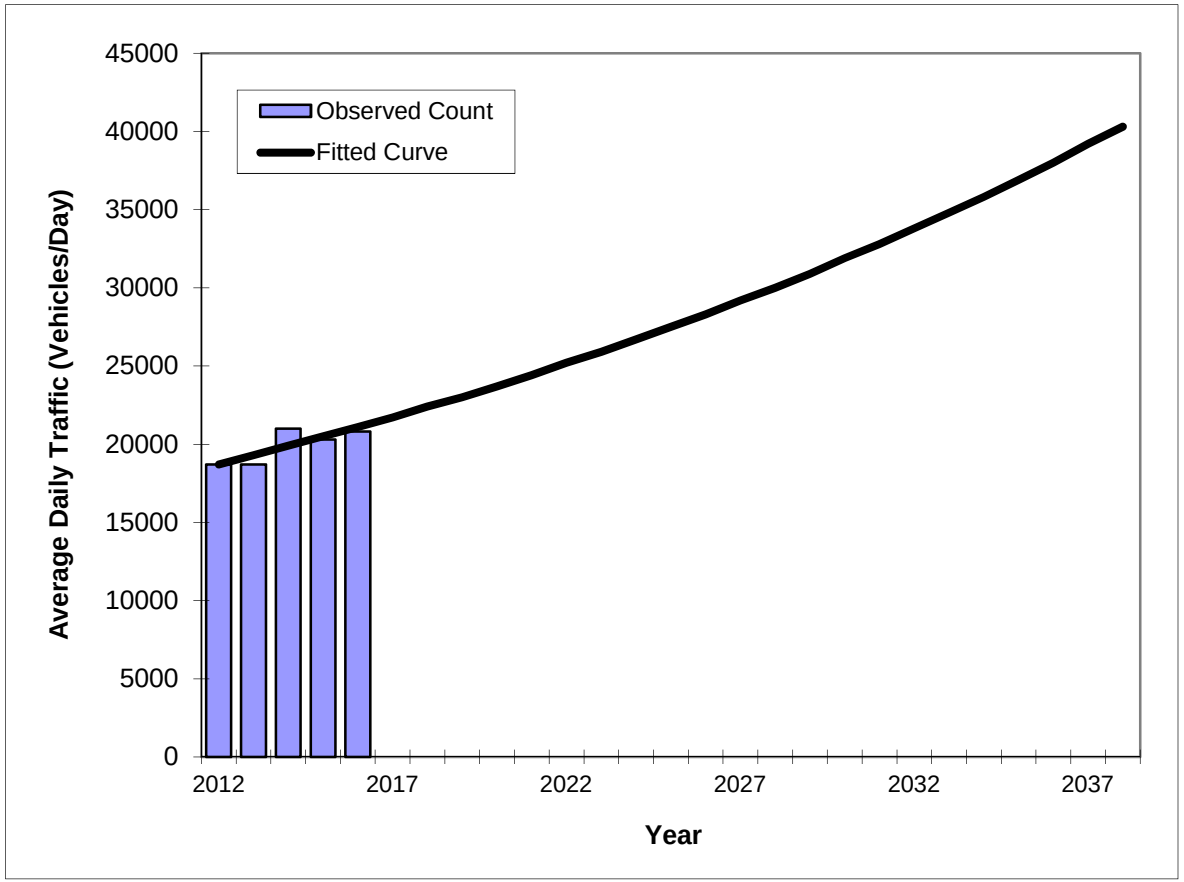
Straight Line Growth Option

*Axle-Adjusted

Traffic Trends

Washington Avenue -- 200 feet north of 12th Street

County:	Miami (87)
Station #:	8414
Highway:	Washington Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	18700	18700
2013	18700	19300
2014	21000	19900
2015	20300	20500
2016	20800	21100

Trend R-squared:	67.05%
Compounded Annual Historic Growth Rate:	3.06%
Printed:	24-Oct-17

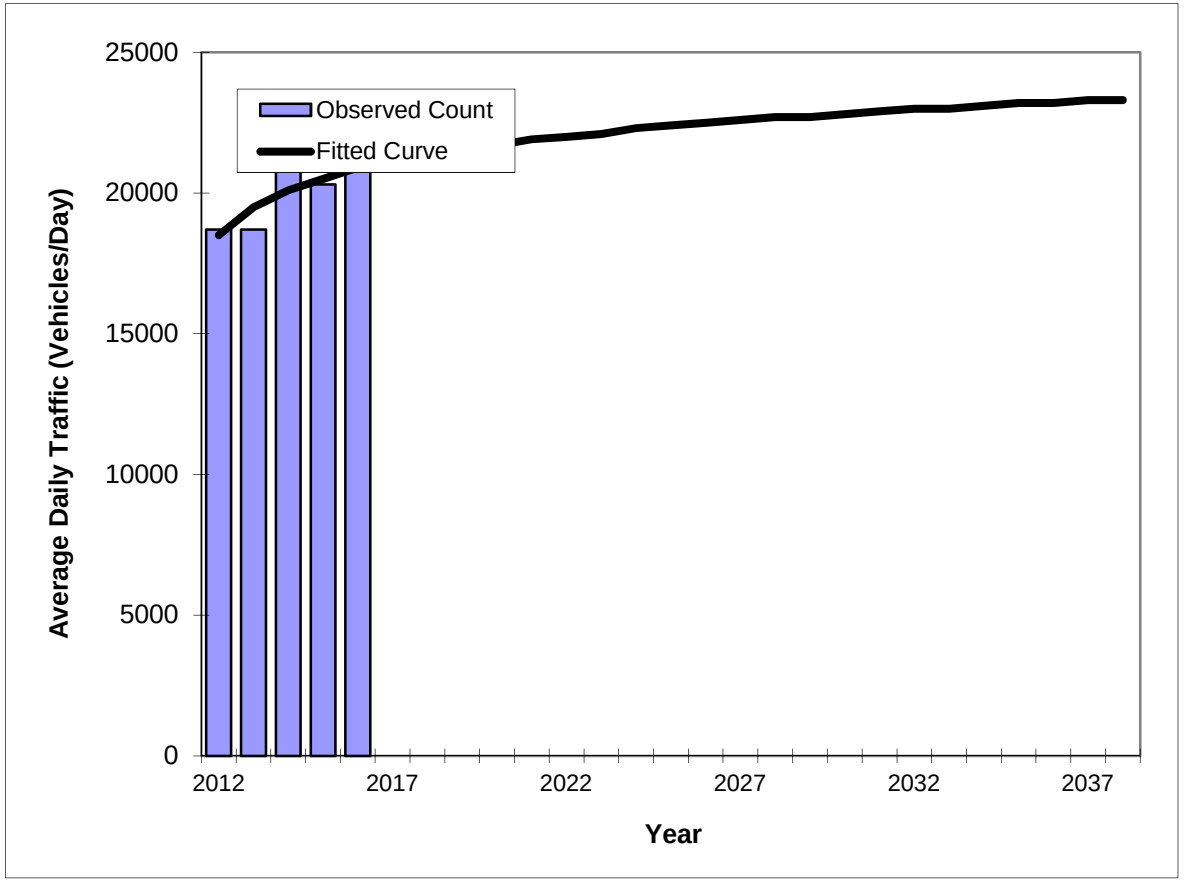
Exponential Growth Option

*Axle-Adjusted

Traffic Trends

Washington Avenue -- 200 feet north of 12th Street

County:	Miami (87)
Station #:	8414
Highway:	Washington Avenue



Year	Traffic (ADT/AADT) Count*	Trend**
2012	18700	18500
2013	18700	19500
2014	21000	20100
2015	20300	20500
2016	20800	20900

Trend R-squared:	69.28%
Compounded Annual Historic Growth Rate:	3.10%
Printed:	24-Oct-17

Decaying Exponential Growth Option

*Axle-Adjusted

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8531 - 17TH ST, 200' EAST OFMERIDIAN AVE (2011 OFF SYSTEM CYCLE)

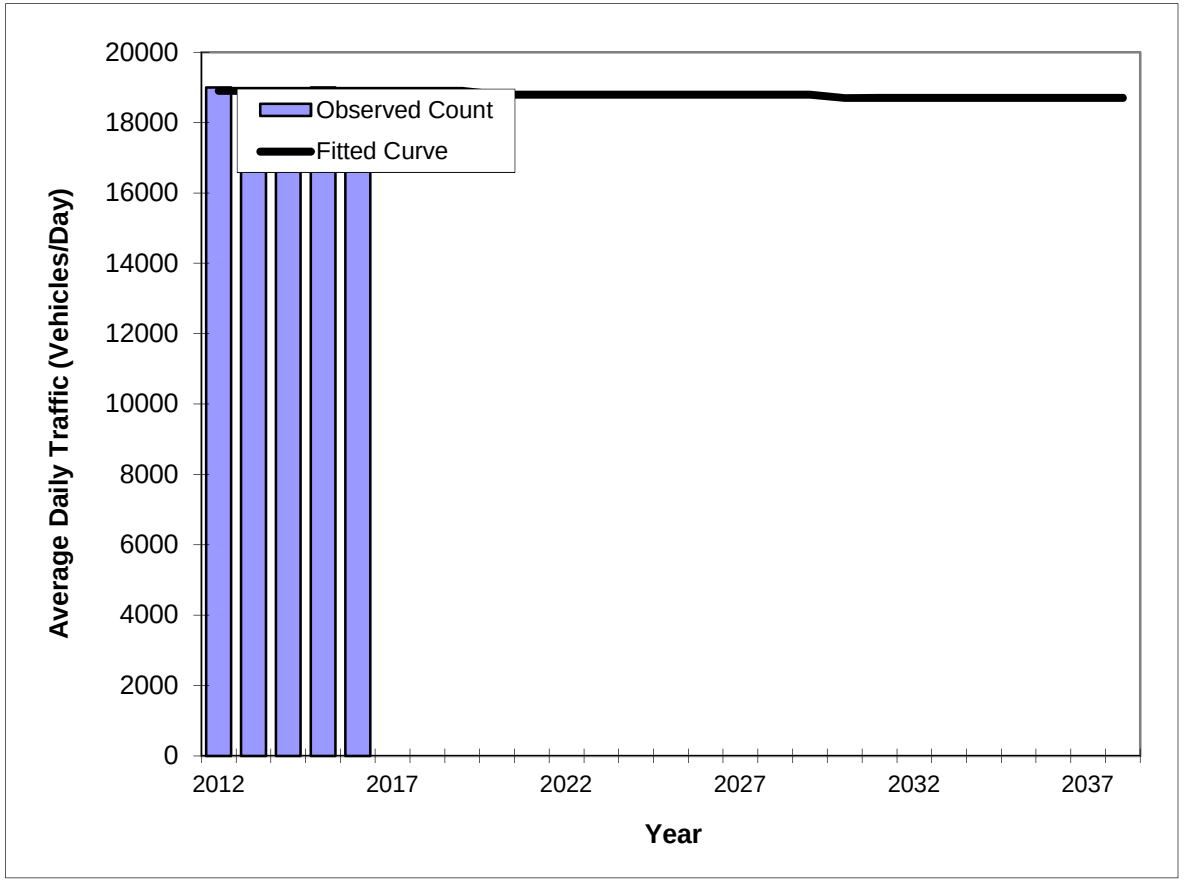
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2016	18900 F	E 8400	W 10500	9.00	56.10	5.10
2015	19000 C	E 8500	W 10500	9.00	57.40	7.10
2014	18700 S	E 9600	W 9100	9.00	59.30	10.70
2013	18900 F	E 9700	W 9200	9.00	58.90	16.20
2012	19000 C	E 9800	W 9200	9.00	59.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends

17th Street -- 200 feet east of Meridian Avenue

County:	Miami (87)
Station #:	8531
Highway:	17th Street



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	19000	18900
2013	18900	18900
2014	18700	18900
2015	19000	18900
2016	18900	18900

Trend R-squared:	1.67%
Trend Annual Historic Growth Rate:	0.00%
Printed:	24-Oct-17

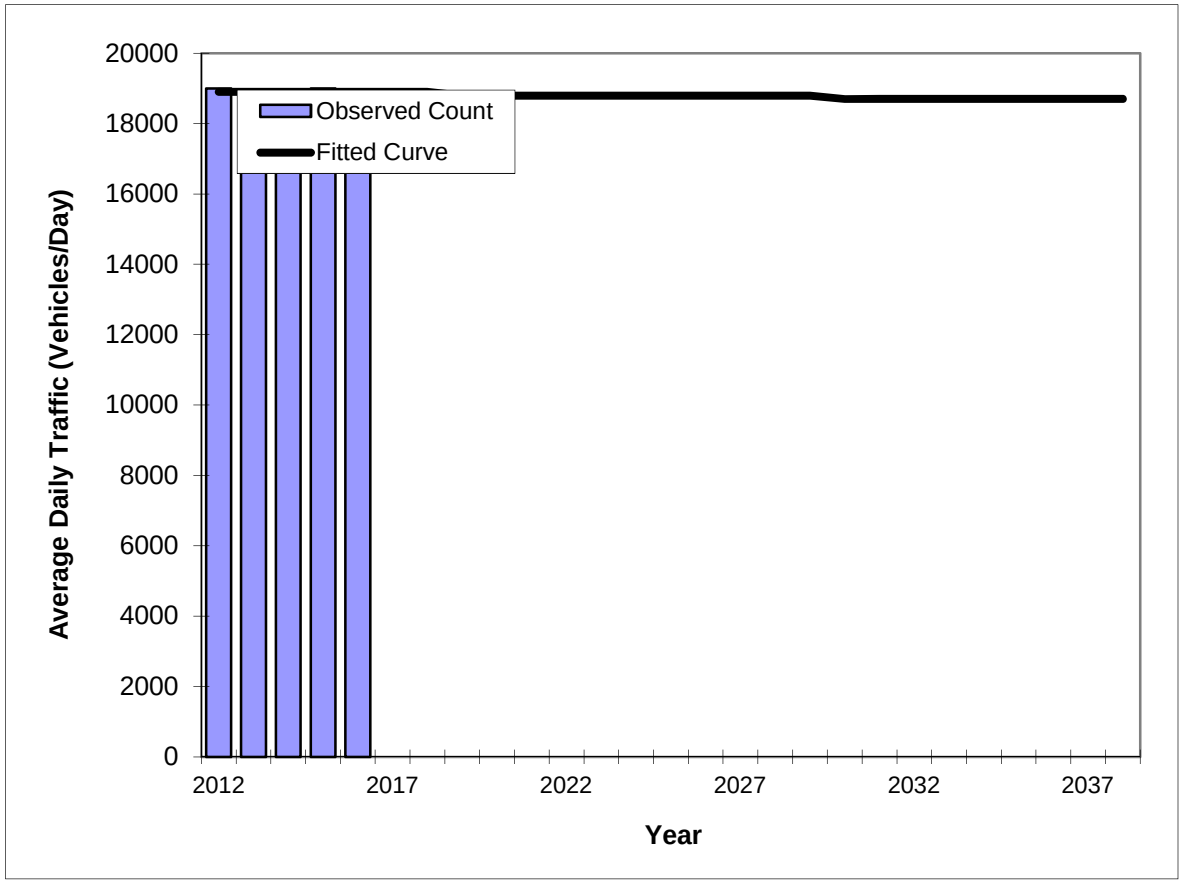
Straight Line Growth Option

*Axle-Adjusted

Traffic Trends

17th Street -- 200 feet east of Meridian Avenue

County:	Miami (87)
Station #:	8531
Highway:	17th Street



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	19000	18900
2013	18900	18900
2014	18700	18900
2015	19000	18900
2016	18900	18900

Trend R-squared:	1.65%
Compounded Annual Historic Growth Rate:	0.00%
Printed:	24-Oct-17

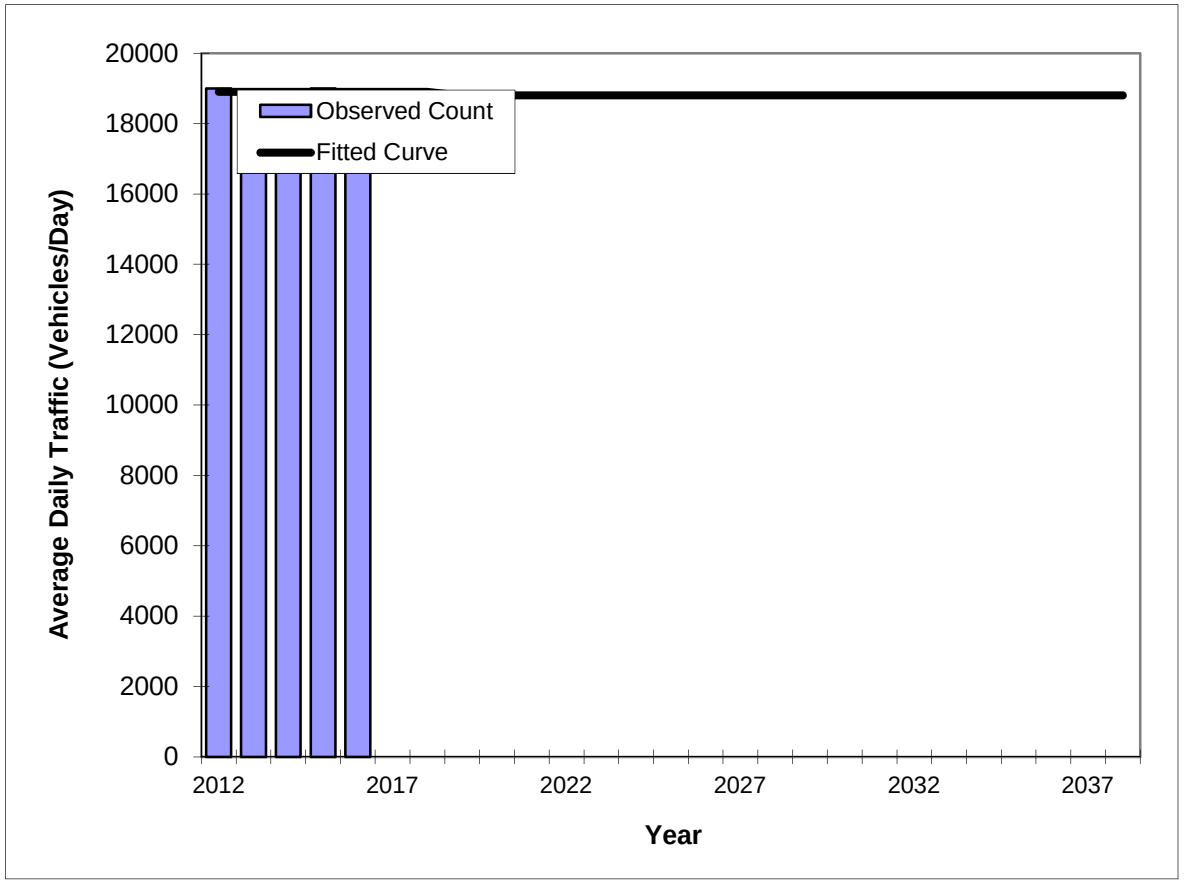
Exponential Growth Option

*Axle-Adjusted

Traffic Trends

17th Street -- 200 feet east of Meridian Avenue

County:	Miami (87)
Station #:	8531
Highway:	17th Street



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	19000	18900
2013	18900	18900
2014	18700	18900
2015	19000	18900
2016	18900	18900

Trend R-squared:	6.78%
Compounded Annual Historic Growth Rate:	0.00%
Printed:	24-Oct-17

Decaying Exponential Growth Option

*Axle-Adjusted

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8567 - 16 ST, 200' EAST OFMERIDIAN AVE (2011 OFF SYSTEM CYCLE)

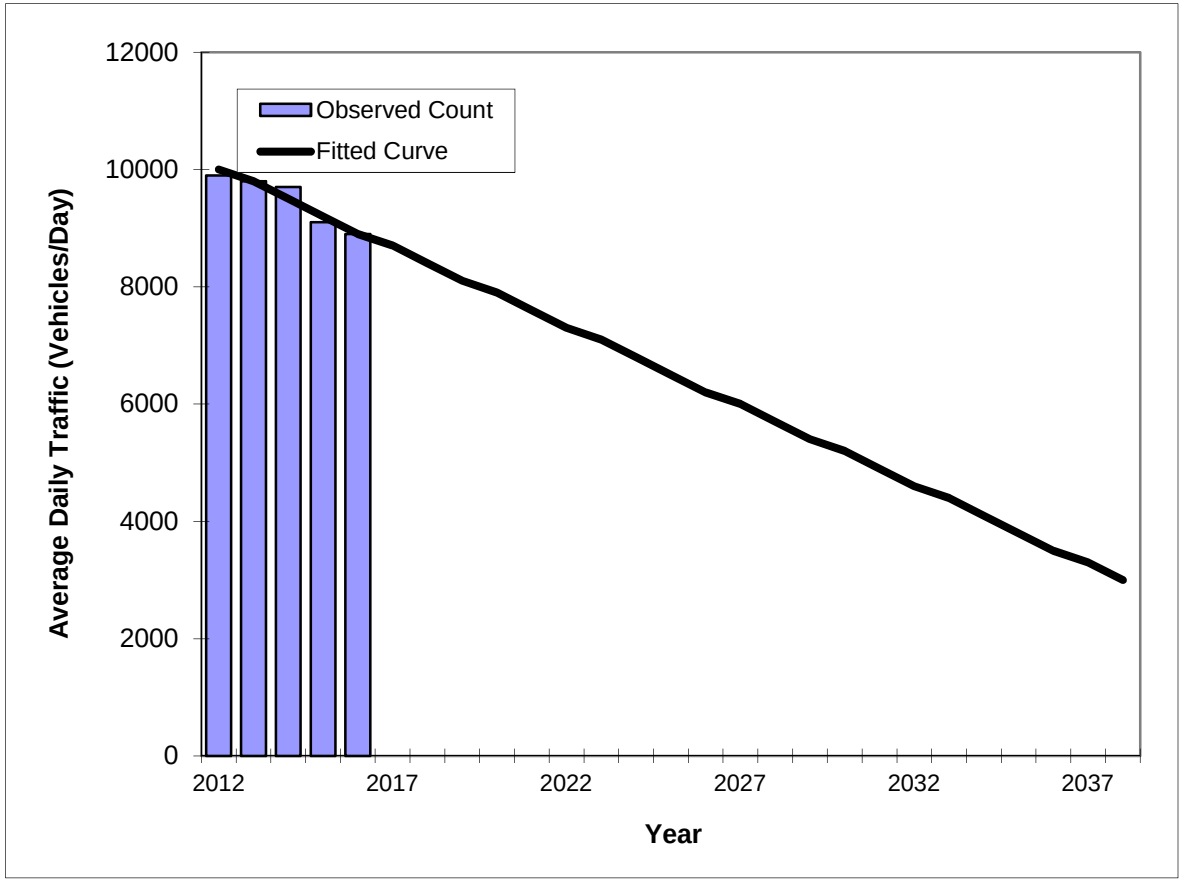
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2016	8900 F	E 4300	W 4600	9.00	56.10	5.10
2015	9100 C	E 4400	W 4700	9.00	57.40	7.10
2014	9700 S			9.00	59.30	10.70
2013	9800 F	0	0	9.00	58.90	16.20
2012	9900 C	E 0	W 0	9.00	59.70	16.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends

16th Street -- 200 feet east of Meridian Avenue

County:	Miami (87)
Station #:	8567
Highway:	16th Street



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9900	10000
2013	9800	9800
2014	9700	9500
2015	9100	9200
2016	8900	8900

Trend R-squared:	90.22%
Trend Annual Historic Growth Rate:	-2.75%
Printed:	24-Oct-17

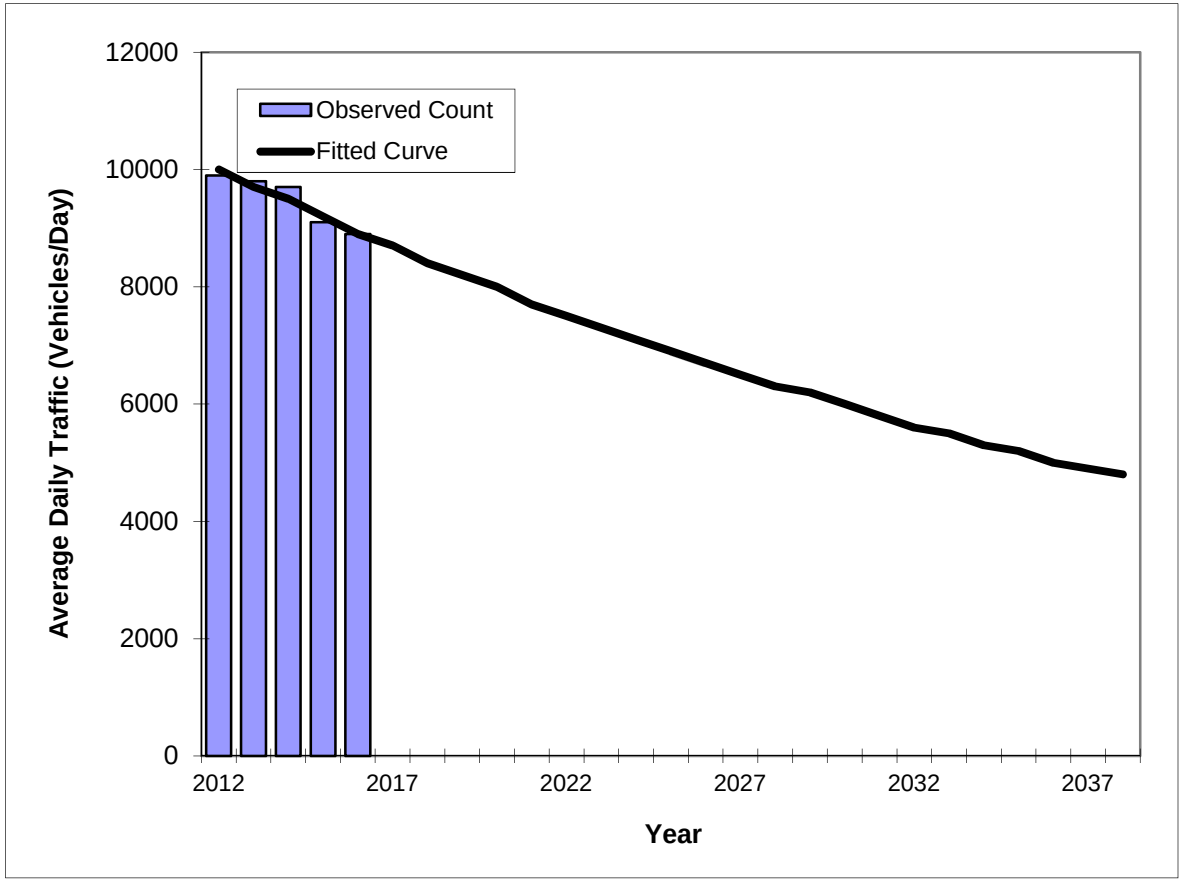
Straight Line Growth Option

*Axle-Adjusted

Traffic Trends

16th Street -- 200 feet east of Meridian Avenue

County:	Miami (87)
Station #:	8567
Highway:	16th Street



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9900	10000
2013	9800	9700
2014	9700	9500
2015	9100	9200
2016	8900	8900

Trend R-squared:	89.94%
Compounded Annual Historic Growth Rate:	-2.87%
Printed:	24-Oct-17

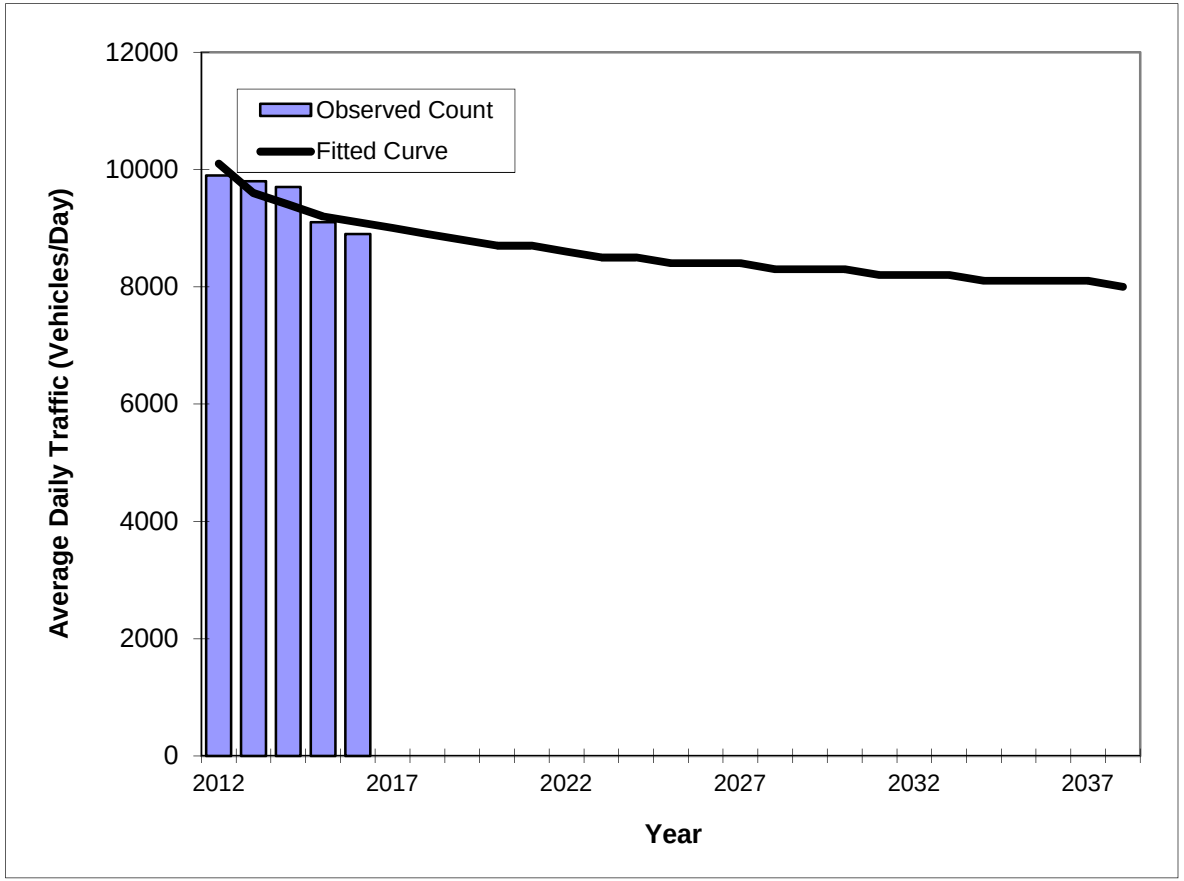
Exponential Growth Option

*Axle-Adjusted

Traffic Trends

16th Street -- 200 feet east of Meridian Avenue

County:	Miami (87)
Station #:	8567
Highway:	16th Street



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9900	10100
2013	9800	9600
2014	9700	9400
2015	9100	9200
2016	8900	9100

Trend R-squared:	76.11%
Compounded Annual Historic Growth Rate:	-2.57%
Printed:	24-Oct-17

Decaying Exponential Growth Option

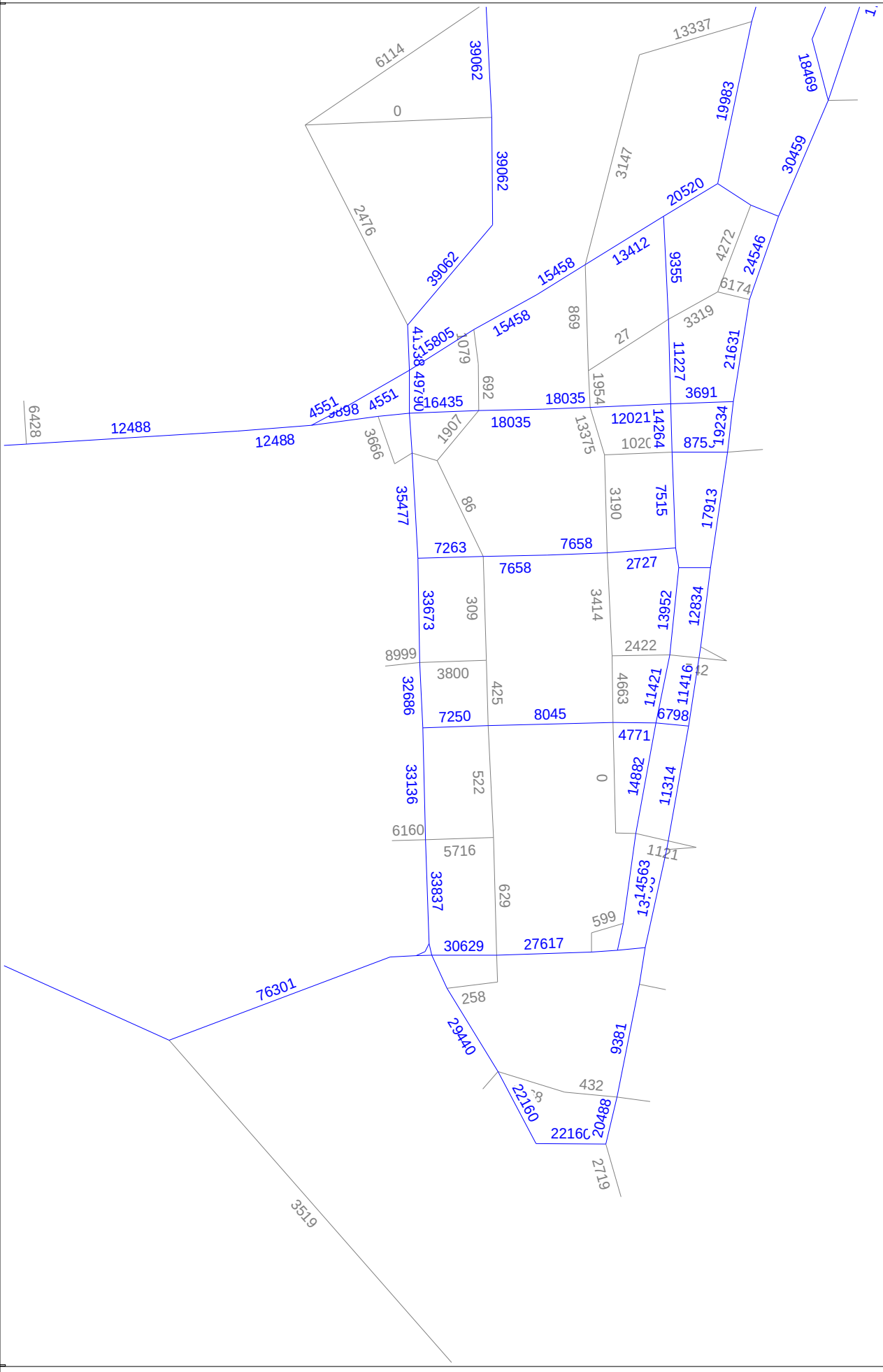
*Axle-Adjusted

SERPM Analysis

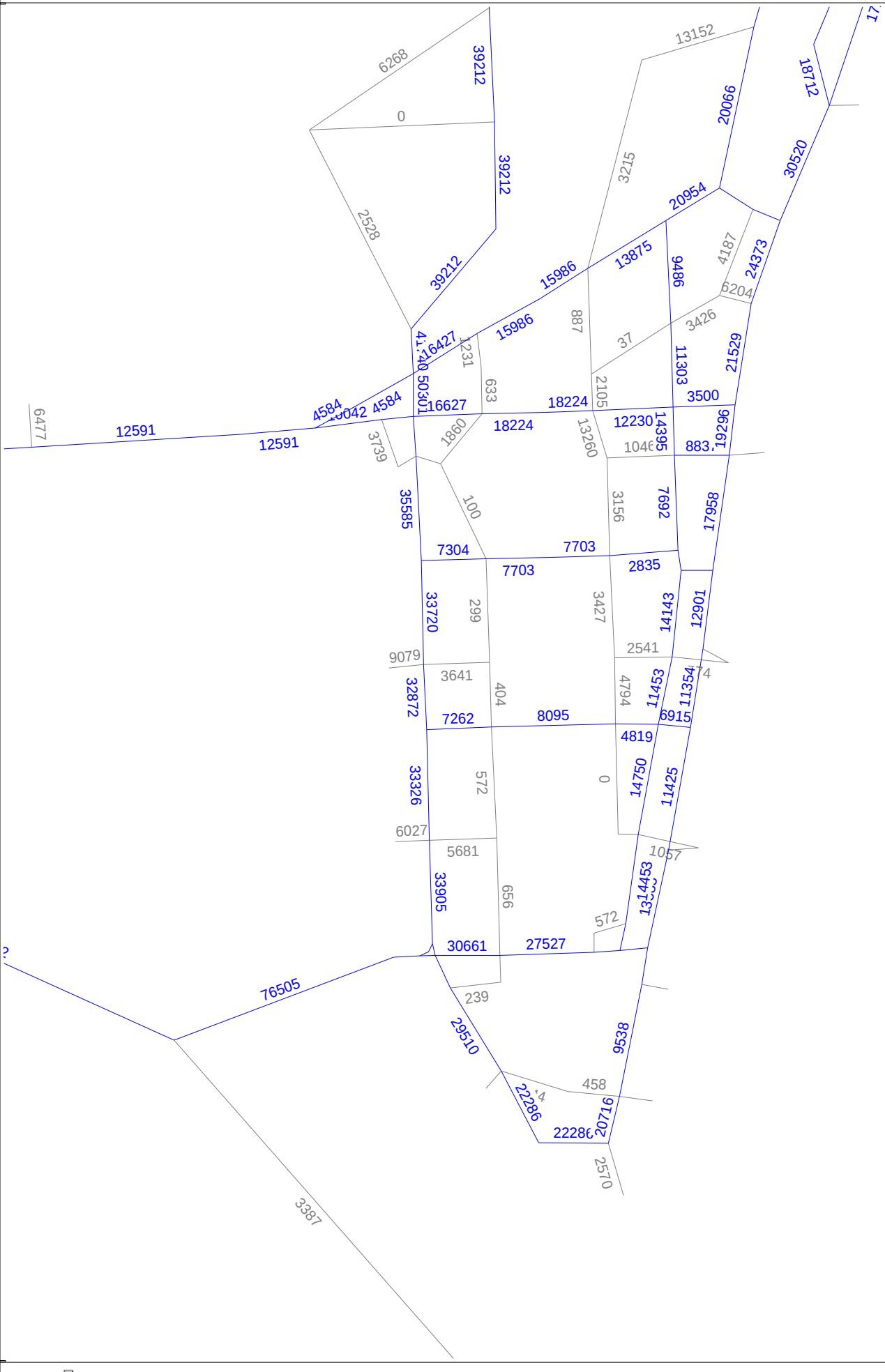
SERPM Growth Rate Summary

Street Name	2010	2040	Difference	Growth Rate	Annual Growth Rate
Washington Avenue	9,355	9,486	131	1.40%	0.05%
	11,227	11,303	76	0.68%	0.02%
	14,264	14,395	131	0.92%	0.03%
	7,515	7,692	177	2.36%	0.08%
SR A1A/Collins Avenue	24,546	24,373	-173	-0.70%	-0.02%
	21,631	21,529	-102	-0.47%	-0.02%
	19,234	19,296	62	0.32%	0.01%
	17,913	17,958	45	0.25%	0.01%
17th Street	12,021	12,230	209	1.74%	0.06%
	3,691	3,500	-191	-5.17%	-0.17%
Lincoln Road	8,759	8,837	78	0.89%	0.03%
15th Street	2,727	2,835	108	3.96%	0.13%
Total	152,883	153,434	551	0.36%	0.01%

SERPM 7.071
Base 2010



SERPM 7.071
CF2040



Appendix E

Committed Development Trip Information

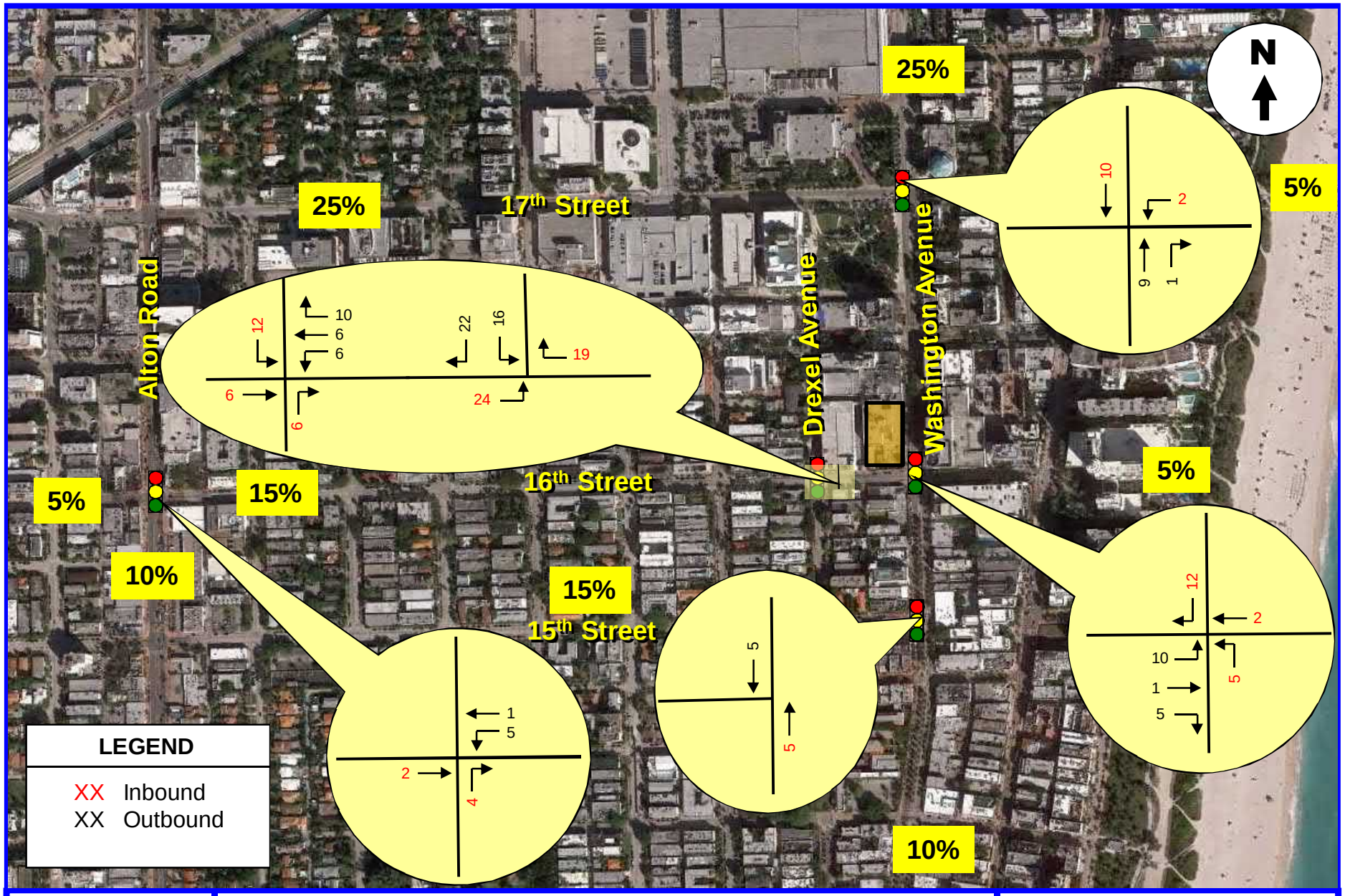
1600 Washington
Miami Beach, Florida

traffic study

prepared for:
1600 Washington

Traf Tech
ENGINEERING, INC.

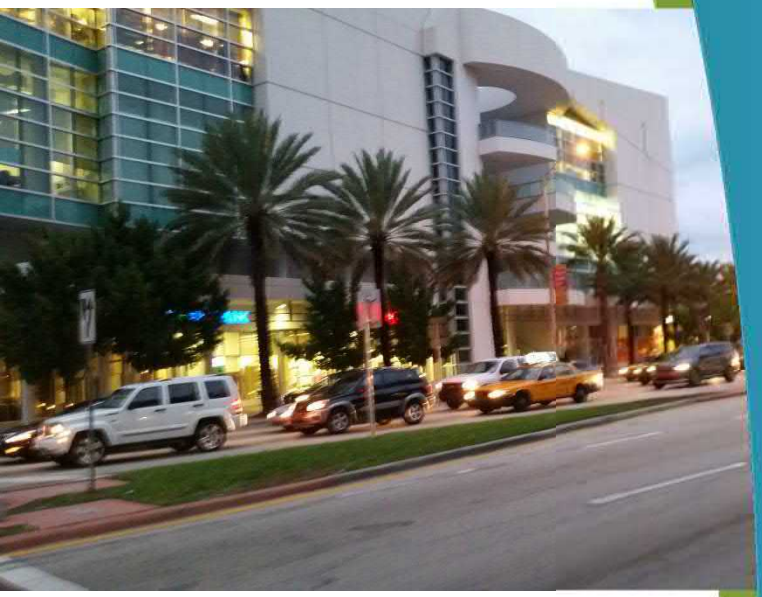
November 2017



Traf Tech ENGINEERING, INC.

PROJECT TRAFFIC ASSIGNMENT

FIGURE 4
1600 Washington
Miami Beach, Florida



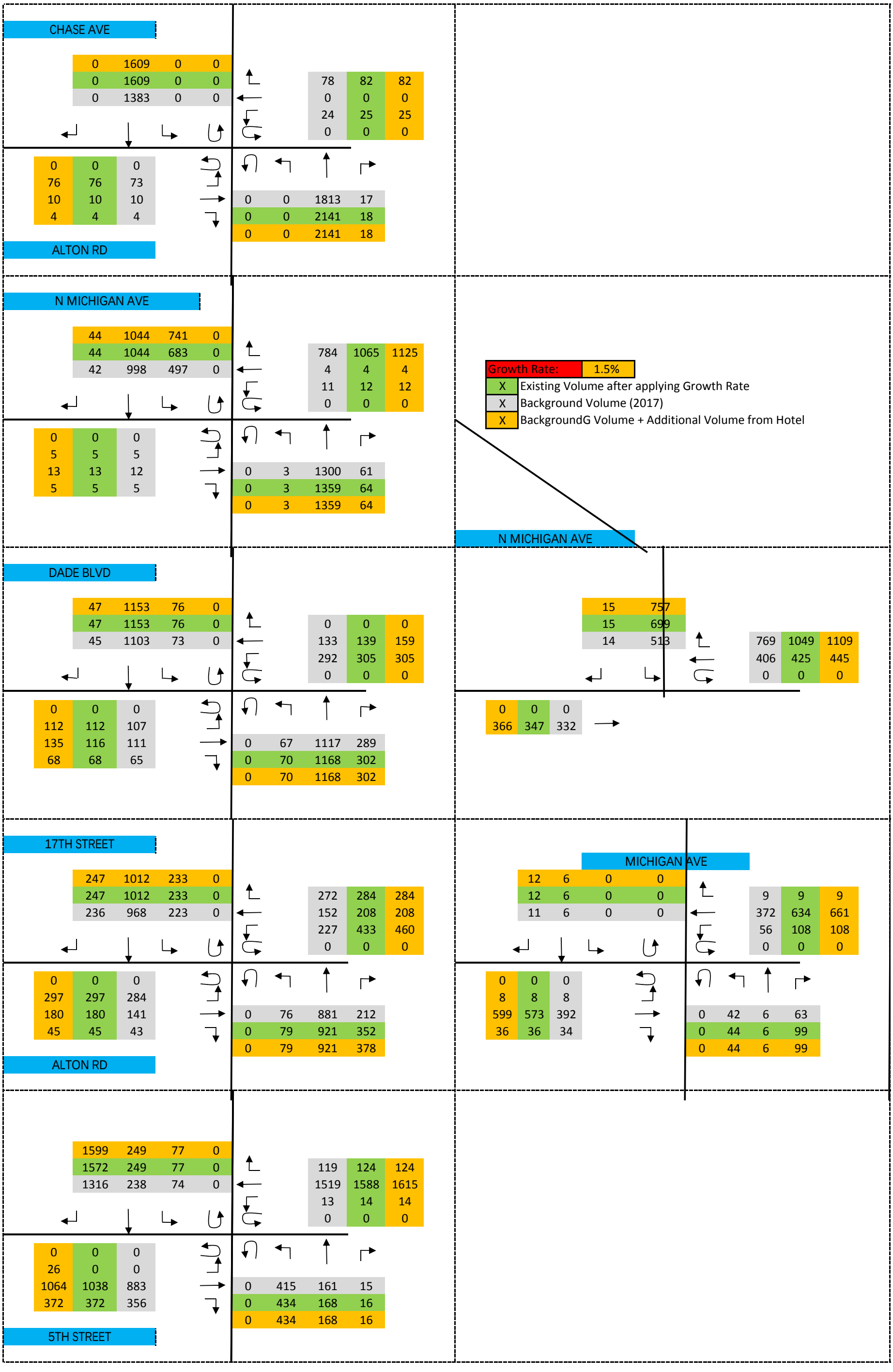
TRAFFIC IMPACT STUDY FINAL REPORT

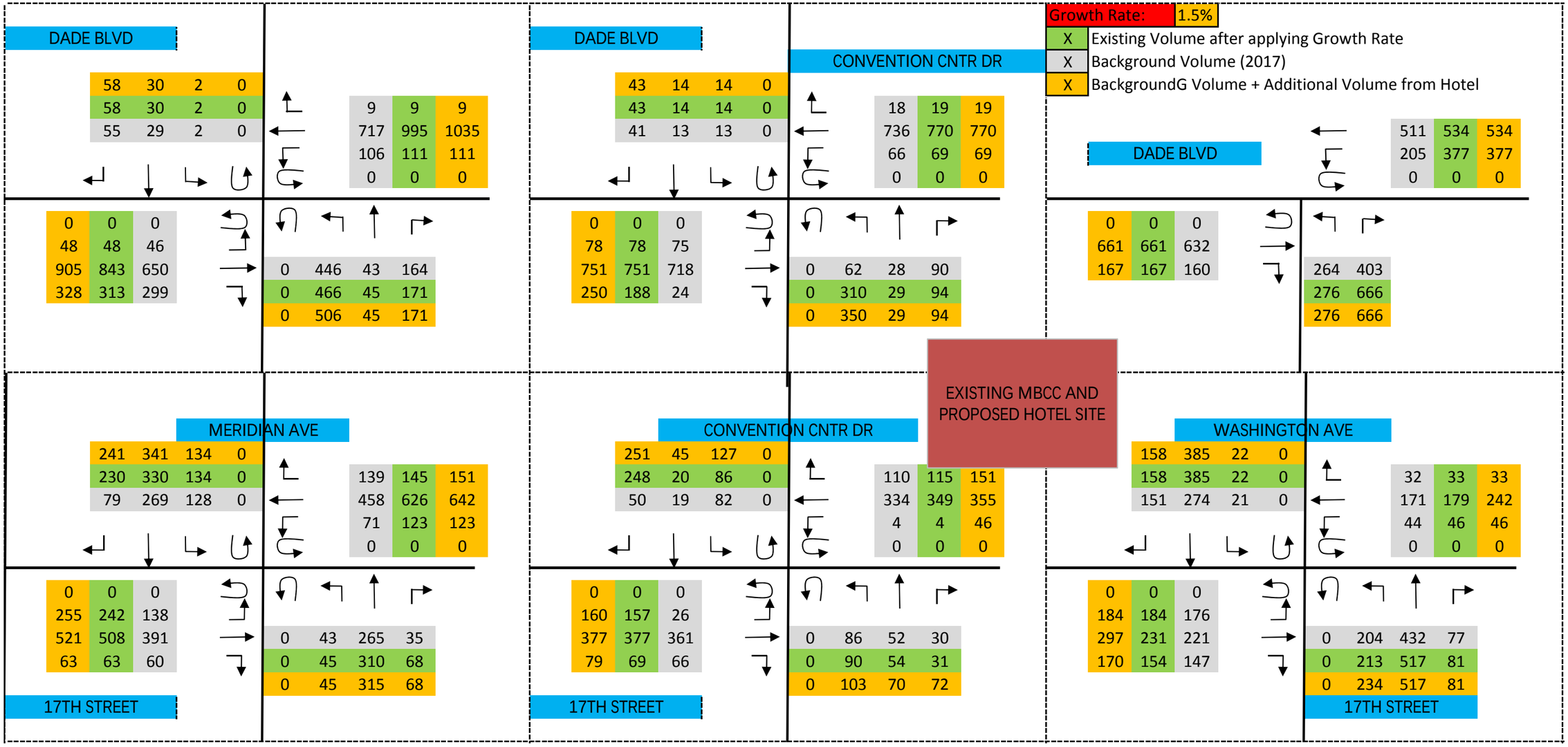
Miami Beach Convention Center Hotel
City of Miami Beach

Prepared for

City of Miami Beach
Transportation Department

December 2014


CHASE AVE
0 1609 0 0
0 1609 0 0
0 1383 0 0
78 82 82
0 0 0
24 25 25
0 0 0
0 0 0
76 76 73
10 10 10
4 4 4
0 0 1813 17
0 0 2141 18
0 0 2141 18
ALTON RD
N MICHIGAN AVE
44 1044 741 0
44 1044 683 0
42 998 497 0
784 1065 1125
4 4 4
11 12 12
0 0 0
0 0 0
5 5 5
13 13 12
5 5 5
0 3 1300 61
0 3 1359 64
0 3 1359 64
Growth Rate: 1.5%
X Existing Volume after applying Growth Rate
X Background Volume (2017)
X BackgroundG Volume + Additional Volume from Hotel
N MICHIGAN AVE
DADE BLVD
47 1153 76 0
47 1153 76 0
45 1103 73 0
0 0 0
133 139 159
292 305 305
0 0 0
0 0 0
112 112 107
135 116 111
68 68 65
0 67 1117 289
0 70 1168 302
0 70 1168 302
15 757
15 699
14 513
769 1049 1109
406 425 445
0 0 0
0 0 0
366 347 332
17TH STREET
MICHIGAN AVE
247 1012 233 0
247 1012 233 0
236 968 223 0
272 284 284
152 208 208
227 433 460
0 0 0
12 6 0 0
12 6 0 0
11 6 0 0
9 9 9
372 634 661
56 108 108
0 0 0
0 0 0
297 297 284
180 180 141
45 45 43
0 76 881 212
0 79 921 352
0 79 921 378
0 0 0
8 8 8
599 573 392
36 36 34
0 42 6 63
0 44 6 99
0 44 6 99
ALTON RD
1599 249 77 0
1572 249 77 0
1316 238 74 0
119 124 124
1519 1588 1615
13 14 14
0 0 0
0 0 0
26 0 0
1064 1038 883
372 372 356
0 415 161 15
0 434 168 16
0 434 168 16
5TH STREET

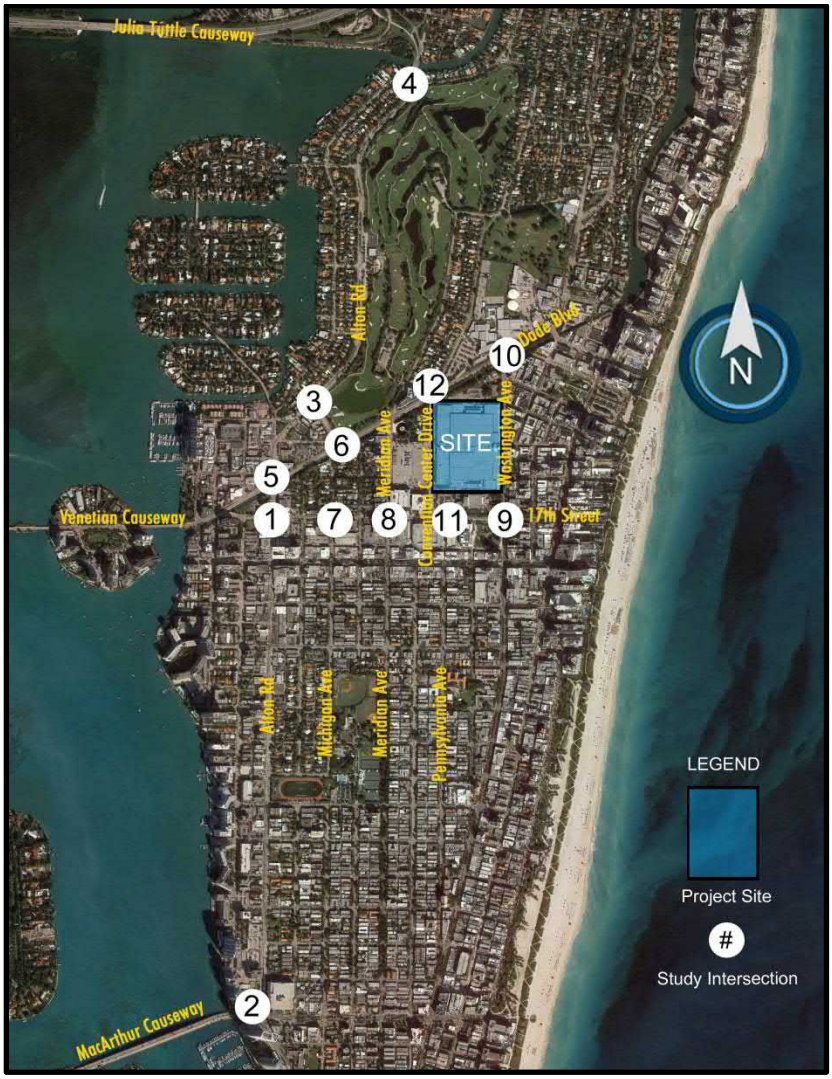


Traffic Volumes based on Growth Rates

BG+ALT5

TRAFFIC IMPACT STUDY

MIAMI BEACH CONVENTION CENTER
(CITY OF MIAMI BEACH, FL)



October 2014

PREPARED FOR

FENTRESS ARCHITECTS

Salman Rathore, P.E.
State of Florida Board of Professional Engineers
Professional Engineer License No. 75281

The Corradino Group
4055 N.W. 97th Avenue, Suite 200
Doral, Florida 33178

Figure – 7 Project Traffic Assignment

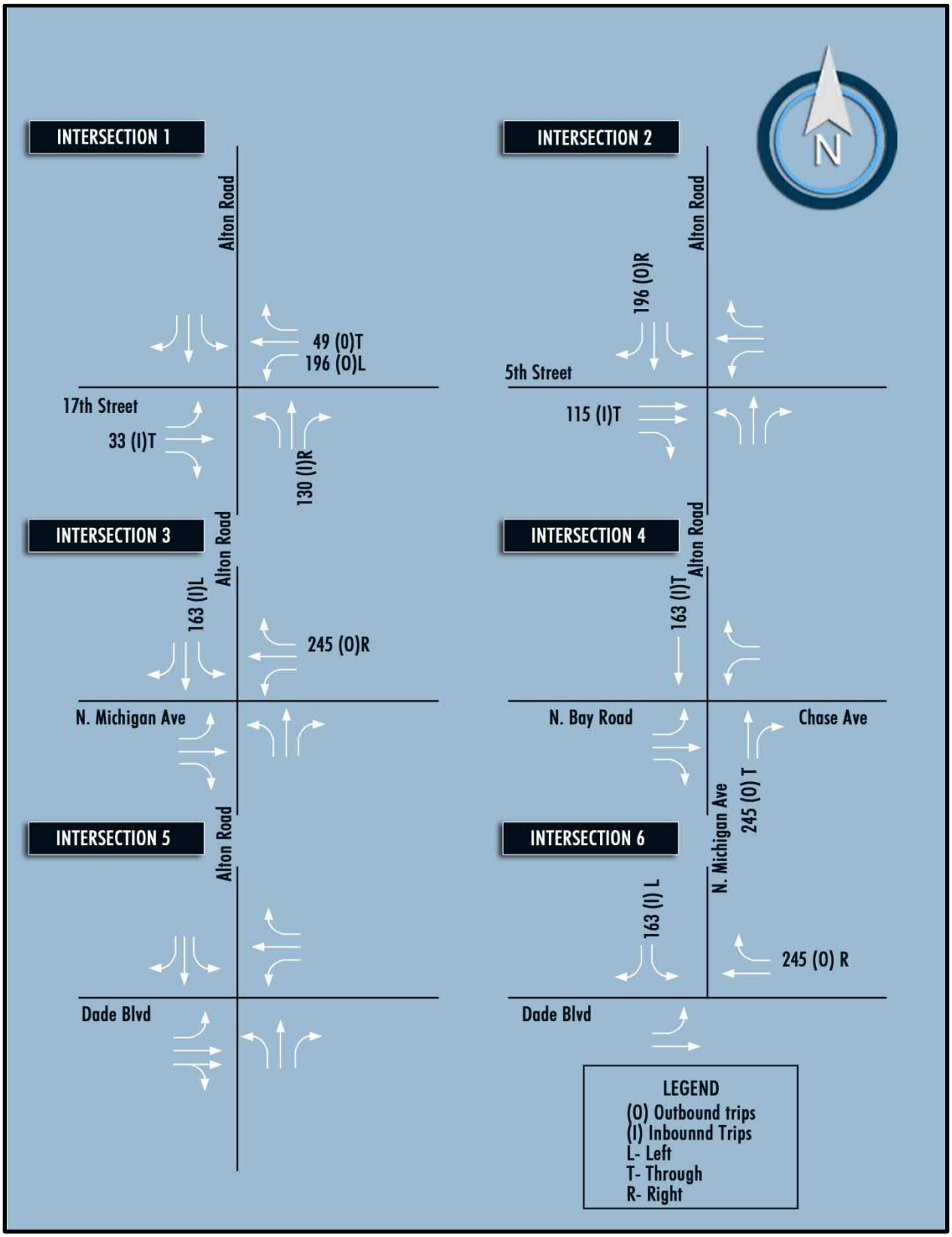
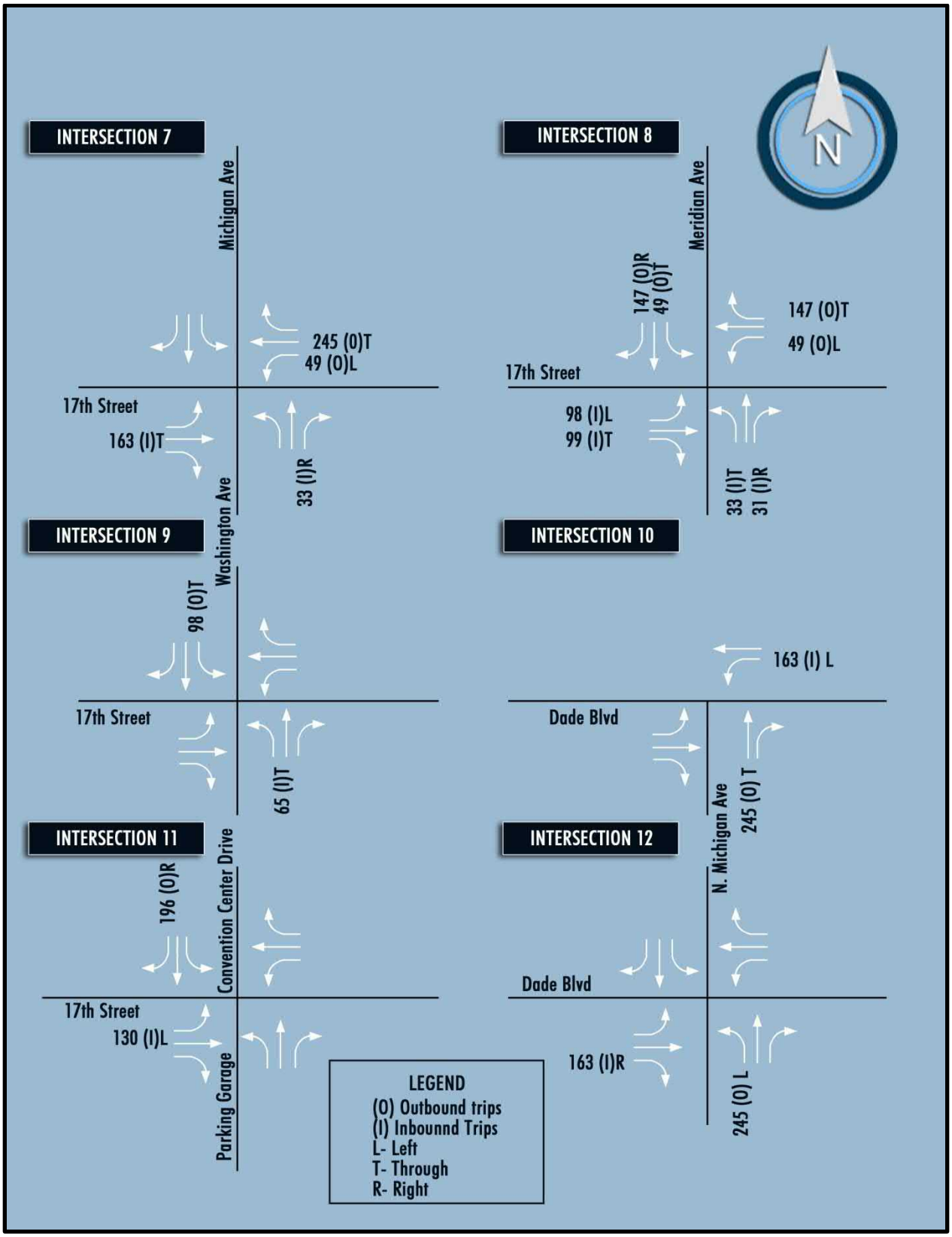


Figure – 8 Project Traffic Assignment



Appendix F

Trip Generation, Taxi Trip Data, and Transit Service Data

Trip Generation

PM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION[1]		BASELINE TRIPS			INTERNAL CAPTURE		DRIVEWAY TRIPS			PASS-BY CAPTURE		NET NEW TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Drive-In Bank	10	912	6.644	ksf	50%	50%	68	68	136	20.0%	27	54	55	109	0.0%	0	54	55	109	35.0%	38	35	36	71
	2																									
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				Total:	68	68	136	20.0%	27	54	55	109	0.0%	0	54	55	109	35.0%	38	35	36	71
		912		Y=20.45(X)																						

Note: [1]**Multimodal reduction based on census tract data from the US Census Bureau's *Means of Transportation to Work* survey.**

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION[1]		BASELINE TRIPS			INTERNAL CAPTURE		DRIVEWAY TRIPS			PASS-BY CAPTURE		NET NEW TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 2	1	Hotel	10	310	150	room	51%	49%	44	42	86	20.0%	17	35	34	69	10.1%	7	31	31	62	0.0%	0	31	31	62
	2	Shopping Center	10	820	2.429	ksf	48%	52%	17	18	35	20.0%	7	14	14	28	32.8%	9	10	9	19	34.0%	6	7	6	13
	3	Walk-in Bank	10	911	4	ksf	51%	49%	25	24	49	20.0%	10	20	19	39	32.8%	13	14	12	26	0.0%	0	14	12	26
	4	Quality Restaurant	10	931	295	seat	67%	33%	56	27	83	20.0%	16	45	22	67	34.3%	23	33	11	44	44.0%	20	18	6	24
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				Total:	142	111	253	19.6%	50	114	89	203	25.6%	52	88	63	151	19.5%	26	70	55	125
		310		Y=0.75*(X)+-26.02																						
		820		LN(Y) = 0.74*LN(X)+2.89																						
		911		Y=12.13(X)																						
		931		Y=0.28(X)																						

Note: [1]**Multimodal reduction based on census tract data from the US Census Bureau's *Means of Transportation to Work* survey.**

	IN	OUT	TOTAL
NET NEW TRIPS	**35**	**19**	**54**

	IN	OUT	TOTAL
PROPOSED EXTERNAL VEHICLE TRIPS	88	63	151
WALK-IN BANK SELF-PARK TRIPS	14	12	26
RETAIL TRIPS	10	9	19
PROPOSED HOTEL AND RESTAURANT VEHICLE TRIPS	64	42	106
42.6% TAXI/RIDESHARE TRIPS	27	18	45
PROPOSED VALET TRIPS (RETAIL, HOTEL, AND RESTAURANT)	**47**	**33**	**80**

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

	Land Use	P.M. Peak Hour	
		Enter	Exit
INPUT	Office		
	Retail	34	33
	Restaurant	45	22
	Cinema/Entertainment		
	Residential		
	Hotel	35	34
		114	89

INTERNAL TRIPS

	Land Use	P.M. Peak Hour	
		Enter	Exit
OUTPUT	Office	0	0
	Retail	10	12
	Restaurant	12	11
	Cinema/Entertainment	0	0
	Residential	0	0
	Hotel	4	3
		26	26

	Total % Reduction	***25.6%***
OUTPUT	Office	
	Retail	32.8%
	Restaurant	34.3%
	Cinema/Entertainment	
	Residential	
	Hotel	10.1%

EXTERNAL TRIPS

	Land Use	P.M. Peak Hour	
		Enter	Exit
OUTPUT	Office	0	0
	Retail	24	21
	Restaurant	33	11
	Cinema/Entertainment	0	0
	Residential	0	0
	Hotel	31	31
		88	63

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.

(105 + 183) / 909 = 31.68%

	Census Tract 42.06, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	909	+/-277
Car, truck, or van:	524	+/-194
Drove alone	509	+/-193
Carpooled:	15	+/-16
In 2-person carpool	8	+/-11
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	7	+/-11
Public transportation (excluding taxicab):	105	+/-77
Bus or trolley bus	56	+/-51
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	49	+/-56
Railroad	0	+/-13
Ferryboat	0	+/-13
Taxicab	7	+/-11
Motorcycle	0	+/-13
Bicycle	0	+/-13
Walked	183	+/-123
Other means	25	+/-32
Worked at home	65	+/-42

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.

While the 2011-2015 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

Taxi Trip Data

Hotel and Restaurant Valet Drop-off and Pick-up Traffic Data Summary
Friday October 22, 2010

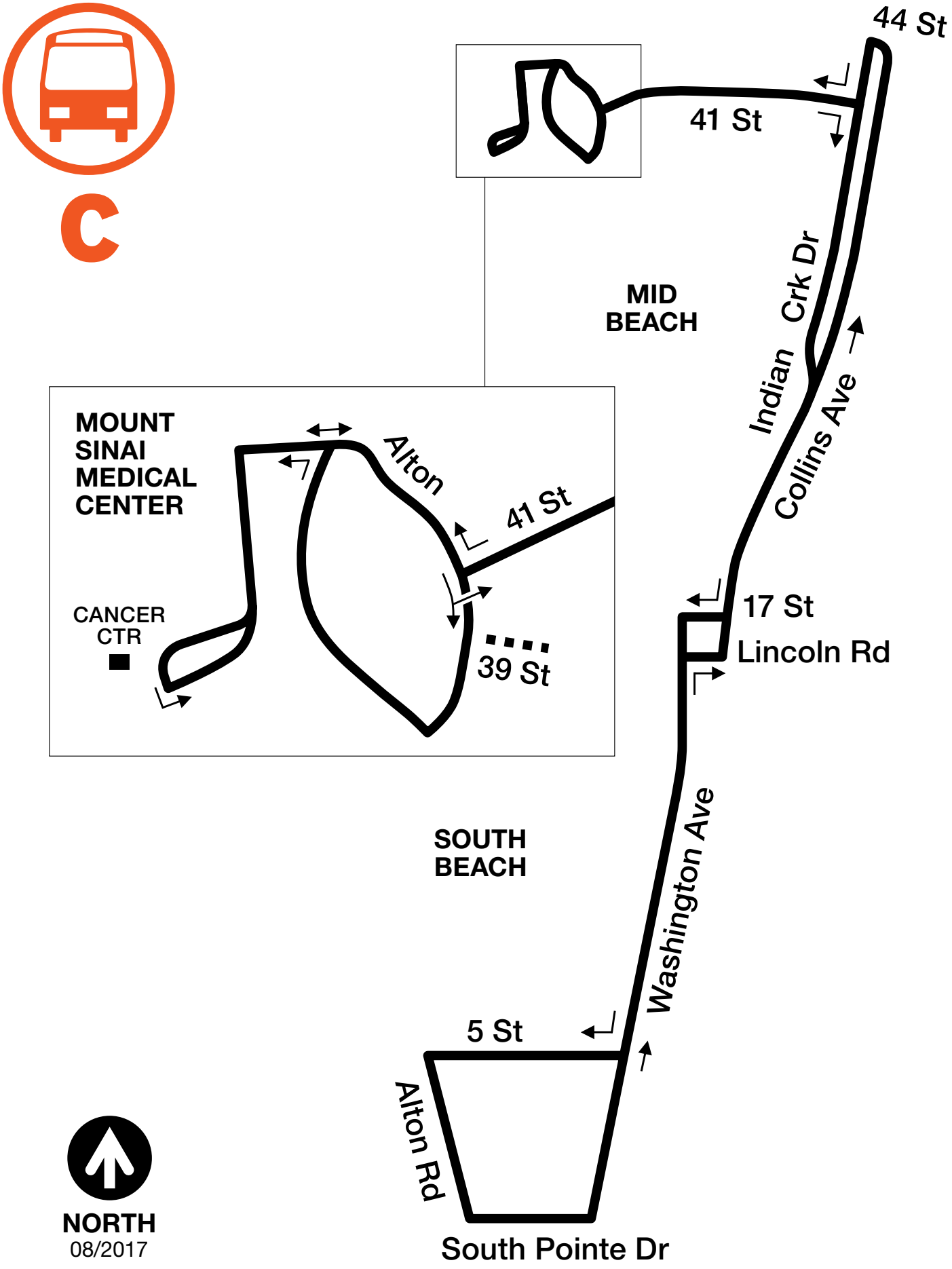
Hotel Valet Area Observations									
Time	Hotel Pick-up Maximum Queue	Hotel Pick-Up Volume	Hotel Pick-Up Peak Hour Volume	Hotel Drop-off Maximum Queue	Hotel Drop-off Volume	Hotel Drop-Off Peak Hour Volume	Total Hotel Volume		Total Hotel Peak Hour Volume
18:00	0	0		3	18		18		
18:15	2	4		2	3		7		
18:30	2	6		3	7		13		
18:45	4	23	40	4	13	37	36		77
19:00	3	9		1	3		12		
19:15	2	6		2	7		13		
19:30	1	2		3	14		16		
19:45	0	0		2	4		4		
20:00	1	3		2	7		10		
20:15	1	3		1	2		5		
20:30	3	11		2	7		18		
20:45	3	13		2	6		19		

Restaurant Valet Area Observations						
Time	Restaurnt Pick-up Maximum Queue	Restaurant Pick-Up Volume	Restaurant Pick-Up Peak Hour Volume	Restaurant Drop-off Maximum Queue	Restaurant Drop-off Volume	Restaurant Drop-off Peak Hour Volume
18:00	5	17		0	0	
18:15	4	13		2	7	8
18:30	3	9		0	0	
18:45	3	18		0	0	
19:00	4	15		1	1	
19:15	4	14		1	1	
19:30	5	18		1	1	
19:45	6	27		1	2	
20:00	5	18	81	1	1	
20:15	5	15		0	0	
20:30	5	15		0	1	
20:45	6	33		0	0	

Taxi vs Valet Trips									
Time	Valet Pick-up Trips	Valet Drop-off Trips	Total Valet Trips	Taxi Pick-up Trips	Taxi Drop-off Trips	Total Taxi Pick-up Trips	Total Site Pick-up Trips	Total Site Drop-off Trips	Total Site Trips
18:00	1	11	12	16	7	23	17	18	35
18:15	5	6	11	12	4	16	17	10	27
18:30	3	3	6	12	4	16	15	7	22
18:45	32	10	42	9	3	12	41	13	54
19:00	17	1	18	7	3	10	24	4	28
19:15	12	5	17	8	3	11	20	8	28
19:30	12	12	24	8	3	11	20	15	35
19:45	20	4	24	7	2	9	27	6	33
20:00	10	4	14	11	4	15	21	8	29
20:15	3	1	4	15	1	16	18	2	20
20:30	15	4	19	11	4	15	26	8	34
20:45	35	2	37	11	4	15	46	6	52

Taxi Trips Observed 42.6%

Transit Service Data


C
44 St
41 St
MID
BEACH
Indian Crk Dr
Collins Ave
MOUNT
SINAI
MEDICAL
CENTER
Alton
41 St
CANCER
CTR
39 St
17 St
Lincoln Rd
SOUTH
BEACH
Washington Ave
5 St
Alton Rd
South Pointe Dr
NORTH
08/2017

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Miami-Dade County Transportation and Public Works

Routes Schedule

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)

(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

)

103 (Northbound) WEEKDAY

ALTON RD & 2 ST MIAMI BEACH	Lincoln Rd & James Ave	INDIAN CREEK DR & 43 ST	MT SINAI HOSPITAL	ALTON RD & 39 ST MIAMI BEACH
06:11AM	06:28AM	06:38AM	06:48AM	06:51AM
06:41AM	06:58AM	07:09AM	07:20AM	07:23AM
07:11AM	07:29AM	07:40AM	07:51AM	07:54AM
07:41AM	07:59AM	08:11AM	08:22AM	08:25AM
08:11AM	08:29AM	08:41AM	08:52AM	08:55AM
08:41AM	08:59AM	09:13AM	09:25AM	09:28AM
09:11AM	09:31AM	09:45AM	09:57AM	10:00AM
09:41AM	10:01AM	10:15AM	10:27AM	10:30AM
10:11AM	10:31AM	10:45AM	10:57AM	11:00AM
10:41AM	11:01AM	11:15AM	11:27AM	11:30AM
11:11AM	11:31AM	11:45AM	11:57AM	12:00PM
11:41AM	12:01PM	12:15PM	12:27PM	12:30PM
12:11PM	12:31PM	12:45PM	12:57PM	01:00PM
12:41PM	01:01PM	01:15PM	01:27PM	01:30PM
01:11PM	01:31PM	01:45PM	01:57PM	02:00PM
01:41PM	02:01PM	02:15PM	02:27PM	02:30PM
02:11PM	02:31PM	02:45PM	02:57PM	03:00PM
02:41PM	03:01PM	03:15PM	03:27PM	03:30PM
03:11PM	03:31PM	03:45PM	03:57PM	04:00PM
03:41PM	04:01PM	04:15PM	04:28PM	04:31PM

04:11PM	04:31PM	04:45PM	04:58PM	05:01PM
04:41PM	05:01PM	05:15PM	05:28PM	05:31PM
05:11PM	05:31PM	05:45PM	05:58PM	06:01PM
05:41PM	06:01PM	06:15PM	06:28PM	06:31PM
06:11PM	06:31PM	06:45PM	06:58PM	-
06:41PM	07:01PM	07:11PM	07:22PM	07:25PM
07:11PM	07:29PM	07:39PM	07:50PM	-
07:41PM	07:59PM	08:09PM	08:20PM	08:23PM
08:26PM	08:44PM	08:54PM	09:05PM	09:08PM
09:11PM	09:29PM	09:39PM	09:50PM	09:53PM
09:56PM	10:14PM	10:25PM	10:34PM	-

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Miami-Dade County Transportation and Public Works

Routes Schedule

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)

(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

)

103 (Southbound) WEEKDAY

ALTON RD & 39 ST MIAMI BEACH	MT SINAI HOSPITAL	INDIAN CREEK DR & 40 ST	WASHINGTON AVE & LINCOLN RD	ALTON RD & 2 ST MIAMI BEACH
-	06:12AM	06:20AM	06:28AM	06:40AM
-	06:41AM	06:49AM	06:57AM	07:10AM
07:05AM	07:08AM	07:18AM	07:27AM	07:40AM
07:34AM	07:37AM	07:47AM	07:56AM	08:10AM
-	08:05AM	08:16AM	08:26AM	08:40AM
08:29AM	08:32AM	08:43AM	08:53AM	09:10AM
08:57AM	09:00AM	09:12AM	09:23AM	09:40AM
09:27AM	09:30AM	09:42AM	09:53AM	10:10AM
09:57AM	10:00AM	10:12AM	10:23AM	10:40AM
10:27AM	10:30AM	10:42AM	10:53AM	11:10AM
10:57AM	11:00AM	11:12AM	11:23AM	11:40AM
11:27AM	11:30AM	11:42AM	11:53AM	12:10PM
11:57AM	12:00PM	12:12PM	12:23PM	12:40PM
12:27PM	12:30PM	12:42PM	12:53PM	01:10PM
12:57PM	01:00PM	01:12PM	01:23PM	01:40PM
01:27PM	01:30PM	01:42PM	01:53PM	02:10PM
01:57PM	02:00PM	02:12PM	02:23PM	02:40PM
02:27PM	02:30PM	02:42PM	02:53PM	03:10PM
02:57PM	03:00PM	03:12PM	03:23PM	03:40PM
03:27PM	03:30PM	03:42PM	03:53PM	04:10PM

03:56PM	03:59PM	04:11PM	04:23PM	04:40PM
04:25PM	04:29PM	04:41PM	04:53PM	05:10PM
04:55PM	04:59PM	05:11PM	05:23PM	05:40PM
05:25PM	05:29PM	05:41PM	05:53PM	06:10PM
05:55PM	05:59PM	06:11PM	06:23PM	06:40PM
06:25PM	06:29PM	06:41PM	06:53PM	07:10PM
07:03PM	07:06PM	07:16PM	07:26PM	07:40PM
07:48PM	07:51PM	08:01PM	08:11PM	08:25PM
08:33PM	08:36PM	08:46PM	08:56PM	09:10PM
09:18PM	09:21PM	09:31PM	09:41PM	09:55PM
10:06PM	10:09PM	10:18PM	10:27PM	10:40PM

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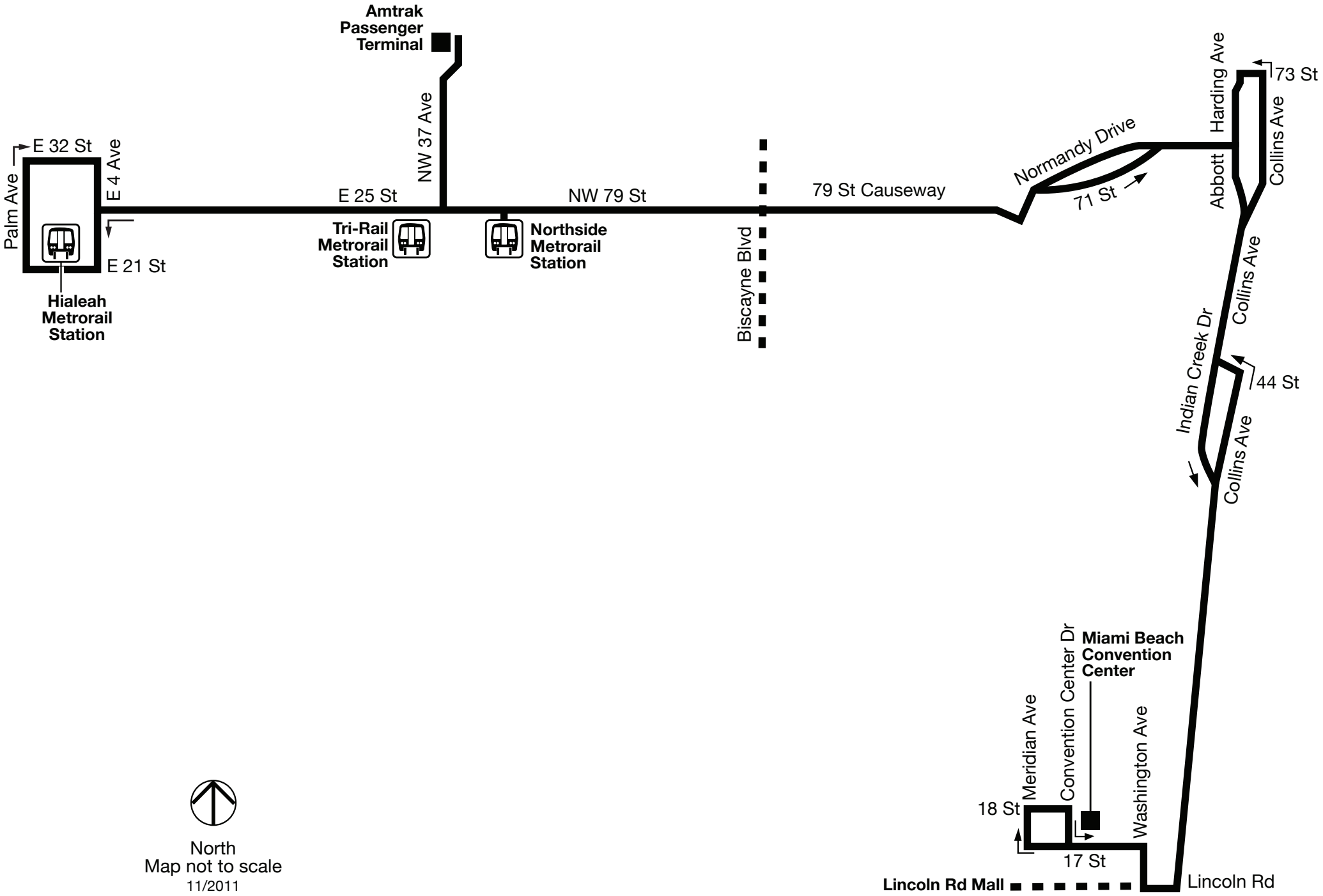
Page Last Edited: Mon Jan 30, 2017 2:39:07 PM

Route L


Amtrak
Passenger
Terminal
NW 37 Ave
E 32 St
E 4 Ave
Palm Ave
E 25 St
NW 79 St
79 St Causeway
Normandy Drive
71 St
Harding Ave
73 St
Collins Ave
Abbott
Tri-Rail
Metrorail
Station
Northside
Metrorail
Station
Biscayne Blvd
E 21 St
Hialeah
Metrorail
Station
Indian Creek Dr
Collins Ave
44 St
Collins Ave
Miami Beach
Convention
Center
Convention Center Dr
Meridian Ave
Washington Ave
18 St
17 St
Lincoln Rd Mall
Lincoln Rd
North
Map not to scale
11/2011

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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

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112 (Eastbound) WEEKDAY

HIALEAH METRORAIL STATION	NW 37 AVE AMTRAK STATION	NORTHSIDE METRORAIL STATION	NW 79 ST & NW 7 AV	NE 79 ST & BISCAYNE BLVD	ABBOTT AVE & 69 ST MIAMI BEACH	INDIAN CREEK DR & 40 ST	LINCOLN RD & WASHINGTON AVE	17 ST & CONVENTION CENTER DR
04:49AM	-	04:59AM	05:09AM	05:16AM	05:28AM	05:37AM	05:44AM	05:47AM
05:10AM	-	05:20AM	05:30AM	05:37AM	05:49AM	06:00AM	06:09AM	06:12AM
05:31AM	-	05:41AM	05:51AM	05:58AM	06:13AM	06:24AM	06:33AM	06:36AM
05:39AM	-	05:49AM	06:01AM	06:10AM	06:25AM	06:36AM	06:45AM	06:48AM
05:47AM	-	06:01AM	06:13AM	06:22AM	06:37AM	06:48AM	06:57AM	07:00AM
05:57AM	-	06:11AM	06:23AM	06:32AM	06:47AM	07:00AM	07:09AM	07:12AM
06:09AM	-	06:23AM	06:35AM	06:44AM	06:59AM	07:12AM	07:21AM	07:24AM
06:19AM	-	06:33AM	06:45AM	06:54AM	07:11AM	07:24AM	07:33AM	07:36AM
06:29AM	-	06:43AM	06:55AM	07:06AM	07:23AM	07:36AM	07:45AM	07:48AM
06:38AM	-	06:52AM	07:07AM	07:18AM	07:35AM	07:48AM	07:57AM	08:00AM
06:47AM	-	07:04AM	07:19AM	07:30AM	07:47AM	08:00AM	08:09AM	08:12AM
06:59AM	-	07:16AM	07:31AM	07:42AM	07:59AM	08:12AM	08:21AM	08:24AM
07:08AM	-	07:25AM	07:40AM	07:51AM	08:11AM	08:24AM	08:33AM	08:36AM
-	07:29AM	07:36AM	07:51AM	08:03AM	08:23AM	08:36AM	08:45AM	08:48AM
07:30AM	-	07:47AM	08:03AM	08:15AM	08:35AM	08:48AM	08:57AM	09:00AM
-	07:52AM	07:59AM	08:15AM	08:27AM	08:47AM	09:00AM	09:09AM	09:12AM
07:54AM	-	08:11AM	08:27AM	08:39AM	08:59AM	09:12AM	09:21AM	09:24AM
-	08:17AM	08:23AM	08:39AM	08:51AM	09:11AM	09:24AM	09:33AM	09:36AM
08:20AM	-	08:37AM	08:53AM	09:05AM	09:23AM	09:36AM	09:45AM	09:48AM

-	08:44AM	08:50AM	09:06AM	09:17AM	09:35AM	09:48AM	09:57AM	10:00AM
08:46AM	-	09:04AM	09:20AM	09:31AM	09:49AM	10:02AM	10:11AM	10:14AM
-	09:13AM	09:19AM	09:35AM	09:46AM	10:04AM	10:17AM	10:26AM	10:29AM
09:16AM	-	09:34AM	09:50AM	10:01AM	10:19AM	10:32AM	10:41AM	10:44AM
-	09:43AM	09:49AM	10:05AM	10:16AM	10:34AM	10:47AM	10:56AM	10:59AM
09:46AM	-	10:04AM	10:20AM	10:31AM	10:49AM	11:02AM	11:11AM	11:14AM
-	10:13AM	10:19AM	10:35AM	10:46AM	11:04AM	11:17AM	11:26AM	11:29AM
10:16AM	-	10:34AM	10:50AM	11:01AM	11:19AM	11:32AM	11:41AM	11:44AM
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10:46AM	-	11:04AM	11:20AM	11:31AM	11:49AM	12:02PM	12:11PM	12:14PM
-	11:13AM	11:19AM	11:35AM	11:46AM	12:04PM	12:17PM	12:26PM	12:29PM
11:16AM	-	11:34AM	11:50AM	12:01PM	12:19PM	12:32PM	12:41PM	12:44PM
-	11:43AM	11:49AM	12:05PM	12:16PM	12:34PM	12:47PM	12:56PM	12:59PM
11:46AM	-	12:04PM	12:20PM	12:31PM	12:49PM	01:02PM	01:11PM	01:14PM
-	12:13PM	12:19PM	12:35PM	12:46PM	01:04PM	01:17PM	01:26PM	01:29PM
12:16PM	-	12:34PM	12:50PM	01:01PM	01:19PM	01:32PM	01:41PM	01:44PM
-	12:43PM	12:49PM	01:05PM	01:16PM	01:34PM	01:47PM	01:56PM	01:59PM
12:46PM	-	01:04PM	01:20PM	01:31PM	01:49PM	02:02PM	02:11PM	02:14PM
-	01:14PM	01:20PM	01:36PM	01:47PM	02:05PM	02:18PM	02:27PM	02:30PM
01:17PM	-	01:35PM	01:51PM	02:02PM	02:20PM	02:33PM	02:42PM	02:45PM
01:45PM	-	02:03PM	02:19PM	02:30PM	02:48PM	03:01PM	03:09PM	03:12PM
-	01:45PM	01:51PM	02:07PM	02:18PM	02:36PM	02:49PM	02:58PM	03:01PM
-	-	02:14PM	02:30PM	02:41PM	02:59PM	03:12PM	03:20PM	03:23PM
-	02:19PM	02:25PM	02:41PM	02:52PM	03:10PM	03:23PM	03:31PM	03:34PM
02:19PM	-	02:37PM	02:53PM	03:05PM	03:22PM	03:35PM	03:43PM	03:46PM
02:43PM	-	03:02PM	03:19PM	03:31PM	03:48PM	04:01PM	04:09PM	04:12PM
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03:07PM	-	03:26PM	03:43PM	03:55PM	04:12PM	04:25PM	04:33PM	04:36PM
-	03:08PM	03:14PM	03:31PM	03:43PM	04:00PM	04:13PM	04:21PM	04:24PM
03:31PM	-	03:50PM	04:07PM	04:19PM	04:36PM	04:49PM	04:57PM	05:00PM
-	03:33PM	03:39PM	03:56PM	04:08PM	04:25PM	04:38PM	04:46PM	04:49PM
03:55PM	-	04:14PM	04:31PM	04:43PM	05:00PM	05:13PM	05:21PM	05:24PM
-	03:56PM	04:02PM	04:19PM	04:31PM	04:48PM	05:01PM	05:09PM	05:12PM
04:19PM	-	04:38PM	04:55PM	05:07PM	05:24PM	05:37PM	05:45PM	05:48PM
-	04:20PM	04:26PM	04:43PM	04:55PM	05:12PM	05:25PM	05:33PM	05:36PM
04:43PM	-	05:02PM	05:19PM	05:31PM	05:48PM	06:01PM	06:09PM	06:12PM
-	04:44PM	04:50PM	05:07PM	05:19PM	05:36PM	05:49PM	05:57PM	06:00PM

05:07PM	-	05:26PM	05:43PM	05:55PM	06:12PM	06:25PM	06:33PM	06:36PM
-	05:08PM	05:14PM	05:31PM	05:43PM	06:00PM	06:13PM	06:21PM	06:24PM
05:32PM	-	05:51PM	06:08PM	06:20PM	06:37PM	06:50PM	06:58PM	07:01PM
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05:57PM	-	06:16PM	06:33PM	06:45PM	07:02PM	07:13PM	07:22PM	07:25PM
-	06:25PM	06:31PM	06:48PM	07:00PM	07:15PM	07:26PM	07:35PM	07:38PM
06:30PM	-	06:49PM	07:06PM	07:16PM	07:31PM	07:42PM	07:51PM	07:54PM
-	06:56PM	07:02PM	07:17PM	07:27PM	07:42PM	-	-	-
07:02PM	-	07:17PM	07:32PM	07:42PM	07:57PM	08:08PM	08:17PM	08:20PM
-	07:30PM	07:35PM	07:50PM	08:00PM	08:14PM	-	-	-
07:41PM	-	07:56PM	08:11PM	08:20PM	08:34PM	08:44PM	08:53PM	08:56PM
08:08PM	08:21PM	08:25PM	08:38PM	08:47PM	09:01PM	09:11PM	09:20PM	09:23PM
08:45PM	-	08:58PM	09:11PM	09:20PM	09:34PM	09:44PM	09:53PM	09:56PM
09:23PM	09:36PM	09:40PM	09:53PM	10:02PM	10:16PM	10:26PM	10:35PM	10:38PM
09:45PM	-	09:58PM	10:11PM	10:20PM	10:34PM	10:44PM	10:53PM	10:56PM
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11:05PM	-	11:18PM	11:31PM	11:40PM	11:54PM	12:04AM	12:10AM	12:13AM
11:51PM	-	12:04AM	12:14AM	12:20AM	12:31AM	-	-	-
-	-	12:40AM	12:50AM	12:56AM	01:07AM	01:15AM	01:21AM	01:24AM
-	-	01:40AM	01:50AM	01:56AM	02:07AM	02:15AM	02:21AM	02:24AM
-	-	02:40AM	02:50AM	02:56AM	03:07AM	03:15AM	03:21AM	03:24AM
-	-	03:40AM	03:50AM	03:56AM	04:07AM	04:15AM	04:21AM	04:24AM
-	04:40AM	04:44AM	04:54AM	05:00AM	05:11AM	05:19AM	05:25AM	05:28AM

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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

)

112 (Westbound) WEEKDAY

17 ST & PENNSYLVANIA AV	Lincoln Rd & James Ave	COLLINS AVE & 41 ST	HARDING AVE & 72 ST	NE 79 ST & BISCAYNE BLVD	NW 79 ST & 7 AVE	NW 79 ST & 32 AVE	NW 37 AVE AMTRAK STATION	HIALEAH METRORAIL STATION
04:38AM	04:40AM	04:48AM	04:58AM	05:10AM	05:17AM	05:27AM	-	05:35AM
05:20AM	05:22AM	05:30AM	05:40AM	05:52AM	06:03AM	06:15AM	06:21AM	06:31AM
-	-	-	05:27AM	05:39AM	05:46AM	05:56AM	-	06:06AM
06:05AM	06:07AM	06:15AM	06:28AM	06:42AM	06:53AM	07:06AM	07:12AM	-
-	-	-	06:11AM	06:25AM	06:36AM	06:48AM	-	06:58AM
06:22AM	06:24AM	06:32AM	06:45AM	06:59AM	07:10AM	07:23AM	07:29AM	-
06:34AM	06:36AM	06:44AM	06:57AM	07:12AM	07:23AM	07:36AM	-	07:49AM
-	-	-	06:43AM	06:57AM	07:08AM	07:21AM	-	07:34AM
06:46AM	06:48AM	06:56AM	07:10AM	07:25AM	07:36AM	07:49AM	07:55AM	-
06:58AM	07:00AM	07:08AM	07:22AM	07:37AM	07:48AM	08:02AM	-	08:15AM
07:10AM	07:12AM	07:20AM	07:34AM	07:49AM	08:00AM	08:14AM	08:20AM	-
07:22AM	07:24AM	07:32AM	07:46AM	08:04AM	08:15AM	08:29AM	-	08:42AM
07:34AM	07:36AM	07:44AM	07:58AM	08:16AM	08:27AM	08:41AM	08:47AM	-
07:46AM	07:48AM	07:56AM	08:10AM	08:28AM	08:39AM	08:53AM	-	09:06AM
07:58AM	08:00AM	08:09AM	08:23AM	08:41AM	08:52AM	09:07AM	09:14AM	-
08:10AM	08:12AM	08:21AM	08:35AM	08:53AM	09:06AM	09:21AM	-	09:34AM
08:22AM	08:24AM	08:33AM	08:47AM	09:05AM	09:18AM	09:33AM	09:40AM	-
08:34AM	08:36AM	08:45AM	08:59AM	09:17AM	09:30AM	09:45AM	-	09:58AM
08:46AM	08:48AM	08:57AM	09:12AM	09:29AM	09:42AM	09:57AM	10:04AM	-

08:58AM	09:00AM	09:10AM	09:25AM	09:42AM	09:55AM	10:10AM	-	10:23AM
09:10AM	09:12AM	09:22AM	09:37AM	09:54AM	10:07AM	10:22AM	10:29AM	-
09:22AM	09:24AM	09:34AM	09:49AM	10:06AM	10:19AM	10:34AM	-	10:47AM
09:34AM	09:36AM	09:46AM	10:01AM	10:18AM	10:31AM	10:46AM	10:53AM	-
09:46AM	09:48AM	09:58AM	10:13AM	10:30AM	10:43AM	10:58AM	-	11:11AM
09:58AM	10:00AM	10:10AM	10:25AM	10:42AM	10:55AM	11:10AM	11:17AM	-
10:13AM	10:15AM	10:25AM	10:40AM	10:57AM	11:10AM	11:25AM	-	11:38AM
10:28AM	10:30AM	10:40AM	10:55AM	11:12AM	11:25AM	11:40AM	11:47AM	-
10:43AM	10:45AM	10:55AM	11:10AM	11:27AM	11:40AM	11:55AM	-	12:08PM
10:58AM	11:00AM	11:10AM	11:25AM	11:42AM	11:55AM	12:10PM	12:17PM	-
11:13AM	11:15AM	11:25AM	11:40AM	11:57AM	12:10PM	12:25PM	-	12:38PM
11:28AM	11:30AM	11:40AM	11:55AM	12:12PM	12:25PM	12:40PM	12:47PM	-
11:43AM	11:45AM	11:55AM	12:10PM	12:27PM	12:40PM	12:55PM	-	01:08PM
11:58AM	12:00PM	12:10PM	12:25PM	12:42PM	12:55PM	01:10PM	01:17PM	-
12:13PM	12:15PM	12:25PM	12:40PM	12:57PM	01:10PM	01:25PM	-	01:38PM
12:28PM	12:30PM	12:40PM	12:55PM	01:12PM	01:25PM	01:40PM	01:47PM	-
12:43PM	12:45PM	12:55PM	01:10PM	01:27PM	01:40PM	01:55PM	-	02:08PM
12:58PM	01:00PM	01:10PM	01:25PM	01:42PM	01:55PM	02:10PM	02:17PM	-
01:13PM	01:15PM	01:25PM	01:40PM	01:57PM	02:10PM	02:25PM	-	02:38PM
01:28PM	01:30PM	01:40PM	01:55PM	02:12PM	02:25PM	02:40PM	02:47PM	-
01:43PM	01:45PM	01:55PM	02:10PM	02:27PM	02:40PM	02:55PM	-	03:08PM
01:58PM	02:00PM	02:10PM	02:25PM	02:42PM	02:55PM	03:12PM	03:18PM	-
02:13PM	02:15PM	02:25PM	02:40PM	02:57PM	03:10PM	03:27PM	-	03:39PM
02:28PM	02:30PM	02:40PM	02:55PM	03:15PM	03:28PM	03:45PM	03:51PM	-
02:43PM	02:45PM	02:55PM	03:12PM	03:32PM	03:45PM	04:02PM	-	04:14PM
02:58PM	03:00PM	03:11PM	03:28PM	03:48PM	04:01PM	04:18PM	04:24PM	-
03:11PM	03:13PM	03:24PM	03:41PM	04:01PM	04:14PM	04:31PM	-	04:43PM
03:22PM	03:24PM	03:35PM	03:52PM	04:12PM	04:25PM	04:42PM	04:48PM	-
03:34PM	03:36PM	03:47PM	04:04PM	04:24PM	04:37PM	04:54PM	-	05:06PM
03:46PM	03:48PM	03:59PM	04:16PM	04:36PM	04:49PM	05:06PM	05:12PM	-
03:58PM	04:00PM	04:11PM	04:28PM	04:48PM	05:01PM	05:18PM	-	05:30PM
04:10PM	04:12PM	04:23PM	04:40PM	05:00PM	05:13PM	05:30PM	05:36PM	-
04:22PM	04:24PM	04:35PM	04:52PM	05:12PM	05:25PM	05:42PM	-	05:54PM
04:34PM	04:36PM	04:47PM	05:04PM	05:24PM	05:37PM	05:54PM	06:00PM	-
04:46PM	04:48PM	04:59PM	05:16PM	05:36PM	05:49PM	06:06PM	-	06:18PM
04:58PM	05:00PM	05:11PM	05:28PM	05:48PM	06:01PM	06:18PM	-	06:30PM
05:10PM	05:12PM	05:23PM	05:40PM	06:00PM	06:13PM	06:30PM	06:36PM	-

05:22PM	05:24PM	05:35PM	05:52PM	06:12PM	06:25PM	06:42PM	-	06:54PM
05:34PM	05:36PM	05:47PM	06:04PM	06:24PM	06:37PM	06:54PM	07:00PM	-
05:46PM	05:48PM	05:59PM	06:16PM	06:36PM	06:49PM	07:06PM	-	07:16PM
05:58PM	06:00PM	06:11PM	06:28PM	06:48PM	07:01PM	07:13PM	07:18PM	-
06:10PM	06:12PM	06:23PM	06:40PM	07:00PM	07:09PM	07:21PM	-	07:31PM
06:22PM	06:24PM	06:35PM	06:52PM	07:12PM	07:21PM	07:33PM	-	-
06:37PM	06:39PM	06:50PM	07:07PM	07:23PM	07:32PM	07:44PM	-	07:54PM
06:52PM	06:54PM	07:05PM	07:20PM	07:36PM	07:45PM	07:57PM	-	08:07PM
07:07PM	07:09PM	07:18PM	07:33PM	07:49PM	07:58PM	08:10PM	-	-
07:22PM	07:24PM	07:33PM	07:48PM	08:04PM	08:12PM	08:22PM	-	08:30PM
07:38PM	07:40PM	07:49PM	08:04PM	08:18PM	08:26PM	08:36PM	-	-
07:58PM	08:00PM	08:09PM	08:23PM	08:37PM	08:45PM	08:55PM	-	09:03PM
08:18PM	08:20PM	08:29PM	08:43PM	08:57PM	09:05PM	09:15PM	-	09:23PM
08:48PM	08:50PM	08:59PM	09:13PM	09:27PM	09:35PM	09:45PM	-	09:53PM
09:28PM	09:30PM	09:39PM	09:53PM	10:07PM	10:15PM	10:25PM	-	10:33PM
10:08PM	10:10PM	10:19PM	10:33PM	10:47PM	10:55PM	11:05PM	-	11:13PM
10:48PM	10:50PM	10:59PM	11:13PM	11:27PM	11:35PM	11:45PM	-	11:53PM
11:28PM	11:30PM	11:39PM	11:53PM	12:07AM	12:14AM	12:24AM	-	-
12:08AM	12:10AM	12:18AM	12:30AM	12:42AM	12:49AM	12:59AM	-	01:06AM
12:40AM	12:42AM	12:50AM	01:02AM	01:14AM	01:21AM	01:31AM	-	-
01:40AM	01:42AM	01:50AM	02:02AM	02:14AM	02:21AM	02:31AM	-	-
02:40AM	02:42AM	02:50AM	03:02AM	03:14AM	03:21AM	03:31AM	-	-
03:40AM	03:42AM	03:50AM	04:02AM	04:14AM	04:21AM	04:31AM	04:35AM	-

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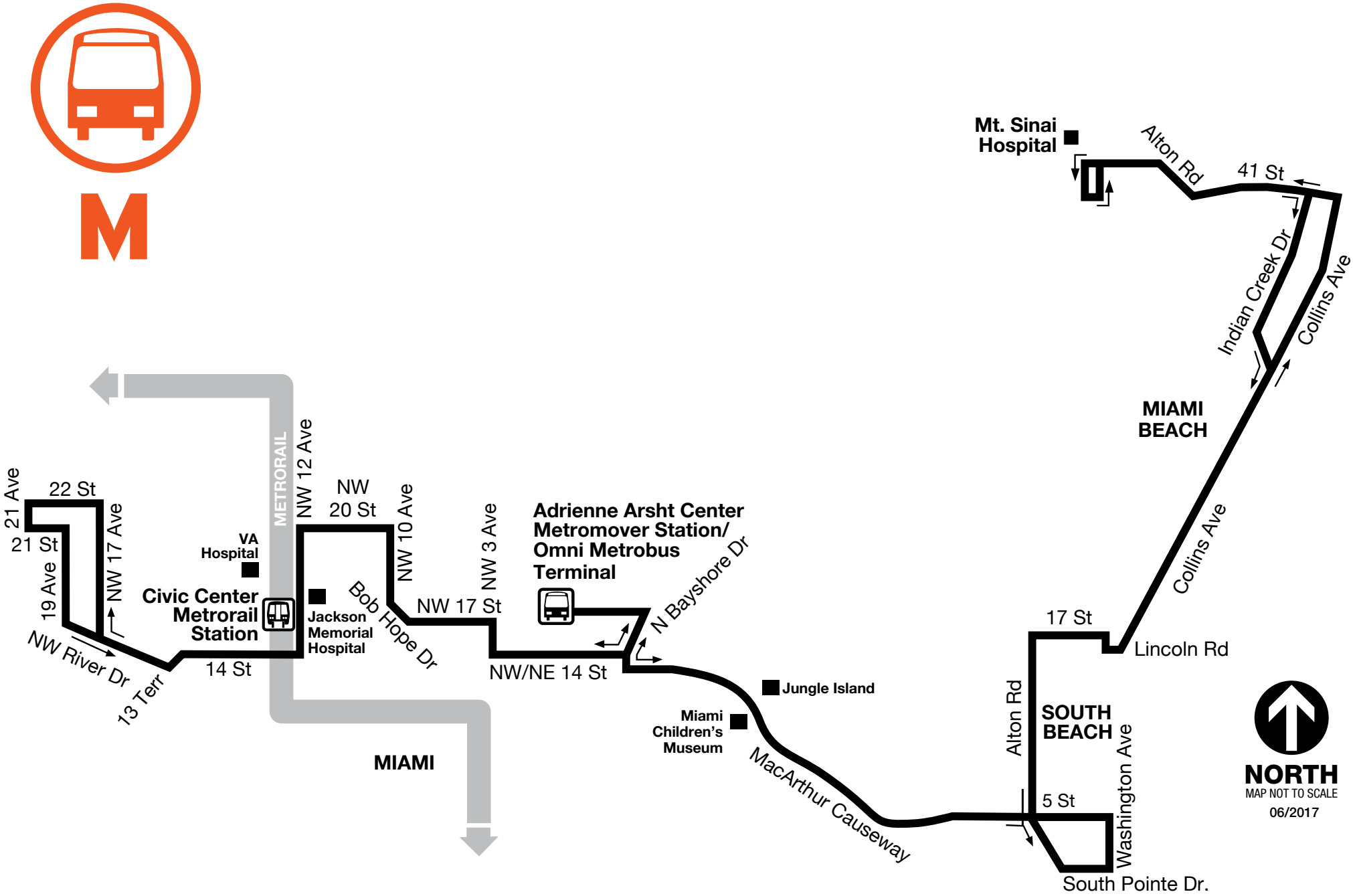
Mt. Sinai Hospital
Alton Rd
41 St
Indian Creek Dr
Collins Ave
MIAMI BEACH
Collins Ave
17 St
Lincoln Rd
Alton Rd
SOUTH BEACH
Washington Ave
5 St
South Pointe Dr.
MacArthur Causeway
Jungle Island
Miami Children's Museum
NW/NE 14 St
N Bayshore Dr
Adrienne Arsht Center Metromover Station/ Omni Metrobus Terminal
NW 3 Ave
NW 17 St
Bob Hope Dr
NW 10 Ave
NW 20 St
NW 12 Ave
METRORAIL
MIAMI
14 St
NW River Dr
13 Terr
Civic Center Metrorail Station
VA Hospital
Jackson Memorial Hospital
NW 17 Ave
19 Ave
21 St
22 St
21 Ave
NORTH
MAP NOT TO SCALE
06/2017

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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

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113 (Westbound) WEEKDAY

ALTON RD & 39 ST MIAMI BEACH	MT SINAI HOSPITAL	41 ST & ALTON RD MIAMI BEACH	41 ST & MERIDIAN AVE MIAMI BEACH	INDIAN CREEK DR & 40 ST	LINCOLN RD & WASHINGTON AVE	ALTON RD & LINCOLN RD MIAMI BEACH	ALTON RD & 2 ST MIAMI BEACH	5 ST & LENOX AVE MIAMI BEACH	OMNI TERMINAL / ARSHT METROMOVER	NW 12 AVE & 16 ST
-	05:43AM	05:45AM	05:46AM	05:50AM	05:56AM	06:01AM	06:08AM	06:13AM	06:21AM	06:34AM
-	06:26AM	06:28AM	06:30AM	06:34AM	06:42AM	06:47AM	06:54AM	06:59AM	07:07AM	07:20AM
07:02AM	07:05AM	07:07AM	07:09AM	07:14AM	07:24AM	07:29AM	07:38AM	07:44AM	07:52AM	08:05AM
07:43AM	07:46AM	07:48AM	07:50AM	07:55AM	08:06AM	08:11AM	08:21AM	08:27AM	08:37AM	08:50AM
08:25AM	08:28AM	08:30AM	08:32AM	08:38AM	08:49AM	08:54AM	09:05AM	09:11AM	09:21AM	09:35AM
09:17AM	09:20AM	09:23AM	09:25AM	09:31AM	09:43AM	09:49AM	10:00AM	10:06AM	10:16AM	10:30AM
10:13AM	10:16AM	10:19AM	10:21AM	10:27AM	10:39AM	10:45AM	10:56AM	11:02AM	11:12AM	11:26AM
-	11:16AM	11:19AM	11:21AM	11:27AM	11:39AM	11:45AM	11:56AM	12:02PM	12:12PM	12:26PM
-	12:16PM	12:19PM	12:21PM	12:27PM	12:39PM	12:45PM	12:56PM	01:02PM	01:12PM	01:26PM
-	01:16PM	01:19PM	01:21PM	01:27PM	01:39PM	01:45PM	01:56PM	02:02PM	02:12PM	02:26PM
-	02:06PM	02:09PM	02:11PM	02:17PM	02:29PM	02:35PM	02:46PM	02:52PM	03:02PM	03:16PM
-	02:56PM	02:59PM	03:01PM	03:07PM	03:19PM	03:25PM	03:36PM	03:42PM	03:52PM	04:06PM
-	03:46PM	03:49PM	03:51PM	03:57PM	04:09PM	04:15PM	04:26PM	04:32PM	04:42PM	04:56PM
04:29PM	04:32PM	04:34PM	04:36PM	04:42PM	04:54PM	05:00PM	05:11PM	05:17PM	05:27PM	05:41PM
05:14PM	05:17PM	05:19PM	05:21PM	05:27PM	05:39PM	05:45PM	05:56PM	06:02PM	06:12PM	06:26PM
06:06PM	06:09PM	06:11PM	06:13PM	06:19PM	06:31PM	06:37PM	06:48PM	06:54PM	07:04PM	07:16PM
07:12PM	07:15PM	07:17PM	07:19PM	07:25PM	07:36PM	07:41PM	07:50PM	07:56PM	08:04PM	08:16PM
08:12PM	08:15PM	08:17PM	08:19PM	08:25PM	08:36PM	08:41PM	08:50PM	08:56PM	09:04PM	09:16PM

08:57PM	09:00PM	09:02PM	09:04PM	09:10PM	09:21PM	09:26PM	09:35PM	09:41PM	09:49PM	10:01PM

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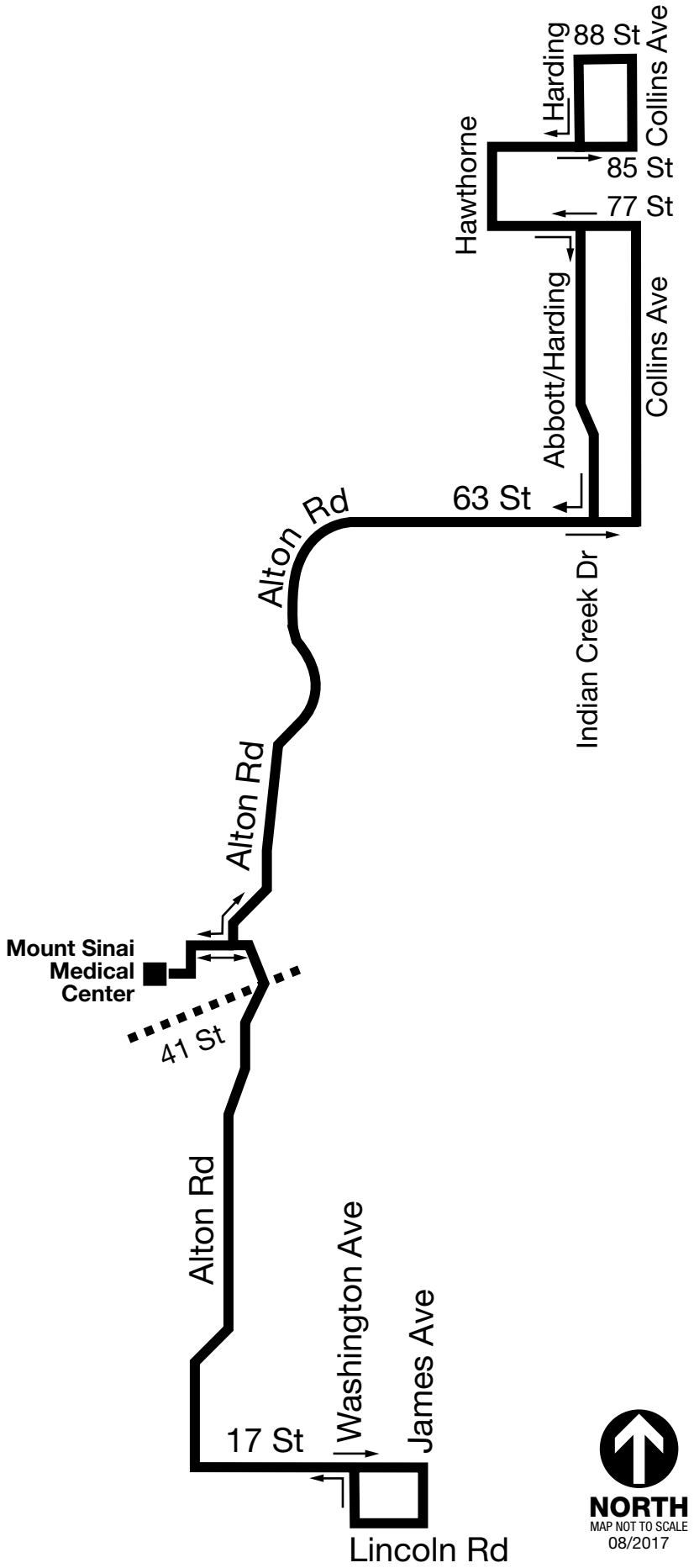
115

MID-NORTH BEACH CONNECTION



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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

)

miamidade.GOV METROBUS

115 (Northbound) WEEKDAY

LINCOLN RD & WASHINGTON AVE	MT SINAI HOSPITAL	COLLINS AVE & 69 ST	COLLINS AVE & 87 ST
07:16AM	07:31AM	07:45AM	08:01AM
08:06AM	08:21AM	08:35AM	08:51AM
08:56AM	09:11AM	09:25AM	09:41AM
09:46AM	10:00AM	10:14AM	10:30AM
10:36AM	10:50AM	11:04AM	11:20AM
11:26AM	11:40AM	11:54AM	12:10PM
12:16PM	12:30PM	12:44PM	01:00PM
01:06PM	01:20PM	01:34PM	01:50PM
01:56PM	02:10PM	02:24PM	02:40PM
02:46PM	03:00PM	03:14PM	03:30PM
03:36PM	03:50PM	04:04PM	04:19PM
04:26PM	04:40PM	04:54PM	05:09PM
05:16PM	05:30PM	05:44PM	05:59PM
06:06PM	06:20PM	06:34PM	06:49PM
06:56PM	07:10PM	07:22PM	07:37PM
07:46PM	07:57PM	08:09PM	08:24PM
08:36PM	08:47PM	08:59PM	09:14PM

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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

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115 (Southbound) WEEKDAY

COLLINS AVE & 87 ST	ABBOTT AVE & 69 ST MIAMI BEACH	MT SINAI HOSPITAL	LINCOLN RD & WASHINGTON AVE
06:30AM	06:42AM	06:53AM	07:10AM
07:20AM	07:34AM	07:47AM	08:04AM
08:10AM	08:24AM	08:37AM	08:54AM
09:00AM	09:12AM	09:25AM	09:44AM
09:50AM	10:02AM	10:15AM	10:34AM
10:40AM	10:52AM	11:05AM	11:24AM
11:30AM	11:42AM	11:55AM	12:14PM
12:20PM	12:32PM	12:45PM	01:04PM
01:10PM	01:22PM	01:35PM	01:54PM
02:00PM	02:12PM	02:25PM	02:44PM
02:50PM	03:02PM	03:15PM	03:34PM
03:40PM	03:52PM	04:05PM	04:24PM
04:30PM	04:42PM	04:55PM	05:14PM
05:20PM	05:32PM	05:45PM	06:04PM
06:10PM	06:22PM	06:35PM	06:54PM
07:00PM	07:12PM	07:22PM	07:37PM
07:50PM	08:02PM	08:12PM	08:27PM
08:40PM	08:52PM	09:02PM	09:17PM

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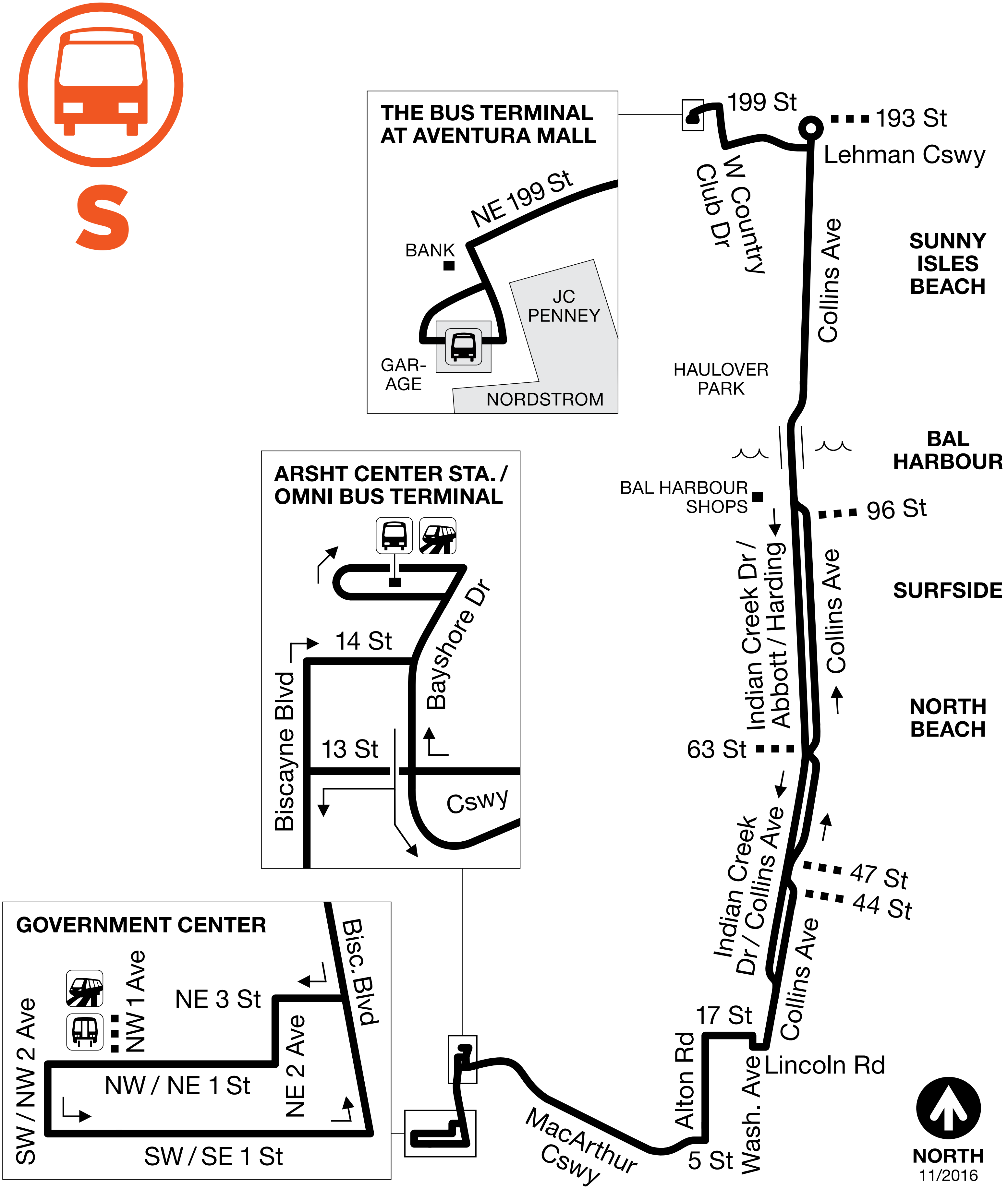
S
THE BUS TERMINAL AT AVENTURA MALL
NE 199 St
BANK
JC PENNEY
GAR-AGE
NORDSTROM
199 St
193 St
Lehman Cswy
W Country Club Dr
Collins Ave
SUNNY ISLES BEACH
HAULOVER PARK
BAL HARBOUR
BAL HARBOUR SHOPS
96 St
SURFSIDE
Indian Creek Dr / Abbott / Harding
NORTH BEACH
63 St
47 St
44 St
Indian Creek Dr / Collins Ave
17 St
Alton Rd
Lincoln Rd
Wash. Ave
5 St
MacArthur Cswy
ARSHT CENTER STA. / OMNI BUS TERMINAL
14 St
Bayshore Dr
Biscayne Blvd
13 St
Cswy
GOVERNMENT CENTER
Bisc. Blvd
NW 1 Ave
NE 3 St
SW / NW 2 Ave
NE 2 Ave
NW / NE 1 St
SW / SE 1 St
NORTH
11/2016

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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

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119 (Northbound) WEEKDAY

Stephen P Clark Center	OMNI TERMINAL / ARSHT METROMOVER	ALTON RD & 6 ST MIAMI BEACH	17 ST & LENOX AV	Lincoln Rd & James Ave	COLLINS AV & 43 ST	COLLINS AVE & 69 ST	COLLINS AVE & 96 ST MIAMI BEACH	Collins Ave at 16900 blk	COLLINS AVE & 193 ST	Bus Terminal at Aventura Mall
05:00AM	05:09AM	05:16AM	05:22AM	05:27AM	05:33AM	05:41AM	05:49AM	05:55AM	06:03AM	06:10AM
05:24AM	05:33AM	05:40AM	05:46AM	05:51AM	05:57AM	06:08AM	06:18AM	06:26AM	06:34AM	06:41AM
05:36AM	05:45AM	05:52AM	05:58AM	06:04AM	06:12AM	06:23AM	06:33AM	06:41AM	06:49AM	06:56AM
05:48AM	05:57AM	06:05AM	06:12AM	06:18AM	06:26AM	06:37AM	06:47AM	06:55AM	07:05AM	07:13AM
06:00AM	06:12AM	06:20AM	06:27AM	06:33AM	06:41AM	06:52AM	07:03AM	07:12AM	07:22AM	07:30AM
06:15AM	06:27AM	06:35AM	06:42AM	06:48AM	06:56AM	07:09AM	07:20AM	07:29AM	07:39AM	07:47AM
06:30AM	06:42AM	06:50AM	06:57AM	07:03AM	07:11AM	07:24AM	07:35AM	07:44AM	07:54AM	08:02AM
06:45AM	06:57AM	07:07AM	07:15AM	07:21AM	07:29AM	07:42AM	07:53AM	08:03AM	08:13AM	08:21AM
06:59AM	07:12AM	07:22AM	07:30AM	07:36AM	07:44AM	07:57AM	08:08AM	08:18AM	08:28AM	08:36AM
07:15AM	07:28AM	07:38AM	07:46AM	07:52AM	08:01AM	08:14AM	08:25AM	08:35AM	08:45AM	08:53AM
07:30AM	07:43AM	07:53AM	08:01AM	08:08AM	08:17AM	08:30AM	08:41AM	08:51AM	09:01AM	09:10AM
07:45AM	07:58AM	08:09AM	08:17AM	08:24AM	08:33AM	08:46AM	08:57AM	09:07AM	09:17AM	09:26AM
08:00AM	08:14AM	08:25AM	08:33AM	08:40AM	08:49AM	09:03AM	09:14AM	09:23AM	09:33AM	09:42AM
08:15AM	08:29AM	08:40AM	08:48AM	08:55AM	09:06AM	09:20AM	09:31AM	09:40AM	09:50AM	09:59AM
08:30AM	08:44AM	08:55AM	09:04AM	09:12AM	09:23AM	09:37AM	09:48AM	09:57AM	10:07AM	10:16AM
08:45AM	08:59AM	09:11AM	09:20AM	09:28AM	09:39AM	09:53AM	10:04AM	10:13AM	10:23AM	10:32AM
09:00AM	09:16AM	09:28AM	09:37AM	09:45AM	09:56AM	10:10AM	10:21AM	10:30AM	10:40AM	10:49AM
09:15AM	09:31AM	09:43AM	09:52AM	10:00AM	10:11AM	10:25AM	10:36AM	10:45AM	10:55AM	11:04AM

09:30AM	09:46AM	09:58AM	10:07AM	10:15AM	10:26AM	10:40AM	10:51AM	11:00AM	11:10AM	11:19AM
09:45AM	10:01AM	10:13AM	10:22AM	10:30AM	10:41AM	10:55AM	11:06AM	11:15AM	11:25AM	11:34AM
10:00AM	10:16AM	10:28AM	10:37AM	10:45AM	10:56AM	11:10AM	11:21AM	11:30AM	11:40AM	11:49AM
10:15AM	10:31AM	10:43AM	10:52AM	11:00AM	11:11AM	11:25AM	11:36AM	11:45AM	11:55AM	12:04PM
10:30AM	10:46AM	10:58AM	11:07AM	11:15AM	11:26AM	11:40AM	11:51AM	12:00PM	12:10PM	12:19PM
10:45AM	11:01AM	11:13AM	11:22AM	11:30AM	11:41AM	11:55AM	12:06PM	12:15PM	12:25PM	12:34PM
11:00AM	11:16AM	11:28AM	11:37AM	11:45AM	11:56AM	12:10PM	12:21PM	12:30PM	12:40PM	12:49PM
11:15AM	11:31AM	11:43AM	11:52AM	12:00PM	12:11PM	12:25PM	12:36PM	12:45PM	12:55PM	01:04PM
11:30AM	11:46AM	11:58AM	12:07PM	12:15PM	12:26PM	12:40PM	12:51PM	01:00PM	01:10PM	01:19PM
11:45AM	12:01PM	12:13PM	12:22PM	12:30PM	12:41PM	12:55PM	01:06PM	01:15PM	01:25PM	01:34PM
12:00PM	12:16PM	12:28PM	12:37PM	12:45PM	12:56PM	01:10PM	01:21PM	01:30PM	01:40PM	01:49PM
12:15PM	12:31PM	12:43PM	12:52PM	01:00PM	01:11PM	01:25PM	01:36PM	01:45PM	01:55PM	02:04PM
12:30PM	12:46PM	12:58PM	01:07PM	01:15PM	01:26PM	01:40PM	01:51PM	02:01PM	02:11PM	02:20PM
12:45PM	01:01PM	01:13PM	01:22PM	01:30PM	01:41PM	01:55PM	02:07PM	02:17PM	02:27PM	02:36PM
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03:30PM	03:46PM	03:59PM	04:09PM	04:18PM	04:29PM	04:44PM	04:55PM	05:05PM	05:14PM	05:23PM
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05:54PM	06:11PM	06:23PM	06:33PM	06:42PM	06:53PM	07:08PM	07:17PM	07:25PM	07:33PM	07:41PM

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06:18PM	06:35PM	06:47PM	06:57PM	07:06PM	07:16PM	07:28PM	07:37PM	07:45PM	07:53PM	08:01PM
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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://twitter.com/gomiamidade)

(https://www.instagram.com/gomiamic

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119 (Southbound) WEEKDAY

Bus Terminal at Aventura Mall	COLLINS AVE & 193 ST	COLLINS AVE & 163 ST	BAL HARBOUR SHOPS	ABBOTT AVE & 69 ST MIAMI BEACH	INDIAN CREEK DR & 40 ST	LINCOLN RD & WASHINGTON AVE	ALTON RD & LINCOLN RD MIAMI BEACH	ALTON RD & 6 ST MIAMI BEACH	OMNI TERMINAL / ARSHT METROMOVER	Stephen P Clark Center
04:16AM	04:23AM	04:29AM	04:35AM	04:44AM	04:52AM	04:58AM	05:03AM	05:08AM	05:14AM	05:24AM
04:53AM	05:00AM	05:06AM	05:12AM	05:21AM	05:29AM	05:35AM	05:40AM	05:45AM	05:51AM	06:05AM
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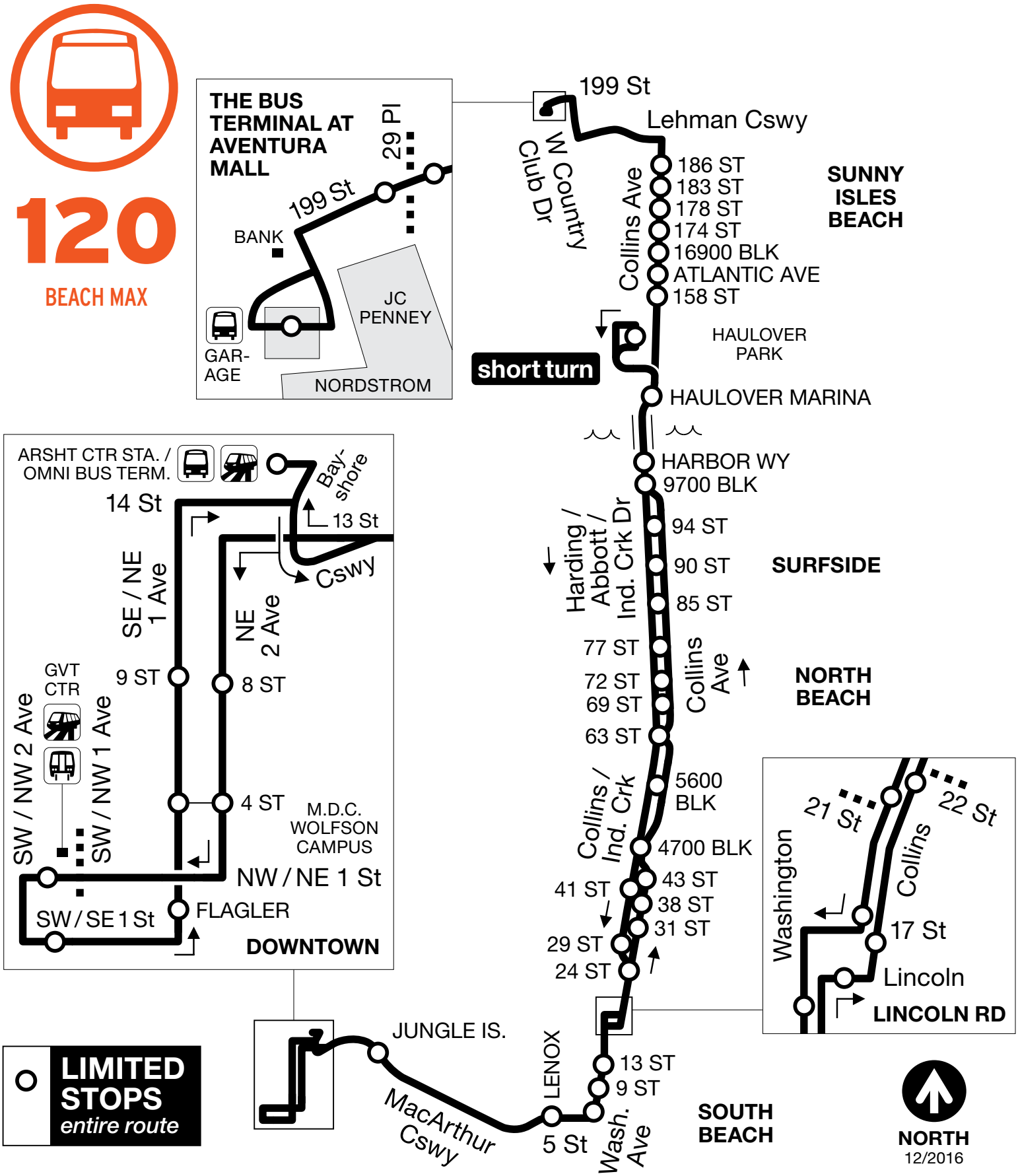
120

BEACH MAX



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Miami-Dade County Transportation and Public Works

Routes Schedule

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)

120 (Northbound) WEEKDAY

Stephen P Clark Center	OMNI TERMINAL / ARSHT METROMOVER	Lincoln Rd & James Ave	COLLINS AV & 43 ST	COLLINS AVE & 69 ST	COLLINS AV & # 9701	Haulover Club Parking Lot	Collins Ave at 16900 blk	Bus Terminal at Aventura Mall
05:00AM	05:10AM	05:26AM	05:33AM	05:40AM	05:47AM	-	05:53AM	05:59AM
05:45AM	05:55AM	06:12AM	06:20AM	06:28AM	06:36AM	-	06:42AM	06:50AM
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02:24PM	02:42PM	03:04PM	03:14PM	03:25PM	03:35PM	-	03:43PM	03:56PM
02:36PM	02:54PM	03:16PM	03:26PM	03:37PM	03:47PM	03:52PM	-	-
02:48PM	03:07PM	03:29PM	03:39PM	03:50PM	04:00PM	-	04:08PM	04:21PM
03:00PM	03:19PM	03:41PM	03:51PM	04:02PM	04:12PM	04:17PM	-	-
03:12PM	03:31PM	03:53PM	04:03PM	04:14PM	04:24PM	-	04:32PM	04:45PM
03:24PM	03:43PM	04:05PM	04:15PM	04:26PM	04:36PM	04:41PM	-	-
03:36PM	03:55PM	04:17PM	04:27PM	04:38PM	04:48PM	-	04:56PM	05:09PM
03:48PM	04:07PM	04:29PM	04:39PM	04:50PM	05:00PM	05:05PM	-	-
04:00PM	04:19PM	04:41PM	04:51PM	05:02PM	05:12PM	-	05:20PM	05:33PM
04:12PM	04:31PM	04:53PM	05:03PM	05:14PM	05:24PM	05:29PM	-	-
04:24PM	04:43PM	05:05PM	05:15PM	05:26PM	05:36PM	-	05:44PM	05:57PM
04:36PM	04:55PM	05:17PM	05:27PM	05:38PM	05:48PM	05:53PM	-	-
04:48PM	05:07PM	05:29PM	05:39PM	05:50PM	06:00PM	-	06:08PM	06:21PM
05:00PM	05:19PM	05:41PM	05:51PM	06:02PM	06:12PM	06:17PM	-	-
05:15PM	05:34PM	05:56PM	06:06PM	06:17PM	06:27PM	-	06:35PM	06:48PM
05:30PM	05:49PM	06:11PM	06:21PM	06:32PM	06:42PM	06:47PM	-	-
05:46PM	06:05PM	06:27PM	06:37PM	06:48PM	06:58PM	-	07:06PM	07:17PM

06:02PM	06:21PM	06:43PM	06:53PM	07:04PM	07:12PM	07:17PM	-	-
06:20PM	06:39PM	07:01PM	07:11PM	07:20PM	07:28PM	-	07:35PM	07:46PM
06:40PM	06:59PM	07:21PM	07:31PM	07:40PM	07:48PM	-	07:55PM	08:06PM
07:05PM	07:18PM	07:38PM	07:48PM	07:57PM	08:05PM	-	08:12PM	08:23PM
07:35PM	07:48PM	08:08PM	08:18PM	08:27PM	08:35PM	-	08:42PM	08:53PM
08:15PM	08:28PM	08:48PM	08:58PM	09:07PM	09:15PM	-	09:22PM	09:33PM
08:55PM	09:08PM	09:28PM	09:38PM	09:47PM	09:55PM	-	10:02PM	10:12PM
09:30PM	09:43PM	10:03PM	10:12PM	10:20PM	10:28PM	10:32PM	-	-

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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://www.instagram.com/gomiamic

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120 (Southbound) WEEKDAY

Bus Terminal at Aventura Mall	COLLINS AV & # 16830	Haulover Club Parking Lot	BAL HARBOUR SHOPS	ABBOTT AVE & 69 ST MIAMI BEACH	INDIAN CREEK DR & 40 ST	WASHINGTON AVE & LINCOLN RD	OMNI TERMINAL / ARSHT METROMOVER	Stephen P Clark Center
-	-	06:00AM	06:05AM	06:14AM	06:23AM	06:31AM	06:46AM	06:56AM
06:00AM	06:13AM	-	06:19AM	06:28AM	06:37AM	06:45AM	07:02AM	07:13AM
06:30AM	06:43AM	-	06:49AM	06:58AM	07:08AM	07:17AM	07:34AM	07:45AM
-	-	06:30AM	06:35AM	06:44AM	06:53AM	07:02AM	07:19AM	07:30AM
06:54AM	07:09AM	-	07:16AM	07:28AM	07:38AM	07:47AM	08:06AM	08:17AM
-	-	06:55AM	07:02AM	07:14AM	07:24AM	07:33AM	07:50AM	08:01AM
07:21AM	07:36AM	-	07:43AM	07:55AM	08:06AM	08:15AM	08:34AM	08:45AM
-	-	07:23AM	07:30AM	07:42AM	07:52AM	08:01AM	08:20AM	08:31AM
07:33AM	07:48AM	-	07:55AM	08:10AM	08:21AM	08:30AM	08:49AM	09:01AM
07:45AM	08:02AM	-	08:09AM	08:24AM	08:35AM	08:44AM	09:04AM	09:16AM
08:00AM	08:17AM	-	08:24AM	08:39AM	08:50AM	08:59AM	09:19AM	09:31AM
08:27AM	08:44AM	-	08:51AM	09:06AM	09:19AM	09:29AM	09:49AM	10:01AM
-	-	08:29AM	08:36AM	08:51AM	09:04AM	09:14AM	09:34AM	09:46AM
08:59AM	09:16AM	-	09:23AM	09:34AM	09:47AM	09:57AM	10:17AM	10:29AM
-	-	09:02AM	09:09AM	09:20AM	09:33AM	09:43AM	10:03AM	10:15AM
09:31AM	09:48AM	-	09:55AM	10:06AM	10:19AM	10:29AM	10:49AM	11:01AM
-	-	09:32AM	09:39AM	09:50AM	10:03AM	10:13AM	10:33AM	10:45AM
-	-	10:00AM	10:07AM	10:18AM	10:31AM	10:41AM	11:01AM	11:13AM
10:05AM	10:22AM	-	10:29AM	10:40AM	10:53AM	11:03AM	11:23AM	11:35AM

-	-	10:11AM	10:18AM	10:29AM	10:42AM	10:52AM	11:12AM	11:24AM
10:31AM	10:48AM	-	10:55AM	11:06AM	11:19AM	11:29AM	11:49AM	12:01PM
-	-	10:35AM	10:42AM	10:53AM	11:06AM	11:16AM	11:36AM	11:48AM
10:56AM	11:13AM	-	11:20AM	11:31AM	11:44AM	11:54AM	12:14PM	12:26PM
-	-	11:01AM	11:08AM	11:19AM	11:32AM	11:42AM	12:02PM	12:14PM
11:20AM	11:37AM	-	11:44AM	11:55AM	12:08PM	12:18PM	12:38PM	12:50PM
-	-	11:25AM	11:32AM	11:43AM	11:56AM	12:06PM	12:26PM	12:38PM
11:44AM	12:01PM	-	12:08PM	12:19PM	12:32PM	12:42PM	01:02PM	01:14PM
-	-	11:49AM	11:56AM	12:07PM	12:20PM	12:30PM	12:50PM	01:02PM
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-	-	12:37PM	12:44PM	12:55PM	01:08PM	01:18PM	01:38PM	01:50PM
12:56PM	01:13PM	-	01:20PM	01:31PM	01:44PM	01:54PM	02:14PM	02:26PM
-	-	01:01PM	01:08PM	01:19PM	01:32PM	01:42PM	02:02PM	02:14PM
01:20PM	01:37PM	-	01:44PM	01:55PM	02:08PM	02:18PM	02:38PM	02:50PM
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01:44PM	02:01PM	-	02:08PM	02:19PM	02:32PM	02:42PM	03:02PM	03:14PM
-	-	01:49PM	01:56PM	02:07PM	02:20PM	02:30PM	02:50PM	03:02PM
02:08PM	02:25PM	-	02:32PM	02:43PM	02:56PM	03:06PM	03:26PM	03:38PM
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02:31PM	02:48PM	-	02:55PM	03:06PM	03:19PM	03:29PM	03:49PM	04:02PM
-	-	02:37PM	02:44PM	02:55PM	03:08PM	03:18PM	03:38PM	03:50PM
02:51PM	03:08PM	-	03:15PM	03:26PM	03:39PM	03:49PM	04:13PM	04:26PM
-	-	02:56PM	03:03PM	03:14PM	03:27PM	03:37PM	04:01PM	04:14PM
03:15PM	03:32PM	-	03:39PM	03:50PM	04:03PM	04:13PM	04:37PM	04:50PM
-	-	03:20PM	03:27PM	03:38PM	03:51PM	04:01PM	04:25PM	04:38PM
03:38PM	03:55PM	-	04:03PM	04:14PM	04:27PM	04:37PM	05:01PM	05:14PM
-	-	03:44PM	03:51PM	04:02PM	04:15PM	04:25PM	04:49PM	05:02PM
03:58PM	04:17PM	-	04:25PM	04:36PM	04:49PM	04:59PM	05:23PM	05:36PM
-	-	04:07PM	04:14PM	04:25PM	04:38PM	04:48PM	05:12PM	05:25PM
04:24PM	04:43PM	-	04:51PM	05:02PM	05:15PM	05:25PM	05:49PM	06:02PM
-	-	04:31PM	04:38PM	04:49PM	05:02PM	05:12PM	05:36PM	05:49PM
-	-	04:59PM	05:06PM	05:17PM	05:30PM	05:40PM	06:04PM	06:15PM
04:59PM	05:18PM	-	05:26PM	05:37PM	05:50PM	06:00PM	06:19PM	06:30PM
05:33PM	05:52PM	-	06:00PM	06:10PM	06:20PM	06:30PM	06:49PM	07:00PM
-	-	05:34PM	05:41PM	05:52PM	06:05PM	06:15PM	06:34PM	06:45PM

-	-	06:06PM	06:15PM	06:25PM	06:35PM	06:45PM	07:04PM	07:15PM
06:12PM	06:28PM	-	06:35PM	06:45PM	06:55PM	07:05PM	07:24PM	07:35PM
06:37PM	06:53PM	-	07:00PM	07:10PM	07:20PM	07:30PM	07:49PM	08:00PM
07:07PM	07:23PM	-	07:30PM	07:40PM	07:50PM	08:00PM	08:19PM	08:30PM
07:47PM	08:03PM	-	08:10PM	08:20PM	08:30PM	08:40PM	08:59PM	09:10PM
08:27PM	08:43PM	-	08:50PM	09:00PM	09:10PM	09:20PM	09:39PM	09:50PM
09:07PM	09:23PM	-	09:30PM	09:40PM	09:50PM	10:00PM	10:17PM	10:27PM
09:49PM	10:05PM	-	10:11PM	10:20PM	10:29PM	10:38PM	10:55PM	11:05PM
10:31PM	10:45PM	-	10:51PM	11:00PM	11:09PM	11:18PM	11:35PM	11:45PM

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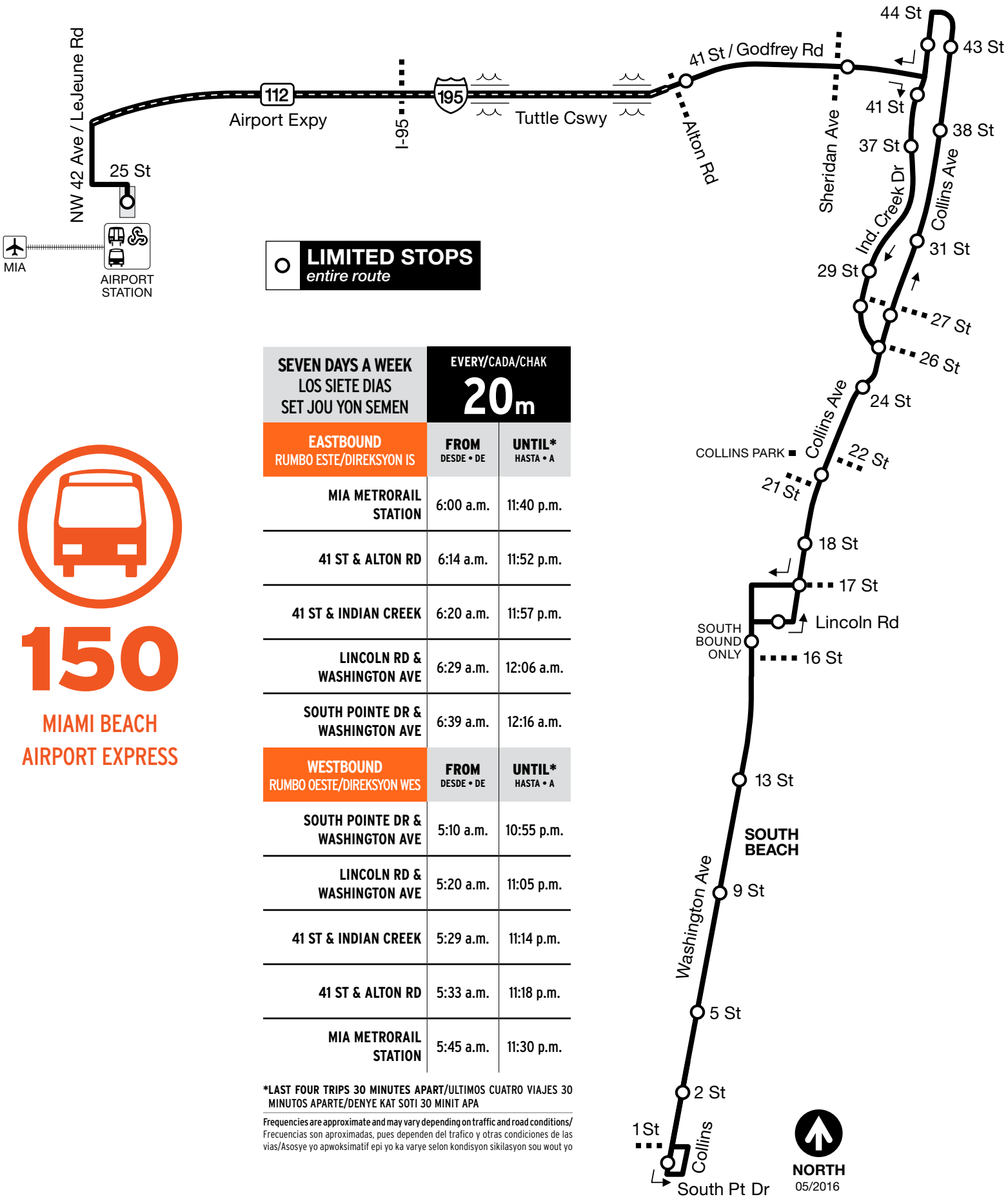

LIMITED STOPS
entire route

150

MIAMI BEACH AIRPORT EXPRESS

SEVEN DAYS A WEEK LOS SIETE DIAS SET JOU YON SEMEN	EVERY/CADA/CHAK 20m	
EASTBOUND RUMBO ESTE/DIREKSYON IS	**FROM** DESDE • DE	**UNTIL*** HASTA • A
MIA METRORAIL STATION	6:00 a.m.	11:40 p.m.
41 ST & ALTON RD	6:14 a.m.	11:52 p.m.
41 ST & INDIAN CREEK	6:20 a.m.	11:57 p.m.
LINCOLN RD & WASHINGTON AVE	6:29 a.m.	12:06 a.m.
SOUTH POINTE DR & WASHINGTON AVE	6:39 a.m.	12:16 a.m.
WESTBOUND RUMBO OESTE/DIREKSYON WES	**FROM** DESDE • DE	**UNTIL*** HASTA • A
SOUTH POINTE DR & WASHINGTON AVE	5:10 a.m.	10:55 p.m.
LINCOLN RD & WASHINGTON AVE	5:20 a.m.	11:05 p.m.
41 ST & INDIAN CREEK	5:29 a.m.	11:14 p.m.
41 ST & ALTON RD	5:33 a.m.	11:18 p.m.
MIA METRORAIL STATION	5:45 a.m.	11:30 p.m.

***LAST FOUR TRIPS 30 MINUTES APART**/ULTIMOS CUATRO VIAJES 30 MINUTOS APARTE/DENYE KAT SOTI 30 MINIT APA

Frequencies are approximate and may vary depending on traffic and road conditions/ Frecuencias son aproximadas, pues dependen del trafico y otras condiciones de las vias/Asosye yo apwoksimatif epi yo ka varye selon kondisyon sikilasyon sou wout yo

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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://www.instagram.com/gomiamic

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150 (Eastbound) WEEKDAY

Airport Station	41 ST & ALTON RD MIAMI BEACH	INDIAN CREEK DR & 40 ST	WASHINGTON AVE & LINCOLN RD	WASHINGTON AVE & SOUTH POINTE DR
06:00AM	06:15AM	06:21AM	06:31AM	06:41AM
06:20AM	06:35AM	06:41AM	06:51AM	07:01AM
06:40AM	06:55AM	07:01AM	07:11AM	07:21AM
07:00AM	07:15AM	07:21AM	07:31AM	07:41AM
07:20AM	07:35AM	07:41AM	07:51AM	08:01AM
07:40AM	07:55AM	08:01AM	08:11AM	08:21AM
08:00AM	08:15AM	08:21AM	08:31AM	08:41AM
08:20AM	08:35AM	08:41AM	08:51AM	09:02AM
08:40AM	08:55AM	09:01AM	09:12AM	09:23AM
09:00AM	09:14AM	09:20AM	09:31AM	09:42AM
09:20AM	09:34AM	09:40AM	09:51AM	10:02AM
09:40AM	09:54AM	10:00AM	10:11AM	10:22AM
10:00AM	10:14AM	10:20AM	10:31AM	10:42AM
10:20AM	10:34AM	10:40AM	10:51AM	11:02AM
10:40AM	10:54AM	11:00AM	11:11AM	11:22AM
11:00AM	11:14AM	11:20AM	11:31AM	11:42AM
11:20AM	11:34AM	11:40AM	11:51AM	12:02PM
11:40AM	11:54AM	12:00PM	12:11PM	12:22PM
12:00PM	12:14PM	12:20PM	12:31PM	12:42PM
12:20PM	12:34PM	12:40PM	12:51PM	01:02PM

12:40PM	12:54PM	01:00PM	01:11PM	01:22PM
01:00PM	01:14PM	01:20PM	01:31PM	01:42PM
01:20PM	01:34PM	01:40PM	01:51PM	02:02PM
01:40PM	01:54PM	02:00PM	02:11PM	02:22PM
02:00PM	02:14PM	02:20PM	02:31PM	02:42PM
02:16PM	02:30PM	02:36PM	02:47PM	02:58PM
02:36PM	02:50PM	02:56PM	03:07PM	03:20PM
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05:33PM	05:49PM	05:56PM	06:07PM	06:20PM
05:53PM	06:09PM	06:16PM	06:27PM	06:40PM
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06:37PM	06:53PM	07:00PM	07:09PM	07:20PM
07:00PM	07:14PM	07:20PM	07:29PM	07:40PM
07:20PM	07:34PM	07:40PM	07:49PM	08:00PM
07:40PM	07:54PM	08:00PM	08:09PM	08:20PM
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08:40PM	08:54PM	09:00PM	09:09PM	09:20PM
09:00PM	09:14PM	09:20PM	09:29PM	09:40PM
09:30PM	09:44PM	09:50PM	09:59PM	10:10PM
10:00PM	10:13PM	10:18PM	10:27PM	10:37PM
10:30PM	10:43PM	10:48PM	10:57PM	11:07PM
11:10PM	11:23PM	11:28PM	11:37PM	11:47PM
11:40PM	11:53PM	11:58PM	12:07AM	12:17AM

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Miami-Dade County Transportation and Public Works

Routes Schedule

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(https://www.instagram.com/gomiamic

)

miamidade.GOV METROBUS

150 (Westbound) WEEKDAY

WASHINGTON AVE & SOUTH POINTE DR	Lincoln Rd & James Ave	INDIAN CREEK DR & 43 ST	41 ST & ALTON RD MIAMI BEACH	Airport Station
05:10AM	05:20AM	05:29AM	05:33AM	05:45AM
05:30AM	05:40AM	05:49AM	05:53AM	06:07AM
05:50AM	06:01AM	06:11AM	06:16AM	06:30AM
06:10AM	06:21AM	06:31AM	06:36AM	06:50AM
06:30AM	06:41AM	06:51AM	06:56AM	07:10AM
06:50AM	07:01AM	07:11AM	07:16AM	07:30AM
07:10AM	07:21AM	07:31AM	07:36AM	07:50AM
07:30AM	07:41AM	07:51AM	07:56AM	08:10AM
07:50AM	08:01AM	08:11AM	08:16AM	08:30AM
08:10AM	08:21AM	08:31AM	08:36AM	08:50AM
08:30AM	08:41AM	08:51AM	08:56AM	09:11AM
08:50AM	09:02AM	09:15AM	09:20AM	09:35AM
09:10AM	09:22AM	09:35AM	09:40AM	09:55AM
09:30AM	09:42AM	09:55AM	10:00AM	10:15AM
09:50AM	10:02AM	10:15AM	10:20AM	10:35AM
10:10AM	10:22AM	10:35AM	10:40AM	10:55AM
10:30AM	10:42AM	10:55AM	11:00AM	11:15AM
10:50AM	11:02AM	11:15AM	11:20AM	11:35AM
11:10AM	11:22AM	11:35AM	11:40AM	11:55AM
11:30AM	11:42AM	11:55AM	12:00PM	12:15PM

11:50AM	12:02PM	12:15PM	12:20PM	12:35PM
12:10PM	12:22PM	12:35PM	12:40PM	12:55PM
12:30PM	12:42PM	12:55PM	01:00PM	01:15PM
12:50PM	01:02PM	01:15PM	01:20PM	01:35PM
01:10PM	01:22PM	01:35PM	01:40PM	01:55PM
01:30PM	01:42PM	01:55PM	02:00PM	02:15PM
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02:30PM	02:42PM	02:55PM	03:01PM	03:20PM
02:50PM	03:04PM	03:17PM	03:23PM	03:42PM
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09:50PM	10:02PM	10:11PM	10:15PM	10:27PM
10:20PM	10:30PM	10:39PM	10:43PM	10:55PM
10:55PM	11:05PM	11:14PM	11:18PM	11:30PM

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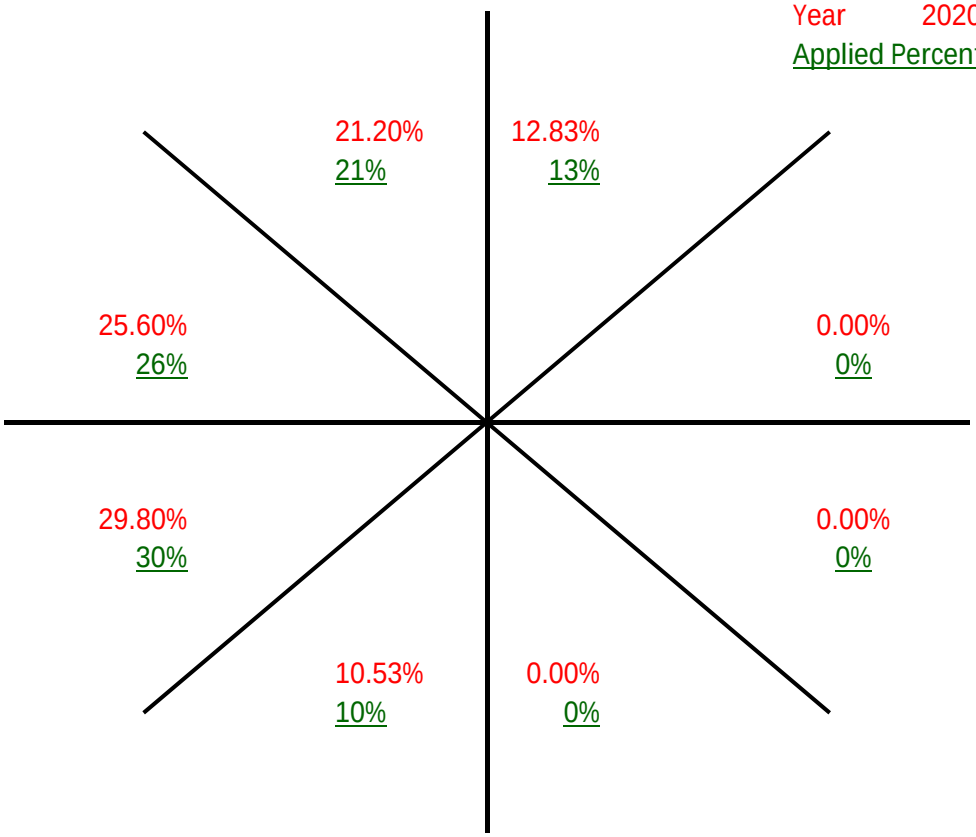
Appendix G

Cardinal Trip Distribution

Cardinal Distribution for TAZ 644



Cardinal Trip Distribution

Cardinal Direction	Percentage of Trips		2020 Interpolated	2020 Rounded
	2010	2040		
North-Northeast	11.2%	16.10%	12.83%	13.00%
East-Northeast	0.0%	0.00%	0.00%	0.00%
East-Southeast	0.0%	0.00%	0.00%	0.00%
South-Southeast	0.0%	0.00%	0.00%	0.00%
South-Southwest	9.6%	12.40%	10.53%	10.00%
West-Southwest	29.7%	30.00%	29.80%	30.00%
West-Northwest	27.3%	22.20%	25.60%	26.00%
North-Northwest	22.1%	19.40%	21.20%	21.00%
Total	99.9%	100.1%	99.97%	100.00%

Miami-Dade 2010 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
636	3536	PERCENT	10.7	0.0	0.0	4.4	10.0	34.0	20.8	20.1	
637	3537	TRIPS	437	39	52	212	109	449	313	207	1,818
637	3537	PERCENT	24.0	2.2	2.9	11.7	6.0	24.7	17.2	11.4	
638	3538	TRIPS	148	25	57	108	66	231	258	107	1,000
638	3538	PERCENT	14.8	2.5	5.7	10.8	6.6	23.1	25.8	10.7	
639	3539	TRIPS	694	286	232	913	139	1,445	989	693	5,391
639	3539	PERCENT	12.9	5.3	4.3	16.9	2.6	26.8	18.4	12.9	
640	3540	TRIPS	436	242	845	100	107	663	503	303	3,199
640	3540	PERCENT	13.6	7.6	26.4	3.1	3.3	20.7	15.7	9.5	
641	3541	TRIPS	1,374	1,440	228	555	352	2,014	2,014	1,124	9,101
641	3541	PERCENT	15.1	15.8	2.5	6.1	3.9	22.1	22.1	12.4	
642	3542	TRIPS	2,054	891	109	1,000	541	3,435	3,075	2,196	13,301
642	3542	PERCENT	15.4	6.7	0.8	7.5	4.1	25.8	23.1	16.5	
643	3543	TRIPS	1,551	277	0	514	462	2,180	2,043	1,648	8,675
643	3543	PERCENT	17.9	3.2	0.0	5.9	5.3	25.1	23.6	19.0	
644	3544	TRIPS	1,376	0	0	0	1,181	3,638	3,350	2,709	12,254
644	3544	PERCENT	11.2	0.0	0.0	0.0	9.6	29.7	27.3	22.1	
645	3545	TRIPS	547	0	0	0	341	1,032	1,603	1,258	4,781
645	3545	PERCENT	11.4	0.0	0.0	0.0	7.1	21.6	33.5	26.3	
646	3546	TRIPS	862	0	61	243	184	1,226	1,566	1,133	5,275
646	3546	PERCENT	16.3	0.0	1.2	4.6	3.5	23.2	29.7	21.5	
647	3547	TRIPS	454	68	83	148	89	427	406	402	2,077
647	3547	PERCENT	21.9	3.3	4.0	7.1	4.3	20.6	19.6	19.4	
648	3548	TRIPS	1,234	415	131	265	56	788	950	546	4,385
648	3548	PERCENT	28.1	9.5	3.0	6.0	1.3	18.0	21.7	12.5	
649	3549	TRIPS	846	215	84	123	15	631	680	403	2,997
649	3549	PERCENT	28.2	7.2	2.8	4.1	0.5	21.1	22.7	13.5	
650	3550	TRIPS	124	133	83	0	20	325	229	66	980
650	3550	PERCENT	12.7	13.6	8.5	0.0	2.0	33.2	23.4	6.7	
651	3551	TRIPS	612	46	55	0	11	438	656	555	2,373
651	3551	PERCENT	25.8	1.9	2.3	0.0	0.5	18.5	27.6	23.4	
652	3552	TRIPS	743	68	63	25	87	625	873	981	3,465
652	3552	PERCENT	21.4	2.0	1.8	0.7	2.5	18.0	25.2	28.3	
653	3553	TRIPS	708	34	64	143	67	703	835	753	3,307
653	3553	PERCENT	21.4	1.0	1.9	4.3	2.0	21.3	25.3	22.8	
654	3554	TRIPS	490	0	203	74	114	628	1,068	1,058	3,635
654	3554	PERCENT	13.5	0.0	5.6	2.0	3.1	17.3	29.4	29.1	
655	3555	TRIPS	1,475	0	0	0	368	1,892	2,676	2,034	8,445
655	3555	PERCENT	17.5	0.0	0.0	0.0	4.4	22.4	31.7	24.1	
656	3556	TRIPS	372	0	0	0	96	740	997	698	2,903
656	3556	PERCENT	12.8	0.0	0.0	0.0	3.3	25.5	34.3	24.0	

Miami-Dade 2040 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
636	3536	PERCENT	19.5	0.0	0.0	8.2	14.8	29.5	14.8	13.3	
637	3537	TRIPS	374	82	83	225	55	396	261	151	1,627
637	3537	PERCENT	23.0	5.0	5.1	13.8	3.4	24.3	16.0	9.3	
638	3538	TRIPS	232	28	34	125	70	269	193	126	1,077
638	3538	PERCENT	21.5	2.6	3.2	11.6	6.5	25.0	17.9	11.7	
639	3539	TRIPS	735	283	169	948	113	1,300	821	476	4,845
639	3539	PERCENT	15.2	5.8	3.5	19.6	2.3	26.8	17.0	9.8	
640	3540	TRIPS	430	255	683	151	73	932	515	373	3,412
640	3540	PERCENT	12.6	7.5	20.0	4.4	2.1	27.3	15.1	10.9	
641	3541	TRIPS	1,419	1,154	177	632	303	1,982	1,752	1,049	8,468
641	3541	PERCENT	16.8	13.6	2.1	7.5	3.6	23.4	20.7	12.4	
642	3542	TRIPS	2,179	1,098	137	956	454	3,066	2,615	1,535	12,040
642	3542	PERCENT	18.1	9.1	1.1	7.9	3.8	25.5	21.7	12.8	
643	3543	TRIPS	2,025	464	0	785	437	2,968	1,920	1,574	10,173
643	3543	PERCENT	19.9	4.6	0.0	7.7	4.3	29.2	18.9	15.5	
644	3544	TRIPS	2,373	0	0	0	1,831	4,426	3,267	2,854	14,751
644	3544	PERCENT	16.1	0.0	0.0	0.0	12.4	30.0	22.2	19.4	
645	3545	TRIPS	1,336	0	0	0	789	1,367	1,649	1,160	6,301
645	3545	PERCENT	21.2	0.0	0.0	0.0	12.5	21.7	26.2	18.4	
646	3546	TRIPS	950	0	142	324	255	1,435	1,393	1,140	5,639
646	3546	PERCENT	16.9	0.0	2.5	5.8	4.5	25.5	24.7	20.2	
647	3547	TRIPS	400	97	99	84	58	528	545	323	2,134
647	3547	PERCENT	18.7	4.6	4.6	3.9	2.7	24.7	25.5	15.1	
648	3548	TRIPS	1,129	496	172	440	46	1,080	1,249	650	5,262
648	3548	PERCENT	21.5	9.4	3.3	8.4	0.9	20.5	23.7	12.4	
649	3549	TRIPS	917	197	118	194	38	829	1,043	478	3,814
649	3549	PERCENT	24.0	5.2	3.1	5.1	1.0	21.7	27.4	12.5	
650	3550	TRIPS	88	112	79	9	31	340	412	150	1,221
650	3550	PERCENT	7.2	9.2	6.5	0.7	2.5	27.9	33.7	12.3	
651	3551	TRIPS	833	9	103	0	52	472	1,049	629	3,147
651	3551	PERCENT	26.5	0.3	3.3	0.0	1.7	15.0	33.3	20.0	
652	3552	TRIPS	856	91	112	82	128	551	1,157	859	3,836
652	3552	PERCENT	22.3	2.4	2.9	2.1	3.3	14.4	30.2	22.4	
653	3553	TRIPS	659	74	119	117	68	718	812	627	3,194
653	3553	PERCENT	20.6	2.3	3.7	3.7	2.1	22.5	25.4	19.6	
654	3554	TRIPS	814	0	220	127	186	1,003	1,184	881	4,415
654	3554	PERCENT	18.4	0.0	5.0	2.9	4.2	22.7	26.8	20.0	
655	3555	TRIPS	2,196	0	0	0	807	1,970	3,347	2,212	10,532
655	3555	PERCENT	20.9	0.0	0.0	0.0	7.7	18.7	31.8	21.0	
656	3556	TRIPS	565	0	0	0	108	489	1,022	769	2,953
656	3556	PERCENT	19.1	0.0	0.0	0.0	3.7	16.6	34.6	26.0	

Appendix H

Volume Development Worksheets

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: 17th Street and Washington Avenue
COUNT DATE: October 27, 2017
PM PEAK HOUR FACTOR: 0.91

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		131	280	120		80	219	22		249	394	76		17	227	96
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
PM EXISTING CONDITIONS		**143**	**305**	**131**		**87**	**239**	**24**		**271**	**429**	**83**		**19**	**247**	**105**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
1600 Washington						2					9	1			10	
Miami Beach Convention Center Hotel			66	16			63			21						
Miami Beach Convention Center											65				98	
TOTAL "VESTED" TRAFFIC			66	16		2	63			21	74	1			108	
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
PM BACKGROUND TRAFFIC GROWTH		2	5	2		1	4	0		24	38	7		2	22	9
PM NON-PROJECT TRAFFIC		**145**	**376**	**149**		**90**	**306**	**24**		**316**	**541**	**91**		**21**	**377**	**114**

"AM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting												100.0%				

"PM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering							-20.0%			20.0%	-35.0%	35.0%		20.0%	-20.0%	
	Exiting										20.0%	35.0%	45.0%				
Net New Distribution	Entering			56.0%									10.0%		21.0%		
	Exiting										56.0%	21.0%	23.0%				
Valet Distribution	Entering																
	Exiting												100.0%				

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New												24				
AM TOTAL PROJECT TRAFFIC													**24**				
AM TOTAL TRAFFIC													**24**				

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By							-4			2	-3	10		4	-4	
	Net New			20							11	4	8		7		
Valet Trips													24				
PM TOTAL PROJECT TRAFFIC				**20**				**-4**			**13**	**1**	**42**		**11**	**-4**	
PM TOTAL TRAFFIC			**145**	**396**	**149**		**90**	**302**	**24**		**329**	**542**	**133**		**32**	**373**	**114**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: 17th Street and James Avenue
COUNT DATE: October 27, 2017
PM PEAK HOUR FACTOR: 0.96

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		55	257	43		23	214	21		40	25	27		10	47	71
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
PM EXISTING CONDITIONS		**60**	**280**	**47**		**25**	**233**	**23**		**44**	**27**	**29**		**11**	**51**	**77**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
1600 Washington			1				2									
Miami Beach Convention Center Hotel			66				63									
Miami Beach Convention Center																
TOTAL "VESTED" TRAFFIC			67				65									
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
PM BACKGROUND TRAFFIC GROWTH		1	4	1		0	4	0		4	2	3		1	4	7
PM NON-PROJECT TRAFFIC		**61**	**351**	**48**		**25**	**302**	**23**		**48**	**29**	**32**		**12**	**55**	**84**

"AM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering			-80.0%													
	Exiting			25.0%	20.0%												
Net New Distribution	Entering							8.0%									5.0%
	Exiting		5.0%	8.0%	10.0%												
Valet Distribution	Entering																
	Exiting																

"AM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
AM TOTAL PROJECT TRAFFIC																	
AM TOTAL TRAFFIC																	

"PM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By			-12	2												
	Net New		1	2	2			3									2
Valet Trips																	
PM TOTAL PROJECT TRAFFIC			**1**	**-10**	**4**			**3**									**2**
PM TOTAL TRAFFIC			**62**	**341**	**52**		**25**	**305**	**23**		**48**	**29**	**32**		**12**	**55**	**86**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: 17th Street and SR A1A/Collins Avenue
COUNT DATE: October 27, 2017
PM PEAK HOUR FACTOR: 0.92

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		120	41	132		25	46	39		104	587	27		13	596	105
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
PM EXISTING CONDITIONS		**131**	**45**	**144**		**27**	**50**	**43**		**113**	**640**	**29**		**14**	**650**	**114**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
1600 Washington				1						1						1
Miami Beach Convention Center Hotel		32		34						31						32
Miami Beach Convention Center																
TOTAL "VESTED" TRAFFIC		32		35						32						33
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
PM BACKGROUND TRAFFIC GROWTH		2	1	2		0	1	1		10	56	3		1	57	10
PM NON-PROJECT TRAFFIC		**165**	**46**	**181**		**27**	**51**	**44**		**155**	**696**	**32**		**15**	**707**	**157**

"AM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		-33.0%	-11.0%	-36.0%												
	Exiting		11.0%	3.0%	11.0%												
Net New Distribution	Entering																8.0%
	Exiting		8.0%														
Valet Distribution	Entering																
	Exiting																

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
AM TOTAL PROJECT TRAFFIC																	
AM TOTAL TRAFFIC																	

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By		-5	-2	-5												
	Net New		2														3
Valet Trips																	
PM TOTAL PROJECT TRAFFIC			**-3**	**-2**	**-5**												**3**
PM TOTAL TRAFFIC			**162**	**44**	**176**		**27**	**51**	**44**		**155**	**696**	**32**		**15**	**707**	**160**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Lincoln Road and Washington Avenue
COUNT DATE: October 27, 2017
PM PEAK HOUR FACTOR: 0.9

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements					6	122		83			620	127		55	471	
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
PM EXISTING CONDITIONS					**7**	**133**		**90**			**676**	**138**		**60**	**513**	

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
1600 Washington											10				12	
Miami Beach Convention Center Hotel											21				16	
Miami Beach Convention Center											65				98	
TOTAL "VESTED" TRAFFIC											96				126	
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
PM BACKGROUND TRAFFIC GROWTH					0	2		1			59	12		5	45	
PM NON-PROJECT TRAFFIC					**7**	**135**		**91**			**831**	**150**		**65**	**684**	

"AM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering															-20.0%	
	Exiting						20.0%										
Net New Distribution	Entering											10.0%					
	Exiting						10.0%										
Valet Distribution	Entering																
	Exiting																

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
AM TOTAL PROJECT TRAFFIC																	
AM TOTAL TRAFFIC																	

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By						2									-4	
	Net New						2					4					
Valet Trips																	
PM TOTAL PROJECT TRAFFIC							**4**					**4**				**-4**	
PM TOTAL TRAFFIC					**7**	**139**		**91**			**835**	**150**		**65**	**680**	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Lincoln Road and James Avenue
COUNT DATE: October 27, 2017
PM PEAK HOUR FACTOR: 0.91

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements	6	42	135		19	0	152	45						44		61
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
PM EXISTING CONDITIONS	**7**	**46**	**147**		**21**	**0**	**166**	**49**						**48**		**66**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
1600 Washington																
Miami Beach Convention Center Hotel																
Miami Beach Convention Center																
TOTAL "VESTED" TRAFFIC																
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
PM BACKGROUND TRAFFIC GROWTH	0.0	1	2		0	0	3	1						4		6
PM NON-PROJECT TRAFFIC	**7**	**47**	**149**		**21**	**0**	**169**	**50**						**52**		**72**

"AM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																20.0%
Net New Distribution	Entering																
	Exiting																10.0%
Valet Distribution	Entering																
	Exiting																

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
AM TOTAL PROJECT TRAFFIC																	
AM TOTAL TRAFFIC																	

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																2
	Net New																2
Valet Trips																	
PM TOTAL PROJECT TRAFFIC																	4
PM TOTAL TRAFFIC	**7**	**47**	**149**		**21**	**0**	**169**	**50**						**52**		**76**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: 17th Street and Project Driveway
COUNT DATE: October 27, 2017
PM PEAK HOUR FACTOR: 0.92

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements			364				323									
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
PM EXISTING CONDITIONS			**397**				**352**									

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
1600 Washington			1				2									
Miami Beach Convention Center Hotel			66				63									
Miami Beach Convention Center																
TOTAL "VESTED" TRAFFIC			67				65									
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
PM BACKGROUND TRAFFIC GROWTH			6				5									
PM NON-PROJECT TRAFFIC			**470**				**422**									

"AM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting				100.0%												

"PM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering			-80.0%	80.0%		20.0%	-20.0%									
	Exiting			45.0%													
Net New Distribution	Entering				87.0%		13.0%										
	Exiting			23.0%													
Valet Distribution	Entering																
	Exiting				100.0%												

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				24												
AM TOTAL PROJECT TRAFFIC					**24**												
AM TOTAL TRAFFIC					**24**												

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By			-10	14		4	-4									
	Net New			4	56		14										
Valet Trips					24												
PM TOTAL PROJECT TRAFFIC				**-6**	**94**		**18**	**-4**									
PM TOTAL TRAFFIC				**464**	**94**		**18**	**418**									

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Washington Avenue and Project Driveway
COUNT DATE: October 27, 2017
PM PEAK HOUR FACTOR: 0.92

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements											711				477	
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
PM EXISTING CONDITIONS											**775**				**520**	

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
1600 Washington											10				12	
Miami Beach Convention Center Hotel											21				16	
Miami Beach Convention Center											65				98	
TOTAL "VESTED" TRAFFIC											96				126	
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
PM BACKGROUND TRAFFIC GROWTH											68				46	
PM NON-PROJECT TRAFFIC											**939**				**692**	

"AM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting								100.0%								

"PM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering															-20.0%	
	Exiting								100.0%								
Net New Distribution	Entering											10.0%					
	Exiting								100.0%								
Valet Distribution	Entering																
	Exiting								100.0%								

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New								24								
AM TOTAL PROJECT TRAFFIC									**24**								
AM TOTAL TRAFFIC									**24**								

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By								8							-4	
	Net New								55			4					
Valet Trips									24								
PM TOTAL PROJECT TRAFFIC									**87**			**4**				**-4**	
PM TOTAL TRAFFIC									**87**			**943**				**688**	

Appendix I

Intersection Capacity Analysis Worksheets

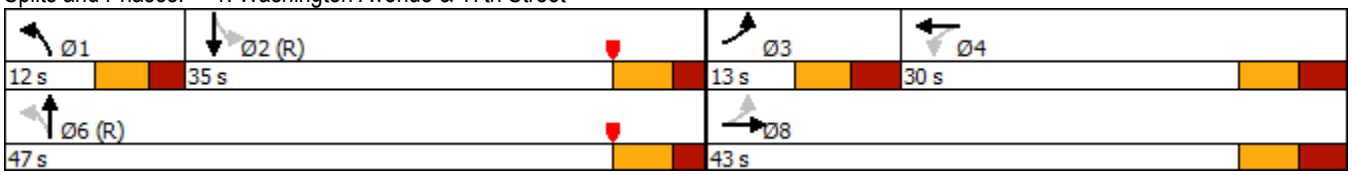
Existing Conditions

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	143	305	87	239	271	429	19	247
Future Volume (vph)	143	305	87	239	271	429	19	247
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases	3	8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	3	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	5.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	30.4	30.0	30.0	11.0	27.3	27.3	27.3
Total Split (s)	13.0	43.0	30.0	30.0	12.0	47.0	35.0	35.0
Total Split (%)	14.4%	47.8%	33.3%	33.3%	13.3%	52.2%	38.9%	38.9%
Yellow Time (s)	3.7	4.0	4.0	4.0	3.7	4.0	4.0	4.0
All-Red Time (s)	3.4	3.4	3.4	3.4	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.4	7.4	7.4	6.0	6.3	6.3	6.3
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 73 (81%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 1: Washington Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	305	131	87	239	24	271	429	83	19	247	105
Future Volume (veh/h)	143	305	131	87	239	24	271	429	83	19	247	105
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.89	0.92		0.84	0.98		0.94	0.97		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1710	1676	1676	1710	1676	1676	1710	1676	1676	1710
Adj Flow Rate, veh/h	157	335	144	96	263	26	298	471	91	21	271	115
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	825	343	267	709	69	391	1143	219	319	695	284
Arrive On Green	0.07	0.39	0.39	0.25	0.25	0.25	0.09	0.61	0.61	0.43	0.43	0.43
Sat Flow, veh/h	1597	2108	876	758	2876	279	1597	2503	479	739	2150	877
Grp Volume(v), veh/h	157	250	229	96	143	146	298	298	264	21	198	188
Grp Sat Flow(s),veh/h/ln	1597	1593	1392	758	1593	1563	1597	1593	1390	739	1593	1435
Q Serve(g_s), s	5.9	10.2	10.8	9.8	6.7	7.0	6.0	8.8	9.0	1.5	7.6	8.1
Cycle Q Clear(g_c), s	5.9	10.2	10.8	9.8	6.7	7.0	6.0	8.8	9.0	1.5	7.6	8.1
Prop In Lane	1.00		0.63	1.00		0.18	1.00		0.34	1.00		0.61
Lane Grp Cap(c), veh/h	338	623	544	267	393	385	391	727	635	319	515	464
V/C Ratio(X)	0.46	0.40	0.42	0.36	0.37	0.38	0.76	0.41	0.42	0.07	0.38	0.41
Avail Cap(c_a), veh/h	338	630	551	270	400	392	391	727	635	319	515	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	19.8	20.0	29.2	28.1	28.2	25.4	11.3	11.4	17.8	19.5	19.7
Incr Delay (d2), s/veh	0.4	0.3	0.4	0.6	0.4	0.5	6.2	1.3	1.6	0.4	2.2	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.5	4.2	2.1	3.0	3.0	5.2	4.1	3.7	0.3	3.6	3.5
LnGrp Delay(d),s/veh	23.7	20.1	20.4	29.9	28.5	28.6	31.7	12.7	12.9	18.2	21.7	22.3
LnGrp LOS	C	C	C	C	C	C	C	B	B	B	C	C
Approach Vol, veh/h		636			385			860			407	
Approach Delay, s/veh		21.1			28.9			19.3			21.8	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Phs Duration (G+Y+Rc), s	12.0	35.4	13.0	29.6		47.4		42.6
Change Period (Y+Rc), s	6.0	* 6.3	* 7.1	7.4		* 6.3		7.4
Max Green Setting (Gmax), s	6.0	* 29	* 5.9	22.6		* 41		35.6
Max Q Clear Time (g_c+I1), s	8.0	10.1	7.9	11.8		11.0		12.8
Green Ext Time (p_c), s	0.0	0.9	0.0	1.5		1.2		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	21.9
HCM 2010 LOS	C

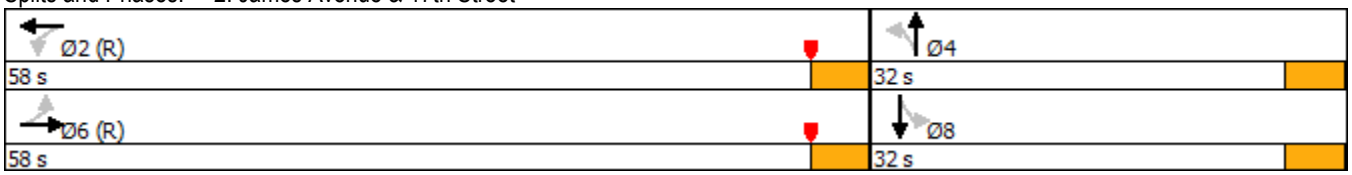
Notes

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	60	280	25	233	44	27	11	51
Future Volume (vph)	60	280	25	233	44	27	11	51
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	33.0	33.0	33.0	33.0	31.3	31.3	31.3	31.3
Total Split (s)	58.0	58.0	58.0	58.0	32.0	32.0	32.0	32.0
Total Split (%)	64.4%	64.4%	64.4%	64.4%	35.6%	35.6%	35.6%	35.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.3		4.3
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Min	C-Min	C-Min	C-Min	None	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 46 (51%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: James Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	280	47	25	233	23	44	27	29	11	51	77
Future Volume (veh/h)	60	280	47	25	233	23	44	27	29	11	51	77
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.89	0.95		0.90	0.95		0.85	0.90		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Adj Sat Flow, veh/h/ln	1676	1676	1710	1676	1676	1710	1710	1676	1710	1710	1676	1710
Adj Flow Rate, veh/h	62	292	49	26	243	24	46	28	30	11	53	80
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	670	1721	283	631	1761	171	177	100	89	53	142	190
Arrive On Green	0.85	0.85	0.85	0.85	0.85	0.85	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	944	2688	442	888	2751	267	446	373	332	38	530	711
Grp Volume(v), veh/h	62	170	171	26	139	128	104	0	0	144	0	0
Grp Sat Flow(s),veh/h/ln	944	1593	1537	888	1593	1425	1151	0	0	1280	0	0
Q Serve(g_s), s	1.1	1.7	1.7	0.5	1.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	1.7	1.7	2.2	1.3	1.4	6.0	0.0	0.0	8.2	0.0	0.0
Prop In Lane	1.00		0.29	1.00		0.19	0.44		0.29	0.08		0.56
Lane Grp Cap(c), veh/h	670	1020	984	631	1020	913	365	0	0	385	0	0
V/C Ratio(X)	0.09	0.17	0.17	0.04	0.14	0.14	0.28	0.00	0.00	0.37	0.00	0.00
Avail Cap(c_a), veh/h	670	1020	984	631	1020	913	410	0	0	436	0	0
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	2.5	2.5	2.7	2.5	2.5	26.3	0.0	0.0	27.2	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.4	0.1	0.3	0.3	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	0.8	0.1	0.6	0.6	2.1	0.0	0.0	3.0	0.0	0.0
LnGrp Delay(d),s/veh	3.0	2.8	2.9	2.8	2.8	2.8	26.6	0.0	0.0	27.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			C		
Approach Vol, veh/h		403			293			104			144	
Approach Delay, s/veh		2.9			2.8			26.6			27.6	
Approach LOS		A			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		61.6		28.4		61.6		28.4
Change Period (Y+Rc), s		4.0		* 4.3		4.0		* 4.3
Max Green Setting (Gmax), s		54.0		* 28		54.0		* 28
Max Q Clear Time (g_c+I1), s		4.2		8.0		4.5		10.2
Green Ext Time (p_c), s		0.6		0.4		0.8		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	9.2
HCM 2010 LOS	A

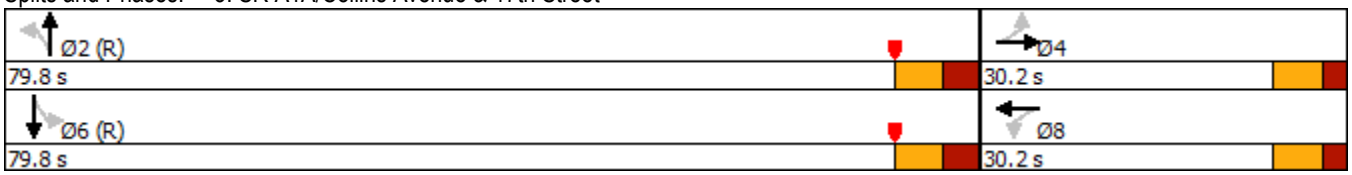
Notes

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	131	45	27	50	113	640	14	650
Future Volume (vph)	131	45	27	50	113	640	14	650
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	30.2	30.2	30.2	30.2	32.0	32.0	32.0	32.0
Total Split (s)	30.2	30.2	30.2	30.2	79.8	79.8	79.8	79.8
Total Split (%)	27.5%	27.5%	27.5%	27.5%	72.5%	72.5%	72.5%	72.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.2	6.2		6.2		7.0		7.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 101 (92%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: SR A1A/Collins Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	45	144	27	50	43	113	640	29	14	650	114
Future Volume (veh/h)	131	45	144	27	50	43	113	640	29	14	650	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.83		0.75	0.89		0.75	0.97		0.78	0.95		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	1.00	1.00	0.92
Adj Sat Flow, veh/h/ln	1676	1676	1710	1710	1676	1710	1710	1676	1710	1710	1676	1710
Adj Flow Rate, veh/h	142	49	157	29	54	47	123	696	32	15	707	124
Adj No. of Lanes	1	1	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	61	195	87	150	146	246	1325	61	48	1620	280
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.88	0.88	0.88	0.88	0.88	0.88
Sat Flow, veh/h	957	279	895	161	689	668	306	2001	92	21	2448	424
Grp Volume(v), veh/h	142	0	206	49	0	81	381	0	470	480	0	366
Grp Sat Flow(s),veh/h/ln	957	0	1175	371	0	1147	1044	0	1356	1641	0	1252
Q Serve(g_s), s	16.1	0.0	18.3	2.5	0.0	6.5	2.2	0.0	8.5	0.0	0.0	6.3
Cycle Q Clear(g_c), s	22.6	0.0	18.3	20.8	0.0	6.5	8.5	0.0	8.5	6.1	0.0	6.3
Prop In Lane	1.00		0.76	0.59		0.58	0.32		0.07	0.03		0.34
Lane Grp Cap(c), veh/h	218	0	256	133	0	250	734	0	897	1120	0	828
V/C Ratio(X)	0.65	0.00	0.80	0.37	0.00	0.32	0.52	0.00	0.52	0.43	0.00	0.44
Avail Cap(c_a), veh/h	218	0	256	133	0	250	734	0	897	1120	0	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	40.8	42.5	0.0	36.2	2.5	0.0	2.7	2.6	0.0	2.6
Incr Delay (d2), s/veh	6.2	0.0	16.2	1.3	0.0	0.5	2.6	0.0	2.2	1.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	7.1	1.5	0.0	2.1	2.5	0.0	3.4	3.0	0.0	2.4
LnGrp Delay(d),s/veh	51.9	0.0	57.0	43.8	0.0	36.7	5.2	0.0	4.9	3.8	0.0	4.3
LnGrp LOS	D		E	D		D	A		A	A		A
Approach Vol, veh/h		348			130			851			846	
Approach Delay, s/veh		54.9			39.4			5.0			4.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		79.8		30.2		79.8		30.2
Change Period (Y+Rc), s		7.0		* 6.2		7.0		* 6.2
Max Green Setting (Gmax), s		72.8		* 24		72.8		* 24
Max Q Clear Time (g_c+I1), s		10.5		24.6		8.3		22.8
Green Ext Time (p_c), s		2.7		0.0		2.1		0.1

Intersection Summary

HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

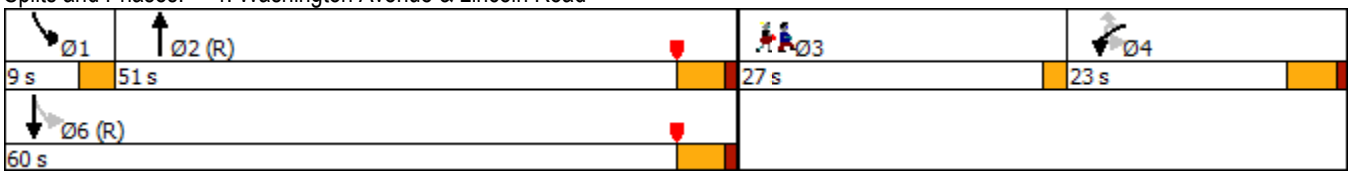
Notes

Lane Group	WBL	WBR	NBT	SBL	SBT	Ø3
Lane Configurations						
Traffic Volume (vph)	133	90	676	60	513	
Future Volume (vph)	133	90	676	60	513	
Turn Type	Prot	Perm	NA	pm+pt	NA	
Protected Phases	4		2	1	6	3
Permitted Phases		4		6		
Detector Phase	4	4	2	1	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0	14.0	5.0	14.0	1.0
Minimum Split (s)	12.0	12.0	19.0	8.0	19.0	27.0
Total Split (s)	23.0	23.0	51.0	9.0	60.0	27.0
Total Split (%)	20.9%	20.9%	46.4%	8.2%	54.5%	25%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	2.0
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	3.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 48 (44%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 4: Washington Avenue & Lincoln Road



Movement	WBU	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	7	133	90	676	138	60	513
Future Volume (vph)	7	133	90	676	138	60	513
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0		3.0	5.0
Lane Util. Factor		1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes		1.00	0.62	0.97		1.00	1.00
Flpb, ped/bikes		0.53	1.00	1.00		0.99	1.00
Frt		1.00	0.85	0.97		1.00	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		836	880	3014		1583	3185
Flt Permitted		0.95	1.00	1.00		0.21	1.00
Satd. Flow (perm)		836	880	3014		354	3185
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	148	100	751	153	67	570
RTOR Reduction (vph)	0	0	65	14	0	0	0
Lane Group Flow (vph)	0	156	35	890	0	67	570
Confl. Peds. (#/hr)	260	1124	807		260	260	
Confl. Bikes (#/hr)			5		9		
Parking (#/hr)					0		
Turn Type	Perm	Prot	Perm	NA		pm+pt	NA
Protected Phases		4		2		1	6
Permitted Phases	4		4			6	
Actuated Green, G (s)		38.9	38.9	53.3		61.1	61.1
Effective Green, g (s)		38.9	38.9	53.3		61.1	61.1
Actuated g/C Ratio		0.35	0.35	0.48		0.56	0.56
Clearance Time (s)		5.0	5.0	5.0		3.0	5.0
Vehicle Extension (s)		1.0	1.0	1.0		1.0	1.0
Lane Grp Cap (vph)		295	311	1460		250	1769
v/s Ratio Prot				c0.30		0.01	c0.18
v/s Ratio Perm		0.19	0.04			0.14	
v/c Ratio		0.53	0.11	0.61		0.27	0.32
Uniform Delay, d1		28.3	23.9	20.7		13.1	13.2
Progression Factor		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2		0.8	0.1	1.9		0.2	0.5
Delay (s)		29.1	24.0	22.6		13.3	13.7
Level of Service		C	C	C		B	B
Approach Delay (s)		27.1		22.6			13.7
Approach LOS		C		C			B

Intersection Summary

HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection								
Int Delay, s/veh	517.3							
Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations			↑↑		↑↑		↾	
Traffic Vol, veh/h	7	46	147	21	166	49	48	66
Future Vol, veh/h	7	46	147	21	166	49	48	66
Conflicting Peds, #/hr	255	779	0	204	0	779	204	255
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	8	51	162	23	182	54	53	73

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	236	1015	0	162	-	0	1437	1152
Stage 1	-	-	-	-	-	-	1034	-
Stage 2	-	-	-	-	-	-	403	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3	3
Pot Cap-1 Maneuver	1016	679	-	1131	-	-	280	377
Stage 1	-	-	-	-	-	-	335	-
Stage 2	-	-	-	-	-	-	735	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	162	162	-	1131	-	-	~ 11	74
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 11	-
Stage 1	-	-	-	-	-	-	~ 51	-
Stage 2	-	-	-	-	-	-	190	-

Approach	EB	WB	SB
HCM Control Delay, s	17.3	0.8	$ 2463.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	162	-	-	-	22
HCM Lane V/C Ratio	0.312	-	-	-	5.694
HCM Control Delay (s)	39.1	9.4	0.1		$ 2463.8
HCM Lane LOS	E	A	A	-	F
HCM 95th %tile Q(veh)	1.2	-	-	-	15.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

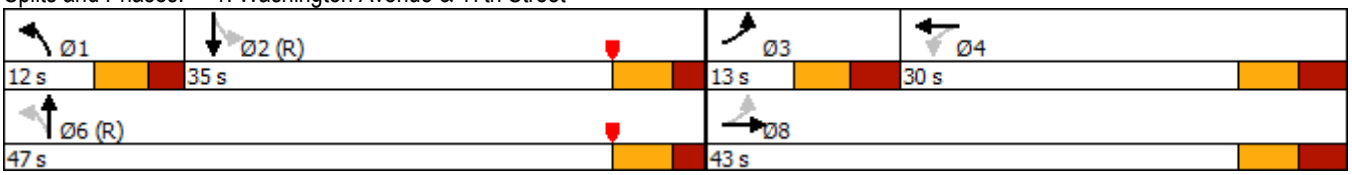
Future Background Conditions

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	145	376	90	306	316	541	21	377
Future Volume (vph)	145	376	90	306	316	541	21	377
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases	3	8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	3	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	5.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	30.4	30.0	30.0	11.0	27.3	27.3	27.3
Total Split (s)	13.0	43.0	30.0	30.0	12.0	47.0	35.0	35.0
Total Split (%)	14.4%	47.8%	33.3%	33.3%	13.3%	52.2%	38.9%	38.9%
Yellow Time (s)	3.7	4.0	4.0	4.0	3.7	4.0	4.0	4.0
All-Red Time (s)	3.4	3.4	3.4	3.4	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.4	7.4	7.4	6.0	6.3	6.3	6.3
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 73 (81%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 1: Washington Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	376	149	90	306	24	316	541	91	21	377	114
Future Volume (veh/h)	145	376	149	90	306	24	316	541	91	21	377	114
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.89	0.93		0.84	0.99		0.94	0.98		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1710	1676	1676	1710	1676	1676	1710	1676	1676	1710
Adj Flow Rate, veh/h	159	413	164	99	336	26	347	595	100	23	414	125
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	846	329	251	731	56	332	1169	196	292	764	227
Arrive On Green	0.07	0.39	0.39	0.25	0.25	0.25	0.09	0.61	0.61	0.43	0.43	0.43
Sat Flow, veh/h	1597	2157	840	700	2952	226	1597	2565	430	656	2370	705
Grp Volume(v), veh/h	159	303	274	99	179	183	347	369	326	23	276	263
Grp Sat Flow(s),veh/h/ln	1597	1593	1404	700	1593	1585	1597	1593	1402	656	1593	1482
Q Serve(g_s), s	5.9	12.8	13.3	11.2	8.6	8.8	6.0	11.9	12.0	1.9	11.6	11.9
Cycle Q Clear(g_c), s	5.9	12.8	13.3	11.5	8.6	8.8	6.0	11.9	12.0	1.9	11.6	11.9
Prop In Lane	1.00		0.60	1.00		0.14	1.00		0.31	1.00		0.48
Lane Grp Cap(c), veh/h	313	624	550	251	394	392	332	726	639	292	514	478
V/C Ratio(X)	0.51	0.48	0.50	0.39	0.46	0.47	1.04	0.51	0.51	0.08	0.54	0.55
Avail Cap(c_a), veh/h	313	630	556	254	400	398	332	726	639	292	514	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.64	0.64	0.64	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	20.5	20.7	29.9	28.7	28.8	30.1	12.0	12.0	18.0	20.7	20.8
Incr Delay (d2), s/veh	0.6	0.4	0.5	0.7	0.6	0.6	51.6	1.6	1.9	0.5	4.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	5.7	5.2	2.2	3.9	3.9	10.4	5.5	4.9	0.4	5.6	5.4
LnGrp Delay(d),s/veh	24.4	21.0	21.2	30.7	29.3	29.4	81.7	13.6	13.9	18.5	24.7	25.3
LnGrp LOS	C	C	C	C	C	C	F	B	B	B	C	C
Approach Vol, veh/h		736			461			1042			562	
Approach Delay, s/veh		21.8			29.7			36.3			24.7	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Phs Duration (G+Y+Rc), s	12.0	35.3	13.0	29.7		47.3		42.7
Change Period (Y+Rc), s	6.0	* 6.3	* 7.1	7.4		* 6.3		7.4
Max Green Setting (Gmax), s	6.0	* 29	* 5.9	22.6		* 41		35.6
Max Q Clear Time (g_c+I1), s	8.0	13.9	7.9	13.5		14.0		15.3
Green Ext Time (p_c), s	0.0	1.2	0.0	1.7		1.6		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

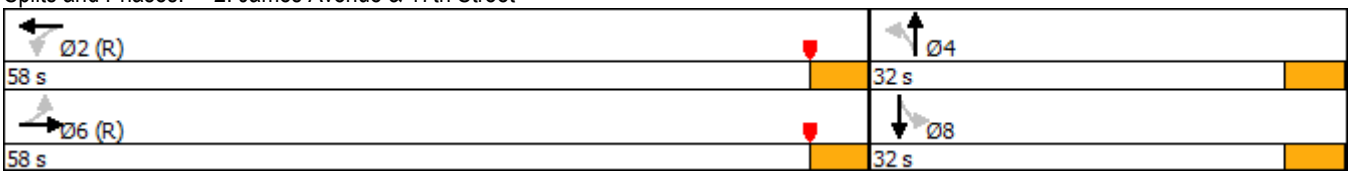
Notes

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	61	351	25	302	48	29	12	55
Future Volume (vph)	61	351	25	302	48	29	12	55
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	33.0	33.0	33.0	33.0	31.3	31.3	31.3	31.3
Total Split (s)	58.0	58.0	58.0	58.0	32.0	32.0	32.0	32.0
Total Split (%)	64.4%	64.4%	64.4%	64.4%	35.6%	35.6%	35.6%	35.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.3		4.3
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Min	C-Min	C-Min	C-Min	None	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 46 (51%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: James Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	351	48	25	302	23	48	29	32	12	55	84
Future Volume (veh/h)	61	351	48	25	302	23	48	29	32	12	55	84
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.89	0.96		0.90	0.95		0.85	0.90		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Adj Sat Flow, veh/h/ln	1676	1676	1710	1676	1676	1710	1710	1676	1710	1710	1676	1710
Adj Flow Rate, veh/h	64	366	50	26	315	24	50	30	33	12	57	88
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	625	1773	239	586	1802	136	175	97	89	54	141	193
Arrive On Green	0.80	0.80	0.80	0.80	0.80	0.80	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	890	2777	374	834	2822	213	436	362	329	40	522	716
Grp Volume(v), veh/h	64	208	208	26	176	163	113	0	0	157	0	0
Grp Sat Flow(s),veh/h/ln	890	1593	1558	834	1593	1442	1127	0	0	1278	0	0
Q Serve(g_s), s	1.7	2.8	2.9	0.7	2.3	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.1	2.8	2.9	3.6	2.3	2.4	6.9	0.0	0.0	9.1	0.0	0.0
Prop In Lane	1.00		0.24	1.00		0.15	0.44		0.29	0.08		0.56
Lane Grp Cap(c), veh/h	625	1017	995	586	1017	921	361	0	0	387	0	0
V/C Ratio(X)	0.10	0.20	0.21	0.04	0.17	0.18	0.31	0.00	0.00	0.41	0.00	0.00
Avail Cap(c_a), veh/h	625	1017	995	586	1017	921	404	0	0	435	0	0
HCM Platoon Ratio	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	0.98	0.98	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.0	3.6	3.6	4.0	3.5	3.5	26.4	0.0	0.0	27.3	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.4	0.1	0.4	0.4	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.3	1.3	0.2	1.1	1.0	2.3	0.0	0.0	3.3	0.0	0.0
LnGrp Delay(d),s/veh	4.3	4.0	4.0	4.2	3.9	3.9	26.8	0.0	0.0	27.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			C		
Approach Vol, veh/h		480			365			113			157	
Approach Delay, s/veh		4.0			3.9			26.8			27.9	
Approach LOS		A			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		61.5		28.5		61.5		28.5
Change Period (Y+Rc), s		4.0		* 4.3		4.0		* 4.3
Max Green Setting (Gmax), s		54.0		* 28		54.0		* 28
Max Q Clear Time (g_c+I1), s		5.6		8.9		6.1		11.1
Green Ext Time (p_c), s		0.8		0.5		1.0		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A

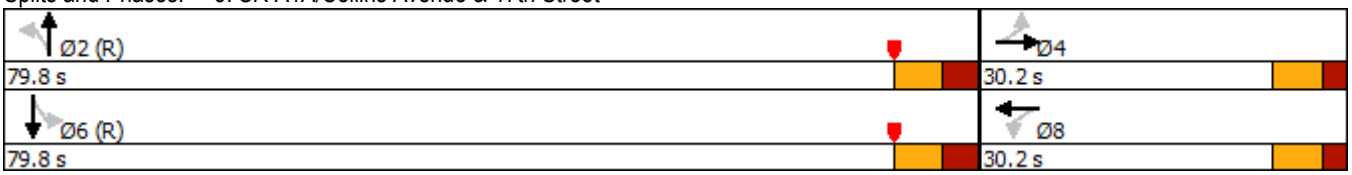
Notes

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	165	46	27	51	155	696	15	707
Future Volume (vph)	165	46	27	51	155	696	15	707
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	30.2	30.2	30.2	30.2	32.0	32.0	32.0	32.0
Total Split (s)	30.2	30.2	30.2	30.2	79.8	79.8	79.8	79.8
Total Split (%)	27.5%	27.5%	27.5%	27.5%	72.5%	72.5%	72.5%	72.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.2	6.2		6.2		7.0		7.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 101 (92%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: SR A1A/Collins Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	46	181	27	51	44	155	696	32	15	707	157
Future Volume (veh/h)	165	46	181	27	51	44	155	696	32	15	707	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.83		0.75	0.92		0.75	0.98		0.78	0.97		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	1.00	1.00	0.92
Adj Sat Flow, veh/h/ln	1676	1676	1710	1710	1676	1710	1710	1676	1710	1710	1676	1710
Adj Flow Rate, veh/h	179	50	197	29	55	48	168	757	35	16	768	171
Adj No. of Lanes	1	1	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	51	202	61	136	135	267	1164	55	47	1540	339
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.88	0.88	0.88	0.88	0.88	0.88
Sat Flow, veh/h	960	235	924	22	623	617	333	1758	83	20	2327	512
Grp Volume(v), veh/h	179	0	247	41	0	91	385	0	575	548	0	407
Grp Sat Flow(s),veh/h/ln	960	0	1159	87	0	1176	813	0	1361	1640	0	1220
Q Serve(g_s), s	16.7	0.0	23.3	0.7	0.0	7.3	15.8	0.0	12.7	0.0	0.0	7.9
Cycle Q Clear(g_c), s	24.0	0.0	23.3	24.0	0.0	7.3	23.7	0.0	12.7	7.6	0.0	7.9
Prop In Lane	1.00		0.80	0.71		0.52	0.44		0.06	0.03		0.42
Lane Grp Cap(c), veh/h	212	0	253	75	0	257	585	0	901	1119	0	807
V/C Ratio(X)	0.85	0.00	0.98	0.54	0.00	0.36	0.66	0.00	0.64	0.49	0.00	0.50
Avail Cap(c_a), veh/h	212	0	253	75	0	257	585	0	901	1119	0	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	0.99	0.00	0.99	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.2	0.0	42.7	47.9	0.0	36.5	4.0	0.0	3.0	2.7	0.0	2.7
Incr Delay (d2), s/veh	25.2	0.0	49.7	6.2	0.0	0.6	5.7	0.0	3.5	1.5	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.0	11.0	1.4	0.0	2.4	5.4	0.0	5.3	3.9	0.0	3.0
LnGrp Delay(d),s/veh	73.4	0.0	92.4	54.1	0.0	37.1	9.7	0.0	6.4	4.2	0.0	4.9
LnGrp LOS	E		F	D		D	A		A	A		A
Approach Vol, veh/h		426			132			960			955	
Approach Delay, s/veh		84.4			42.3			7.7			4.5	
Approach LOS		F			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		79.8		30.2		79.8		30.2
Change Period (Y+Rc), s		7.0		* 6.2		7.0		* 6.2
Max Green Setting (Gmax), s		72.8		* 24		72.8		* 24
Max Q Clear Time (g_c+I1), s		25.7		26.0		9.9		26.0
Green Ext Time (p_c), s		3.6		0.0		2.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	21.6
HCM 2010 LOS	C

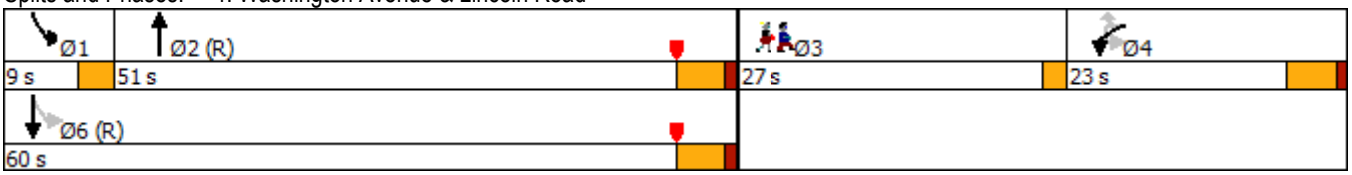
Notes

Lane Group	WBL	WBR	NBT	SBL	SBT	Ø3
Lane Configurations						
Traffic Volume (vph)	135	91	831	65	684	
Future Volume (vph)	135	91	831	65	684	
Turn Type	Prot	Perm	NA	pm+pt	NA	
Protected Phases	4		2	1	6	3
Permitted Phases		4		6		
Detector Phase	4	4	2	1	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0	14.0	5.0	14.0	1.0
Minimum Split (s)	12.0	12.0	19.0	8.0	19.0	27.0
Total Split (s)	23.0	23.0	51.0	9.0	60.0	27.0
Total Split (%)	20.9%	20.9%	46.4%	8.2%	54.5%	25%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	2.0
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	3.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 48 (44%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 4: Washington Avenue & Lincoln Road



Movement	WBU	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	7	135	91	831	150	65	684
Future Volume (vph)	7	135	91	831	150	65	684
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0		3.0	5.0
Lane Util. Factor		1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes		1.00	0.62	0.97		1.00	1.00
Flpb, ped/bikes		0.53	1.00	1.00		1.00	1.00
Frt		1.00	0.85	0.98		1.00	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		844	884	3028		1589	3185
Flt Permitted		0.95	1.00	1.00		0.14	1.00
Satd. Flow (perm)		844	884	3028		241	3185
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	150	101	923	167	72	760
RTOR Reduction (vph)	0	0	65	12	0	0	0
Lane Group Flow (vph)	0	158	36	1078	0	72	760
Confl. Peds. (#/hr)	260	1124	807		260	260	
Confl. Bikes (#/hr)			5		9		
Parking (#/hr)					0		
Turn Type	Perm	Prot	Perm	NA		pm+pt	NA
Protected Phases		4		2		1	6
Permitted Phases	4		4			6	
Actuated Green, G (s)		39.7	39.7	52.4		60.3	60.3
Effective Green, g (s)		39.7	39.7	52.4		60.3	60.3
Actuated g/C Ratio		0.36	0.36	0.48		0.55	0.55
Clearance Time (s)		5.0	5.0	5.0		3.0	5.0
Vehicle Extension (s)		1.0	1.0	1.0		1.0	1.0
Lane Grp Cap (vph)		304	319	1442		192	1745
v/s Ratio Prot				c0.36		0.02	c0.24
v/s Ratio Perm		0.19	0.04			0.19	
v/c Ratio		0.52	0.11	0.75		0.38	0.44
Uniform Delay, d1		27.7	23.4	23.4		15.1	14.7
Progression Factor		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2		0.6	0.1	3.6		0.4	0.8
Delay (s)		28.3	23.6	27.0		15.6	15.5
Level of Service		C	C	C		B	B
Approach Delay (s)		26.5		27.0			15.5
Approach LOS		C		C			B

Intersection Summary

HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection

Int Delay, s/veh 7420.1

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	7	47	149	21	169	50	52	72
Future Vol, veh/h	7	47	149	21	169	50	52	72
Conflicting Peds, #/hr	255	779	0	204	0	779	204	255
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	8	52	164	23	186	55	57	79

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	241	1020	0	164	-	0	1445	1155
Stage 1	-	-	-	-	-	-	1039	-
Stage 2	-	-	-	-	-	-	406	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3	3
Pot Cap-1 Maneuver	1009	676	-	1128	-	-	277	376
Stage 1	-	-	-	-	-	-	332	-
Stage 2	-	-	-	-	-	-	732	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	70	70	-	1128	-	-	~ 1	~ 73
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 1	-
Stage 1	-	-	-	-	-	-	~ 6	-
Stage 2	-	-	-	-	-	-	189	-

Approach	EB	WB	SB
HCM Control Delay, s	113.2	0.8	$ 33742.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	70	-	-	-	2
HCM Lane V/C Ratio	0.738	-	-	-	68.132
HCM Control Delay (s)	165.8	94.1	0.1	$	33742.3
HCM Lane LOS	F	F	A	-	F
HCM 95th %tile Q(veh)	3.4	-	-	-	19.4

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

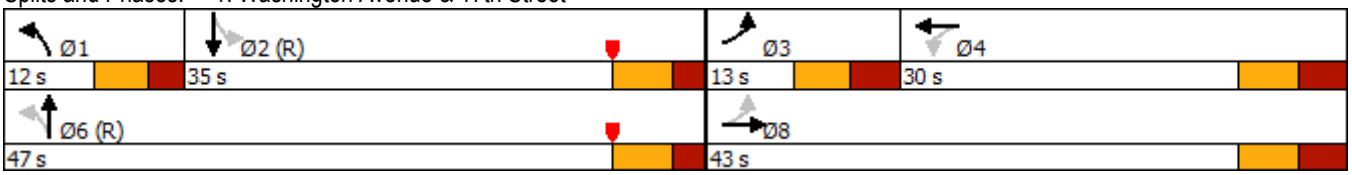
Future Total Conditions

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	145	396	90	302	329	542	32	373
Future Volume (vph)	145	396	90	302	329	542	32	373
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases	3	8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	3	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	5.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	30.4	30.0	30.0	11.0	27.3	27.3	27.3
Total Split (s)	13.0	43.0	30.0	30.0	12.0	47.0	35.0	35.0
Total Split (%)	14.4%	47.8%	33.3%	33.3%	13.3%	52.2%	38.9%	38.9%
Yellow Time (s)	3.7	4.0	4.0	4.0	3.7	4.0	4.0	4.0
All-Red Time (s)	3.4	3.4	3.4	3.4	2.3	2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.4	7.4	7.4	6.0	6.3	6.3	6.3
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 73 (81%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 1: Washington Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	396	149	90	302	24	329	542	142	32	373	114
Future Volume (veh/h)	145	396	149	90	302	24	329	542	142	32	373	114
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.89	0.94		0.84	0.99		0.94	0.98		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1676	1710	1676	1676	1710	1676	1676	1710	1676	1676	1710
Adj Flow Rate, veh/h	159	435	164	99	332	26	362	596	156	35	410	125
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	860	319	244	731	57	333	1066	278	269	762	228
Arrive On Green	0.07	0.39	0.39	0.25	0.25	0.25	0.09	0.61	0.61	0.43	0.43	0.43
Sat Flow, veh/h	1597	2193	813	688	2948	228	1597	2339	610	624	2364	709
Grp Volume(v), veh/h	159	314	285	99	177	181	362	405	347	35	274	261
Grp Sat Flow(s),veh/h/ln	1597	1593	1413	688	1593	1584	1597	1593	1357	624	1593	1481
Q Serve(g_s), s	5.9	13.4	13.8	11.5	8.5	8.7	6.0	13.6	13.7	3.3	11.5	11.8
Cycle Q Clear(g_c), s	5.9	13.4	13.8	12.3	8.5	8.7	6.0	13.6	13.7	5.0	11.5	11.8
Prop In Lane	1.00		0.58	1.00		0.14	1.00		0.45	1.00		0.48
Lane Grp Cap(c), veh/h	315	625	554	244	395	393	333	725	618	269	513	477
V/C Ratio(X)	0.50	0.50	0.51	0.41	0.45	0.46	1.09	0.56	0.56	0.13	0.53	0.55
Avail Cap(c_a), veh/h	315	630	559	246	400	398	333	725	618	269	513	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	20.7	20.8	30.5	28.6	28.7	30.1	12.3	12.4	19.4	20.7	20.8
Incr Delay (d2), s/veh	0.5	0.5	0.6	0.8	0.6	0.6	63.9	1.9	2.2	1.0	3.9	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	5.9	5.5	2.2	3.8	3.9	5.9	6.3	5.5	0.6	5.6	5.4
LnGrp Delay(d),s/veh	24.3	21.2	21.4	31.3	29.2	29.4	94.0	14.2	14.6	20.4	24.7	25.3
LnGrp LOS	C	C	C	C	C	C	F	B	B	C	C	C
Approach Vol, veh/h		758			457			1114			570	
Approach Delay, s/veh		21.9			29.7			40.3			24.7	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Phs Duration (G+Y+Rc), s	12.0	35.3	13.0	29.7		47.3		42.7
Change Period (Y+Rc), s	6.0	* 6.3	* 7.1	7.4		* 6.3		7.4
Max Green Setting (Gmax), s	6.0	* 29	* 5.9	22.6		* 41		35.6
Max Q Clear Time (g_c+I1), s	8.0	13.8	7.9	14.3		15.7		15.8
Green Ext Time (p_c), s	0.0	1.3	0.0	1.6		1.8		3.1

Intersection Summary	
HCM 2010 Ctrl Delay	30.8
HCM 2010 LOS	C

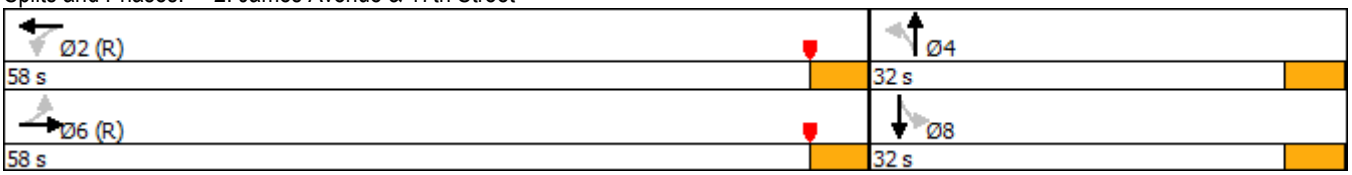
Notes

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	62	341	25	305	48	29	12	55
Future Volume (vph)	62	341	25	305	48	29	12	55
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	33.0	33.0	33.0	33.0	31.3	31.3	31.3	31.3
Total Split (s)	58.0	58.0	58.0	58.0	32.0	32.0	32.0	32.0
Total Split (%)	64.4%	64.4%	64.4%	64.4%	35.6%	35.6%	35.6%	35.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.3		4.3
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Min	C-Min	C-Min	C-Min	None	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 46 (51%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: James Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	341	52	25	305	23	48	29	32	12	55	86
Future Volume (veh/h)	62	341	52	25	305	23	48	29	32	12	55	86
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.89	0.96		0.90	0.95		0.85	0.90		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Adj Sat Flow, veh/h/ln	1676	1676	1710	1676	1676	1710	1710	1676	1710	1710	1676	1710
Adj Flow Rate, veh/h	65	355	54	26	318	24	50	30	33	12	57	90
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	623	1743	261	589	1803	135	175	97	88	54	139	195
Arrive On Green	0.80	0.80	0.80	0.80	0.80	0.80	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	888	2731	409	839	2824	211	434	360	328	39	515	723
Grp Volume(v), veh/h	65	205	204	26	178	164	113	0	0	159	0	0
Grp Sat Flow(s),veh/h/ln	888	1593	1547	839	1593	1443	1123	0	0	1276	0	0
Q Serve(g_s), s	1.7	2.8	2.9	0.7	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.1	2.8	2.9	3.6	2.4	2.4	6.9	0.0	0.0	9.2	0.0	0.0
Prop In Lane	1.00		0.26	1.00		0.15	0.44		0.29	0.08		0.57
Lane Grp Cap(c), veh/h	623	1017	988	589	1017	921	360	0	0	387	0	0
V/C Ratio(X)	0.10	0.20	0.21	0.04	0.17	0.18	0.31	0.00	0.00	0.41	0.00	0.00
Avail Cap(c_a), veh/h	623	1017	988	589	1017	921	402	0	0	435	0	0
HCM Platoon Ratio	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.98	0.98	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.0	3.6	3.6	4.0	3.5	3.5	26.4	0.0	0.0	27.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.4	0.1	0.4	0.4	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.3	1.3	0.2	1.1	1.0	2.3	0.0	0.0	3.3	0.0	0.0
LnGrp Delay(d),s/veh	4.3	4.0	4.0	4.2	3.9	3.9	26.8	0.0	0.0	27.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			C		
Approach Vol, veh/h		474			368			113			159	
Approach Delay, s/veh		4.0			3.9			26.8			27.9	
Approach LOS		A			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		61.4		28.6		61.4		28.6
Change Period (Y+Rc), s		4.0		* 4.3		4.0		* 4.3
Max Green Setting (Gmax), s		54.0		* 28		54.0		* 28
Max Q Clear Time (g_c+I1), s		5.6		8.9		6.1		11.2
Green Ext Time (p_c), s		0.8		0.5		1.0		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	9.7
HCM 2010 LOS	A

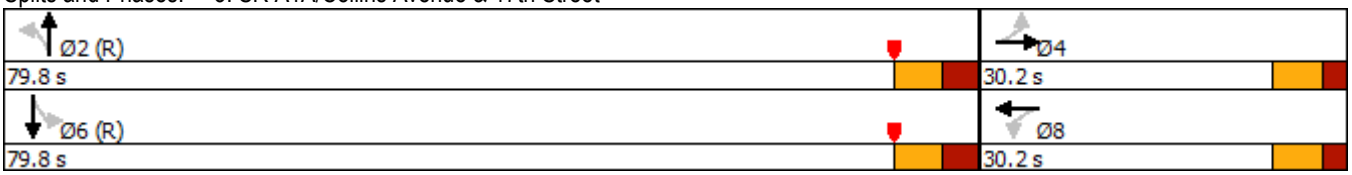
Notes

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	162	44	27	51	155	696	15	707
Future Volume (vph)	162	44	27	51	155	696	15	707
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	30.2	30.2	30.2	30.2	32.0	32.0	32.0	32.0
Total Split (s)	30.2	30.2	30.2	30.2	79.8	79.8	79.8	79.8
Total Split (%)	27.5%	27.5%	27.5%	27.5%	72.5%	72.5%	72.5%	72.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.2	6.2		6.2		7.0		7.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 101 (92%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: SR A1A/Collins Avenue & 17th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	44	176	27	51	44	155	696	32	15	707	160
Future Volume (veh/h)	162	44	176	27	51	44	155	696	32	15	707	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.83		0.75	0.91		0.75	0.98		0.78	0.98		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	1.00	1.00	0.92
Adj Sat Flow, veh/h/ln	1676	1676	1710	1710	1676	1710	1710	1676	1710	1710	1676	1710
Adj Flow Rate, veh/h	176	48	191	29	55	48	168	757	35	16	768	174
Adj No. of Lanes	1	1	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	51	202	66	138	137	257	1151	55	47	1534	344
Arrive On Green	0.17	0.17	0.17	0.22	0.22	0.22	0.83	0.83	0.83	0.83	0.83	0.83
Sat Flow, veh/h	959	233	925	48	630	626	317	1739	83	20	2318	519
Grp Volume(v), veh/h	176	0	239	42	0	90	385	0	575	550	0	408
Grp Sat Flow(s),veh/h/ln	959	0	1158	134	0	1171	778	0	1361	1640	0	1217
Q Serve(g_s), s	16.9	0.0	22.4	1.6	0.0	7.1	23.7	0.0	17.0	0.0	0.0	11.0
Cycle Q Clear(g_c), s	24.0	0.0	22.4	24.0	0.0	7.1	34.7	0.0	17.0	10.6	0.0	11.0
Prop In Lane	1.00		0.80	0.69		0.53	0.44		0.06	0.03		0.43
Lane Grp Cap(c), veh/h	212	0	253	84	0	255	562	0	900	1119	0	806
V/C Ratio(X)	0.83	0.00	0.95	0.50	0.00	0.35	0.69	0.00	0.64	0.49	0.00	0.51
Avail Cap(c_a), veh/h	212	0	253	84	0	255	562	0	900	1119	0	806
HCM Platoon Ratio	0.80	0.80	0.80	1.00	1.00	1.00	1.25	1.25	1.25	1.25	1.25	1.25
Upstream Filter(I)	0.99	0.00	0.99	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.4	0.0	44.8	47.0	0.0	36.4	7.4	0.0	4.7	4.1	0.0	4.2
Incr Delay (d2), s/veh	22.4	0.0	41.5	3.4	0.0	0.6	6.7	0.0	3.5	1.5	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	10.1	1.4	0.0	2.4	7.5	0.0	7.0	5.2	0.0	4.0
LnGrp Delay(d),s/veh	72.8	0.0	86.3	50.4	0.0	37.0	14.1	0.0	8.1	5.7	0.0	6.4
LnGrp LOS	E		F	D		D	B		A	A		A
Approach Vol, veh/h		415			132			960			958	
Approach Delay, s/veh		80.5			41.3			10.5			6.0	
Approach LOS		F			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		79.8		30.2		79.8		30.2
Change Period (Y+Rc), s		7.0		* 6.2		7.0		* 6.2
Max Green Setting (Gmax), s		72.8		* 24		72.8		* 24
Max Q Clear Time (g_c+I1), s		36.7		26.0		13.0		26.0
Green Ext Time (p_c), s		3.6		0.0		2.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.2
HCM 2010 LOS	C

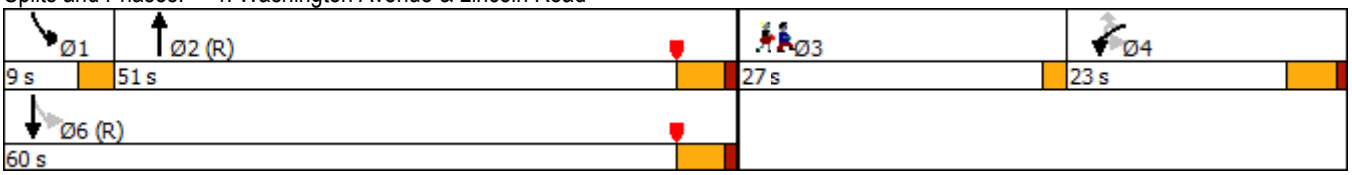
Notes

Lane Group	WBL	WBR	NBT	SBL	SBT	Ø3
Lane Configurations						
Traffic Volume (vph)	139	91	835	65	680	
Future Volume (vph)	139	91	835	65	680	
Turn Type	Prot	Perm	NA	pm+pt	NA	
Protected Phases	4		2	1	6	3
Permitted Phases		4		6		
Detector Phase	4	4	2	1	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0	14.0	5.0	14.0	1.0
Minimum Split (s)	12.0	12.0	19.0	8.0	19.0	27.0
Total Split (s)	23.0	23.0	51.0	9.0	60.0	27.0
Total Split (%)	20.9%	20.9%	46.4%	8.2%	54.5%	25%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	2.0
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	3.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 48 (44%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 4: Washington Avenue & Lincoln Road



Movement	WBU	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	7	139	91	835	150	65	680
Future Volume (vph)	7	139	91	835	150	65	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0		3.0	5.0
Lane Util. Factor		1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes		1.00	0.62	0.97		1.00	1.00
Flpb, ped/bikes		0.54	1.00	1.00		1.00	1.00
Frt		1.00	0.85	0.98		1.00	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		856	890	3027		1589	3185
Flt Permitted		0.95	1.00	1.00		0.14	1.00
Satd. Flow (perm)		856	890	3027		228	3185
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	154	101	928	167	72	756
RTOR Reduction (vph)	0	0	63	12	0	0	0
Lane Group Flow (vph)	0	162	38	1083	0	72	756
Confl. Peds. (#/hr)	260	1124	807		260	260	
Confl. Bikes (#/hr)			5		9		
Parking (#/hr)					0		
Turn Type	Perm	Prot	Perm	NA		pm+pt	NA
Protected Phases		4		2		1	6
Permitted Phases	4		4			6	
Actuated Green, G (s)		41.1	41.1	51.0		58.9	58.9
Effective Green, g (s)		41.1	41.1	51.0		58.9	58.9
Actuated g/C Ratio		0.37	0.37	0.46		0.54	0.54
Clearance Time (s)		5.0	5.0	5.0		3.0	5.0
Vehicle Extension (s)		1.0	1.0	1.0		1.0	1.0
Lane Grp Cap (vph)		319	332	1403		182	1705
v/s Ratio Prot				c0.36		0.02	c0.24
v/s Ratio Perm		0.19	0.04			0.19	
v/c Ratio		0.51	0.11	0.77		0.40	0.44
Uniform Delay, d1		26.6	22.5	24.6		16.1	15.6
Progression Factor		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2		0.5	0.1	4.2		0.5	0.8
Delay (s)		27.2	22.5	28.8		16.6	16.4
Level of Service		C	C	C		B	B
Approach Delay (s)		25.4		28.8			16.4
Approach LOS		C		C			B

Intersection Summary

HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection								
Int Delay, s/veh	384.3							
Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	7	47	149	21	169	50	52	76
Future Vol, veh/h	7	47	149	21	169	50	52	76
Conflicting Peds, #/hr	255	779	0	204	0	779	204	255
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	8	52	164	23	186	55	57	84

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	241	1020	0	164	-	0	1445	1155
Stage 1	-	-	-	-	-	-	1039	-
Stage 2	-	-	-	-	-	-	406	-
Critical Hdwy	6.44	4.14	-	6.44	-	-	5	5
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	-
Follow-up Hdwy	2.52	2.22	-	2.52	-	-	3	3
Pot Cap-1 Maneuver	1009	676	-	1128	-	-	277	376
Stage 1	-	-	-	-	-	-	332	-
Stage 2	-	-	-	-	-	-	732	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	~ -17	~ -17	-	1128	-	-	~ 18	~ 73
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 18	-
Stage 1	-	-	-	-	-	-	84	-
Stage 2	-	-	-	-	-	-	189	-

Approach	EB	WB	SB
HCM Control Delay, s		0.8	$ 1713
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	+	-	-	-	33
HCM Lane V/C Ratio	-	-	-	-	4.262
HCM Control Delay (s)	-	-	0.1	-	$ 1713
HCM Lane LOS	-	-	A	-	F
HCM 95th %tile Q(veh)	-	-	-	-	16.6

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	81	890	0	0	658
Future Vol, veh/h	0	81	890	0	0	658
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	88	967	0	0	715

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	484	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	5	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3	-	-	-	-
Pot Cap-1 Maneuver	0	745	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	745	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	745	-
HCM Lane V/C Ratio	-	0.118	-
HCM Control Delay (s)	-	10.5	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.4	-

Attachment B
Updated Valet Analysis

Kimley»Horn

MEMORANDUM

To: Firat Akcay, City of Miami Beach
Josiel Ferrer, E.I., City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE
Cory D. Dorman, E.I.

Date: April 26, 2018

Subject: 1685 Washington Avenue
Valet Operations Analysis

Kimley-Horn and Associates, Inc. has prepared a valet operations analysis for the proposed redevelopment located at 1685 Washington Avenue in Miami Beach, Florida. Currently, the site is occupied by a 6,644 square-foot drive-in bank. The proposed redevelopment will consist of a 150-room hotel, 2,023 square feet of specialty retail space, a 4,000 square-foot walk-in bank, and 295 total restaurant seats with 145 seats located on the ground floor (5,258 square feet) and 150 seats located on the rooftop level (2,156 indoor square feet and 2,244 exterior square feet). The parking garage includes 110 mechanical-lift parking spaces and 12 conventional parking spaces. Please note that on-site self-parking will be provided for the proposed walk-in bank and all other vehicles will be valeted to the on-site parking garage with the exception of taxis/rideshare. A conceptual site plan and project location map are included in Attachment A.

VALET SERVICE AND OPERATIONS

The redevelopment will be served by one (1) porte-cochere for valet drop-off and pick-up. The porte-cochere is located on-site just south of 17th Street project driveway. The porte-cochere consists of one (1) storage lane with approximately four (4) vehicles of storage and one (1) bypass lane. It is assumed that three (3) spaces will be used for valet operations and one (1) space will be used for taxi/rideshare.

Access to the proposed redevelopment will be provided by one (1) ingress left-in/right-in driveway along 17th Street between Washington Avenue and James Avenue and one (1) egress right-out only driveway along Washington Avenue between 17th Street and Lincoln Road. On-site self-parking will be provided for the proposed walk-in bank. All other vehicles will be valeted on-site with the exception of taxis and rideshare. The parking garage includes 110 mechanical-lift parking spaces and 12 conventional parking spaces. All mechanical-lift parking spaces are assumed to be used for valet and all conventional parking spaces are assumed to be used for self-parking.

The valet drop-off route is contained within the site and is not expected to impact the external roadway network. It is assumed that valet pick-up vehicles will exit the site via the Washington Avenue project driveway, travel northbound along Washington Avenue, travel eastbound along 17th Street, and utilize the 17th Street project driveway to access the on-site porte-cochere. Figure 2 contained in Attachment A provides a graphic illustration of the proposed valet routes to and from the on-site parking garage.

TRIP GENERATION

Trip generation for the proposed redevelopment was calculated using rates contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. Trip generation rates were examined for the weekday P.M. peak hour. Please note that a 42.6 percent (42.6%) taxi/rideshare trip factor was applied to the hotel and restaurant components of the redevelopment to account for guests and patrons arriving via taxi/rideshare to the site and to determine the number of valet trips. The proposed redevelopment is expected to generate 80 valet trips of which 47 enter the site and 33 exit the site during the P.M. peak hour. Detailed trip generation calculations are included in Attachment B.

VALET OPERATIONS ANALYSIS

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 17th Street. Valet operations were analyzed for the number of valet attendants and required vehicle stacking for the redevelopment proposed traffic.

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 will be stationed at the on-site porte-cochere. 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 within the on-site parking garage. 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 at the on-site porte-cochere for pick-up. Note that the average mechanical-lift processing time was based on the Klaus Model G61 vehicle lift. The average mechanical-lift processing time was based on the average processing times of parking and retrieving vehicles from all the various positions within the tandem mechanical-lift system. The detailed mechanical-lift processing time analysis is contained in Attachment C. The following summarizes the total valet drop-off and pick-up service times.

The service time for valet drop-off operation corresponds to the following:

- Exchange between valet attendant and driver including unloading luggage (1.0 minute)
- Valet attendant drives vehicle from porte-cochere to on-site parking garage (0.6 minutes)
- Valet attendant parks vehicle using mechanical-lift (1.7 minutes)
- Valet attendant returns to valet station (0.4 minutes)
- Total service rate: 3.7 minutes

The service time for valet pick-off operation corresponds to the following:

- Valet attendant proceeds to the garage to retrieve the vehicle (0.4 minutes)
- Valet attendant retrieves moves vehicle from mechanical-lift (1.6 minutes)

- Valet attendant drives vehicle from on-site parking garage to the porte-cochere (1.2 minutes)
- Exchange between valet attendant and driver and loading baggage (1.0 minute)
- Total service rate: 4.2 minutes

The calculated average service time for vehicles valeted from the on-site porte-cochere 3.7 minutes for valet drop-off and 4.2 minutes for valet pick-up. However, to provide a conservative analysis, a service time of 4.0 minutes for valet drop-off and 5.0 minutes for valet pick-up was used. Processing times include the time for the exchange between the driver and valet attendants and time to unload and load baggage is assumed for all vehicles valeted. Note that this results in a conservative analysis. Detailed trip length calculations are included in Attachment C.

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. This analysis seeks to ensure that the queue length does not exceed the storage provided at a level of confidence of 95 percent (95%). Three (3) vehicle drop-off/pick-up spaces are provided for valet operations based on the attached site plan for the porte-cochere valet drop-off/pick-up located.

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 95th percentile valet queue does not extend beyond the designated valet service area. Detailed valet analysis worksheets are provided in Attachment D.

Results of the highest demand condition valet operations analysis demonstrate that nine (9) valet attendants would be required so that the vehicle drop-off/pick-up storage would not be exceeded.

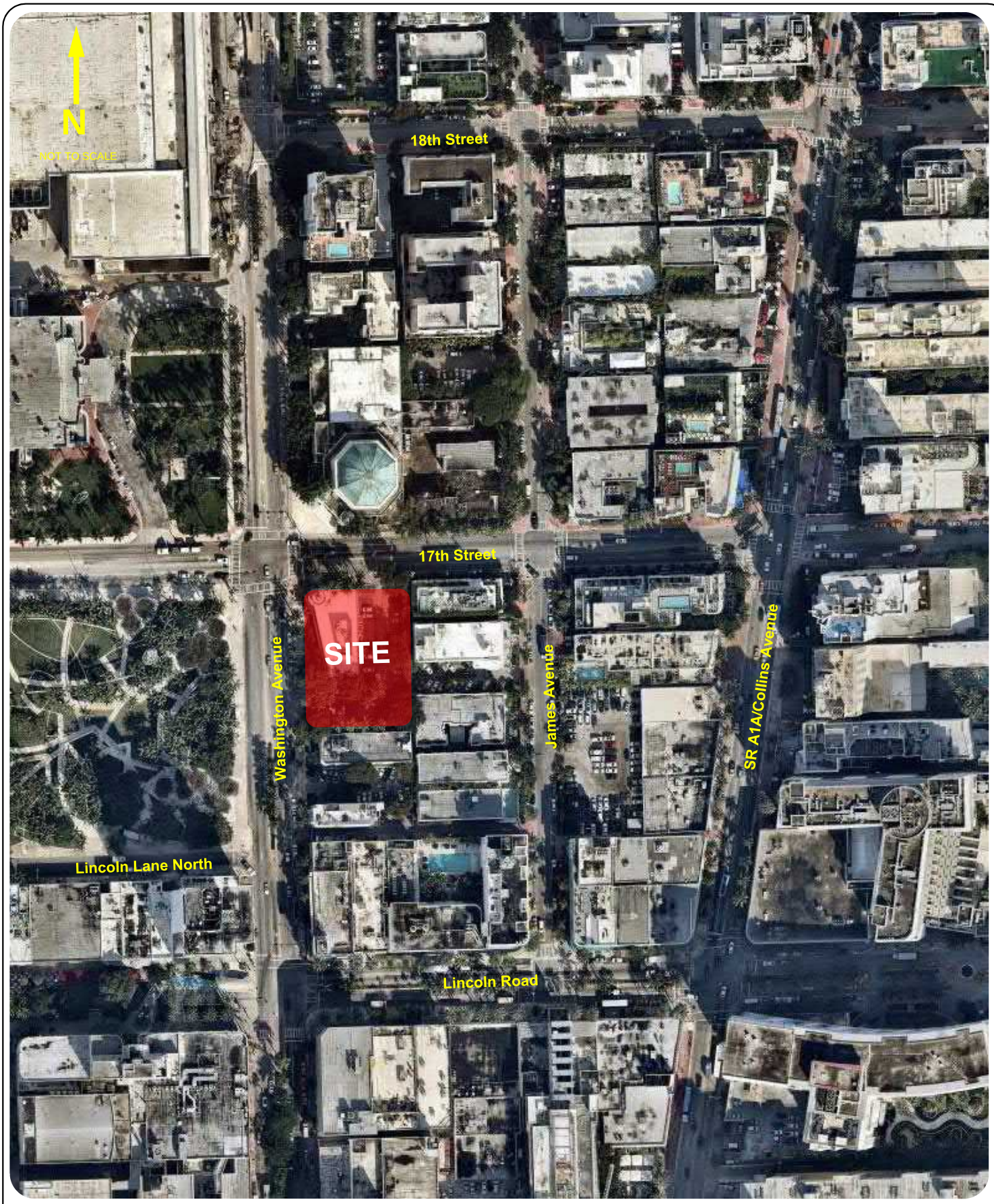
VALET CONCLUSION

Based on the valet operations analysis performed, it was determined that the 95th percentile valet queues will not extend beyond the valet service area onto 17th Street. Based upon the conservative assumptions applied to the highest traffic demand condition, it was estimated that nine (9) valet attendants may be required during peak periods. 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.

K:\FTL_TPTO\043896000-1685 Washington Avenue\Correspondence\valet\Valet Operations Analysis 04 26 18.docx

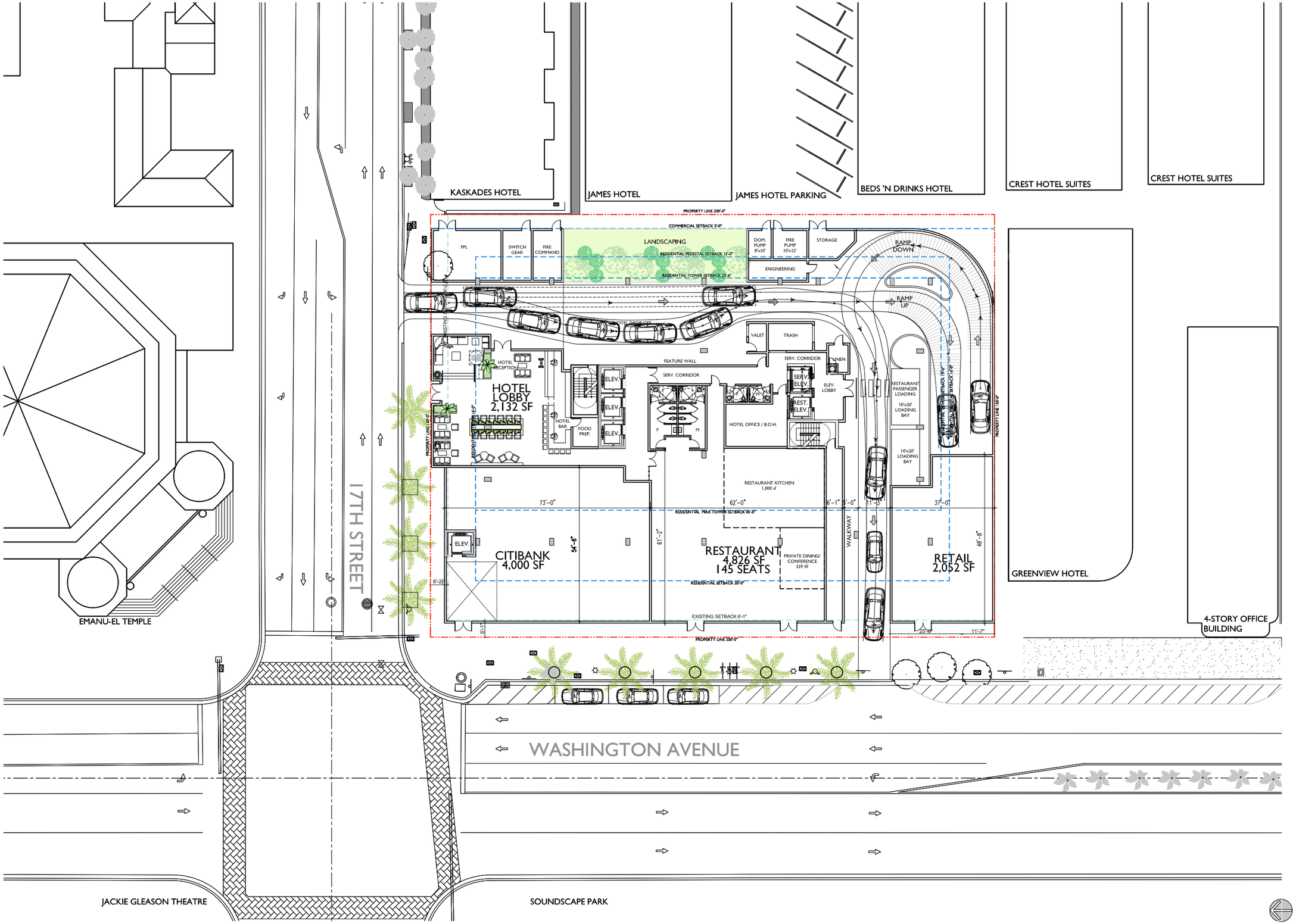
Attachment A

Conceptual Site Plan and Project Location Map



Kimley»Horn

Figure 1
Location Map
1685 Washington Avenue
Miami Beach, Florida



PROPOSED SITE PLAN 1/32" = 1'-0"

MCG
ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

RUDY RICCIOTTI architecte
ARTISTIC ADVISOR

DRAWING:

PROPOSED SITE PLAN

SCALE:	N.T.S.
CHECK:	JMcG
DATE:	04/02/2018

SHEET NUMBER

A2.00B

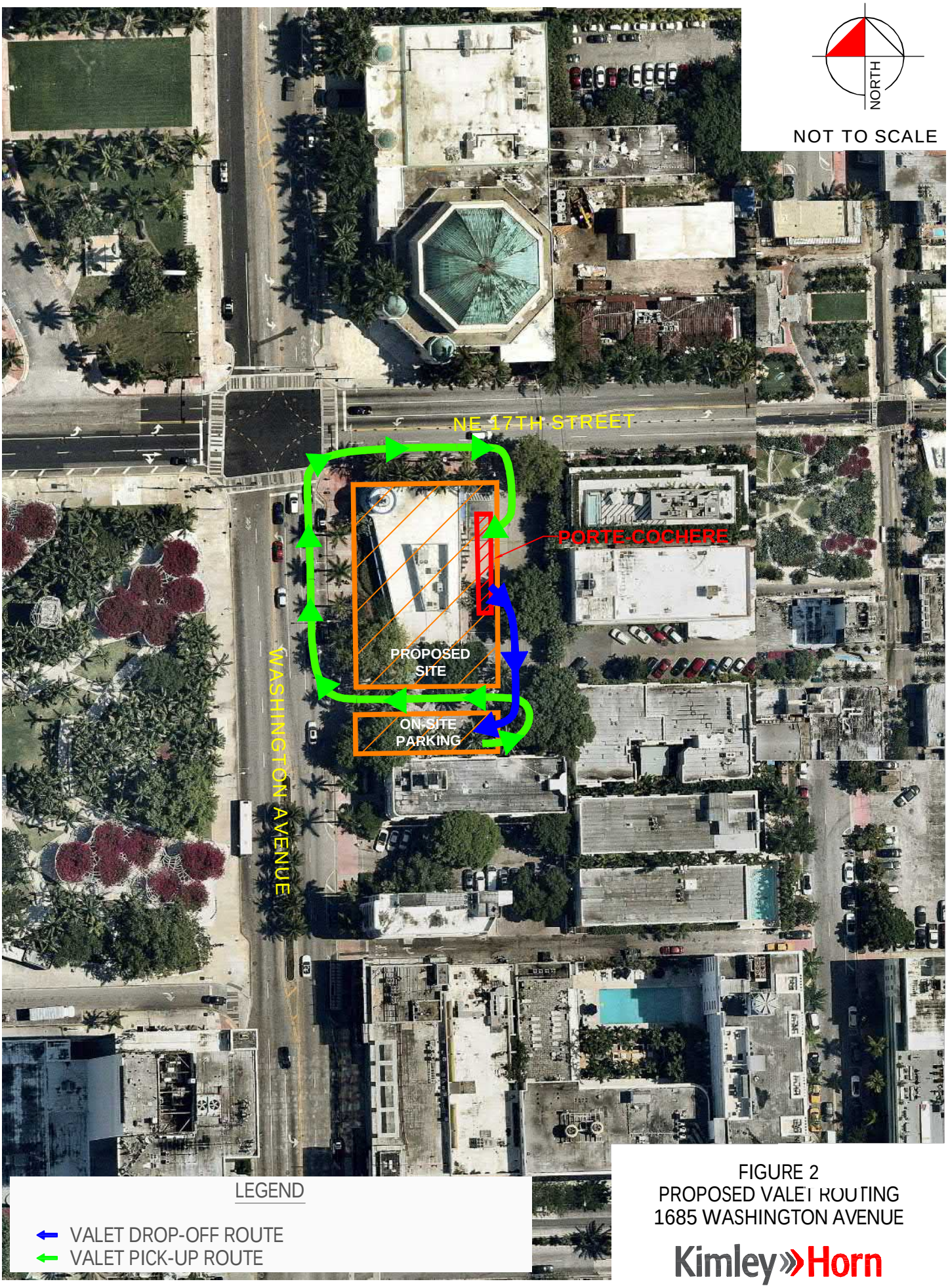


FIGURE 2
PROPOSED VALET ROUTING
1685 WASHINGTON AVENUE

Kimley»Horn

Drawing name: K:\FTL_TPTO\043896000-1685 Washington Avenue\CADD\Valet\Valet Figures.dwg Figure 6 Jan 08, 2018 12:54pm by: cory.dorman

Attachment B

Trip Generation

PM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION[1]		BASELINE TRIPS			INTERNAL CAPTURE		DRIVEWAY TRIPS			PASS-BY CAPTURE		NET NEW TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Drive-In Bank	10	912	6.644	ksf	50%	50%	68	68	136	20.0%	27	54	55	109	0.0%	0	54	55	109	35.0%	38	35	36	71
	2																									
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				Total:	68	68	136	20.0%	27	54	55	109	0.0%	0	54	55	109	35.0%	38	35	36	71
		912		Y=20.45(X)																						

Note: [1]**Multimodal reduction based on census tract data from the US Census Bureau's *Means of Transportation to Work* survey.**

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION[1]		BASELINE TRIPS			INTERNAL CAPTURE		DRIVEWAY TRIPS			PASS-BY CAPTURE		NET NEW TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 2	1	Hotel	10	310	150	room	51%	49%	44	42	86	20.0%	17	35	34	69	10.1%	7	31	31	62	0.0%	0	31	31	62
	2	Shopping Center	10	820	2.429	ksf	48%	52%	17	18	35	20.0%	7	14	14	28	32.8%	9	10	9	19	34.0%	6	7	6	13
	3	Walk-in Bank	10	911	4	ksf	51%	49%	25	24	49	20.0%	10	20	19	39	32.8%	13	14	12	26	0.0%	0	14	12	26
	4	Quality Restaurant	10	931	295	seat	67%	33%	56	27	83	20.0%	16	45	22	67	34.3%	23	33	11	44	44.0%	20	18	6	24
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				Total:	142	111	253	19.6%	50	114	89	203	25.6%	52	88	63	151	19.5%	26	70	55	125
		310		Y=0.75*(X)+-26.02																						
		820		LN(Y) = 0.74*LN(X)+2.89																						
		911		Y=12.13(X)																						
		931		Y=0.28(X)																						

Note: [1]**Multimodal reduction based on census tract data from the US Census Bureau's *Means of Transportation to Work* survey.**

	IN	OUT	TOTAL
NET NEW TRIPS	**35**	**19**	**54**

	IN	OUT	TOTAL
PROPOSED EXTERNAL VEHICLE TRIPS	88	63	151
WALK-IN BANK SELF-PARK TRIPS	14	12	26
RETAIL TRIPS	10	9	19
PROPOSED HOTEL AND RESTAURANT VEHICLE TRIPS	64	42	106
42.6% TAXI/RIDESHARE TRIPS	27	18	45
PROPOSED VALET TRIPS (RETAIL, HOTEL, AND RESTAURANT)	**47**	**33**	**80**

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

	Land Use	P.M. Peak Hour	
		Enter	Exit
INPUT	Office		
	Retail	34	33
	Restaurant	45	22
	Cinema/Entertainment		
	Residential		
	Hotel	35	34
		114	89

INTERNAL TRIPS

	Land Use	P.M. Peak Hour	
		Enter	Exit
OUTPUT	Office	0	0
	Retail	10	12
	Restaurant	12	11
	Cinema/Entertainment	0	0
	Residential	0	0
	Hotel	4	3
		26	26

OUTPUT	***Total % Reduction***	***25.6%***
	Office	
	Retail	32.8%
	Restaurant	34.3%
	Cinema/Entertainment	
	Residential	
	Hotel	10.1%

EXTERNAL TRIPS

	Land Use	P.M. Peak Hour	
		Enter	Exit
OUTPUT	Office	0	0
	Retail	24	21
	Restaurant	33	11
	Cinema/Entertainment	0	0
	Residential	0	0
	Hotel	31	31
		88	63

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.

(105 + 183) / 909 = 31.68%

	Census Tract 42.06, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	909	+/-277
Car, truck, or van:	524	+/-194
Drove alone	509	+/-193
Carpooled:	15	+/-16
In 2-person carpool	8	+/-11
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	7	+/-11
Public transportation (excluding taxicab):	105	+/-77
Bus or trolley bus	56	+/-51
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	49	+/-56
Railroad	0	+/-13
Ferryboat	0	+/-13
Taxicab	7	+/-11
Motorcycle	0	+/-13
Bicycle	0	+/-13
Walked	183	+/-123
Other means	25	+/-32
Worked at home	65	+/-42

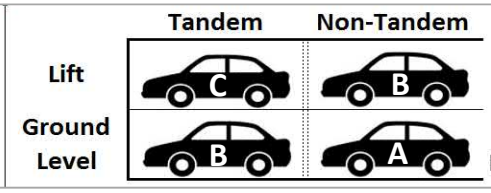
Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as 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 C

Valet Processing Time

Vehicle Processing Scenarios

Mechanical Lift Layout	

Vehicle A (non-tandem) - Drop-Off

1.	Attendant drives onto lift	10
		10 sec

Vehicle A (non-tandem) - Pick-Up

1.	Attendant drives off of lift	10
		10 sec

Vehicle B (non-tandem): No Vehicle A - Drop-Off

1.	Attendant maneuvers in front of lift	10
2.	Attendant exits vehicle to lower lift	5
3.	Attendant lowers lift	30
4.	Attendant re-enters vehicle and drives onto lift	15
5.	Attendant exits vehicle	5
6.	Attendant raises lift	30
		95 sec

Vehicle B (non-tandem): No Vehicle A - Pick-Up

1.	Attendant lowers lift	30
2.	Attendant enters vehicle and drives off of lift	15
3.	Attendant exits vehicle to raise lift	5
4.	Attendant raises lift	30
5.	Attendant re-enters vehicle	5
		85 sec

Vehicle B (non-tandem): Vehicle A Parked - Drop-Off

1.	Attendant exits Vehicle B	5
2.	Attendant enters Vehicle A	5
3.	Attendant moves Vehicle A to drive aisle	10
4.	Attendant exits Vehicle A	5
5.	Attendant lowers lift	30
6.	Attendant re-enters Vehicle B and drives onto lift	15
7.	Attendant exits Vehicle B	5
8.	Attendant raises lift	30
9.	Attendant re-enters Vehicle A and drives into parking space	15
10.	Attendant exits Vehicle A	5
		125 sec

Vehicle B (non-tandem): Vehicle A Parked - Pick-Up

1.	Attendant moves Vehicle A underneath lift to drive aisle	10
2.	Attendant exits Vehicle A	5
3.	Attendant lowers lift	30
4.	Attendant enters Vehicle B and drives off of lift	15
5.	Attendant exits Vehicle B to raise lift	5
6.	Attendant raises lift	30
7.	Attendant re-enters Vehicle A and drives into parking space	15
8.	Attendant exits Vehicle A	5
9.	Attendant re-enters Vehicle B	5
		120 sec

Vehicle Processing Scenarios

Vehicle B/C (Tandem): Vehicle A and B Parked - Drop-Off

1.	Attendant exits Vehicle C	5
2.	Attendant enters Vehicle A	5
3.	Attendant moves Vehicle A to drive aisle	10
4.	Attendant exits Vehicle A	5
5.	Attendant enters Vehicle B and moves to drive aisle	15
6.	Attendant exits Vehicle B	5
7.	Attendant lowers lift	30
8.	Attendant re-enters Vehicle C and drives into lift	15
9.	Attendant exits Vehicle C	5
10.	Attendant raises lift	30
11.	Attendant re-enters Vehicle B and drives into parking space	15
12.	Attendant exits Vehicle B	5
13.	Attendant re-enters Vehicle A and drives into parking space	15
14.	Attendant exits Vehicle A	5
		165 sec

Vehicle B/C (Tandem): Vehicle A and B Parked - Pick-Up

1.	Attendant moves Vehicle A underneath lift to drive aisle	10
2.	Attendant exits Vehicle A	5
3.	Attendant moves Vehicle B underneath lift to drive aisle	10
4.	Attendant exits Vehicle B	5
5.	Attendant lowers lift	30
6.	Attendant enters Vehicle C and drives of off lift to drive aisle	15
7.	Attendant exits Vehicle C to raise lift	5
8.	Attendant raises lift	30
9.	Attendant re-enters Vehicle B and drives into parking space	15
10.	Attendant exits Vehicle B	5
11.	Attendant re-enters Vehicle A and drives into parking space	15
12.	Attendant exits Vehicle A	5
13.	Attendant re-enters Vehicle C	5
		155 sec

Average Drop-off Processing Time	**99 sec**
Average Pick-up Processing Time	**93 sec**

KLAUS

Parking Systems Atlantic, Inc.

Klaus Model G61 Vehicle lift Processing time:

- 7.5 HP Power Pack
- 12 Liters per Minute Valves
- Raising Lift Platform < 30 seconds
  (With Vehicle)
- Lowering Lift Platform < 30 seconds
  (With Vehicle)

When operating Klaus Model G61 Vehicle Lifts with 7.5 HP Power Pack and 12 Liters per Minute Valves, valet can expect the time required to raise platform (With Vehicle) to be no longer than 30 seconds and the time required to lower platform (With Vehicle) no longer than 30 seconds.

Bruce B. Roden Jr.
KLAUS Parking Systems Atlantic, Inc.
Vice President

655 NW. 128th St, North Miami, Fl 33168
O: (305) 687-5733 | F: (305) 687-5734 | Email: Bruce@klauspark.com
www.klausparking.com | www.multiparking.com

1685 Washington Avenue On-Site Parking Calculated Average Travel Time	
VALET DROP-OFF	
VEHICLE TRAVEL TIME	**VALET ATTENDANT TRAVEL TIME**
Travel Times (Assume 10 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
0.09 miles / 0.6 minutes	0.02 miles / 0.4 minutes
Controlled Delay* 1.0 Minutes	
Average Mechanical-Lift Processing Time 1.7 Minutes	
Total Time 3.7 Minutes	

1685 Washington Avenue On-Site Parking Calculated Average Travel Time	
VALET PICK-UP	
VALET ATTENDANT TRAVEL TIME	**VALET ATTENDANT TRAVEL TIME**
Travel Times (Assume 5 ft/s speed)	Travel Times (Assume 10 mph speed)
To Valet Garage (Walk/Run)	**Return from Valet Garage (In Vehicle) to Valet Area**
Distance / Travel Time	Distance / Travel Time
0.02 miles / 0.4 minutes	0.19 miles / 1.2 minutes
Controlled Delay* 1.0 Minutes	
Average Mechanical Lift Processing Time 1.6 Minutes	
Total Time 4.2 Minutes	

Attachment D

Valet Analysis

1685 Washington Avenue

Highest Demand Condition P.M. Peak Hour

Arrival Rate

IN	OUT	
47	33	veh/hr

Service Rate

IN	OUT	
4.00	5.00	mins/veh

Number of Valet Attendants (N) =	9	
Level of Confidence =	0.95	
Storage Provided On-Site =	4	vehicles
Total Entering and Exiting Vehicles(q) =	80	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	13.60	veh/hr/pos
Average Service Rate (t) =	4.41	mins/veh
rho (t/Q) =	0.654	

N	N-1		
1	0	P(n=0)=	1.000
2	1	P(n=1)=	5.883
3	2	P(n=2)=	17.307
4	3	P(n=3)=	33.941
5	4	P(n=4)=	49.921
6	5	P(n=5)=	58.740
7	6	P(n=6)=	57.598
8	7	P(n=7)=	48.410

P(0) = 0.27%

Service Time = 4.41 mins/veh

Expected (avg.) number of vehicles in the system	E(m)=	0.34	
Expected (avg.) number of vehicles waiting in queue	E(n)=	6.22	
Mean time in the queue	E(w)=	0.25	mins
Mean time in system	E(t)=	4.67	mins

Proportion of customers who wait (P) (E(w) > 0)= 17.89%

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 C
Updated Maneuverability Analysis

Kimley»Horn

MEMORANDUM

To: Josiel Ferrer, E.I., City of Miami Beach
Firat Akcay, City of Miami Beach

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

Date: April 26, 2018

Subject: 1685 Washington Avenue Redevelopment
Miami Beach, Florida
Maneuverability Analysis

Kimley-Horn and Associates, Inc. has prepared a maneuverability analysis for the 1685 Washington Avenue redevelopment. The areas included in the analysis include the on-site porte-cochere, parking garage, and loading areas. The analysis was performed using Transoft Solutions Inc.'s *AutoTurn 10.2* software which applies vehicle turning templates consistent with American Association of State Highway and Transportation Officials' (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 2011. The analysis was prepared using passenger car (P) design vehicle for the porte-cochere and parking garage areas. Delivery vans comparable to P design vehicles will be used for deliveries and loading activities. The following summarizes the results of this analysis.

Porte-cochere

Access to the site's porte-cochere is provided by a left-in/right-in driveway from 17th Street along the north side of the property and a right-out only driveway along the west side of the property onto Washington Avenue. A P design vehicle will be able to maneuver into and through the porte-cochere area without conflicting with by-passing traffic, refer to Figure 1 Attachment A.

Parking Garage and Loading Area Access

Access to the parking garage will be provided via an entry and exit ramp along the south side of the property. A P design vehicle will be able to maneuver into and through the parking garage without conflicting with oncoming traffic, refer to Figure 2 in Attachment A. Delivery vans, comparable to P vehicles, will be used for loading activities at the site and will be able to maneuver through the parking garage, site drive aisles, and loading areas, refer to Figures 3, 4, 5, and 6. Note that the westernmost loading bay on 2nd level will require the delivery vehicle to make a multi-point turn to exit the space.

Note that refuse receptacles will wheeled out to either 17th Street or Washington Avenue for waste and trash pick-up.

Conclusion

In conclusion, passenger vehicles and delivery van traffic will be able to ingress and egress from the site's porte-cochere and parking garage without conflicting with oncoming traffic.

K:\FTL_TPTO\043896000-1685 Washington Avenue\Correspondence\memo\1685 Washington Avenue - Maneuverability Analysis 04 26 18.docx

Attachment A

Maneuverability Plots

PROPERTY LINE 200'-0"

COMMERCIAL SETBACK 5'-0"

RESIDENTIAL PEDESTAL SETBACK 15'-0"

RESIDENTIAL TOWER SETBACK 22'-6"

ELEV.

ELEV.

ELEV.

SERV. ELEV.

REST. ELEV.

RESIDENTIAL SETBACK 16'-0"

PROPERTY LINE 150'-0"

RESIDENTIAL TOWER SETBACK 19'-0"

RESIDENTIAL PEDESTAL SETBACK 16'-0"

PROPERTY LINE 150'-0"

70' RIGHT OF WAY

17TH STREET

RESIDENTIAL MAX TOWER SETBACK 45'-0"

TOWER SETBACK PROJECTION (VARIANCE REQUIRED) 26'-7"

RESIDENTIAL SETBACK 20'-0"

ELEV.

PROPERTY LINE 200'-0"

GREENVIE

Figure 1 - Ground Level Maneuverability

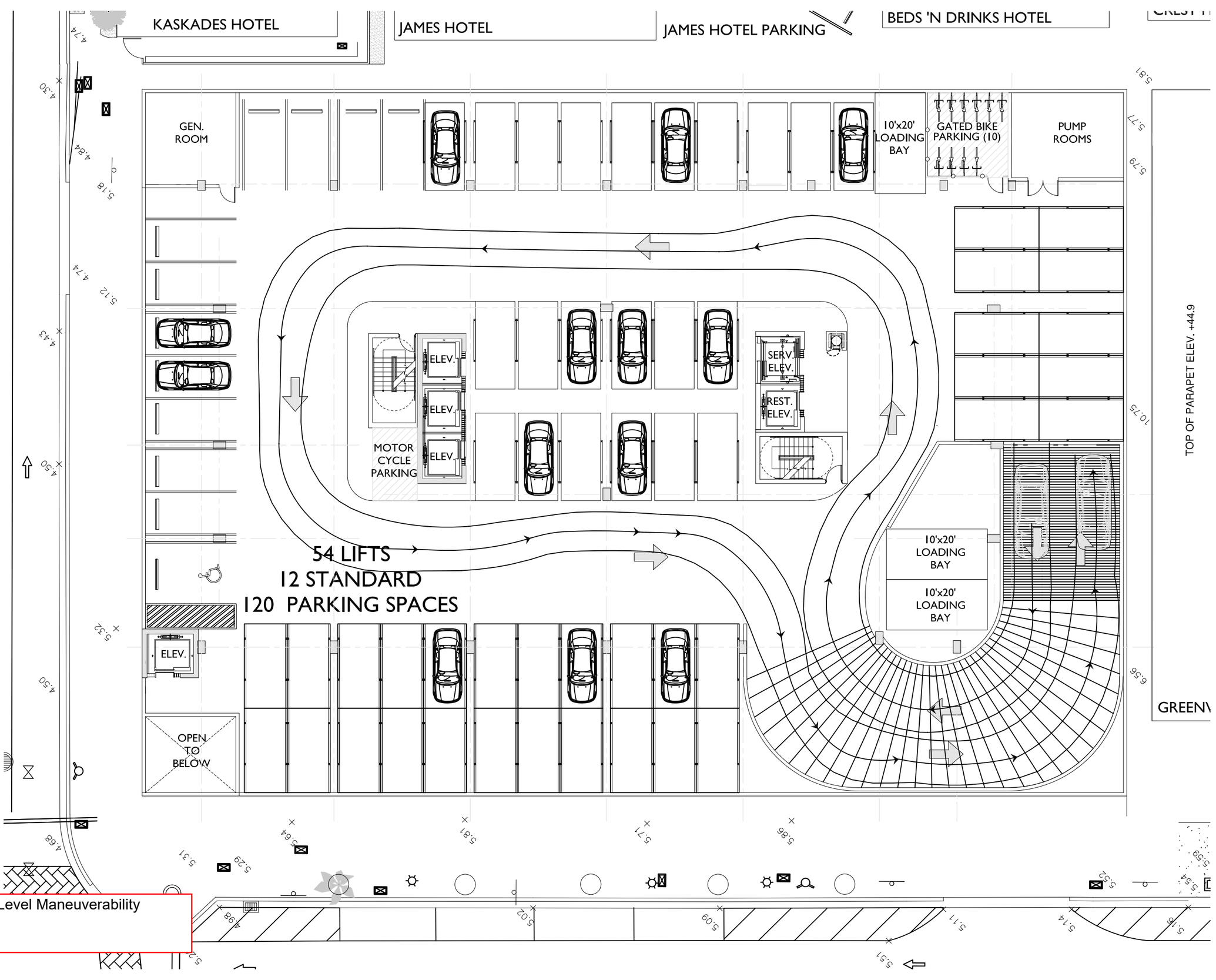


Figure 2 - 2nd Level Maneuverability

PROPERTY LINE 200'-0"

COMMERCIAL SETBACK 5'-0"

RESIDENTIAL PEDESTAL SETBACK 15'-0"

RESIDENTIAL TOWER SETBACK 22'-6"

AASHTO 2011 (US)

ELEV.

ELEV.

ELEV.

SERV. ELEV.

REST. ELEV.

RESIDENTIAL SETBACK 16'-0"

PROPERTY LINE 150'-0"

RESIDENTIAL TOWER SETBACK 19'-0"

RESIDENTIAL PEDESTAL SETBACK 16'-0"

PROPERTY LINE 150'-0"

70' RIGHT OF WAY

17TH STREET

RESIDENTIAL MAX TOWER SETBACK 45'-0"

TOWER SETBACK PROJECTION (VARIANCE REQUIRED) 26'-7"

RESIDENTIAL SETBACK 20'-0"

PROPERTY LINE 200'-0"

GREENVIE

Figure 3 - Ground Level Loading Maneuverability

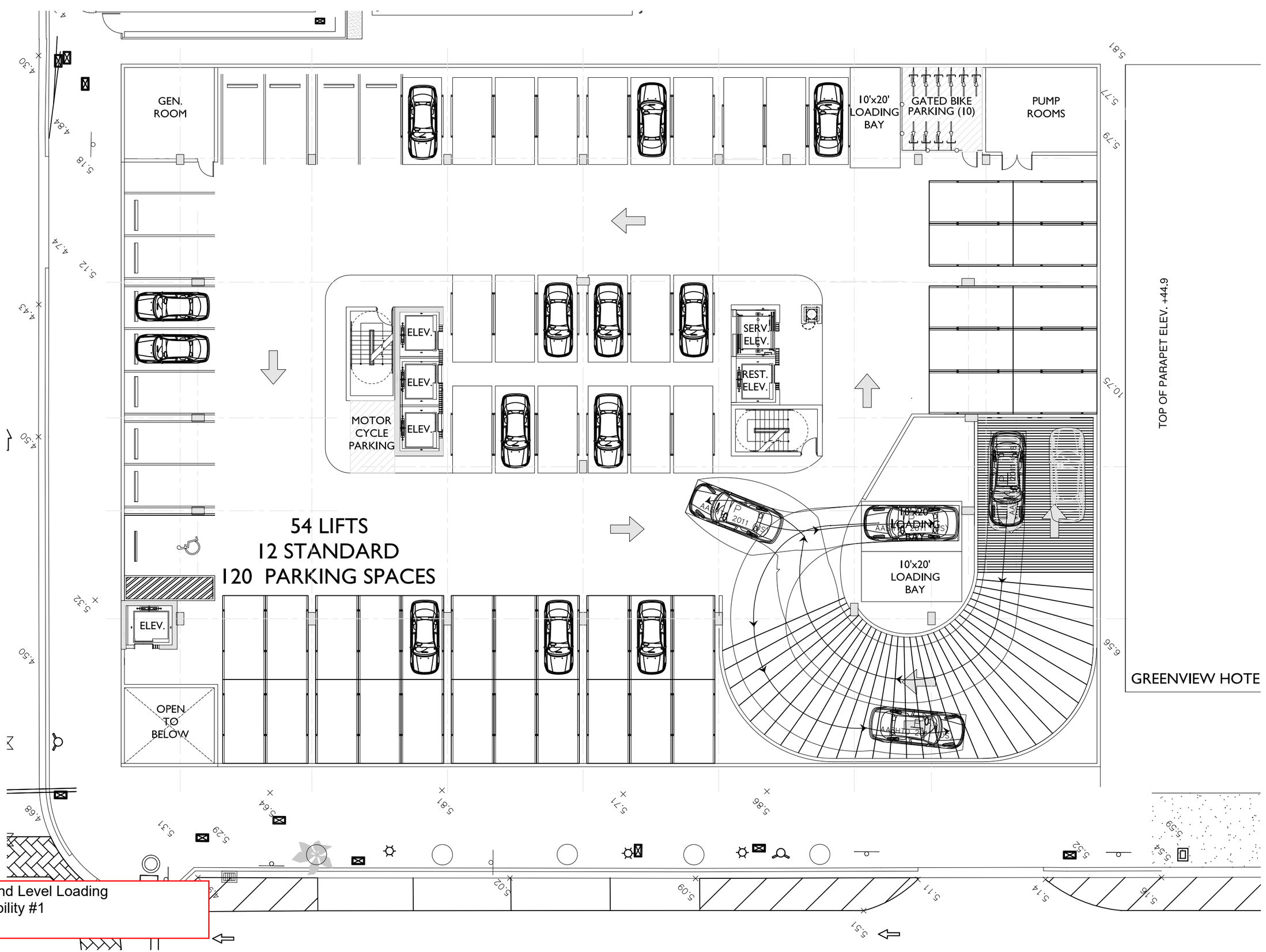


Figure 4 - 2nd Level Loading Maneuverability #1

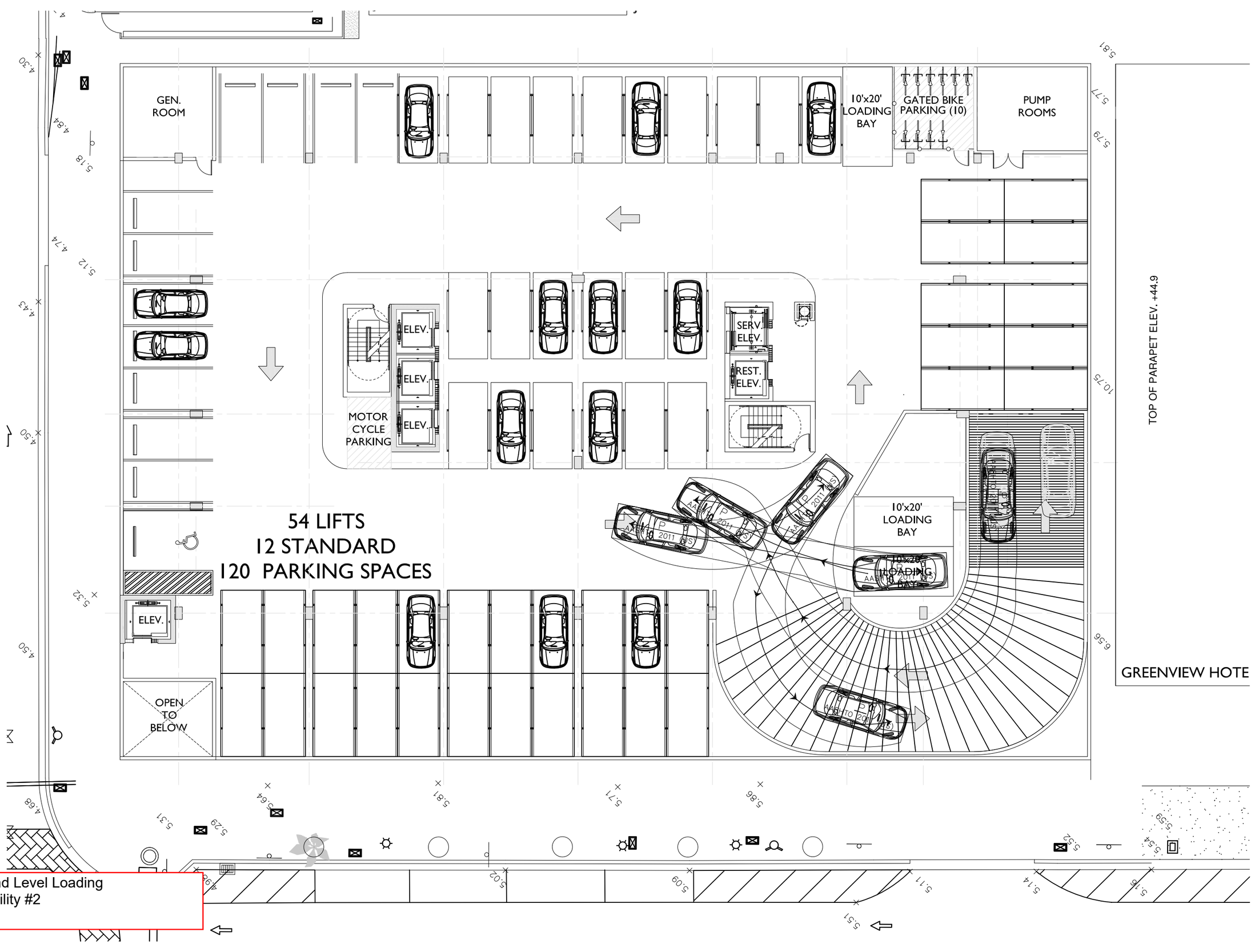


Figure 5 - 2nd Level Loading Maneuverability #2

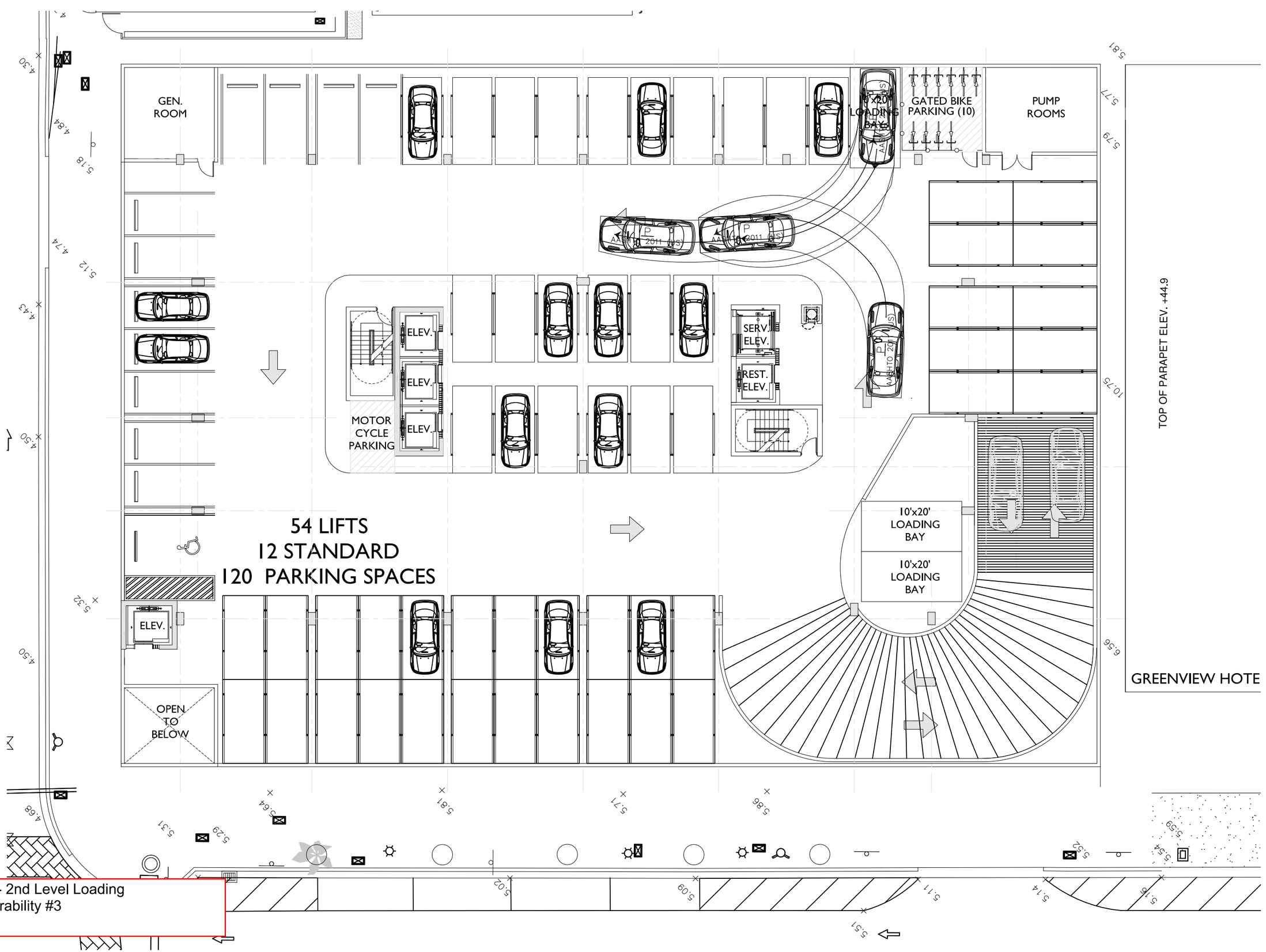


Figure 6 - 2nd Level Loading Maneuverability #3

Kimley»Horn

MEMORANDUM

To: Josiel Ferrer, E.I., City of Miami Beach
Firat Akcay, City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE
Cory D. Dorman, E.I.

Date: April 4, 2018

Subject: 1685 Washington Avenue
Valet Operations Analysis

Kimley-Horn and Associates, Inc. has prepared a valet operations analysis for the proposed redevelopment located at 1685 Washington Avenue in Miami Beach, Florida. Currently, the site is occupied by a 6,644 square-foot drive-in bank. The proposed redevelopment will consist of a 150-room hotel, 2,023 square feet of specialty retail space, a 4,000 square-foot walk-in bank, and 295 total restaurant seats with 145 seats located on the ground floor (5,258 square feet) and 150 seats located on the rooftop level (2,156 indoor square feet and 2,244 exterior square feet). The parking garage includes 110 mechanical-lift parking spaces and 12 conventional parking spaces. Please note that on-site self-parking will be provided for the proposed walk-in bank and all other vehicles will be valeted to the on-site parking garage with the exception of taxis/rideshare. A conceptual site plan and project location map are included in Attachment A.

VALET SERVICE AND OPERATIONS

The redevelopment will be served by one (1) porte-cochere for valet drop-off and pick-up. The porte-cochere is located on-site just south of 17th Street project driveway. The porte-cochere consists of one (1) storage lane with approximately four (4) vehicles of storage and one (1) bypass lane. It is assumed that three (3) spaces will be used for valet operations and one (1) space will be used for taxi/rideshare.

Access to the proposed redevelopment will be provided by one (1) ingress left-in/right-in driveway along 17th Street between Washington Avenue and James Avenue and one (1) egress right-out only driveway along Washington Avenue between 17th Street and Lincoln Road. On-site self-parking will be provided for the proposed walk-in bank. All other vehicles will be valeted on-site with the exception of taxis and rideshare. The parking garage includes 110 mechanical-lift parking spaces and 12 conventional parking spaces. All mechanical-lift parking spaces are assumed to be used for valet and all conventional parking spaces are assumed to be used for self-parking.

The valet drop-off route is contained within the site and is not expected to impact the external roadway network. It is assumed that valet pick-up vehicles will exit the site via the Washington Avenue project driveway, travel northbound along Washington Avenue, travel eastbound along 17th Street, and utilize the 17th Street project driveway to access the on-site porte-cochere. Figure 2 contained in Attachment A provides a graphic illustration of the proposed valet routes to and from the on-site parking garage.

TRIP GENERATION

Trip generation for the proposed redevelopment was calculated using rates contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 9th Edition. Trip generation rates were examined for the weekday P.M. peak hour. Please note that a 42.6 percent (42.6%) taxi/rideshare trip factor was applied to the hotel, retail, and restaurant components of the redevelopment to account for guests and patrons arriving via taxi/rideshare to the site and to determine the number of valet trips. The proposed redevelopment is expected to generate 60 valet trips of which 35 enter the site and 25 exit the site during the P.M. peak hour. Detailed trip generation calculations are included in Attachment B.

VALET OPERATIONS ANALYSIS

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 17th Street. Valet operations were analyzed for the number of valet attendants and required vehicle stacking for the redevelopment proposed traffic.

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 will be stationed at the on-site porte-cochere. 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 within the on-site parking garage. 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 at the on-site porte-cochere for pick-up. Note that the average mechanical-lift processing time was based on the Klaus Model G61 vehicle lift. The average mechanical-lift processing time was based on the average processing times of parking and retrieving vehicles from all the various positions within the tandem mechanical-lift system. The detailed mechanical-lift processing time analysis is contained in Attachment C. The following summarizes the total valet drop-off and pick-up service times.

The service time for valet drop-off operation corresponds to the following:

- Exchange between valet attendant and driver including unloading luggage (1.0 minute)
- Valet attendant drives vehicle from porte-cochere to on-site parking garage (0.6 minutes)
- Valet attendant parks vehicle using mechanical-lift (1.7 minutes)
- Valet attendant returns to valet station (0.4 minutes)
- Total service rate: 3.7 minutes

The service time for valet pick-off operation corresponds to the following:

- Valet attendant proceeds to the garage to retrieve the vehicle (0.4 minutes)

- Valet attendant retrieves moves vehicle from mechanical-lift (1.6 minutes)
- Valet attendant drives vehicle from on-site parking garage to the porte-cochere (1.2 minutes)
- Exchange between valet attendant and driver and loading baggage (1.0 minute)
- Total service rate: 4.2 minutes

The calculated average service time for vehicles valeted from the on-site porte-cochere 3.7 minutes for valet drop-off and 4.2 minutes for valet pick-up. However, to provide a conservative analysis, a service time of 4.0 minutes for valet drop-off and 5.0 minutes for valet pick-up was used. Processing times include the time for the exchange between the driver and valet attendants and time to unload and load baggage is assumed for all vehicles valeted. Note that this results in a conservative analysis. Detailed trip length calculations are included in Attachment C.

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. This analysis seeks to ensure that the queue length does not exceed the storage provided at a level of confidence of 95 percent (95%). Three (3) vehicle drop-off/pick-up spaces are provided for valet operations based on the attached site plan for the porte-cochere valet drop-off/pick-up located.

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 95th percentile valet queue does not extend beyond the designated valet service area. Detailed valet analysis worksheets are provided in Attachment D.

Results of the highest demand condition valet operations analysis demonstrate that seven (7) valet attendants would be required so that the vehicle drop-off/pick-up storage would not be exceeded.

VALET CONCLUSION

Based on the valet operations analysis performed, it was determined that the 95th percentile valet queues will not extend beyond the valet service area onto 17th Street. Based upon the conservative assumptions applied to the highest traffic demand condition, it was estimated that seven (7) valet attendants may be required during peak periods. 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.

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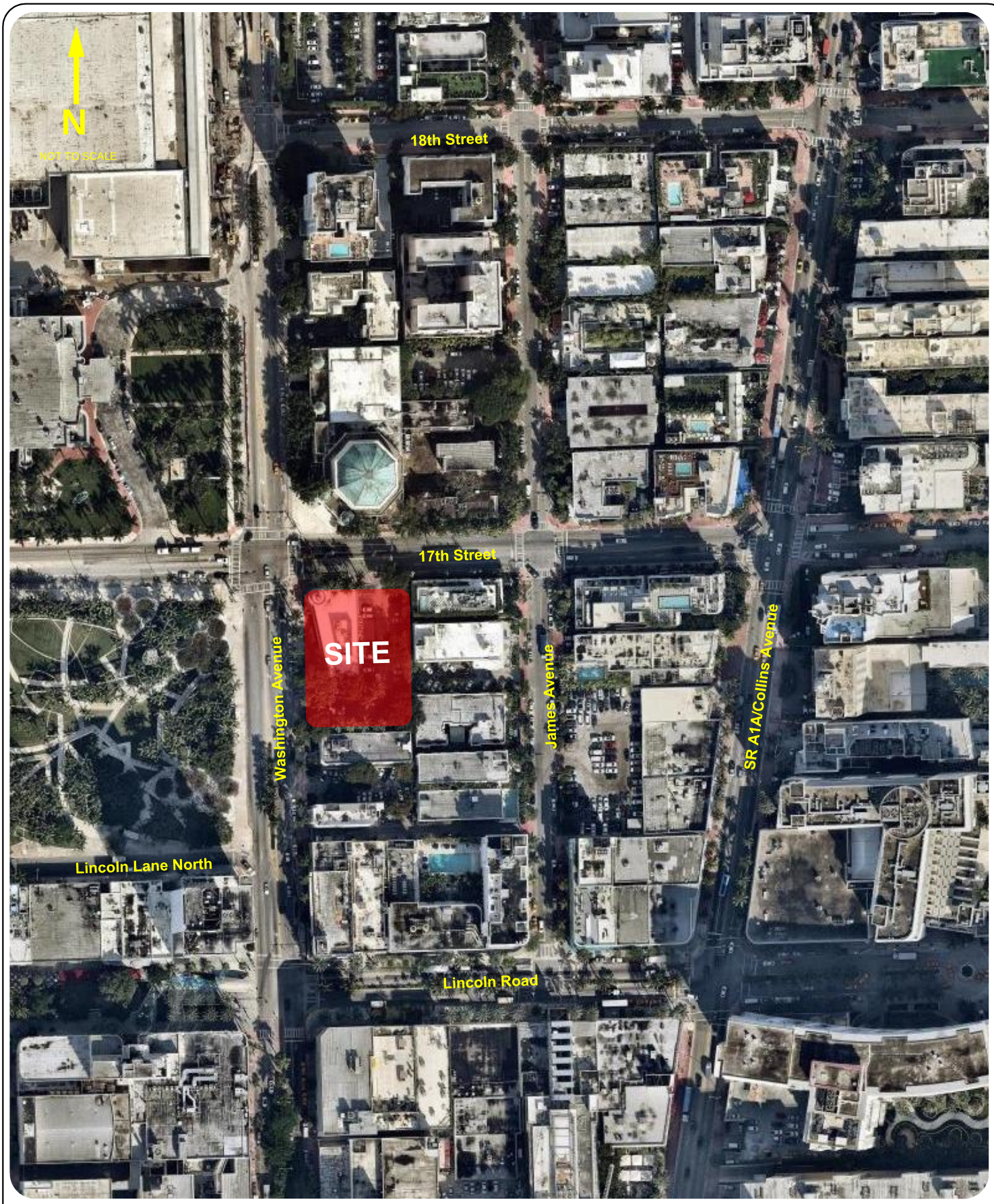
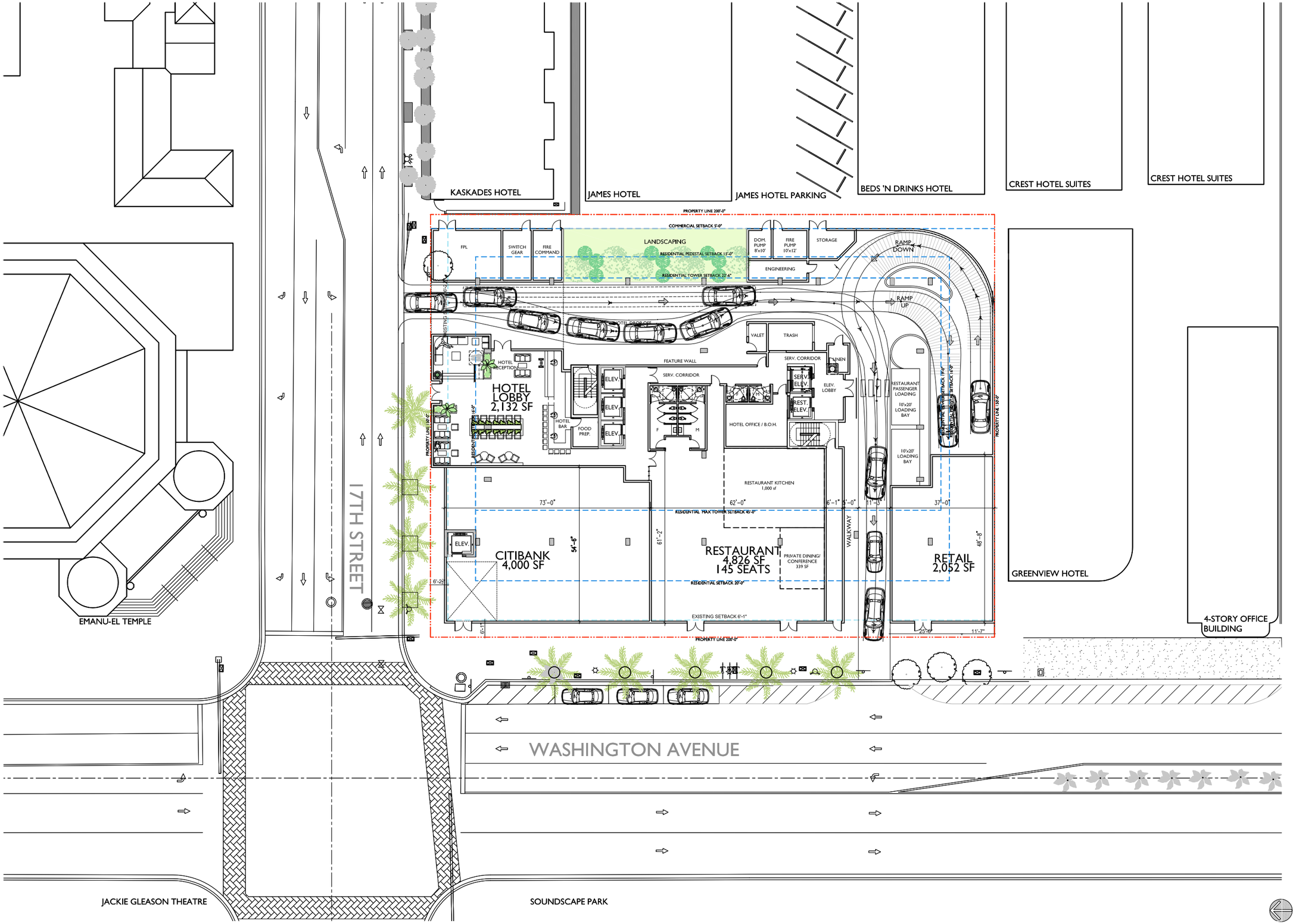
Attachment A

Conceptual Site Plan and Project Location Map



Kimley»Horn

Figure 1
Location Map
1685 Washington Avenue
Miami Beach, Florida



PROPOSED SITE PLAN 1/32" = 1'-0"

MCG
ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723

PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

RUDY RICCIOTTI architecte
ARTISTIC ADVISOR

DRAWING:

PROPOSED SITE PLAN

SCALE:	N.T.S.
CHECK:	JMcG
DATE:	04/02/2018

SHEET NUMBER

A2.00B

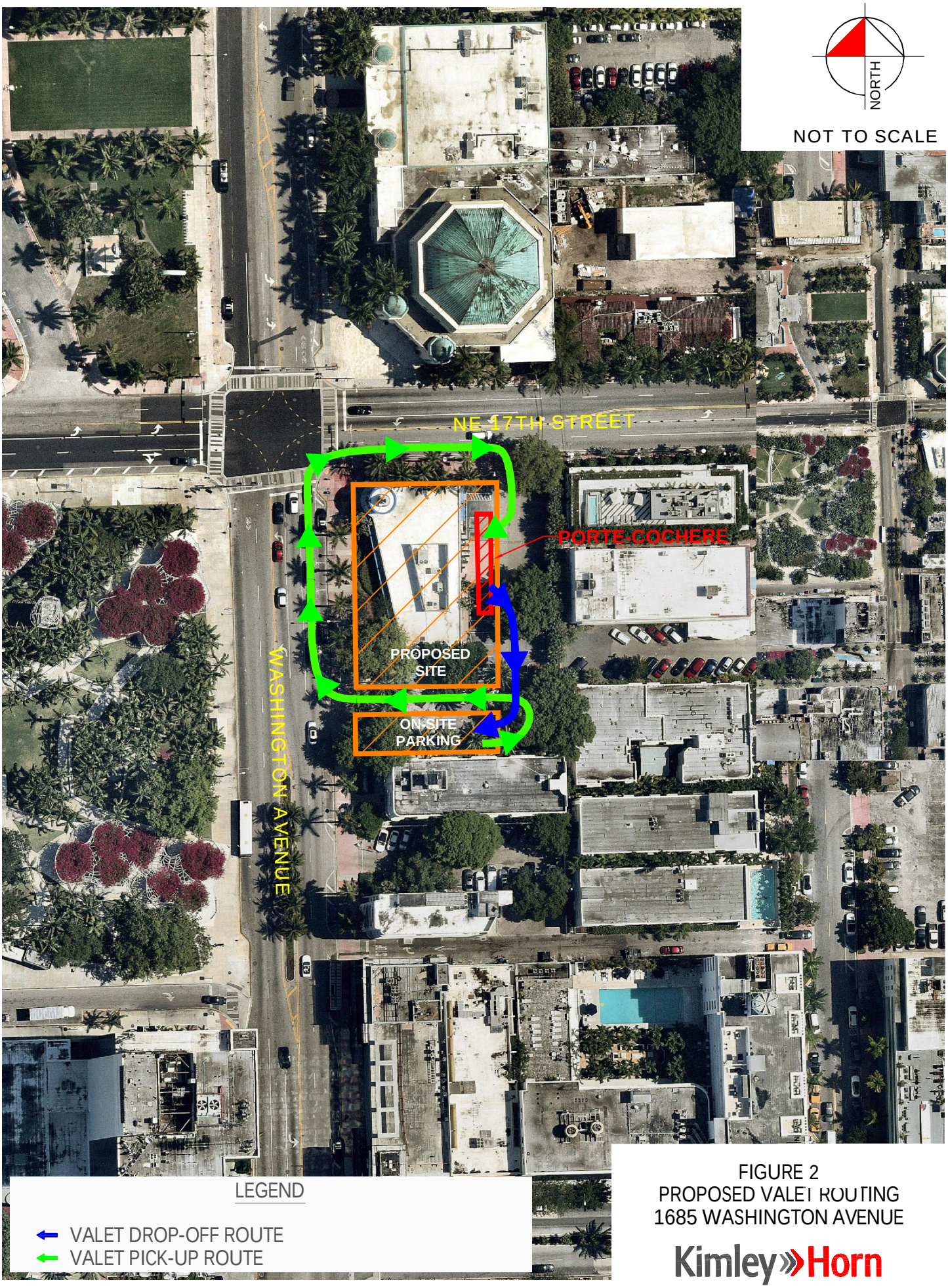


FIGURE 2
PROPOSED VALET ROUTING
1685 WASHINGTON AVENUE

Kimley»Horn

Drawing name: K:\FTL_TPTO\043896000-1685 Washington Avenue\CADD\Valet\Valet Figures.dwg Figure 6 Jan 08, 2018 12:54pm by: cory.dorman

Attachment B

Trip Generation

PM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION[1]		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Drive-In Bank	9	912	6.644	ksf	50%	50%	81	80	161	31.7%	51	55	55	110	0.0%	0	55	55	110	35.0%	39	36	35	71
	2																									
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	81	80	161	31.7%	51	55	55	110	0.0%	0	55	55	110	35.0%	39	36	35	71
		912		Y=24.3(X)																						

Note: [1]**Multimodal reduction based on census tract data from the US Census Bureau's *Means of Transportation to Work* survey.**

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION[1]		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 2	1	Hotel	9	310	150	room	51%	49%	46	44	90	31.7%	29	31	30	61	6.6%	4	29	28	57	0.0%	0	29	28	57
	2	Specialty Retail Center	9	826	2.023	ksf	44%	56%	11	15	26	31.7%	8	8	10	18	31.4%	6	5	7	12	0.0%	0	5	7	12
	3	Walk-in Bank	9	911	4	ksf	44%	56%	22	27	49	31.7%	16	15	18	33	31.4%	10	11	12	23	0.0%	0	11	12	23
	4	Quality Restaurant	9	931	295	seat	67%	33%	52	25	77	31.7%	24	36	17	53	34.0%	18	26	9	35	44.0%	15	15	5	20
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	131	111	242	31.7%	77	90	75	165	23.0%	38	71	56	127	11.8%	15	60	52	112
		310		Y=0.6(X)																						
		826		Y=2.4*(X)+21.48																						
		911		Y=12.13(X)																						
		931		Y=0.26(X)																						

	IN	OUT	TOTAL
NET NEW TRIPS	**24**	**17**	**41**

Note: [1]**Multimodal reduction based on census tract data from the US Census Bureau's *Means of Transportation to Work* survey.**

	IN	OUT	TOTAL
PROPOSED VEHICLE TRIPS	71	56	127
WALK-IN BANK SELF-PARK TRIPS	11	12	23
NON WALK-IN BANK PROPOSED VEHICLE TRIPS	60	44	104
42.6% TAXI/RIDESHARE TRIPS	25	19	44
PROPOSED VALET TRIPS	**35**	**25**	**60**

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	P.M. Peak Hour	
	Enter	Exit
Office		
Retail	23	28
Restaurant	36	17
Cinema/Entertainment		
Residential		
Hotel	31	30
	90	75

INTERNAL TRIPS

OUTPUT

Land Use	P.M. Peak Hour	
	Enter	Exit
Office	0	0
Retail	7	9
Restaurant	10	8
Cinema/Entertainment	0	0
Residential	0	0
Hotel	2	2
	19	19

OUTPUT

Total % Reduction	*23.0%*
Office	
Retail	31.4%
Restaurant	34.0%
Cinema/Entertainment	
Residential	
Hotel	6.6%

EXTERNAL TRIPS

OUTPUT

Land Use	P.M. Peak Hour	
	Enter	Exit
Office	0	0
Retail	16	19
Restaurant	26	9
Cinema/Entertainment	0	0
Residential	0	0
Hotel	29	28
	71	56

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.

(105 + 183) / 909 = 31.68%

	Census Tract 42.06, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	909	+/-277
Car, truck, or van:	524	+/-194
Drove alone	509	+/-193
Carpooled:	15	+/-16
In 2-person carpool	8	+/-11
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	7	+/-11
Public transportation (excluding taxicab):	105	+/-77
Bus or trolley bus	56	+/-51
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	49	+/-56
Railroad	0	+/-13
Ferryboat	0	+/-13
Taxicab	7	+/-11
Motorcycle	0	+/-13
Bicycle	0	+/-13
Walked	183	+/-123
Other means	25	+/-32
Worked at home	65	+/-42

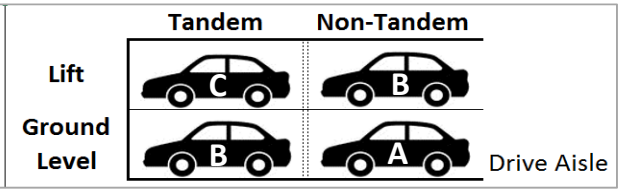
Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as 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 C

Valet Processing Time

Vehicle Processing Scenarios

Mechanical Lift Layout	

Vehicle A (non-tandem) - Drop-Off

1.	Attendant drives onto lift	10
		10 sec

Vehicle A (non-tandem) - Pick-Up

1.	Attendant drives off of lift	10
		10 sec

Vehicle B (non-tandem): No Vehicle A - Drop-Off

1.	Attendant maneuvers in front of lift	10
2.	Attendant exits vehicle to lower lift	5
3.	Attendant lowers lift	30
4.	Attendant re-enters vehicle and drives onto lift	15
5.	Attendant exits vehicle	5
6.	Attendant raises lift	30
		95 sec

Vehicle B (non-tandem): No Vehicle A - Pick-Up

1.	Attendant lowers lift	30
2.	Attendant enters vehicle and drives off of lift	15
3.	Attendant exits vehicle to raise lift	5
4.	Attendant raises lift	30
5.	Attendant re-enters vehicle	5
		85 sec

Vehicle B (non-tandem): Vehicle A Parked - Drop-Off

1.	Attendant exits Vehicle B	5
2.	Attendant enters Vehicle A	5
3.	Attendant moves Vehicle A to drive aisle	10
4.	Attendant exits Vehicle A	5
5.	Attendant lowers lift	30
6.	Attendant re-enters Vehicle B and drives onto lift	15
7.	Attendant exits Vehicle B	5
8.	Attendant raises lift	30
9.	Attendant re-enters Vehicle A and drives into parking space	15
10.	Attendant exits Vehicle A	5
		125 sec

Vehicle B (non-tandem): Vehicle A Parked - Pick-Up

1.	Attendant moves Vehicle A underneath lift to drive aisle	10
2.	Attendant exits Vehicle A	5
3.	Attendant lowers lift	30
4.	Attendant enters Vehicle B and drives off of lift	15
5.	Attendant exits Vehicle B to raise lift	5
6.	Attendant raises lift	30
7.	Attendant re-enters Vehicle A and drives into parking space	15
8.	Attendant exits Vehicle A	5
9.	Attendant re-enters Vehicle B	5
		120 sec

Vehicle Processing Scenarios

Vehicle B/C (Tandem): Vehicle A and B Parked - Drop-Off

1.	Attendant exits Vehicle C	5
2.	Attendant enters Vehicle A	5
3.	Attendant moves Vehicle A to drive aisle	10
4.	Attendant exits Vehicle A	5
5.	Attendant enters Vehicle B and moves to drive aisle	15
6.	Attendant exits Vehicle B	5
7.	Attendant lowers lift	30
8.	Attendant re-enters Vehicle C and drives into lift	15
9.	Attendant exits Vehicle C	5
10.	Attendant raises lift	30
11.	Attendant re-enters Vehicle B and drives into parking space	15
12.	Attendant exits Vehicle B	5
13.	Attendant re-enters Vehicle A and drives into parking space	15
14.	Attendant exits Vehicle A	5
		165 sec

Vehicle B/C (Tandem): Vehicle A and B Parked - Pick-Up

1.	Attendant moves Vehicle A underneath lift to drive aisle	10
2.	Attendant exits Vehicle A	5
3.	Attendant moves Vehicle B underneath lift to drive aisle	10
4.	Attendant exits Vehicle B	5
5.	Attendant lowers lift	30
6.	Attendant enters Vehicle C and drives of off lift to drive aisle	15
7.	Attendant exits Vehicle C to raise lift	5
8.	Attendant raises lift	30
9.	Attendant re-enters Vehicle B and drives into parking space	15
10.	Attendant exits Vehicle B	5
11.	Attendant re-enters Vehicle A and drives into parking space	15
12.	Attendant exits Vehicle A	5
13.	Attendant re-enters Vehicle C	5
		155 sec

Average Drop-off Processing Time	**99 sec**
Average Pick-up Processing Time	**93 sec**

KLAUS

Parking Systems Atlantic, Inc.

Klaus Model G61 Vehicle lift Processing time:

- 7.5 HP Power Pack
- 12 Liters per Minute Valves
- Raising Lift Platform < 30 seconds
  (With Vehicle)
- Lowering Lift Platform < 30 seconds
  (With Vehicle)

When operating Klaus Model G61 Vehicle Lifts with 7.5 HP Power Pack and 12 Liters per Minute Valves, valet can expect the time required to raise platform (With Vehicle) to be no longer than 30 seconds and the time required to lower platform (With Vehicle) no longer than 30 seconds.

Bruce B. Roden Jr.
KLAUS Parking Systems Atlantic, Inc.
Vice President

655 NW. 128th St, North Miami, Fl 33168
O: (305) 687-5733 | F: (305) 687-5734 | Email: Bruce@klauspark.com
www.klausparking.com | www.multiparking.com

1685 Washington Avenue On-Site Parking Calculated Average Travel Time	
VALET DROP-OFF	
VEHICLE TRAVEL TIME	**VALET ATTENDANT TRAVEL TIME**
Travel Times (Assume 10 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
0.09 miles / 0.6 minutes	0.02 miles / 0.4 minutes
Controlled Delay* 1.0 Minutes	
Average Mechanical-Lift Processing Time 1.7 Minutes	
Total Time 3.7 Minutes	

1685 Washington Avenue On-Site Parking Calculated Average Travel Time	
VALET PICK-UP	
VALET ATTENDANT TRAVEL TIME	**VALET ATTENDANT TRAVEL TIME**
Travel Times (Assume 5 ft/s speed)	Travel Times (Assume 10 mph speed)
To Valet Garage (Walk/Run)	**Return from Valet Garage (In Vehicle) to Valet Area**
Distance / Travel Time	Distance / Travel Time
0.02 miles / 0.4 minutes	0.19 miles / 1.2 minutes
Controlled Delay* 1.0 Minutes	
Average Mechanical Lift Processing Time 1.6 Minutes	
Total Time 4.2 Minutes	

Attachment D

Valet Analysis

1685 Washington Avenue

Highest Demand Condition P.M. Peak Hour

Arrival Rate

IN	OUT	
35	25	veh/hr

Service Rate

IN	OUT	
4.00	5.00	mins/veh

Number of Valet Attendants (N) =	7	
Level of Confidence =	0.95	
Storage Provided On-Site =	4	vehicles
Total Entering and Exiting Vehicles(q) =	60	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	13.58	veh/hr/pos
Average Service Rate (t) =	4.42	mins/veh
rho (t/Q) =	0.631	

N	N-1		
1	0	P(n=0)=	1.000
2	1	P(n=1)=	4.417
3	2	P(n=2)=	9.753
4	3	P(n=3)=	14.359
5	4	P(n=4)=	15.855
6	5	P(n=5)=	14.005
7	6	P(n=6)=	10.309
8	7	P(n=7)=	0.000

P(0) = 1.15%

Service Time = 4.42 mins/veh

Expected (avg.) number of vehicles in the system	E(m)=	0.35	
Expected (avg.) number of vehicles waiting in queue	E(n)=	4.76	
Mean time in the queue	E(w)=	0.35	mins
Mean time in system	E(t)=	4.76	mins

Proportion of customers who wait (P) (E(w) > 0)=	20.18%
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

Kimley»Horn

MEMORANDUM

To: Josiel Ferrer, E.I., City of Miami Beach
Firat Akcay, City of Miami Beach

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

Date: April 4, 2018

Subject: 1685 Washington Avenue Redevelopment
Miami Beach, Florida
Maneuverability Analysis

Kimley-Horn and Associates, Inc. has prepared a maneuverability analysis for the 1685 Washington Avenue redevelopment. The areas included in the analysis include the on-site porte-cochere, parking garage, and loading areas. The analysis was performed using Transoft Solutions Inc.'s *AutoTurn 10.2* software which applies vehicle turning templates consistent with American Association of State Highway and Transportation Officials' (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 2011. The analysis was prepared using passenger car (P) design vehicle for the porte-cochere and parking garage areas. Delivery vans comparable to P design vehicles will be used for deliveries and loading activities. The following summarizes the results of this analysis.

Porte-cochere

Access to the site's porte-cochere is provided by a left-in/right-in driveway from 17th Street along the north side of the property and a right-out only driveway along the west side of the property onto Washington Avenue. A P design vehicle will be able to maneuver into and through the porte-cochere area without conflicting with by-passing traffic, refer to Figure 1 Attachment A.

Parking Garage and Loading Area Access

Access to the parking garage will be provided via an entry and exit ramp along the south side of the property. A P design vehicle will be able to maneuver into and through the parking garage without conflicting with oncoming traffic, refer to Figure 2 in Attachment A. Delivery vans, comparable to P vehicles, will be used for loading activities at the site and will be able to maneuver through the parking garage and site drive aisles.

Note that refuse receptacles will wheeled out to either 17th Street or Washington Avenue for waste and trash pick-up.

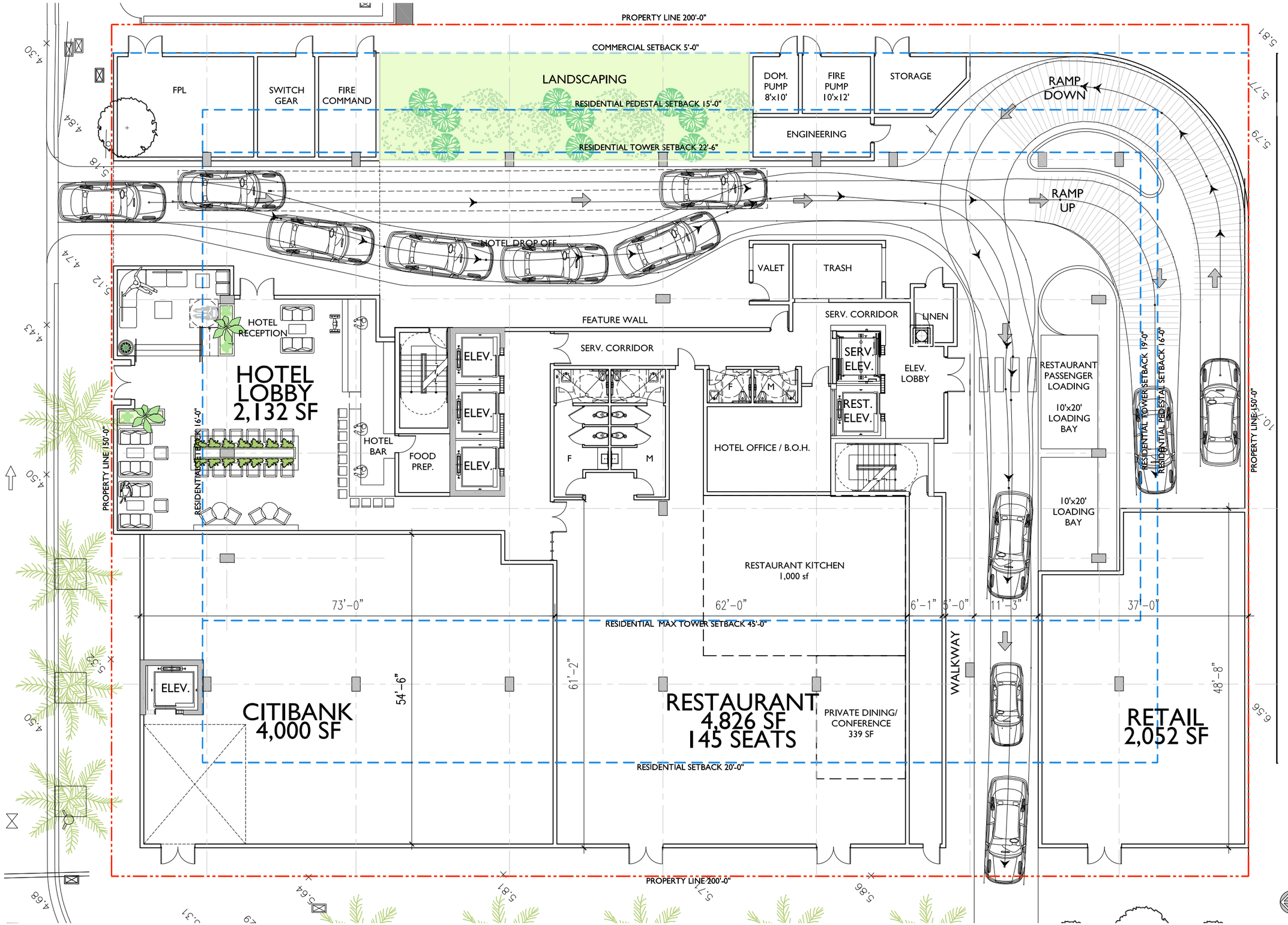
Conclusion

In conclusion, passenger vehicles and delivery van traffic will be able to ingress and egress from the site's porte-cochere and parking garage without conflicting with oncoming traffic.

K:\FTL_TPTO\043896000-1685 Washington Avenue\Correspondence\memo\1685 Washington Avenue - Maneuverability Analysis.docx

Attachment A

Maneuverability Plots



PROPOSED GROUND LEVEL PLAN 1/16" = 1'-0"

McG
ARCHITECTURE + PLANNING
7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

RUDY RICCIOTTI architecte
ARTISTIC ADVISOR

DRAWING:

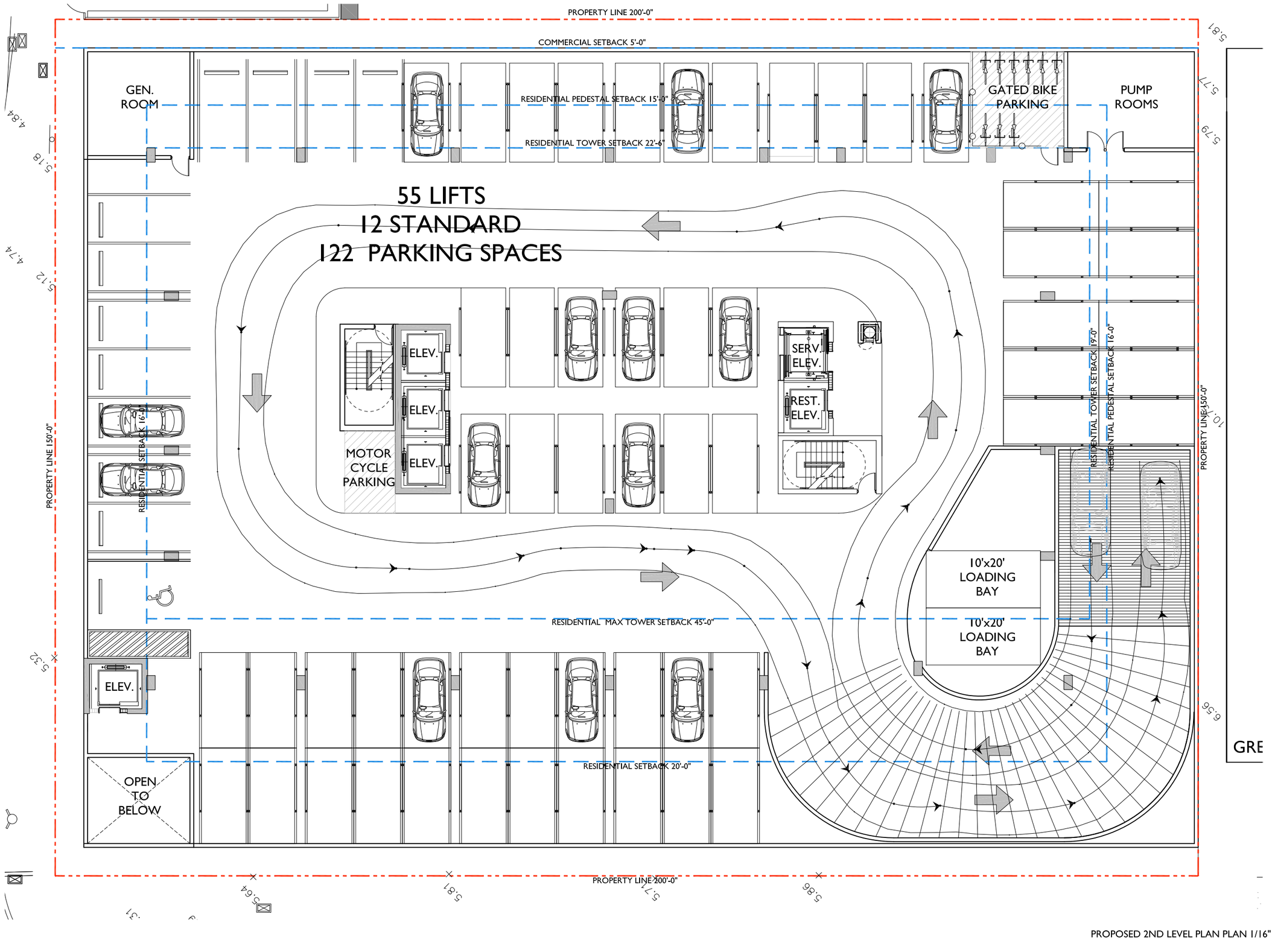
PROPOSED GROUND LEVEL PLAN

SCALE:	N.T.S.
CHECK:	JMcG
DATE:	04/02/2018

SHEET NUMBER

FIGURE 1

A2.01A



PROPOSED 2ND LEVEL PLAN PLAN 1/16" = 1'-0"

MCG
ARCHITECTURE + PLANNING

7580 NE 4th Court
Studio 100
Miami, FL 33138

1723
PROJECT NUMBER

PROJECT:

1685 Washington

1685 Washington Ave
Miami Beach, FL 33139

FINVARB GROUP
CLIENT

RUDY RICCIOTTI architecte
ARTISTIC ADVISOR

DRAWING:

PROPOSED 2ND LEVEL PLAN

SCALE:	N.T.S.
CHECK:	JMcG
DATE:	04/02/2018

SHEET NUMBER

FIGURE 2
A2.02

1685 Washington Avenue, Miami Beach, Florida
Specimen Tree Arborist Report

BARTLETT TREE EXPERTS
SCIENTIFIC TREE CARE SINCE 1907

Prepared for:

Christopher Cawley
780 Northeast 69th Street, Suite 1106
Miami, Florida 33138
(786) 534-5327
chris@cristophercawley.com

Submitted by:

Bartlett Tree Experts

Jeremy T. Chancey, Commercial Arborist Representative, Local Manager
ASCA Registered Consulting Arborist #646
ISA Certified Arborist #FL-0762A
ISA Tree Risk Qualified
Certified Landscape Inspector #2007-007

Kristopher Ratliff ISA certified Arborist # FL-6512A
TRAQ Qualified / BIS Specialist

TABLE OF CONTENTS

1685 Washington Avenue, Miami Beach, Florida
SPECIMEN TREE REPORT

April 26, 2018

Christopher Cawley
780 Northeast 69th Street, Suite 1106
Miami, Florida 33138
(786) 534-5327

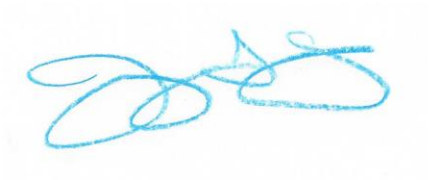
Dear Mr. Cawley,

Thank you for allowing Bartlett Tree Experts the opportunity to review the specimen trees located at 1685 Washington Avenue in Miami Beach, Florida.

We found eight shade trees on the property. This report details those eight trees found there. The tree numbers are 13, 14, 15, 20, 34, 39, 40, and 41. Four of these trees are in poor condition and the remaining four trees are in fair condition. We have provided photographs and more details of the trees herein. We utilized the tree disposition plans provided by your office and we maintained the same tree numbering.

If you have any questions, please feel free to contact me at the office number or my cell phone at (954) 612-2500. Thank you again for this opportunity.

Best regards,



Jeremy T. Chancey, Consulting Arborist
ASCA Registered Consulting Arborist #646
ISA Certified Arborist #FL-0762A
ISA Tree Risk Qualified
Certified Landscape Inspector #2007-007

Kristopher Ratliff, Inventory Arborist
ISA Certified Arborist # FL-6512A
TRAQ Certified BIS Specialist

EXECUTIVE SUMMARY

Bartlett Tree Experts conducted a review of eight trees at 1685 Washington Avenue, Miami Beach, Florida. The attributes that we collected included size, condition class, and observed defects.

The trees have been numbered to match the tree survey. Four of the trees are mahogany trees (*Swietenia mahagoni*). Two trees are black olives (*Bucida buceras*), and one is a live oak (*Quercus virginiana*). There is one shrub a viburnum (Viburnum adoxaceae), number four, and the remaining tree is a laurel oak, (Quercus laurifolis), of these trees three of the mahogany # 15, 20, 39 are in poor condition as well as one of the black olives #14. All four of the other trees, one mahogany #40, one black olive #34, one live oak #13, and the viburnum #41 are in fair condition.

Understanding of Inventory Constraints

It is important for the tree owner or manager to know and understand that all trees pose some degree of risk from failure or other conditions. The information and recommendations within this report have been derived from the level of tree risk assessment identified in this report, using the information and practices outlined in the *International Society of Arboriculture's Best Management Practices for Tree Risk Assessment*, as well as the information available at the time of the inspection. However, the overall risk rating, the mitigation recommendations, or any other conclusions do not preclude the possibility of failure from undetected conditions, weather events, or other acts of man or nature. Trees can unpredictably fail even if no defects or other conditions are present. It is the responsibility of the tree owner or manager to schedule repeat or advanced assessments, determine actions, and implement follow up recommendations, monitoring and/or mitigation.

Bartlett Tree Experts can make no warranty or guarantee whatsoever regarding the safety of any tree, trees, or parts of trees, regardless of the level of tree risk assessment provided, the risk rating, or the residual risk rating after mitigation. The information in this report should not be considered as making safety, legal, architectural, engineering, landscape architectural, land surveying advice or other professional advice. This information is solely for the use of the tree owner and manager to assist in the decision making process regarding the management of their tree or trees. Tree risk assessments are simply tools which should be used in conjunction with the owner or tree manager's knowledge, other information and observations related to the specific tree or trees discussed, and sound decision making.

1685 Washington Avenue Tree Table

4/25/2018	1685 Washington Avenue Miami Beach ,FL							
TREE #	**COMMON NAME**	**BOTANICAL NAME**	**HEIGHT (ft)**	**WIDTH (ft)**	**DBH (in)**	**COND %**	**CONDITION**	**OBSERVATIONS**
13	Live Oak	*Quercus virginiana*	30	22	14	65	FAIR	Lean, uneven crown, girdling roots, codominant leaders, burried root collar
14	Black Olive	*Bucida buceras*	40	36	24	45	POOR	Wound in stem, seam, poor structure, codominant leaders, storm damage
15	Mahogany	*Swietenia mahagoni*	45	46	34	40	POOR	Poor structure, severe girdling roots, multiple pruning wounds, dieback
20	Mahogany	*Swietenia mahagoni*	44	38	32 @ 2ft	40	POOR	Two pruning wounds south side, codominant leaders, wound in leader
34	Black Olive	*Bucida buceras*	45	40	21	50	FAIR	Severe girdling roots, rubbing limbs, codominant leaders, wounded roots
39	Mahogany	*Swietenia mahagoni*	45	16	28 @ 3ft	40	POOR	Topped, poor brach structure, supressed growth
40	Mahogany	*Swietenia mahagoni*	45	58	35	60	FAIR	Poor structure, severe girdling roots, over extended branches,
41	Viburnum	*Viburnum odoratissimum var. awabuki*	25	18	multi	50	FAIR	Suppressed growth, girdling material, overhead wires
	* I certify that all the statements of fact in this evaluation are true, complete, and correct to the best of my knowledge and belief, and that they are made in good faith.							
	Kristopher Ratliff ISA Certified Arborist # FI-6512 A							

Discussion

Tree number 13

Live oak with a height of 30 feet and a width of 22 feet .The diameter of the tree at breast height is 14 inches. This tree is in fair condition with a 65% health rating. The tree has an uneven crown and a lean, it also has codominant leaders as well as some girdling roots and a buried root collar.

Tree number 14

Black olive, poor condition with a 45% health rating. The tree is 40 feet tall with a width of 36 feet. The diameter at breast height was 24 inches. This tree has a large wound on the stem as well as a seam on the base of the stem. Structural issues were noted including, codominant leaders. Storm damage was evident.

Tree number 15

Mahogany, poor condition with a 40% health condition. The tree is 45 feet tall and 46 feet wide. The diameter measured at breast height was 34 inches. The tree has poor structure as well as severe girdling roots, multiple large pruning wounds, die back and suppressed growth due to the confined planting area.

Tree number 20

Mahogany, poor condition with a 40% health condition. The tree is 44 feet tall and 38 feet wide, it has a diameter of 32 inches taken at two feet above grade due to growth conditions of the codominant stems and where they originate. This tree has many defects, a buried root collar, and two large pruning wounds on the south side of the tree. There is also a large wound on the branch at about 15 feet above grade level as well as poor tree structure.

Tree number 34

Black olive, fair condition with a 50% health condition. It has a height of 45 feet and is 40 feet wide with a diameter of 21 inches measured at breast height. The defects in this tree include severe girdling roots, rubbing limbs, codominant leaders as well as some wounded roots near sidewalk area.

Tree number 39

Mahogany, poor condition with a 40% health condition. It has a height of 45 feet and is 16 feet wide. The diameter of this tree 28 inches that was measured at three feet above grade due to codominant leaders originating at approximately three and one-half feet. It has been severely topped, has very poor branch structure and the growth is suppressed due to growing conditions and lack of space.

Tree number 40

Mahogany, fair condition with a 60% health condition. It has a height of 45 feet and is 58 feet wide with a trunk diameter of 35 inches. This trees issues include but are not limited to poor structure, severe girdling roots, over extended branches, and included bark as well as a uneven crown due to overhead wires on east side that resulted in directional pruning.

Tree number 41

Viburnum, fair condition with a 50% health condition. It has a height of 25 feet as well as a width of 18 feet. The diameter of the stems are 5 inches and 4 inches taken at breast height. This tree has suppressed growth conditions, overhead wires, and girdling roots.

Photos

Tree Number 13

View looking North East

View of codominant leaders in tree 13

Girdling root on tree 13

Tree number 14

View from west side

View of wound on west side of stem

Picture of tree # 14 poor branch structure

Tree number 15

Tree 15 poor structure

Tree 15 girdling roots.

Wound in leader of tree 15 on north side

Tree Number 20

View from east side